

Economics/EEP C181
Commercial Policy
Lecture 20

I. Introduction: What types of instruments are available to use to protect domestic industry?

A. Tariffs. Usually imposed as a percent. For example a 20 percent tariff would indicate that if the import was priced at one dollar, with a tariff, the import price would now be \$1.20. Sometimes, however, the tariff is a specific amount ie 10 cents per pound. A percent tariff is called ad valorem, while the other type is known as a specific tariff. The value of a specific tariff will not go up with the price of the good, but it is often used in developing countries as a way of dealing with underinvoicing.

In the USA, tariffs have been driven down on average to around 5 percent by successive trade rounds. It is similarly low in other industrial countries.

Some terms you should know:

FOB: free on board. (Price of export from source country)

CIF: cost, insurance, and freight. (Price of export once it lands in destination)

DDU or ex dock: delivered, duty paid. CIF plus tariffs.

In developing countries, tariffs are higher than in developed countries (see Figure 3 at the end of these lecture notes), despite massive tariff reductions in the 1980s and 1990s. However, actual tariff collections even lower than the statutory rate--in Brazil averages tariff rates of 50 percent could lead to collections amounting to 5 percent of actual imports. Why?

B. Quotas. Quantity restraints on imports. In the USA used for sugar, apparel, steel and cars.

C. Voluntary export restraints (VERs) also known as voluntary restraint agreements (VRAs). This is a type of quota imposed by the exporting country (ie Japan) instead of the importer (the USA). Steel and car quotas were of this type.

D. "Less than fair value" (LTFV) cases. These are imposed on exporters to the USA if they price at LTFV. There are two types:

- (1) Anti-dumping (by far the most numerous) duties
- (2) Countervailing duties (CVD).

The amount of these duties can be very high--recently, a 363 percent duty was imposed on garlic exports from China. However, they are very expensive to file--on average a filing can cost half a million dollars. So only the larger players are likely to file.

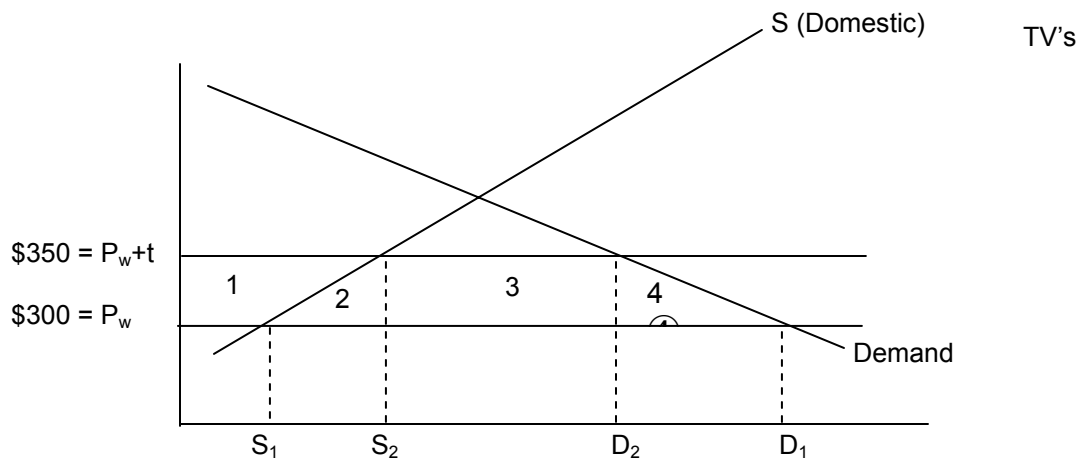
II. Tariffs

There are two cases we analyze here.

Case #1: You're a small country, and your demand for a good has no impact on the world price.

Case #2: You're a large country, so imposing a tariff on imports will lower overall demand for the good, both at home and abroad, leading to a reduction the world price of the good (even if its tariff-inclusive price goes up at home). This is called the "terms of trade" effect.

Case #1: Small Country Case



Prior to the tariff:

- Domestic supply at S_1
- Domestic demand at D_1
- Imports = $D_1 - S_1$

With the tariff:

- Domestic supply rises to S_2 (domestic producers gain)
- Demand falls to D_2
- Imports fall = $D_2 - S_2$

Welfare Analysis:

Producers gain	+1
Consumers lose	-1-2-3-4
Government revenue rises	+3

Net gain from tariff: = - 2 - 4. Overall we lose. This is the thinking which is behind the arguments that we "win" with the passage of the Doha round despite the fact that we may lose tariff revenue and some producers will be hurt by the removal of tariffs. However, tariff revenue is a significant source of government income only in poorer countries, where direct tax collections may be low.

Intuition for why we lose from a tariff:

- (1) Too much of the good is supplied domestically with the tariff.
- (2) Too little is consumed.

Three final points about Case #1:

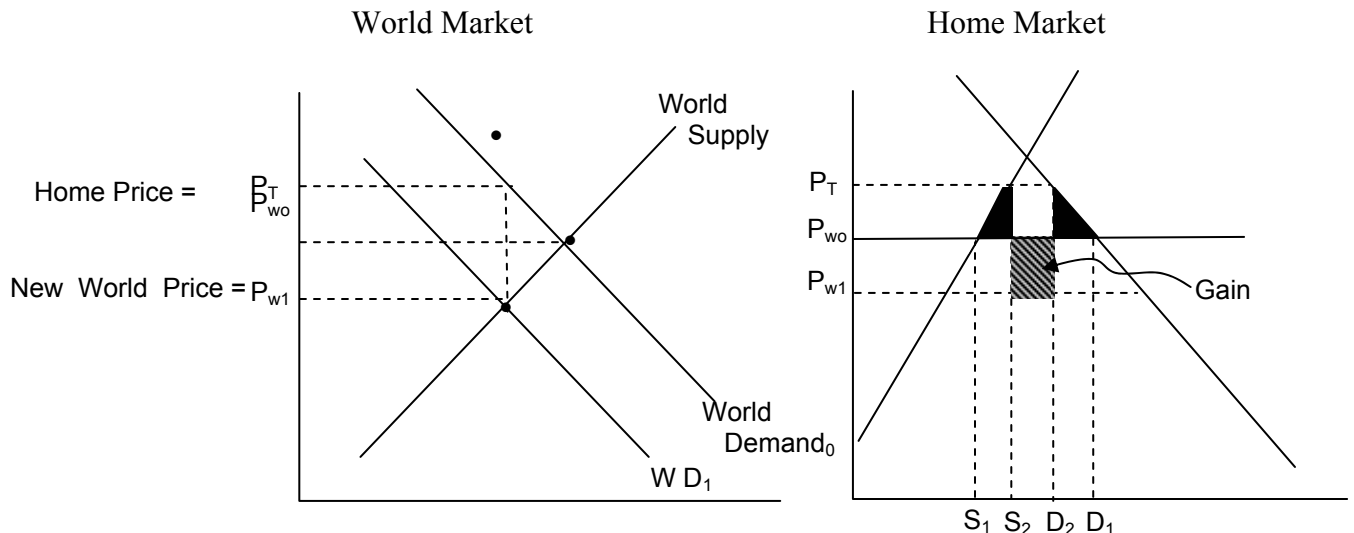
(1) Not everyone loses from the tariff. Although the country as a whole is worse off, producers who are competing with the import gain from the tariff (but do they gain in the long run? This allows them to delay adjustment, which is likely to be inevitable in the longer run)

(2) Triangles 2 and 4 are called the "deadweight loss" from the tariff. Estimates of these suggest that they may not be very big--nevertheless there are other gains from trade as well. As a producer, you need those good quality inputs that come with imports.

(3) The "catch": as a producer, want high prices on competing goods, low prices on inputs. Another problem is that you also want to avoid retaliation from other countries on competing goods that you export.

Case # 2: Large Country case.

A country can affect the international price of a good by lowering world demand through imposing a tariff on imports.

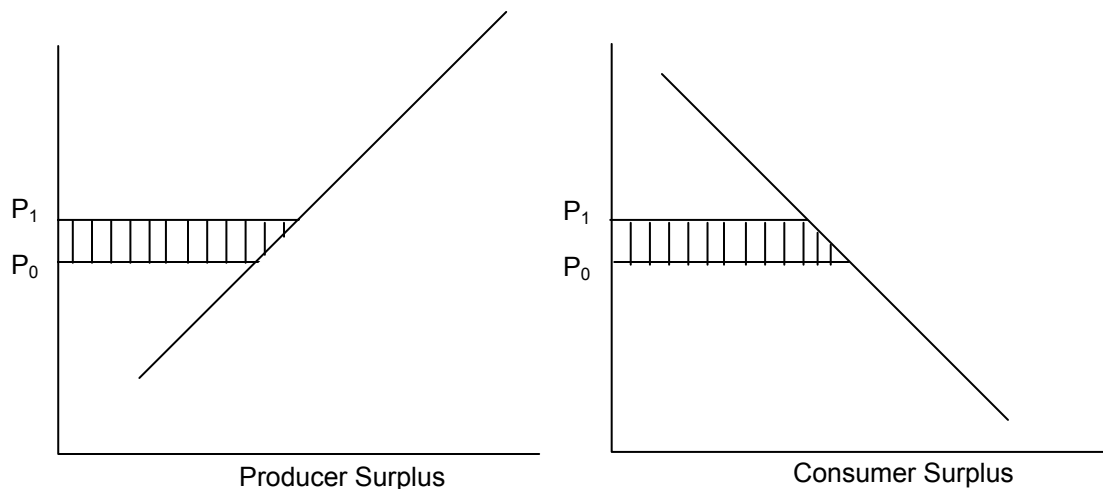


Intuition behind tariff incidence: the results are the same whether one shows this as a shift up and to the left in supply, or a shift in and down in demand. If you show the shift as a supply shift, the intuition is that suppliers are only willing to supply as much as before if P goes up by $P + t$ (ie if we move from P_{w1} to P_t). If you show the shift as a demand shift, then demand remains the same only if the price falls by the amount of the tariff ie if the price is now P_{w1} .

Welfare analysis: Same as before, but now there is a positive amount added, equal to $(D_2 - S_2) * (P_{w0} - P_{w1}^*)$. This means that the impact of a tariff on welfare can be positive or negative--its impact is ambiguous.

We can't tell without measuring whether the country as a whole gains or loses from trade. The intuition behind the ambiguous result is that the tariff leads to a decline in the world price, which lowers your tariff-inclusive home price and benefits your consumers.

[An aside on consumer surplus and producer surplus]



How large is the optimal tariff in practice? This is a matter of debate. A priori reasoning suggests that many substitutes exist for imports--so if you impose a tariff on one good, consumers could simply switch to a substitute and the overall price may not change much.

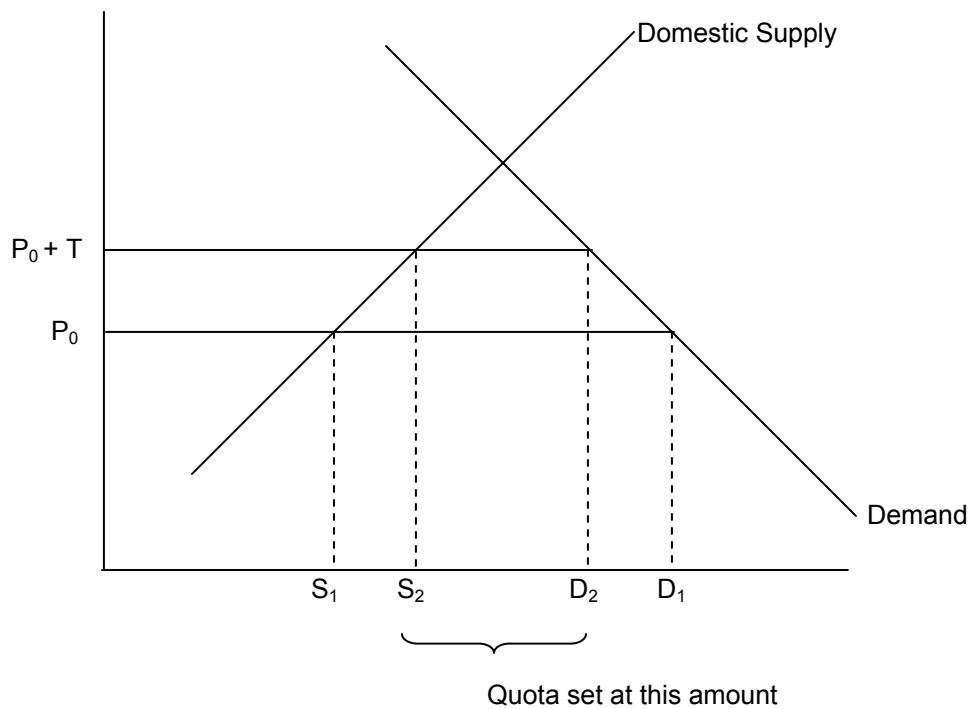
Should we implement optimal tariffs? Recall that the only reason a country gains is through the terms of trade effect. This means that the policy is a pure transfer: a positive TOT effect at home is a negative TOT effect for your trade partner. This is why the policy is known as a "beggar thy neighbor" policy. For that reason, it is also likely to lead to retaliation, resulting in a prisoner's dilemma.

III. Quotas

Successive GATT rounds have achieved large multilateral tariff reductions. By contrast, codes for non-tariff barriers ("NTBs") are vague and hard to police or enforce. Consequently, relative reliance on NTBs has increased.

A quota limits the quantity of imports. Note in principle that it is possible to choose a quota and tariff level to yield the equivalent level of imports. The net welfare impact is also the same. However, there is one major difference: with a quota, the revenue that went to the government when a tariff was imposed now goes to distributors. So from a profit perspective, business should prefer the imposition of a quota to a tariff.

One "catch"--you need to be one of the lucky ones who gets to buy at P_m and sell at $P_m + t$. Typically import licenses are allocated based on last year's sales. However, governments have made changes and are now starting to auction off quota licenses--which means that quotas become equivalent tariffs both in their welfare and distributional effects. Yet even if quota licenses are auctioned off, many producers are likely to continue to favor quotas over tariffs. Why? Quotas hide the real "cost" to the public (MFA), and the tariff-equivalent is often very high.



Equivalence: Set import quantity
Allowed at $D_2 - S_2 \approx$ Tariff of t

Figure 3 MFN tariffs by region, late 1980s and 2003 (simple average)

