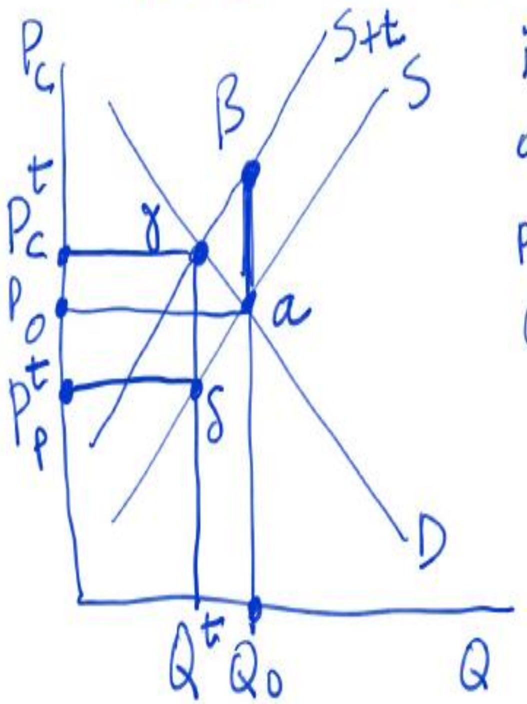
Explanatory Notes

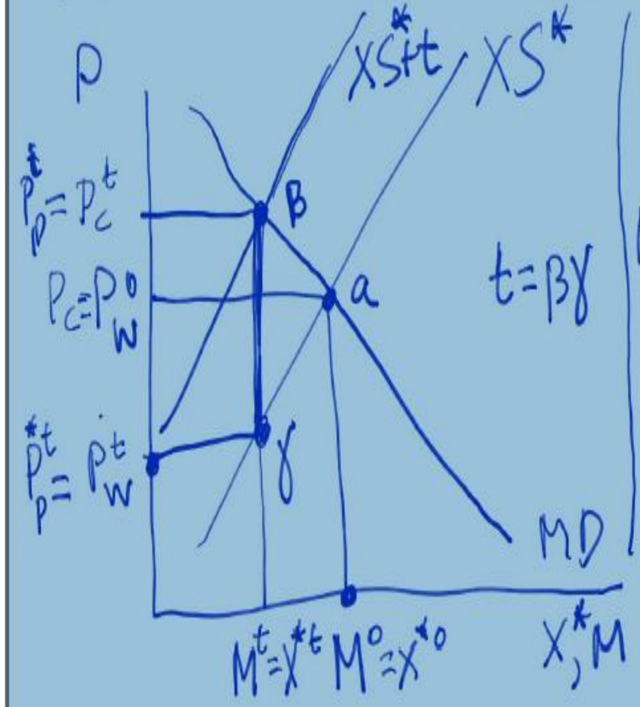
The Effect of Taxes: Initial market equilibrium is shown at point a. The imposition of a tax per unit equal to t, makes producers willing to supply quantity Q_0 only if consumers pay a price $P_c^t = P_0 + t$, since the price received by producers is equal to what consumers pay minus the tax, i.e. $P_p^t = P_c^t - t$, so that if $P_c^t = P_0 + t$, $P_p^t = P_0 + t - t = P_0$. So if $a\beta = t$, producers will be willing to supply output according to supply curve S+t.



The new cross of the supply curve S+t with the D curve determines the new consumer price P_c^t and the new (equilibrium) quantity Q^t (point γ). The price received by the producers is found by subtracting the tax $(= a\beta = \gamma\delta)$ from P_c^t, and so it is P_p^t. Thus, as a result of taxation consumers pay more, and producers receive less. In other words, the tax is shared (not necessarily equally) between consumers and producers.

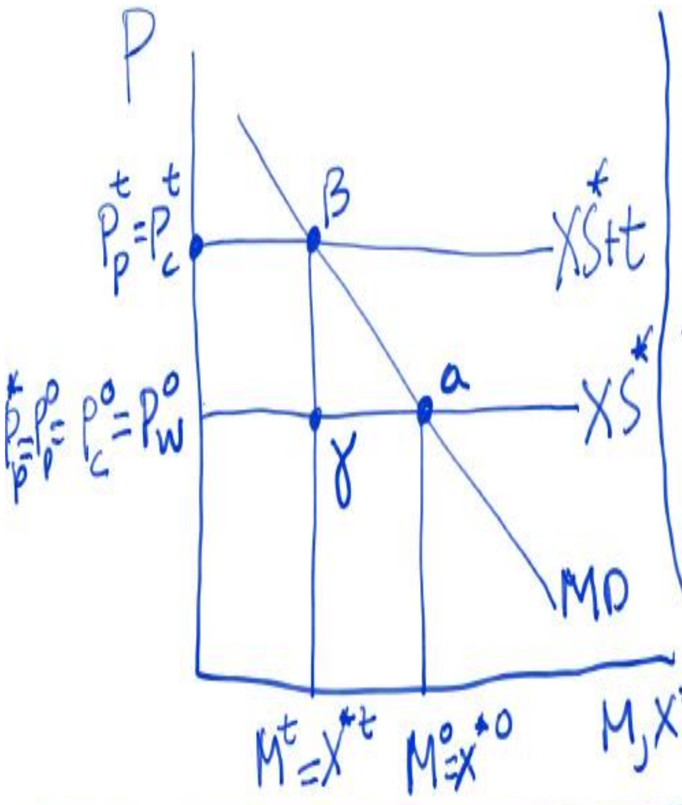
Looking into the determination of world prices (Large Importing Country)

Effects of Tariffs: Tariffs are just like any other tax except that it applies only to foreign-produced goods. Diagram shows the export supply (of foreign producers) and the import demand curves crossing at point a for a large importing country.



World price is P_W^0. If the importing country imposes a tariff t (per unit of imports) this shifts the XS^* curve upwards by the amount of the tariff (as in the tax case analysed earlier) to XS^*+t, resulting in a rise in the price paid by domestic consumers, P_c^t, and a decline in the price received by foreign producers, P_p^{*t}, which is equal to the new world price of the good, P_W^t. Obviously, the difference between P_c^t and P_p^{*t} is the tariff; $P_c^t = P_p^{*t} + t$. Thus, in the case of the large (importing) country, the imposition of a tariff reduces the price which the country pays to import the good. The quantity of imports is also reduced.

Looking into the determination of world prices (Small Importing Country)

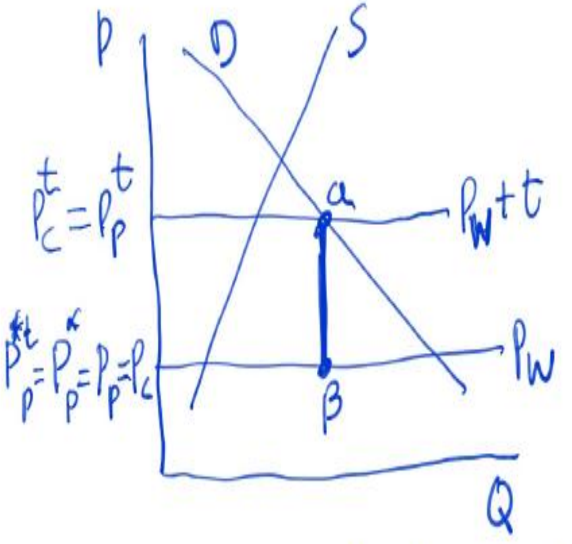


What if the importing country is small? Then, as discussed in the lectures, the foreign export supply curve is horizontal. As before, the imposition of a tariff, t, by the small country shifts the XS^* upwards by the amount of the tariff, to $XS^* + t$. The equilibrium now shifts to point β, and the price for domestic consumers (and producers) rises by the full extent of the tariff imposed, i.e. it rises by $t = \beta\gamma$. The world price remains the same, and so foreign producers receive the same price as before the tariff; $P_W^o = P_W^t = P_p^{*o} = P^{*t}$.

Thus the imposition of the tariff raises the price received by domestic producers by as much as the tariff imposed, but it does not result in a drop in the price received by foreign producers. In other words, unlike the case of the large country, the small country cannot through the tariff induce a decline in the price it pays for its imports.

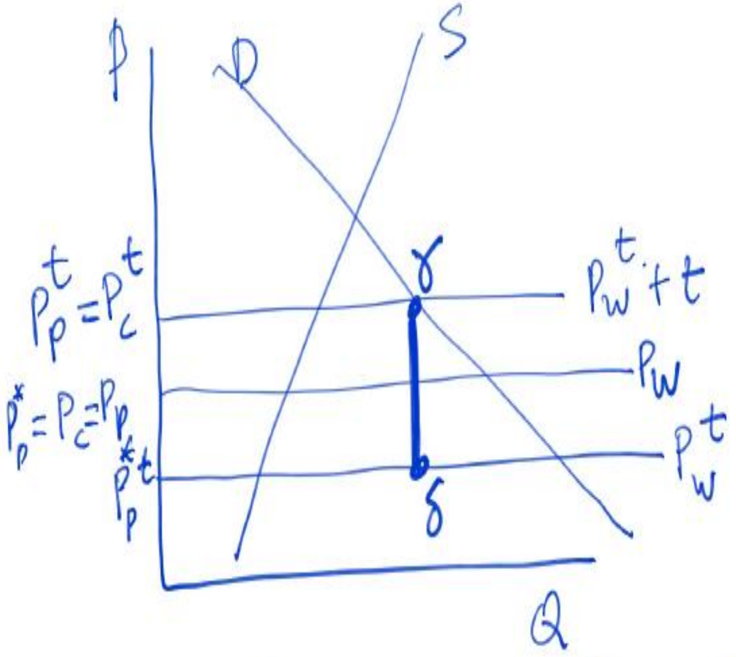
LOOKING AT THE EFFECTS ON THE DOMESTIC (IMPORTING) COUNTRY

SMALL COUNTRY



Under FT (free trade), the wored price, P_W, is also the price received by foreign producers P_p^*, the price received by domestic producers, P_p, and the price paid by domestic consumers, P_c. After the imposition of the tariff (t), if the country is small, P_W stays the same, and so foreign producers receive the same price P_p^{*t} ($=P_W$) as before the tariff. Domestic consumers pay a higher price $P_c^t = P_c + t = P_W + t$, and domestic producers receive also a higher price, $p^t = P_W + t = P_p + t$. The distance αβ is equal to the tariff imposed.

LARGE COUNTRY



In contrast, if the country is large, the imposition of a tariff reduces P_W, to P_W^t. As a result, the domestic consumer price rises to $P_W^t + t$. the country pays a lower price to buy the good than before (it pays now P_W^t), and foreign producers receive a lower price than before. The distance γδ is the tariff imposed.