EFFECTS OF TRADE DISTORTIONS

FIGURE 1: IMPORT TARIFF IN A SMALL ECONOMY

\[ \text{MRS} = \text{MRT} = p = p^*(1+t) > p^* \]  
\[ p_x^*(X_c - X_p) + p_y^*(Y_c - Y_p) = 0 \]
FIGURE 2: EXCESS DEMAND AND IMPORT TARIFFS

Tariff revenue = $pp^* \cdot TS$
FIGURE 3: IMPORT QUOTA IN A SMALL ECONOMY

The diagram illustrates the impact of import quotas on a small economy. The axes are labeled Y for imports and X for domestic output. The curve N_t represents the maximum level of imports without quotas. The quota Q_q is imposed, reducing the quantity imported to Q_x. Points A and D indicate the new equilibrium with the quota. Points B and C represent the consumption levels before and after the quota, with C being the new equilibrium point. The curves U_f and U_q show the utility levels before and after the quota, with U_q being higher, indicating a welfare loss due to the quota.
FIGURE 4: EXCESS DEMAND QUOTAS vs. TARIFFS

- \(X_c - X_p\)  
  0  
  \(E^*\)  
  \(E_x\)  
  \(E_{xt}\)  
  \((X_c - X_p)\)
If a country is large, it can influence its *terms of trade*, i.e., the price of its exports falls as it exports more, and the price of its imports rise as it imports more.

It may be optimal for a large country to exploit its market power in order to alter its terms of trade by imposing tariffs on its exports and imports (see figure 5).

An export tariff has two effects: it reduces supply of export good to world market, raising the world price, but at same time domestic supply increases, lowering the domestic price.

The import tariff also has two effects: it increases supply of import good on world market, lowering the world price, but at same time domestic supply is reduced, raising the domestic price.

However this worsens the terms of trade for other country, i.e., their export price falls and their import price rises, so they will retaliate with their own tariffs, resulting in a “trade war.”
FIGURE 5: OPTIMAL TARIFFS AND MARKET POWER
FIGURE 6: LOSSES FROM DISTORTIONS