Lecture 24

- A partial equilibrium framework for tariffs and quotas
- Equivalence of tariffs and quotas under perfect competition and certainty
- Tariffs and quotas under uncertainty
- VERs and other non-tariff barriers
A Single-Market Effect of a Tariff in a Small Country

- In a partial equilibrium framework, we no longer consider more than one good, but will only concentrate on the market for a single product and take all the conditions in the other markets as given.
- In a single product market, the autarky equilibrium is given by the intersection of domestic demand & supply.
- If the world price is lower than the above autarky price in a small economy, then the country will import this good at the world price. The domestic consumption & production, and the quantities of imports are shown in Figure 1 on p. 268.
- Based on the above analysis, work out the gain/loss to consumers/producers if a country put on a specific tariff (t), i.e. the domestic price = world price $\times (1+t)$ (Figures 1 to 3 on pp. 271-272).
Equivalence of Tariffs and Quotas

- If world price and the demand/supply curves are known and there is perfect competition, then we can replace the above tariff and achieve the same protection to domestic producers by one of the following: (pp. 270 - 273, Figure 4)
  - Impose an import quota (equivalent quota)
    (Draw the after quota domestic supply curve, which should intersect the demand curve at the final equilibrium)
  - Provide production subsidy (equivalent subsidy)
  - Case Study 1 on p. 275

- Apply the above framework to analyze the welfare effects on consumers/producers under the following export policies: (pp. 273 - 277)
  - Export tax and export quota (Figure 6 on p. 276)
  - Export subsidy (Figure 7 on p. 277)
  - Voluntary Export Restraint (VER) on p. 285

- Externalities of tariffs/quotas on related markets:
  - Cross-price effects on p. 273
Tariffs and Quotas under Uncertainty

If we are uncertain about the domestic demand, for an example, if the demand can either be high ($D_h$) or low ($D_l$), each with probability a half, then examine the welfare effects on consumers and producers under the following policies: (let’s consider the case where the autarky price is above the world price under both demands)

- Tariff
- Import quota which would have the same effect as the above tariff at the expected demand, $1/2(D_l + D_h)$

The above analysis gives an example that tariffs are more efficient than any quantitative trade barriers, such as quotas:

- Imports adjust under a tariff, but not a quota
- Domestic production adjusts under a quota, but not a tariff
- Expected welfare loss is bigger under a quota than a tariff
VERs and Other Non-Tariff Barriers

- US trade policies on wheat:
  - Case Study 2 on p. 285
  - Case Study 3 on p. 289

- Nominal vs. effective protection:
  (pp. 256 - 259)
  - Nominal and effective tariff rates
  - Case Study 3 on p. 258
  - Non-Tariff barriers to free trade
  (pp. 259 - 263)