AGRICULTURAL MARKET ACCESS AND GATT

- Agriculture not fully integrated into general tariff reductions during first seven GATT rounds

- Achievement of Uruguay Round was to re-write rules on market access rather than large tariff reductions, and *tariffication* was a major advance

- Tariffication: transformation of non-tariff barriers into tariffs

- "*Dirty*" tariffication resulted in some new bound tariffs that gave some more protection than previously existed

- GATT members agreed on quotas to maintain historic trade levels or increase trade - actual instrument known as *tariff-rate quotas* (TRQs)

- Specific requirements for allocation of quotas not specified, so that allocation and administration is an issue for negotiation in the Doha Round, and in FTAs such as TPP

- How do TRQs work?
TARIFF-RATE QUOTAS

- TRQs not a very common instrument of trade policy (Moschini, 1991)

- TRQs not the same as quotas – no absolute maximum set on total imports over a given period

- More like a variable tariff
  - lower in-quota tariff is applied to imports entering under market access commitment
  - higher over-quota tariff levied on imports in excess of agreed market access

- As Abbott and Paarlberg (1998) note, in-quota tariffs were bound either at or above historic levels, while over-quota tariffs were often bound at prohibitive levels

- Figure 1 (a) represents domestic market - autarky price $p^a$ determines vertical intercept of the importing country's excess demand curve $(ED)$ in (b), which describes world market
ES is relevant excess supply curve if no tariff were applied by importing country, ES¹ is excess supply curve including the in-quota tariff \( t^i \), while ES² is excess supply curve including over-quota tariff \( t^o \).

Effective excess supply curve is made up of ES¹ for import levels below minimum access level \( Q \), and by ES² for import levels in excess of minimum access level.

At \( Q \), there is a discontinuity between ES¹ and ES², the height of which is a function of the difference between the in and over-quota tariffs, given the level of market access.

Equilibrium is where ED intersects effective excess supply curve in the discontinuity.

Imports are the agreed level of minimum access, \( Q \), and the equilibrium domestic price is \( p^d_e \).

In terms of its effect on domestic price, equilibrium is equivalent to a pure quota set at \( Q \).
- Equilibrium in Figure 1 illustrates case where over-quota tariff $t^o$ is much higher than that necessary to make TRQ bind.

- Vertical difference between $k$ and $e$ is commonly termed *water* in the over-quota tariff, which may be due to dirty tariffication.

- Under a pure quota, total quota rents would be given by the rectangle $abce$, whereas with a binding TRQ, part of this is captured by the importing country's government as tariff revenue, $fbcg$, leaving area $afge$ as quota rents.

- Who gains these rents is a function of how TRQ is administered.

  - If rights to import under minimum level of access are auctioned off competitively by importing country, it will fully capture rents, $afge$

  - If methods other than auctioning are used, rents are captured by private agents, either in importing country or exporting countries.
- Unless rights to import are freely tradable after allocation, methods of administration such as license on demand, first-come-first-served (FCFS), and historical allocation allow for extra-marginal suppliers to fill either part or all of the quota $Q$

- Effective excess supply curve can be rotated up from $h'g$ to $h'e$ to approximate higher production costs of extra-marginal suppliers.

- This inefficiency is added to the usual deadweight loss triangle, which is $ejc$ when measured relative to free trade, and $eig$ when compared to a simple ad valorem tariff of $t^i$.

![In addition to equilibrium drawn in Figure 1, three other equilibria are illustrated in Figure 2.](image)

- Case 1, $ED_1$ does not intersect excess supply at all, autarky price $p^a = p_1^d$ is globally lower than border price inclusive of in-quota tariff, as a result of which there are no imports and, hence, zero fill of the TRQ
- In Case 2, $ED_2$ intersects $ES'$, which is below minimum access level $Q$, so that there is partial TRQ fill at $q'$, in-quota tariff is binding, the equilibrium domestic price, inclusive of tariff $t^i$, being $p_2^d$, so that effects of TRQ are equivalent to a tariff

- Case 3 is equilibrium already outlined in Figure 1 where $ED_3$ intersects excess supply in the discontinuity

- Case 4, $ED_4$ intersects $ES''$, such that over-quota tariff is binding, amount imported $q''$ exceeds $Q$, i.e., there are over-quota imports, and equilibrium domestic price is $p_4^d$ inclusive of the over-quota tariff $t^o$

Tariff revenue consists of area $fbcg$ due to application of in-quota tariff on $Q$ units imported under agreed minimum access, and area $eijh$ due to application of the over-quota tariff on $q''-Q$

In addition, compared to Case 3, owners of rights to import under the minimum access now earn larger quota rents of $afge$, which is clearly larger than rents earned in Case 3
- depending on method of quota rights allocation, some of these rents may be paid out to extra-marginal factors of production, adding to the inefficiency of the TRQ

- deadweight loss of Case 4, relative to the free trade equilibrium, is the area $hjk$

- 1,425 TRQs notified to the WTO by 43 countries

- For OECD, average in-quota tariff of 36% and average over-quota tariff of 120%

- Total tariff revenue of US$ 26 billion, and quota rents of US$ 16 billion

- Only 36% of TRQs are filled, the average fill-rate being 61%

- Common methods of administration are licenses on demand, first-come-first-served, and historical importers, accounting for 49% of all TRQs – auctions account for only 5% of all TRQs