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«ЗАПОРІЗЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ»  
МІНІСТЕРСТВА ОСВІТИ І НАУКИ УКРАЇНИ

# Non-tariff barriers: import quotas

## IMPORT QUOTAS:

Quantity restrictions imposed by the government of one nation on imports from other nations.

The primary goal of import quotas is to reduce imports and increase domestic production. Because the quantity of imports is restricted, the price of imports increases, which thus encourages domestic consumers to buy more domestic production.

The goal of import quotas is to encourage domestic consumers to purchase domestic production.

Import quotas are one of three common foreign trade policies designed to discourage imports and/or encourage exports. The other two are tariffs and export subsidies.

In general, a quota is simply a quantity restriction placed on a good, service, or activity. For example, employers often face hiring quotas for different demographic groups and sales representatives often have quotas for sales activities.

## The Why of Import Quotas

The imposition of import quotas on foreign imports, as well as other foreign trade policies, are commonly justified for at least five of reasons.

- **Domestic Employment:** Because foreign imports are produced in other countries by foreign workers, decreasing imports and increasing domestic production also increases domestic employment.
- **Low Foreign Wages:** Restricting imports produced by foreign workers who receive lower wages "levels the competitive playing field" compared to domestic goods produced by higher paid domestic workers.
- **Infant Industry:** If foreign imports compete with a relatively young domestic industry that is not mature enough nor large enough to benefit from

economies of scale, then import quotas protect the "infant industry" while it matures and develops.

- **Unfair Trade:** The foreign imports might be sold at lower prices in the domestic economy because foreign producers engage in unfair trade practices, such as "dumping" imports at prices below production cost. Import quotas seek to prevent foreign producers such activity.
- **National Security:** Import quotas can also discourage imports and encourage domestic production of goods that are deemed critical to the security of the national economy.

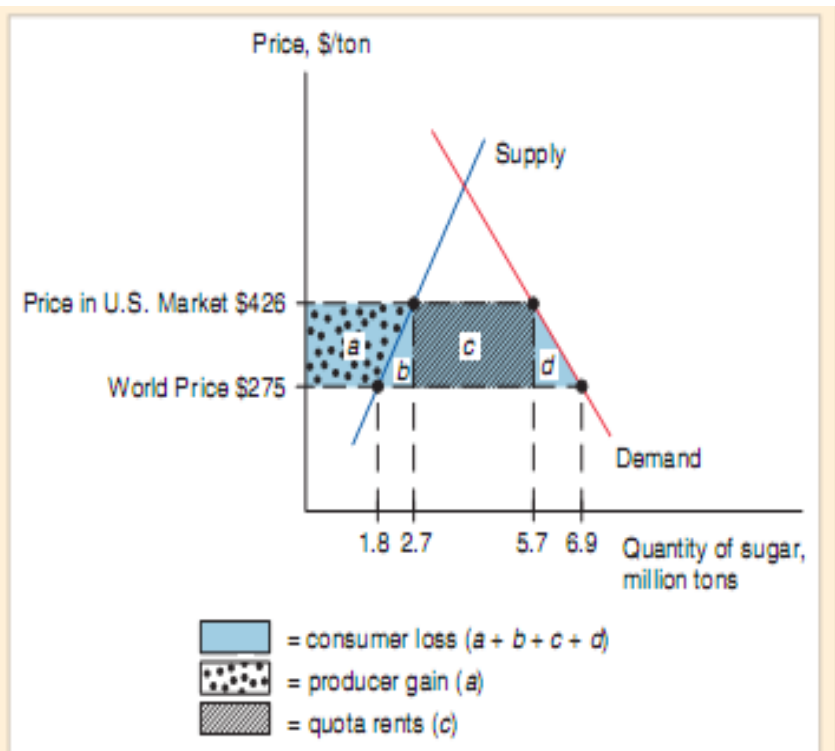
While import quotas and other foreign trade policies can be beneficial to the aggregate domestic economy they tend to be most beneficial, and thus **most commonly promoted by, domestic firms facing competition from foreign imports.** Domestic firms benefit with higher sales, greater profits, and more income to resource

owners. However, by increasing domestic prices and restricting access to imports, foreign trade policies also

**Figure 9-13**

**Effects of the U.S. Import Quota on Sugar**

The quota limits imports of raw sugar to 3 million tons. Without the quota, imports of sugar would be 66 percent higher, or 5.1 million tons. The result of the quota is that the price of sugar is \$426 per ton, versus the \$275 price on world markets. This produces a gain for U.S. sugar producers, but a much larger loss for U.S. consumers. There is no offsetting gain in revenue because the quota rents are collected by foreign governments.



The following are important economic effects of import quotas:

**The Price Effect:**

Import quotas, by limiting physical quantities, tend to raise the prices of commodities to which they apply. While this is generally, true also of a tariff, there is one important difference in the impact of quotas. Mostly, the rise in price caused by a tariff is limited to the amount of the duty imposed, less any decrease in price abroad. Thus,

the range of the price change due to tariff can well be circumscribed.

In contrast, a quota can raise price to any extent, since it places an absolute limit upon the volume of imports and leaves price determination in the domestic market to the interaction of supply and demand force.

The price effect of quotas is, thus, related to:

**(i)** the restrictiveness of the quota, i.e., the degree to which the supply of imported commodity is restricted;

**(ii)** the degree of elasticity of domestic and foreign supply of the commodity;

**(iii)** the nature of the demand, i.e., the intensity or elasticity of demand for the commodity in the importing country. Hence, the price change due to quotas is far less predictable.



## **The Terms of Trade Effect :**

As a result of the fixing of import quotas, the terms of trade of a country change. The new terms of trade may be either more or less favourable to the country importing the quota.

The terms of trade are generally improved by a quota, to the extent that the foreign offer curve is elastic. If the foreign exporters of the commodity are well-organised and the offer curve is less elastic, the terms of trade may move against the country imposing quota. But, if the foreign offer curve is more elastic, the terms of trade may move favourably to the country imposing the quota.

## **The Balance of Payments Effect :**

It has been argued that import quotas can also serve as a useful means for safeguarding the balance of trade. By restricting imports, quotas seek to eliminate deficit and influence the balance

of payments situation favourably. Further, it is usually assumed that administrative reduction of imports, through import quotas, would be a less harmful measure for correcting disequilibrium in the balance of payments than such microeconomic measures like deflation or devaluation.

Moreover, there is a greater expansive income effect of quotas, considered important for underdeveloped countries which usually suffer from balance of payment difficulties resulting from domestic inflation. Due to import quotas, the marginal propensity to import becomes zero after the quota limit is reached, which thus, reduces leakages and increase the value of income multipliers in the country.

### **Other Miscellaneous Effects :**

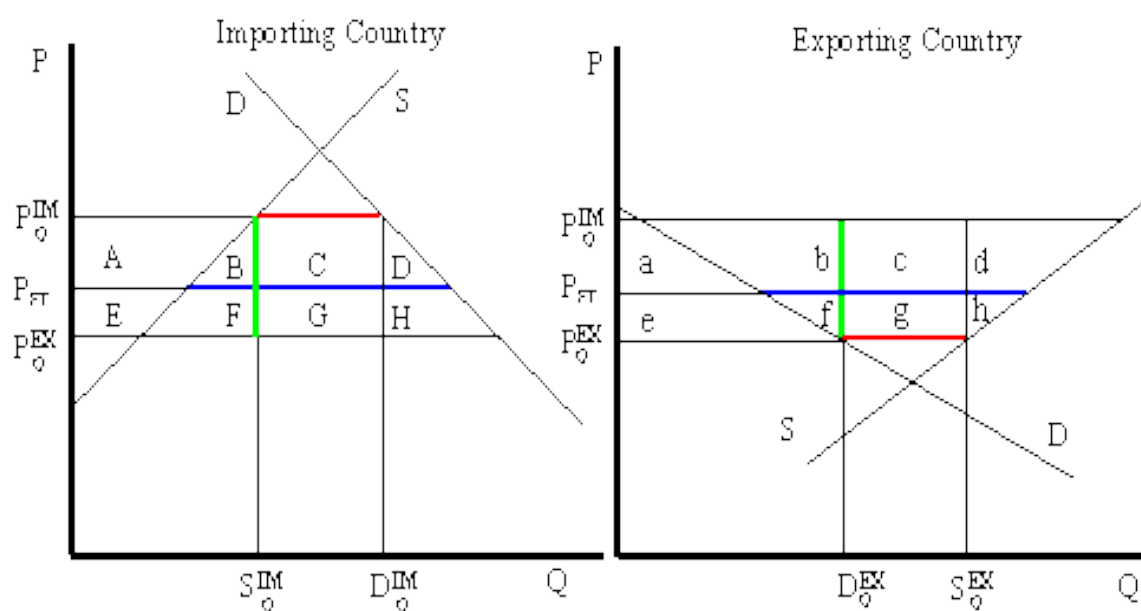
Another important effect of quotas is that they have a protective effect. By limiting imports to a fixed amount, irrespective of supply and demand

conditions or prices in the domestic or foreign markets, import quotas may tend to be absolutely protective. They stimulate home production.

Further, import quotas raise domestic prices, causing reduction in overall consumption. This is the consumption effect of quotas. They tend to discourage consumption of imported goods as also domestic consumption of goods involving foreign raw materials, since the prices of these goods rise due to the artificial scarcity created by import restriction.

Another effect of quota is found to be the redistribution effect. When prices rise, there is redistribution of income from consumers to producers. The domestic producers' receipts increase when prices of goods rise and the consumers' surplus in these goods decreases. Hence, there is a redistribution effect.

Suppose for simplicity that there are only two trading countries, one importing and one exporting country. The supply and demand curves for the two countries are shown in the adjoining diagram.  $P_{FT}$  is the free trade equilibrium price. At that price, the excess demand by the importing country equals excess supply by the exporter.



The free trade quantity of imports and exports is shown as the **blue** line segment on each country's graph. (That's the horizontal distance between the supply and demand curves at the free trade price) Suppose the large importing country implements a

binding quota set equal to the length of the red line segment. (That's the horizontal distance between the supply and demand curves at either the higher import price or the lower export price)

When a new equilibrium is reached the price in the importing country will rise to the level at which import demand is equal to the quota level.

The price in the exporting country will fall until export supply is equal to the quota level.

## **Import Quota Effects on:**

**Importing Country Consumers** - Consumers of the product in the importing country suffer a reduction in well-being as a result of the quota. The increase in the domestic price of both imported goods and the domestic substitutes reduces the amount of consumer surplus in the market.

**Importing Country Producers** - Producers in the importing country experience an increase in well-being as a result of the quota. The increase in the price of their product on the domestic market increases producer surplus in the industry. The price increase also induces an increase in output of existing firms (and perhaps the addition of new firms), an increase in employment, and an increase in profit and/or payments to fixed costs.

**Quota Rents** - Who receives the quota rents depends on how the government administers the quota.

1) If the government auctions the quota rights for their full price, then the government receives the quota rents. In this case **the quota is equivalent to a specific tariff** set equal to the difference in prices (  $T = P_Q^{IM} - P_Q^{EX}$  ) shown as the length of the green line segment in the diagram.

2) If the government gives away the quota rights then the quota rents accrue to whomever receives these rights. Typically they would be given to someone in the importing economy which means that the benefits would remain in the domestic economy.

3) If the government gives the quota rights away to foreigners then they receive the quota rents. This would imply that these rents should be

shifted to the exporting country effects and subtracted from the importing country effects.

**Importing Country** - The aggregate welfare effect for the country is found by summing the gains and losses to consumers, producers and the recipients of the quota rents. Assume that the quota rent recipients are domestic residents. The net effect consists of three components: a positive terms of trade effect (G), a negative production distortion (B), and a negative consumption distortion (D).

Because there are both positive and negative elements, the net national welfare effect can be either positive or negative. The interesting result, however, is that it can be *positive*. This means that **a quota implemented by a "large" importing country *may* raise national welfare.**



Generally speaking,

1) whenever a "large" country implements a small restriction on imports, it will raise national welfare.

2) if the quota is too restrictive, national welfare will fall

and 3) there will be a positive quota level that will maximize national welfare.

However, it is also important to note that everyone's welfare does not rise when there is an increase in national welfare. Instead there is a redistribution of income. Producers of the product and recipients of the quota rents will benefit, but consumers will lose. A national welfare increase, then, means that the sum of the gains exceeds the sum of the losses across all individuals in the economy. Economists generally argue that, in this

case, compensation from winners to losers can potentially alleviate the redistribution problem.

### **Import Quota Effects on:**

**Exporting Country Consumers** - Consumers of the product in the exporting country experience an increase in well-being as a result of the quota. The decrease in their domestic price raises the amount of consumer surplus in the market.

**Exporting Country Producers** - Producers in the exporting country experience a decrease in well-being as a result of the quota. The decrease in the price of their product in their own market decreases producer surplus in the industry. The price decline also induces a decrease in output, a decrease in employment, and a decrease in profit and/or payments to fixed costs.

**Quota Rents** - There are no quota rent effects in the exporting country as a result of the importer's

quota, unless the importing government gives away the quota rights to foreigners. Only in this case would the rents accrue to someone in the exporting country.

**Exporting Country** - The aggregate welfare effect for the country is found by summing the gains and losses to consumers and producers. The net effect consists of three components: a negative terms of trade effect (g), a negative consumption distortion (f), and a negative production distortion (h).

Since all three components are negative, the importer's tariff must result in a reduction in national welfare for the exporting country. However, it is important to note that a redistribution of income occurs, i.e., some groups gain while others lose. In this case the sum of the losses exceeds the sum of the gains.

## **Import Quota Effects on:**

**World Welfare** - The effect on world welfare is found by summing the national welfare effects in the importing and exporting countries. By noting that the terms of trade gain to the importer is equal to the terms of trade loss to the exporter, the world welfare effect reduces to four components: the importer's negative production distortion (B), the importer's negative consumption distortion (D), the exporter's negative consumption distortion (f), and the exporter's negative production distortion (h). Since each of these is negative, **the world welfare effect of the import quota is negative.** The sum of the losses in the world exceeds the sum of the gains. In other words, we can say that **an import quota results in a reduction in world production and consumption efficiency.**