

## **[Lecture 9] Nontariff Barriers and Arguments for Protectionism**

While tariffs remain the most universal of trade barriers, they are not the only form of commercial policy available to governments. In fact, nontariff barriers (NTBs) in a wide variety of forms are used as instruments of commercial policy by most governments. The amount of trade that is disrupted because of NTBs is large; because of this, NTBs have become a major focus of concern in international talks to reduce trade barriers.

We will explore NTBs such as quotas, subsidies, health and safety standards, and government procurement policies, all of which are aimed at affecting the level of international trade.

After analyzing them, we will move to an analysis of the motivation for imposing barriers to trade. We focus particularly on the question of what, if any, are the legitimate arguments for protection. That is, governments use a variety of justifications to defend their imposition of trade barriers. These include the preservation of jobs, industry restructuring, national defense, and government revenue. One of the interesting results of this topic is that most of the commonly heard arguments for protection have little or no legitimacy. That is, protection fails to lead to the outcome it is supposed to achieve. On the other hand, legitimate arguments for protection exist, but in cases where these arguments apply, protection is seldom the best way to achieve the stated goal.

### **1. Quotas**

*Quotas* are government-imposed limits on the quantity or value of goods traded between countries.

Ex) no more than 1.25 million tons of sugar per year, no more than \$25 million of cotton blouses  
In practice, quantitative quotas, often based on market shares, are more common than value quotas.

*Embargoes* are quotas that entirely eliminate trade in a certain product. Embargoes are sometimes established as a form of economic sanction against the policies or practices of another country.

Ex) U.S. embargo on exports to Cuba since 1960 and an embargo on the import of most products from Cuba since 1962. And embargoes on the imports from Iran, Iraq, Libya, and North Korea.  
Some countries will impose embargoes for national defense reasons.

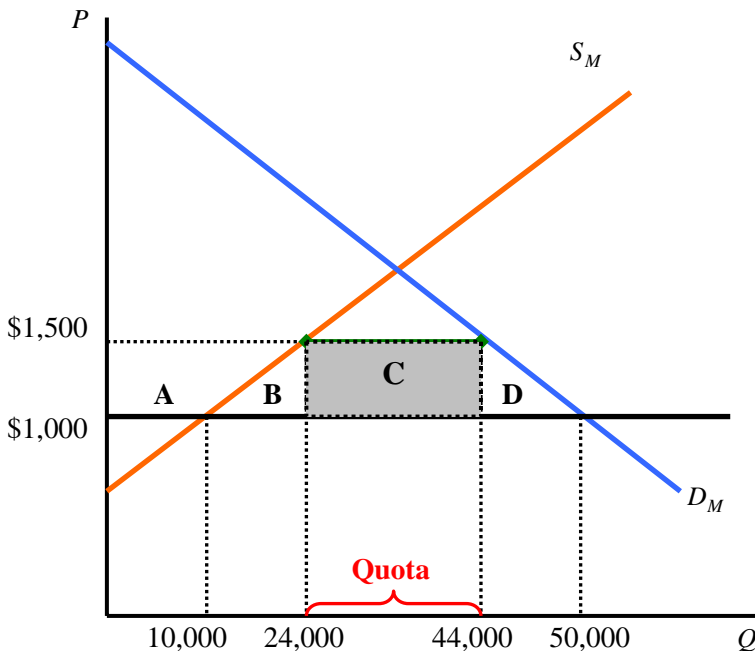
For a variety of reasons that we will soon explore, quotas are viewed as being more restrictive than tariffs. Perhaps as a result of this attitude, quotas on most manufactured products have long been prohibited by the international trade law administered by the WTO. And, as part of the 1994 Uruguay Round agreements, signatory countries have begun to replace existing quotas on agricultural products, textiles, and apparel with tariffs or tariff rate quotas (TRQs). TRQs are quota policies that allow a certain quantity of a good into a country at low (often zero) tariff rates, but then apply (often substantially) higher tariffs to quantities that exceed the quota. Despite the movement to replace them with these alternative forms of protection, quotas still exist. Phaseout of world wide textile and apparel quotas is not scheduled to be completed until 2005. international trade law allows countries to impose quotas to provide temporary protection to aid locally distressed industries or when they have balance-of-payments problems.

As of late 2001, U.S. still had in place quotas on more than half of its clothing imports and 32 percent of textile imports. It also had TRQs on milk, cream, cheese, butter, margarine, peanuts, sugar, various products containing sugar (including chocolate), cotton, and cotton waste. In addition, it has a law known as the Jones Act of 1920 that requires all shipping between U.S. ports to be carried on American-built, American-owned ships. Also, Canada has TRQs on dairy products, eggs, and poultry; Indonesia has banned the export of logs and rattan; Thailand prohibits imports of cigarettes; and Finland has a ban on the import of softwood products.

In addition to formal restrictions, countries have found ways of imposing quotas indirectly by obtaining agreements from exporting countries to “voluntarily” limit exports. These latter agreements are also gradually being phased out under the auspices of the WTO.

The internal and external impact of the quota depends in part on how the policy is administered. Sometimes countries announce an unallocated global quota. In these circumstances, customs officials are instructed to maintain a count of the imported product as it arrives at the docks from different foreign suppliers. Once the quota has been reached, no more of the product is allowed into the country. Thus, those foreign suppliers who get their product to the domestic market first are able to sell their products. Latecomers are turned away.\*

Quota licenses provide the bearer with the right to import into the country a specific amount of the product during a specific period of time. Depending upon the quota scheme in force, licenses may be sold or given away. The recipients may be domestic or foreign. As we shall see, the welfare impact of this quota system depends in part on who gets the licenses and how much was paid to obtain them.



Market for Motorcycles (M)

The world price is assumed to be ( ). Under free trade, residents of this country would consume ( ) motorcycles; ( ) of these would be produced locally, and ( ) would be imported.

Suppose that the government imposes a quota that limits imports to 20,000 units. Because of the reduction in imports, motorcycle prices will start to rise, and this will encourage local producers to expand their output levels. These market forces will bring about a new equilibrium. Where is the equilibrium?

Consider the diagram. Price must continue to rise until desired imports fall to the quota level of 20,000 units (until the difference between domestic demand and supply equals 20,000). In the above diagram, this occurs at a price of ( ). At this price, 44,000 units will be purchased; 20,000 of these will be imported, and the remaining 24,000 will be produced locally. Thus, just as with a tariff, quotas serve to limit trade and raise prices. In fact, as drawn in the diagram, a quota of 20,000 units appears to be qualitatively identical with a tariff of ( ). How apt is this comparison? It is to this question that we want to turn.

**2. Welfare Effects of Quotas**

What are the welfare effects of a quota?

Imposition of quota raises the domestic price and therefore lowers consumer surplus. Consumers lose the amount \$ ( + + + ).

\* But, unallocated global quotas are relatively uncommon for a variety of reasons. Rather, it has become common for quotas to be allocated on the basis of licenses (quota licenses).

\$ A: higher profit (producer surplus) that accrue to domestic firms. Import barriers have lowered the amount of foreign competition faced by domestic firms. So, domestic firms are able to raise their prices above the free-trade price without fear of losing their customers to foreign suppliers.

\$ B + D: deadweight costs of quota and correspond exactly to the deadweight costs of an equivalent tariff (a tariff of \$500).

\$ C?: the value of *quota rents*. Profits that accrue to whoever has the right to bring into the country and sell these goods in the protected market.

$\$1,500 - \$1,000 =$  per unit profit earned by whoever has the right to sell the imported product  
20,000 is the amount of imports allowed into the country.

A new issue is brought to us regarding *who gets the licenses* and *how much is spent in obtaining them*.

- Suppose the licenses are auctioned by the government. If there is competitive bidding for all licenses, we would expect that the government should be able to collect almost all of area C. In this case, area C can be thought of as government revenue. Treating \$C as an increase in government revenue leads to a straightforward calculation of the economic costs of the quota. In particular, the quota causes a redistribution of income from consumers to domestic producers (\$A) and the government (\$C). The remaining loss of consumer surplus represents the net deadweight cost to the economy, \$(B+D).
- Using one-dollar one vote metric, the welfare cost to the economy is identical with the cost imposed by an import tariff that raises the price by the same amount.
- While tariffs and quotas appear to be identical in this instance, it is necessary to study other scenarios. Surprisingly, it is seldom the case that governments auction import licenses. One exception is Russia; it auctions licenses for goods such as sugar.

How big is area C? The answer varies according to the country that imposes the quota, the products protected, and the degree of protection.

When governments give away quota rights, the welfare effects of quota protection depend crucially on who receives the licenses.

- For instance, when licenses are given to domestic producers or importers, the effects are quantitatively identical with those of auctions.
- The only difference between this situation and auctioning is that in this instance area A becomes part of domestic producer surplus. That is, profits to domestic firms rise by \$(A+C), while government revenue remains unchanged (can you believe it?).
- A case where quota rents were given to local producers occurred in the 1960s in U.S. The government imposed a quota on imported oil. The purpose was to drive oil prices up inside the country to increase the competitiveness of U.S. oil fields. Quota rights were given to U.S. oil industry. The quotas were restrictive that the domestic industry was able to buy oil in the world market at a price of \$1.85 per barrel from Persian Gulf and sell it inside for \$3.10, a 67% markup. In 1966, the quota rents accruing to oil importers amounted to \$620 million (about \$3.5 billion in 2002 dollars).

Let's consider the case in which the government gives the quota licenses to foreigners. A classic example of this type of policy is a *voluntary export restraint (VER)* agreement negotiated with foreign suppliers. Under such an agreement, a foreign government restricts the exports of its industries to the importing countries. In return, these foreign industries are able to raise their prices, thus earning the quota rents (\$C) on top of their normal profits. What are the welfare costs of a VER? \$(B+D+C)?

### 3. Other Nontariff Barriers

#### A) Export Subsidies

A direct or indirect payment from a country's government to one or more of its export industries, which enables exporters to charge a price that is lower than would otherwise be charged. With lower prices, exporters are then able to gain a larger share of the world market. As was the case with quotas, export subsidies on manufactured goods are outlawed by the WTO. Foreign export subsidies are also against U.S. law. The WTO permits subsidies on primary (non-manufactured) products, and U.S. is one of many countries that subsidize the export of at least some of its agricultural products.

What happens to the internal prices of exportables with export subsidies? Specifically, consumers become liable for the additional taxes that are required to finance the export subsidy.

Export subsidies take on many forms in the real world:

- Tax rebates
- Subsidized loans to foreign purchasers
- Insurance guarantees
- Government funding for R&D
- Guarantees against losses
- Direct grants or subsidized loans

Both international law and the laws of countries like U.S. proscribe export subsidies. Under both sets of laws, the legal means for dealing with export subsidies is to impose a tariff on the subsidized exports, known as a *countervailing duty*, to offset the subsidy and raise the price of the product to the presubsidy price.

The fact that tariff protection is the chosen means to offset foreign subsidies provides domestic industry with an incentive to allege the existence of foreign subsidization. Such allegations are also often aimed at practices that may have only very indirect links to exports. Hence, governments are forced to decide whether various foreign government policies constitute export subsidies. Not surprisingly, there is often considerable ambiguity in relation to the issue. For example, do defense contracts from U.S. government to domestic aircraft manufacturers, such as Boeing, constitute export subsidies? Some European countries charge that these expenditures are unfair subsidies because knowledge gained from research on aircraft design for the military can be used to design new commercial aircraft.

#### B) Government Procurement Policies

When governments purchase products, they are often constrained by legislative mandate to purchase from domestic producers. In U.S., there are “*Buy American*” provisions at all levels of government.<sup>†</sup>

The obvious implication of the “Buy American” act is that domestic firms can raise prices charged to the government as if there were a tariff of as much as 50 percent on competing imported items. The effect of this type of policy is to raise the cost to government of providing public services, transferring income in the process from taxpayers to domestic producers.

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<sup>†</sup> The federal “Buy American” act was first passed in 1933. It requires that U.S. government agencies (except the Department of Defense) purchase domestically produced goods and services unless the domestic price is more than 12 percent greater than the foreign price. By law, the Defense Department uses a 50 percent rule except on certain military purchases from NATO countries.

In 1994, as part of the UR agreement, the government procurement code was expanded to include government purchases of both goods and services, to cover central, subcentral governments, and government-owned enterprises, and to follow improvements in procurement procedures. Signatories to this agreement, known as the WTO Agreement on Government Procurement, include U.S., Canada, the EU, Japan, Norway, Switzerland, and Korea. Each of these countries negotiated the exclusion of certain procurement from obligations imposed by the code. U.S. agencies excluded from agreement include the Department of Transportation, the Department of Energy, the Tennessee Valley Authority, the Corps of Engineers of the Department of Defense, the Bureau of Reclamation, and the Data and Telecommunications Services of the General Services Administration.

### **C) Health and Safety Standards**

In 1989 EU imposed an embargo on beef imports containing growth hormones. This ban has had a considerable effect on U.S. beef exports, since most cattle raised in U.S. are treated with these (USDA-approved) hormones. The U.S. government has taken the position that the ban represents an illegal trade measure, since there is no conclusive proof that the growth hormone has had any harmful effects on humans. In 1996, U.S. initiated formal WTO dispute settlement proceedings with the EU. In 1997, an independent WTO panel ruled in favor of the U.S. position that the EU ban violated obligations made by the EU, since the ban was not based on scientific risk assessment. In 1998, an appellate panel in the WTO reaffirmed the earlier decision. In 1999, the WTO authorized U.S. to impose retaliatory, prohibitive tariffs on \$117 million of European agricultural exports. As of early 2003, those tariffs were still in place.

In 1996, EU introduced new import controls on animals and animal products that threatened to disrupt U.S. exports to the EU. At the heart of this ban was a desire to standardize veterinary inspection practices across the countries of the EU. In turn, these standardized procedures differed from U.S. practice. The two sides to the dispute entered into negotiations in early 1997 and shortly after reached an agreement on a framework for recognizing each other's veterinary inspection systems as equivalent.

The imposition of health and safety standards by national governments is legitimate form of government behavior. Such standards aim to guarantee that lives are not jeopardized unduly by exposure to the potentially adverse effects associated with certain products. However, as the preceding examples indicate, these codes provide a strong incentive to local producers for insisting that foreign products be made to conform to local standards or that they be restricted from the local markets even in situations where the health or safety of the local populace is not threatened. In either event, the result is for prices to rise and for local producers to claim a larger share of the market.

### **D) Failure to Protect Intellectual Property Rights**

Innovative or creative ideas of inventors, artists, or authors.

Patent, copyright, and trademark laws exist to provide incentives to create intellectual properties by ensuring that the owners of the intellectual properties maintain exclusive control over these ideas, at least for a certain period of time.

Different countries provide different levels of intellectual property protection, and this can have significant effects on international trade. For example, in the mid 1990s the U.S. computer software industry estimated that 49 out of 50 software programs used in China were pirated and calculated its lost export sales to China to stand at \$500 million annually. U.S. government measures aimed at Chinese copyright piracy in 1996 almost led to a trade war between the two countries. In 2001, China amended its copyright, trademark, and patent laws to comply with WTO standards on intellectual property protection. Nonetheless, the U.S. pharmaceutical companies argue that lax copyright

enforcement of their drug patents by Argentina has allowed Argentine firms to make cheap generic substitutes for both home and export markets. The U.S. government maintains that U.S. firms have lost \$600 million annually in pharmaceutical exports because of Argentine policy.

Intellectual property protection of pharmaceutical products has become an increasingly controversial issue throughout the world. Developing countries complain that stringent patent protection on various medicines makes these drugs unaffordable, leading to widespread public health problems and a slowdown in the rate of economic development.<sup>‡</sup> Clearly, there are merits to both sides of the arguments, and long-term solutions to this problem will not be reached without government actions.

Another rising problem in international trade is trade in counterfeit goods. Such goods are sold in international markets with fraudulent (or counterfeit) trademarks. Firms with valid trademarks lose more than sales due to counterfeit goods. Fraudulent copies are often substandard and perform poorly. Legitimate manufacturers may be blamed for this performance and thereby lose their reputation and further sales of these and other products.

Trade Related Intellectual Property Rights (TRIPs) agreement as part of the Uruguay Round. It provides for minimal standards of protection in all member countries of the WTO. In some areas, such as copyrights, the agreement applies the principles of long-standing international agreements. In other areas, such as patent protection, the agreement provides for higher standards than were previously required. Despite this agreement, the issue of intellectual property rights protection remains in flux. As part of the current round of trade talks, known as the Doha Round, amending the TRIPs agreement to deal with public health issues is under consideration.

#### 4. Arguments for Protection

Why do governments impose protection?

Are there circumstances where protection is a valid means to a particular policy goal?

##### A) Invalid Arguments

- **Patriotism:** The appeal to patriotism is somewhat misplaced. This is especially true if domestic consumers switch to the consumption of locally produced goods because protection has raised the price of foreign goods. After all, as we have seen, in many circumstances when a country imposes protection, its national well-being falls. True patriots, it would seem, should oppose policies that lower national welfare.
- **Employment:** The naïve basis for this claim is that because output expands in the protected sector, employment must rise throughout the country. In general, this argument is false because it ignores effects in other markets (general equilibrium effects).
- **Fallacy of Composition:** Sometimes protection is justified on the grounds that because it is good for a protected industry, it must be good for all industries.
- **Fair Play for Domestic Industry:** The allegation is often raised that foreign producers do not play fair. But the commerce is not a game. It is business and it can be ruthless. Everyone is to outperform its rivals.
- **Preservation of the Home Market:** Does import mean that the money flows out of the country? No. goods must pay for goods. The money that flows out comes back to the country to pay for domestic exports, and we must work in order to produce these goods.

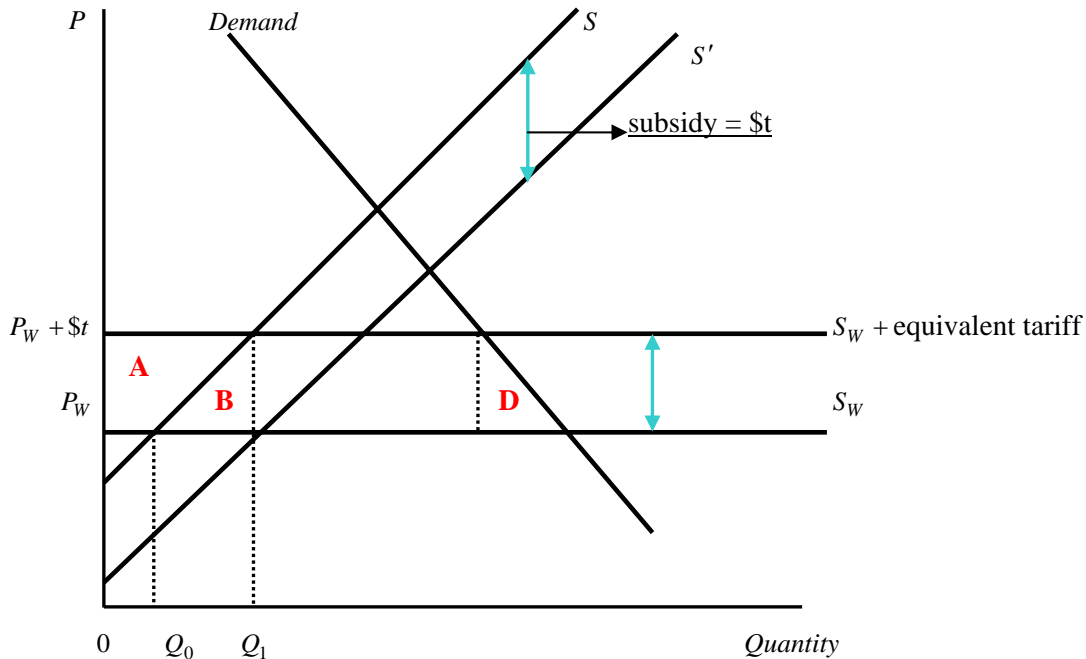
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<sup>‡</sup> Pharmaceutical companies argue that patents play an important role in stimulating companies to engage in research and development of essential medicines. Moreover, they point out that a number of drugs, including some used to treat HIV/AIDS, are not protected by patents but are still expensive due to their high production costs.

## B) Valid Arguments

- **Government Revenue**
- **Income Redistribution**
- **Noneconomic Goals:** for example, national defense and limiting the importation of defense-related products. A better policy than protection to guarantee that a certain level of domestic production of defense-related products is achieved is through a direct subsidy to the industry coupled with free trade (see the discussion below).

We want to show the market for a product whose continued domestic production is considered vital to the national defense.



Output under free trade will be ( ) units. Suppose policy makers have decided that, for defense reasons, domestic output should increase to ( ) units. Clearly, one way to achieve that goal would be to impose a tariff of \$ $t$ .

Consider instead a per unit production subsidy of \$ $t$  paid by the government to domestic manufacturers coupled with free trade. The effect of the subsidy would be to shift the domestic supply ( ) by the amount of the subsidy – reflecting the lower costs the industry now faces ( $S \Rightarrow S'$ ). Because of the subsidy, domestic producers would expand their output to the point where their subsidy-augmented supply curve crosses the world price line ( $Q_1$  units). What is the economic cost of the subsidy program? First, it is the subsidy itself. From the diagram, we can easily see that producers receive \$ $A + \$B$ . That is, they receive \$ $t$  times every unit produced domestically ( $Q_1$  units).

Where does the government get the money needed to finance the subsidy?

Now, what do producers gain under the subsidy? It is that domestic profits rise by \$ $A$ . The remainder of the money they receive goes to pay for the additional cost of resources required to expand production from  $Q_0$  to  $Q_1$  units. Thus, just as with tariffs, we can think of \$ $B$  as a deadweight cost of government policy, in this case the cost of the subsidy program. Putting it all together, consumers lose \$ $A + \$B$  in the form of higher taxes, while producers gain \$ $A$  in profits. The cost to society is area  $B$ . This compares favorably with a tariff of \$ $t$  that would produce deadweight costs \$ $(B + D)$ . That is, the difference between tariff and a subsidy is that with the former there is both a production deadweight cost and a consumption deadweight cost. With the subsidy and free trade, goods sell at world prices,

so that there is no consumption deadweight cost. Finally, it is important to note that subsidies are superior to protection in another way: they are more visible. If governments are making payments on a regular basis to domestic industry, it becomes a part of the public record. Unlike with trade barriers, it becomes easy to understand the costs to society of supporting any given industry. Thus, one would expect that industries with only an indirect link to national defense would have a harder time winning subsidy payments than they might gaining import protection.

- **Infant Industry Protection:** Industries require temporary protection from foreign competition in order to grow and prosper. Because the initial costs of production tend to be very high. But, it has some problems; first, it presupposes that protected firms will work to lower costs, even though they are destined to face increased foreign competition if they are successful. Second, even if the industry responds by improving its productivity, the argument seems to imply that governments are better able to pick winners than the private market is.
- **Domestic Distortions**
- **Protecting the Environment**
- **Strategic Trade Policies**