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# THE MULTILATERAL TRADE NEGOTIATIONS

Chancellor, Distinguished Members of the Senate, Ladies and Gentlemen, Dear Students,

It is a great honour and privilege to be with you today. Wrocław is my native city and coming here means being back home.

This lecture deals with the multilateral trade negotiations (MTNs) such as the Doha Development Round, presently conducted under the auspices of the World Trade Organization (WTO). It does not focus on the current developments discussed in the press articles, but rather deals with the essential mechanics of such negotiations, their economic rationales and their changing role in the process of economic globalization.

## 1. POLAND'S INTEREST IN THE MTNS

The multilateral trade negotiations of the WTO are important for most people around the world. The MTNs influence prices that consumers pay for their goods and services and affect the cost of inputs used by national industry and individual business firms. Unfortunately for the WTO, very few consumers realize how much they owe to the WTO. The consumers are rarely aware of the fact that when they pay less for their bread and butter, shoes, clothing, cars and other products, it is frequently due to the WTO.

The WTO has also a role to play in the context of Poland's prospective EU membership and the country's trade relations with the non-EU countries:

(i) Any trade liberalization introduced by the EU during the WTO negotiations is likely to reduce the level of preference granted to Polish suppliers in the European market and thus detrimentally affect the market share of Polish exporters.

(ii) The terms of membership in the EU for Poland and the other Central European countries will be examined in the WTO forum and a compensation

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for trade diversion effect on the third countries, is likely to be negotiated in the WTO.

(iii) Poland's trade with non-EU countries continues to be regulated by WTO rules which will gain in importance with the expected accession of Russia, Ukraine and other former Soviet republics to the WTO (Hoekman, Kostecki, 2002).

## 2. THE NATURE OF THE WTO

The WTO administers the agreements negotiated by its member countries, in particular the General Agreement on Tariffs and Trade (GATT), the General Agreement on Trade in Services (GATS), and the Agreement on Trade Related Intellectual Property Rights (TRIPs). The basic philosophy of the WTO is that non-discrimination, open markets, and global competition are conducive to the social welfare of all trading nations and that freer trade is an effective peacekeeping operation, because those who gain from it don't wish to eliminate their clients.

Starting as an obscure international trade arrangement, over the past decade the General Agreement on Tariffs and Trade (GATT) has become a prominent organization. The Uruguay Round of trade negotiations, held under its auspices during 1986–93 period, played a significant role in raising GATT's public profile. It led to the creation of the World Trade Organization (WTO), and expanded the coverage of the multilateral trading system above the traditional area of trade in goods, to include also trade in services, intellectual property and trade-related investment measures.

Since the late forties, the multilateral trade order increased and developed into a system of great complexity. Initially limited to tariff deals, over time – as levels of custom duties fell – GATT increasingly came to deal with non-tariff measures (NTMs) and domestic policies with an impact on trade. Its success was reflected in the steady growth of world trade and the expansion of the number of member countries. Total world trade in goods, services, and intellectual property was in the range of US$ 7 trillion (thousand billion) in 2002, of which services and intellectual property accounted for some US$ 1.5 trillion. At the same time, the WTO counted 144 member states and two dozen other countries were in the process of accession (www.wto.org). Prophecies made during the 1990s that 'GATT is dead' sit oddly with these signs of success.

The public criticism of the WTO - originating in various quarters - is partly a reflection of the great speed at which economic globalization is taking place. Over the past two decades the volume of international trade has more than doubled and the cross-border flow of foreign direct investment (FDI) has grown 10 times faster than world production (WTO, 1999). These trends coincided with deregulation, market-oriented reforms and liberalization of trade. Only one employee in 10 is currently working in places that are largely separated from the world market, compared to two-thirds in the late eighties (Dicken, 1998). At the same time, multinational firms have assumed a greater role in the international economy. In the late nineties, about 75 million people were employed by foreign affiliates of multinational firms, of which about one fifth were located in developing countries (Hirst and Thompson, 1999). These developments, although economically beneficial, have given rise to fears of a loss of national sovereignty or traditional culture and concerns about the ability of national economies to resist exogenous shocks. Several ministerial meetings of the WTO were accompanied by violence and demonstrations by groups spanning the non-governmental organizations (NGO), labour unions and anti-globalization lobbies seeking to limit the reach of multilateral trade disciplines. The public relations challenge confronted by the WTO was well illustrated in a 1999 TV scene where a small boy is scared to go to sleep because 'there is a WTO under my bed'.

## 3. THE MULTILATERAL TRADE NEGOTIATIONS (MTNS)

Negotiations are the driving force of the WTO trading system. They are used to agree on rules and procedures, to periodically reduce barriers to trade (during the so-called Rounds), to define the ticket of admission for the newcomers, or to resolve trade disputes. The WTO is a permanent negotiating forum in which trade issues may be discussed and agreed upon against the background of the WTO provisions. Negotiations take place in permanent and *ad hoc* WTO bodies, and are often informal in nature. Although the WTO is a multilateral organization, it relies heavily on bilateral interactions. Whenever trade deals involving a subset of countries emerge, they are most frequently multilateralized through the MFN rule and benefit all the WTO member states.

Box 1

Rounds of the Multilateral Trade Negotiations

Until 2003, eight series of multilateral trade negotiations (Rounds) had been finalized and the ninth Doha Development Round was underway. The first eight rounds included the MTN in Geneva (1947), Annecy (1949), Torquay (1951), another negotiation in Geneva in 1956, the Dillon Round (1960–1), the Kennedy Round (1964–7), the Tokyo Round (1973–9) and more recently the Uruguay Round (1986–94).

The first five rounds dealt almost exclusively with tariff liberalization. Starting with the Kennedy Round, attention began to shift towards non-tariff measures (NTMs) and to the problem of trade in agricultural products. Although the Kennedy Round dealt only with non-tariff barriers that were already covered by GATT, the Tokyo Round addressed policies that were not subject to GATT disciplines such as technical standards and government procurement. This trend was continued in the Uruguay Round, which broadened the scope of the multilateral trading system to include trade in services, intellectual property, and rules of origin – all matters on which the GATT had little to say. It was widely felt that the Uruguay Round deal has fallen short in bringing enough benefits to Third World economies. The current Doha Development Round is expected to continue the process of trade liberalization paying particular attention to the trade interests of the least developed and developing nations (Hoekman, Kostecki 2001).

## 4. THE PARADOX OF RECIPROCITY

A trade negotiation is a market in the sense that trading nations come together to exchange market access and other commitments on a reciprocal basis. Is it rational to request reciprocity for trade liberalization commitments that benefit the country as a result of a reduction in its level of protection? In such circumstances, isn't asking for reciprocity equivalent to requesting compensation for stopping to shoot one's foot?

A textbook list of arguments invoked to justify government restrictions on trade typically comprises (i) the infant industry argument, (ii) the tax revenue argument and (iii) the terms of trade argument. Most of the above arguments tend to be weak - if not invalid - and provide little support in favour of trade intervention.

First, even if it is assumed that governments may correctly identify the market failure, a trade barrier will rarely be an appropriate instrument to offset the source of distortion affecting an infant industry. Usually a subsidy rather than a trade control measure will be a less inefficient instrument to protect infant sectors. Second, a similar line of argument may apply to the tax revenue consideration since foreign trade taxation results in a social loss which may be avoided when introducing more efficient forms of taxation.

Third, the terms of trade argument, based on a large country assumption, is also of a limited validity. Indeed, it is not often that a particular trading nation has a price-making power in a global market. Moreover, for the world as a whole even the large-country imposition of trade restrictions by one or more trading nations can only reduce welfare.

Finally, there also is the mercantilist bias among the decisions makers, i.e. a belief that exports are good and imports are bad. That prejudice is based on the observation that imports require the transfer of foreign exchange abroad, whereas exports bring in foreign currency. The objective of mercantilist policy is a trade surplus – ensuring that exports exceed imports. Mercantilism is driven by nationalism, the perception being that trade surpluses and political power are closely linked. However, the mercantilist approach makes no economic sense. Starting with economic thinkers such as David Hume, Adam Smith, John Stuart Mill and David Ricardo, it has been pointed out that imports are desirable and that exports are simply a way to pay for imports. The theory of comparative advantage and free trade was developed largely in response to mercantilist pressures and policies.

Economic theory suggests that, as a general rule (from which there are certain exceptions), countries interested in maximizing their wealth have little reasons for imposing trade barriers. This is certainly the case for small countries that are price-takers on world markets. This may also be the case of large trading nations that find themselves in a Prisoner's Dilemma (see below). Contemporary economic research confirms the claim that - as a matter of principle - trade liberalization helps countries more efficiently use their production capacities and has two essential effects. It brings about a reallocation of resources towards those activities in which the country has a comparative advantage and it expands consumption opportunities, as more efficient production generates greater income and increased opportunities to buy goods and services from other trading nations.

If the above line of argument is correct, we are faced with the paradox of reciprocity: why should a protectionist nation require reciprocity (i.e. exchange of concessions in trade negotiations), if the decision to liberalize trade increases the nation's welfare? The apparent paradox may be resolved by considering the political economy of trade policy-making discussed below.

## 5. THE POLITICAL ECONOMY OF RECIPROCITY

Governments are not necessarily the welfare-maximizing decision-makers found in economics textbooks. Due to protectionist policies, some groups of society gain at the expense of other segments of society. Governments develop trade policies subject to the pressures of a variety of interest groups. In other terms, trade policy may be used to redistribute income and being bad economics, it can still constitute good politics from the government perspective. Protectionist policy may be thus perceived as a mechanism through which interest groups that support political parties or candidates can be compensated in relatively non-transparent ways. Groups seeking protection will offer political support to the government (or to challengers in elections) as *a quid pro quo* (Hoekman, Kostecki, 2002).

In all trading nations there are pressure groups that have different preferences with respect to trade policy. The structure of protection at any point in time may be regarded as the result of the interactions between the demand expressed by the pressure groups and the supply offered by governments. Attempts to alter this equilibrium and move towards a welfare-increasing reduction in protection will generate opposition by those groups that lose from trade liberalization. Such losses are usually concentrated in import-competing industries, while the gainers – consumers of the products concerned or input users – tend to be diffuse. This gives rise to an important asymmetry in trade policy-making.

The interest groups facing losses have a substantially greater incentive to invest in lobbying against trade liberalization than the groups that gain from the liberalized trade policies. It is at this stage that trade reciprocity has a role to play. By making liberalization conditional on better access to foreign markets, the total gains of liberalization increase and the political process of market opening becomes feasible. The main argument for reciprocity in trade negotiations is thus political in nature. Reciprocity allows policy makers to offset opposition to trade liberalization on the part of import-competing industries by creating political support on the part of export interests that benefit from the policy change.

Trade negotiators solve this problem by confronting the interest groups that gain from protection with other groups that benefit from trade liberalization due to new export opportunities. Similarly, by requiring reciprocal reductions in trade barriers, the prisoners' dilemma that may confront the large countries that exploit their price-making power can also be overcome. Reciprocity may also permit to get "a cherry on the cake": while trade liberalization is beneficial to a nation, it may be even more beneficial if the trading partner is doing the same. Finally, by including many products in the multilateral bargaining, losers obtain some automatic compensation through access to cheaper imports. A rationale for the reciprocity-based WTO trade regime is thus the following: political constraints prevent governments from adopting efficient trade policies, and through the exchange of liberalization commitments these constraints can be overcome.

## 6. THE MULTILATERAL TRADE NEGOTIATIONS AND THE GAME THEORY

Game theory refers to situations where actions by players are interdependent. Results depend on the rules of the game, the information at the players' disposal, and the player's expectations about the other player's behaviour. Two types of games can be distinguished: (i) cooperative games and (ii) non-cooperative games. The cooperative game assumes that outcomes of games are efficient in the sense that gains from trade are maximized, and what is at issue, is the distribution of the possible gains across players. A binding enforcement mechanism is assumed to exist and defection by players from the cooperative solution is assumed to be known by other players.

Non-cooperative games emerge in settings where there is no central enforcement mechanism and where there is no presumption that outcomes will be Pareto-optimal. (A Pareto-optimal situation is one where no party can be made better off without another party being made worse off). The facts that trade policy-makers are driven as much by domestic political concerns as economic concerns affects their decision criteria. From a domestic political perspective, a Pareto-optimal outcome is one where no player can be made better off without another player knowing that it is being made worse off (Kostecki, 1983). The "Dracula principle" suggests that problems disappear once light is thrown on them. This principle of transparency is particularly important in trade policy-making. It ensures that political and economic notions of optimality do not diverge.

The WTO negotiations can be regarded as an attempt to introduce some rules for the non-cooperative trade game. The WTO members try to achieve a consensus regarding the type of game they want to play and the MTNs become an institution-setting exercise. Numerous situations can be identified that give rise to the creation of institutions. One very well known case is precisely the Prisoner's Dilemma, where players choosing individually rational strategies end up in an equilibrium that is inefficient.

The Prisoner's Dilemma is illustrated in Table 1 below. The equilibrium outcome of the game has both nations pursuing protectionist policies each obtaining a pay-off of zero (0, 0). The outcome is inferior to the Pareto-optimal free-trade solution, where each party obtains a pay-off of b - c > 0, where b is the benefit of obtaining access to the partner's market and c is the net cost of opening up its own market, with b assumed to be higher than c. Cost c involves an essentially political cost (plus the possible decline in the terms of trade for the large trading nations). Non-cooperation takes place, because it is in each nation's interest to abstain from liberalization, independent of what the other nation does (Garrett, 1992, Leidy and Hoekman, 1993).

Table 1

Prisoner's Dilemma in Trade Policy: The Payoff Matrix

| **Nation V** | **Nation Z** | |
|---|---|---|
| | Liberalization | Protection |
| Liberalization | **b–c, b–c** | **–c, b** |
| Protection | **b, –c** | **0, 0** |

Source: adopted from McMillan (1988) and Garrett (1992)

Whatever policy option is taken by nation V, nation Z will maximize its pay-off by choosing a protectionist stance, and vice versa for country Z. For example, if Z chooses free trade, V's pay-off is highest under protection, as b > b - c. If Z chooses protection, V again will prefer protection (McMillan, 1988). If the nations cooperated and both liberalized trade, they would each gain b - c. In instances such as these, where individually rational behaviour by governments is not efficient, the creation of an institution such as the

WTO framework can help solve the dilemma by inducing a cooperative behaviour. In the real world of the WTO negotiations, there usually are numerous feasible outcomes that make all nations better off and are Pareto-superior to the *status quo*.

## 7. STAGES IN THE NEGOTIATING PROCESS

The negotiating process of a MTN may be divided into four stages: catalyst, pre-negotiation, negotiation, and post-negotiation (Leidy, Hoekman 1993).

1. In the catalyst stage there is a visionary. The visionary could be a pressure group or a government. The suggested policy vision is the catalyst, suggesting in broad terms the issues to be negotiated.
2. In the pre-negotiation stage, discussions take place on the possible agenda for the formal negotiations. The agenda, once established, places constraints on the parameters of the formal negotiation that will follow. Agreeing on the agenda of a multilateral trade negotiation is a complex negotiation in itself. Such an agenda will determine a set of possible policy packages that could emerge as outcomes of the negotiation process.
3. The third negotiation stage is that of the official government-to-government bargaining. The bargaining formally involves governments, but interest groups tend to informally influence the negotiating process. Not all of the packages included in the agenda will be feasible. A necessary condition for the adoption of a package by all participants is that it improves upon the *status quo ante* or upon whatever is expected to be the *status quo* if negotiations fail (the so-called threat or no agreement point). Subject to the limitations established by the agenda, interest groups lobby governments, and preferences for policy packages are progressively modified. Finally, depending on bargaining strategies, tactics, and time constraints, a formal draft of an agreement emerges.
4. The final stage of a MTN is the implementation (post-negotiation) stage, which determines how the agreements are embodied in a nation's law and enforced by its government, judiciary and legislature.

## 8. ISSUE LINKAGES

Trade-offs in a MTN may occur both within and across issues. Intra-issue reciprocity is exemplified by tariff negotiations. Trading partners make bids and offers on the level of specific tariff lines, or the average customs duty level. If trading partners at any point in time cannot improve upon their joint welfare, they may try to trade across issues – that is, expand the MTN agenda. If there are enough issues, cross-issue trade may allow agreement if within-issue trade-offs proves insufficient to result in an improvement on the *status quo* for all countries concerned. For example, agreement on liberalization of trade in services may be made contingent on a commitment that the liberalization of trade in agriculture also takes place.

Box 2

Distributive versus Integrative Bargaining

One can distinguish between distributive bargaining (zero-sum game) and integrative bargaining ('win-win' game). Negotiators engaged in distributive bargaining usually determine their resistance points (the minimal acceptable outcome) and their respective target points (desired outcomes). The former indicates when to reject the offer. For an agreement to occur there must exist a set of target points such that the negotiating parties can attain a settlement that exceeds the resistance points (Raiffa, 1982). A negotiator must determine an opponent's resistance point through questioning or other tactics. Obviously, during the negotiation process, participants are likely to modify their perception of how realistic their particular target points remain.

Situations in which one party will clearly gain at the expense of the other party are rather rare in WTO negotiations. However, win-win integrative bargaining is by far the most frequent in the multilateral trading system. Integrative bargaining is significantly different from distributive bargaining. Negotiations are a process that aims at resolution of issues, involving cooperation in identifying issues for which an agreement may be feasible, proposing competing solutions, establishing preference orderings over proposals, and a search for a final agreement. Whereas distributive bargaining may call for bluffs and threats, manipulation of information and minimally honest behaviour, integrative negotiations require a high level of trust and openness as well as substantial intellectual input. The 'culture' of the WTO negotiations as well as the attitudes and behaviour of members differ substantially from those prevailing in the commercial sphere.

Issue linkages play an important role for fostering trade deals because they allow side-payments to be made. First, they can be used to achieve reciprocity, i.e. to allow a balance of benefits and concessions. Second, they may be used to increase potential gains from trade. In the latter case, linkage is an instrument that allows a more efficient negotiation (Hoekman, Kostecki, 2002). The choice facing negotiators is generally (i) what to link and (ii) when to link. The desirability of linkages depends on whether there are sufficient mutual gains from cooperating within a given issue area, and whether these gains are shared symmetrically enough. If gains are small, or asymmetric, cross-issue linkage may offer the way out. The need to manage issues and suggest linkages explains why MTNs require more creativity than distributive ('win-lose') bargaining between a buyer and a seller of a carpet or of a second hand car.

The Uruguay Round agreements on textiles, agriculture or intellectual property (TRIPs) would have been considerably different or non-existent, if no cross-issue linkages had been made. In other terms, linkages can create a space of mutual advantage where previously none existed.

Traditionally, GATT countries were inclined to constrain themselves to tradeoffs within a single-issue area, due to the generalized practice of creating separate negotiating groups for each negotiated issue. Attempts at cross-issue linkages generally are made only at the beginning and at the end of a negotiating process. In the pre-negotiation phase of trade negotiations, cross-issue tradeoffs were aimed at getting a balanced negotiating agenda (Winham 1986). In the final stage of negotiations cross-issue trade-offs were usually made at a high political level and under time pressure. The *modus operandi* of the Uruguay Round in this connection was the general rule that "nothing is agreed upon until everything is agreed upon".

## 9. COALITION BUILDING IN THE WTO NEGOTIATIONS

A coalition of like-minded players on an issue is frequently seen as a way to circumvent free riding and increasing negotiating leverage. Moreover, limiting the number of parties in a negotiation can also be efficient in terms of generating trade deals due to reduced transaction costs. Among the various types of coalitions that may arise in the context of the WTO negotiations, one can distinguish between agenda moving, proposal making, blocking, and negotiating coalitions (Hamilton and Whalley, 1989). The first three of these are the most frequent, as they require a limited amount of coordination, since there is no need to arrive at a common position.

The Cairns group – a coalition of 14 agricultural exporting nations in the Uruguay Round – was an example of a proposal making coalition that became a blocking coalition at the Brussels ministerial meeting in 1990. The main developing countries often acted as an agenda moving coalition on issues such as services or TRIPs in the Uruguay Round. In 2002, the developing country agenda moving coalition enabled to consider the issue of improved access of low-income consumers to anti-AIDS drugs in Africa and elsewhere. Negotiating coalitions work out a common position and thereafter are able to speak with one voice. The major example of such a coalition is the EU speaking with one voice in the WTO forum.

For large countries the incentive to build coalitions is likely to be a reduction in transactions costs, and perhaps concern over free riding. For small trading nations the primary motivation is likely to be the increase in bargaining power. Coalition formation in MTNs can also be used by lobbies in an attempt to shift the location of policy packages in the preference ordering of their governments (Leidy and Hoekman, 1993).

## 10. LOBBYING IN WTO NEGOTIATIONS

The informal involvement of numerous pressure groups in WTO negotiations helps to understand why trade deals tend to be complex and difficult to comprehend for an outsider. Most trade negotiations are a 'two-level' game, involving both domestic bargaining among pressure groups, and negotiations on a government-to-government level (Putnam, 1988). (In the case of the EU there is even a three-level game involving national groups, EU member states, the European Commission, and the WTO).

Industry associations and large enterprises have a strong interest in taking a proactive stand at both a national and international level. As firms do not have direct access to the WTO (except through *amicus briefs* in the case of disputes), they must exercise influence through their governments. Business interests play a major role in the design of trade rules. For example, financial institutions such as American Express, Citibank, and the American Insurance Group played a very active role in the Uruguay Round and in the horse-trading that occurred during the 1997 negotiations on financial services (Arkell, 1994). Business firms also drive the enforcement dimension of the WTO, as they often go to court to ensure proper implementation of their rights resulting from the WTO agreements (e.g. TRIPs).

The major trading nations recognize lobbying as part of the democratic process and regard it as a useful tool for obtaining information. Hundreds of legislative initiatives are required to manage foreign trade systems, agricultural policies, technical standards, intellectual property regimes and other issues of interest to traders and producers located in WTO member states. Log rolling and decision-making on the basis of the lowest common denominator occur frequently. The laborious process of internal negotiations to arrive at a common stand on issues such as agriculture, intellectual property rights and services during the Uruguay Round all illustrate the importance for stakeholders of having effective representation in Brussels as well as in their home market. There is evidence to suggest that the business community has more influence on trade policy-making in the leading industrial countries and that other business communities, including that of Poland, have yet to learn the art of business advocacy in international trade (Kostecki, 2002).

## 11. PRACTICING RECIPROCITY IN WTO NEGOTIATIONS

Reciprocity in the GATT/WTO context is defined as the exchange of a reduction in the level of protection in one country in return for an equivalent reduction in the level of protection of another country. Tariff negotiations under GATT and WTO auspices are to be reciprocal and mutually advantageous. The exchanged of concessions are to be bound and be applied on an MFN basis.

Reciprocity of market opening commitments is traditionally measured in terms of incremental rather then absolute trade flows. One dollar of additional market access in one country is exchanged for one dollar of additional market opening in another country. Ernest Preeg, an American negotiator commenting on the Kennedy Round and preceding negotiations, observed that negotiators relying on projected trade impact criteria tended to strike a rough balance between the estimated increases in the value of imports and the forecast rise in the value of exports resulting from the tariff concessions (Preeg, 1970).

Reciprocity criteria or formulae used by participants in negotiations may be intra- or inter-issue. An intra-issue criterion provides for the exchange of concessions of an identical nature (tariff concessions against tariff concessions for a given product or group of products). An inter-issue formula provides for the exchange of concessions of a dissimilar nature (such as tariff concessions against removal of quotas).

Reciprocity criteria may be product specific – as in so-called item-by-item negotiations – or more general in nature. Examples of the latter are so-called across-the-board trade barrier reductions, which tend to take the form of a formula: an $x$ percent reduction in average tariffs, or a $z$ percent reduction in the dispersion of tariffs (Kostecki, 1979). Item-by-item and across-the-board approaches can be applied to tariffs and non-tariff measures (NTMs), although in the latter case the evaluation of reciprocity criteria tends to be more difficult.

The methods used to evaluate trade deals have little relationship to what economics would suggest as rational yardsticks. The techniques used may be described as providing negotiating parties with a focal point, that is, a tangible element enabling negotiators to set objectives, evaluate the position of their partners, assess negotiating progress, and recognize acceptable options. In the case of GATT negotiations, the focal point is generally nothing more than a measure that takes into account the relative size of different trading nations and is simple to calculate using available trade flows data.

## 12. EVALUATING THE VALUE OF TARIFF CONCESSIONS

Several methods are used to evaluate the value of tariff concessions, including such approaches as trade coverage, 50 percent equivalent and the average cut method.

*Trade coverage.* One approach in evaluation is to focus on trade coverage, defined as the reduction in a tariff multiplied by the volume of imports of the product concerned. For example, if imports of a product are US$ 10 million and the applicable tariff rate is reduced from 50 percent to 30 percent, the trade coverage is 0.2 times 10, or US$ 2 million.

*50 percent equivalent.* A related method that has been used can be referred to as 50 percent equivalents. This also takes into account both the tariff cut on a good and the value of imports of the good before the tariff reduction. A 50 percent equivalent (or "one equivalent" in the negotiators' jargon) signifies that a 50 percent tariff cut took place with respect to US$ 1 million worth of imports. A tariff cut of 25 percent for a product line in which the value of imports is US$ 2 million is equal to one equivalent. The formula used is the following:

$$E = [\, M \ \mathrm{d}\, t \,] / 50$$

where, $E$ stands for the "equivalents", $M$ is the value of imports and $\mathrm{d}\, t$ is the percentage tariff reduction. These methods of assessing reciprocal concessions were often used in the earlier MTNs when trade between two negotiating countries was not bilaterally balanced in a specific product.

*Average cut method.* Another evaluation option is the average cut method. Usually, weighted averages rather than simple averages are used in that case. Suppose that country V imports US$ 10 million worth of shoes and US$ 15 million worth of leather boots. During trade negotiations it agrees to reduce its tariff on shoes by 5 percent and its tariff on leather boots by 10 percent. The weighted-average cut in import tariffs for shoes and boots imports by country V is then:

$$E = (0.05 \text{ x } \$10 \text{ million} + 0.1 \text{ x } \$15 \text{ million})/(\$10 \text{ million} + \$15 \text{ million}) = 0.8$$

The average tariff cut by country V in the shoes/boots sector is thus 8 percent. Average cuts do not always provide a satisfactory indication of the size of trade liberalization. If a nation's tariff is prohibitive (no imports are reported in at all), there will be nothing to weigh the tariff cut by for the product line under negotiation (Hoekman, Kostecki, 2001).

Reciprocity formulae may be across-the-board (general) or item-by-item (specific). Negotiations conducted on an item-by-item basis rely on a specific reciprocity formula, that is, tariff reduction relating to one product line is exchanged for tariff reduction on another product line. Negotiations conducted on an across-the-board basis rely on a general reciprocity formula (Kostecki, 1979).

The initial GATT process of negotiations on specific concessions was essentially bilateral. That is, two countries presented each other with request and offer lists, and negotiations centred on achieving a bilaterally balanced exchange of concessions. However, this network of bilateral negotiations subsequently acquires a multilateral dimension because specific tariff concessions once negotiated bilaterally are generalized through the MFN clause. In practice the largest trading nations negotiate with virtually every WTO member, whereas smaller players negotiate primarily with countries that are principal suppliers or represent important export markets.

## 13. THE PRINCIPAL SUPPLIER RULES AND THE INITIAL NEGOTIATING RIGHTS

The principle of non-discrimination clashes with the principle of reciprocity. Under a MFN clause, no conditionality (discrimination) may be introduced once a concession has been granted. However, conditionality (which is the very essence of reciprocity) may be introduced in the negotiating process. There are two general techniques that my limit the free rider problem: (i) the principal supplier rule and (ii) the practice of balancing concessions in exchange for so-called initial negotiating rights.

Under the principal supplier rule, requests for concessions referring to a particular product line are normally made by, and only by, the principal (largest) suppliers of a product. This limits free riding, as the concessions granted by an importing country (M) to the principal supplier (X) of a specific product must be balanced by concessions from that principal supplier (X) on products for which M is in turn a principal supplier. The principal supplier is the country which benefits the most from a concession and is thus prepared to offer more reciprocal trade liberalization than a smaller supplier would be prepared to do.

Box 3

The Principal Supplier Rule and Multilateral Balancing of Trade Flows

Multilateral product-by-product negotiations based on the principal supplier rule rely on multilateral balancing. Assume that country V is the principal supplier of good *x* to country Z, and that Z is the principal supplier of good *y* to V. Negotiations are then feasible. Assume further that Z imports US$ 1000 million from V, while V imports only US$ 500 million from Z. Although an exchange is certainly possible, because trade flows are unbalanced, Z may demand that V reduces its tariff by twice as much as Z. If V is unwilling to do this, and the reciprocity rule requires equality in cuts as measured, for example, by tariff revenues, negotiations may break down. Involving another country M may allow V and Z to circumvent their problem. If country M is the principal supplier of good *r* to V, exporting US$ 1000 million, and is also the principal supplier of good *s* to country Z, with exports of US$ 500 million, and in turn imports goods worth US$ 500 and US$ 1000 million, respectively, from V and Z, negotiations are balanced. This is, of course, a hypothetical example. In practice many product lines are involved, and precise balancing is impossible to achieve. The main point is that by involving many trading nations, more trades are possible under the principal supplier constraint.

While the principal supplier rule reduces the role of smaller partners in multilateral tariff negotiations, it does not eliminate them as players. A factor leading to the involvement of smaller trading nations is the need for end game or "last-minute balancing". At the end of the bilateral phase of a trade round, every negotiator knows that his country is not only required to grant the benefits of concessions to other countries but also that it is entitled to the benefits of concessions negotiated between other trading partners. At this stage the negotiators attempt to strike a balance in the global effect of concessions.

To achieve that objective they may seek to modify previous requests and offers. A trading nation that finds out that one of its concessions indirectly benefited another country that refused to grant a reciprocal concession always has the possibility to withdraw the original concession. Thus, the granting of concessions to principal suppliers is often made conditional upon obtaining additional balancing concessions from a number of smaller suppliers of the product line under negotiation.

The fact that the concession-granting nation is able to 'sell' its concession to more than one trading partner allows it to obtain greater compensation than under a system of bilateral bargaining. Greater compensation also implies that more can be offered in terms of market opening (Dam, 1970). The item-by-item, principal supplier approach was the main technique used in the first five MTNs (up to the Dillon round).

The linear cutting formula consists in applying the same rate of tariff reduction to all product lines by all trading partners. The formula was used during the Kennedy Round, with developed countries agreeing to reduce their tariffs on industrial products by 50 percent, except for "sensitive" products. The linear approach maximizes the number of tariff lines brought to the bargaining table and leads to the exchange of a greater amount of concessions than negotiations based on a specific reciprocity formula.

The linear cutting formula tends to be preferred by trading nations with high import duties since any equal-percentage tariff cut will leave the nation with higher tariffs in the end than other nations that started from a lower tariff level. Issues such as tariff escalation, high tariffs and lack of inter- and intra-country uniformity of tariffs may not be better addressed under the linear tariff-cutting formula.

Harmonization formulas result in non-linear cuts in tariffs. There are many options in this respect (Hoekman, Kostecki, 2001). One possibility that was used in the Tokyo Round was to cut each tariff according to the so-called Swiss formula:

$$T2 = rT1/(r + T1)$$

where $T2$ stands for the reduced tariff and $T1$ for the initial tariff rate. This formula reduced high tariff rates more than low ones, the ultimate result depending on the value of $r$ that is opted for. In the event, the value of $r$ that was chosen by countries ranged between 14 and 16. Thus, a 14 percent tariff would be reduced by 50 percent, tariffs below (above) 14 percent being reduced by less (more) than 50 percent.

A main problem concerning across-the-board formula is that agreement must be reached on which formula to use and on the extent to which exceptions to the use of the formula are to be permitted. The larger the scope for exceptions, the less useful is the use of a general formula.

## 14. EFFECTIVE PROTECTION AND WTO NEGOTIATIONS

Internationally traded products are rarely produced in only one country. In many cases, inputs or parts of the product are imported. A useful distinction in this connection is between the nominal rate of protection (NRP) and the effective rate of protection (ERP). The NRP for a product can be measured as the proportional increase in the producer price of a good relative to free trade. The ERP differs from the NRP by taking into account the magnitude of protection imposed on intermediate inputs used to manufacture a good. The ERP is a better economic measure of the extent to which the production process is protected than the NRP because it incorporates information on the structure of protection. The higher the tariffs and NTMs on imported inputs, the lower the ERP will be for products that contain these inputs.

The WTO focuses only on nominal rates of protection (tariff rates) and there are no obligations with respect to effective rates. This does not mean that negotiators do not understand the concept. Let us return to the example of steel given in Box 4. In this case the incentives for exporters of steel to reduce the 20 percent tariff are greater than is suggested by the nominal rate. The fact that the ERP for most products tends to be higher than the NRP (because governments prefer to protect activities that generate higher value added) explains why tariff negotiations continue to be at the central stage of MTNs, even though the absolute level of tariffs has fallen significantly. An average tariff on highly processed goods of only 10 percent can hide an ERP that is substantially more trade distorting.

Box 4

Nominal and Effective Rate of Protection

The nominal rate of protection (NRP) can be defined as

$$NRP = (P - P')/P'$$

where $P$ is the domestic tariff inclusive price of a good, and $P'$ is the free trade price. As the latter cannot be observed in practice, most empirical studies take the world price as a measure of $P'$. The effective rate of protection (ERP) can be defined as the proportional increase in value added per unit of a good produced in a country relative to value added when there is no protection (free trade). The magnitude of the ERP depends not only on the nominal tariff on the final product concerned, but also on the tariffs applied to the inputs used, and the importance of those inputs in the value of the final product. A simple formula for calculating the ERP is

$$ERP = (V - V')/V'$$

where $V$ is the domestic value added per unit of the final good (including the tariffs on that good) and on its inputs, and $V'$ is value added under free trade. Value added per unit in turn is defined as the gross value of output minus the cost of inputs used in production:

$$V = t_f P_f - t_i P_i X,$$

where $t_f$ and $t_i$ equal one plus the tariff on the final good and inputs, respectively, $P_f$ and $P_i$ are the prices, and $X$ is the amount of input used to produce a unit of the final product. Value added at free trade prices is the same, except that tariffs in this case do not exist (the value of $t$ is one). For example, suppose one ton of steel is worth US$ 1000 in the world market. To produce it, a factory has to buy one ton of iron ore at a world price of US$ 600. Assume for simplicity that nothing more is needed for steel production. Under these circumstances the value added per ton of steel in our factory will be US$ 400. If a 20 percent nominal tariff rate is imposed on steel imports and no tariff on iron ore, the effective rate of protection in those circumstances will be (1200 - 600)/ 400 = 1.5 or 50 percent. The ERP in this example is more than double the 20 percent NRP on steel.

## 15. NEGOTIATIONS ON NON-TARIFF MEASURES

There are numerous types of non-tariff measures (NTMs). Some of them are used to achieve non-trade objectives and only incidentally restrict trade (e.g. technical standards or sanitary requirements). There is therefore some difficulty in determining what measures constitute a barrier to trade and which are legitimate forms of government regulation.

It is equally difficult to apply the concept of reciprocity in negotiations on NTMs. First of all, the set of potential trades is of a much lower dimension than in the case of tariffs. Second, it is much more difficult to translate the value of proposals into a common denominator (Hoekman, 1993). Because NTM issues are heftier than tariffs, gains from trade become more difficult to realize, and cross-issue linkages are important in achieving agreement.

The problem of valuation is often fundamental. In tariff negotiations, it is relatively straightforward to agree on how to value requests and offers, although the criteria used tend to have little economic sense (see section 4). Measurements for NTM negotiations are more difficult to agree upon. For example, in the MTN on agriculture, efforts have been made to agree on methods that convert various types of state intervention into a producer subsidy equivalent or an aggregate measure of support (AMS).

In most NTM negotiations the focus is not on principal suppliers or on reduction in the level of protection, but on specific measures or rules whose implementation is thought to increase market access, or on easily quantified variables that are not necessarily trade-related. For example, the agreement on government procurement focuses on the size of the contracts and the entities to be included (on the basis of past procurement activity). This allowed a balance to be achieved in terms of the percentage of total procurement to be covered by the arrangement (Hoekman, Mavroidis, 1997).

Numerous issues that have appeared on the agendas of the current Doha Development Round are not easily expressed in terms of a simple quantitative metric. This will make it more difficult for negotiators to determine whether they have established reciprocity. This is the case especially when the focus is on rule making. Frequently, it may not be feasible to make marginal changes in proposed rules without making the rule irrelevant. Instead, negotiated deals involve accepting rule x for issue N in return for rule y for issue K, that is, engaging in issue linkage. In such cases, it becomes important to have a clear view of the implications of the alternative policy options. This requires skilful analysis of the potential economic effects on home constituents and the trading system at large. It is not surprising therefore that the approach taken is usually one of opting for principles such as transparency and perhaps non-discrimination, rather than seeking changes in the substance of regulations.

## CONCLUSIONS

Although economic theory suggests that trading nations should opt for liberal trade policies, in practice most countries actively intervene in international trade. The WTO is an institution which enables governments to resist pressures for protection and to confront domestic protectionist lobbies with other groups that benefit from trade liberalization due to new export opportunities.

The masterpiece of the WTO negotiations is the principle of reciprocity, which enables the participating trading nation to avoid the prisoner's dilemma that result in Pareto-inefficient trade equilibrium. Reciprocity as practiced by WTO negotiators in the traditional market access bargaining regards the balance of incremental reduction of trade barriers rather than in terms of full equality of market access.

Negotiators use numerous techniques and measurements to practice and evaluate trade concessions. Many of the latter reflect the mercantilist bias of governments and the political realities of trade policy-making rather than a purely economic rationality. The traditional market access agenda of the multilateral trade negotiations has been considerably extended to include trade in services and an expending number of domestic policy matters with an impact on trade. With the increasing emphasis of WTO negotiations on rule making and non-tariff barriers to trade, reciprocity is more difficult to practice and to evaluate. Intra-issue tradeoffs and coalition building become critical factors of success in that type of trade negotiation, which also require more creativity and trust to make the system work.

Industry lobbies have a very strong influence on WTO negotiations and are partly responsible for a growing mistrust of the civil society towards the WTO negotiating process and its outcome. The issue of trade and development remains among the most sensitive areas that constitute the testing ground of the current Doha Development Round and the WTO system as a whole.

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## BIBLIOGRAPHY


Arkell, Julian (1994) in: M. Kostecki (ed.) *Marketing Strategies for Services*, Oxford, Pergamon Press.

Curzon, Gerard (1965) *Multilateral Commercial Diplomacy*, London: Michael Joseph, 1965.

Dicken, P. (1998) *Global Shift: Transforming the World Economy*, London, Paul Chapman.

Garrett, G. (1992) *International Cooperation and Institutional Choice: The European Community's Internal Market*, "International Organization", 46.

Hamilton, C. and Whalley, John (1989) *Coalitions in the Uruguay Round*, Weltwirtschaftliches Archiv, 125.

Hirst, P. and Thompson, G. (1999) *Globalization in Question*, London, Polity Press.

Hoekman, Bernard (1993) *Multinational Trade Negotiations and Coordination of Commercial Policies*, in R. Stern (ed.) *The Multilateral Trading System: Analysis and Options for Change*, Ann Arbor, University of Michigan Press.

Hoekman, B. Kostecki, M. (2001) *The Political Economy of the World Trading System: The WTO and Beyond*, Oxford, Oxford University Press.

Hoekman, Bernard, Kostecki, Michał M. (2002) *Ekonomia światowego systemu handlu. WTO: Zasady i mechanizmy negocjacji*, Wrocław, Wydawnictwo Akademii Ekonomicznej im. Oskara Langego we Wrocławiu, 2002.

Hoekman, Bernard, Mavroidis, Petros (eds.) (1997) *Law and Policy in Public Purchasing: The WTO Agreement on Government Procurement*, Ann Arbor, University of Michigan Press.

Kostecki, M. M. (1979) *East-West Trade and the GATT System*, London, Macmillan Press.

Kostecki, M. M. (2002) *Business Advocacy in Trade Policy*, Geneva, International Trade Centre UNCTAD/WTO.

Kostecki, M. M. (1983) *Trade Control Measures and Decision Making*, "Economia Internazionale", 36.

Leidy, M. and Hoekman, B. (1993) *What to Expect from Regional and Multilateral Trade Negotiations: A Public Choice Perspective*, in K. Anderson and R. Blackhurst (eds.) *Regional Integration and the Global Trading System*, New York, Harvester-Wheatsheaf.

McMillan, John (1988) *A Game-Theoretic View of International Trade Negotiations*, in John Whalley (ed.) *Rules, Power and Credibility*, London: University of Western Ontario, 1988.

Preeg, Ernest (1970) *Traders and Diplomats: An Analysis of the Kennedy Round under the General Agreement on Tariffs and Trade*, Washington DC: Brookings Institution.

Putnam, R. D. (1988) *Diplomacy and Domestic Politics: The Logic of Two-level Games*, "International Organization", 42.

Raiffa, Howard (1983) *The Art and Science of Negotiation*, Cambridge: Harvard University Press.

Winham, Gilbert (1986) *International Trade and the Tokyo Round Negotiations*. Princeton: Princeton University Press.

WTO (1999) *International Trade 1999*, Geneva, 1999 vol. 1.

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