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A SIMPLE ANALYTIC OF A SELFISH HEGEMON

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ABSTRACT

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The concept of hegemonic stability (Kindleberger, **Gilpin**) rests on the assumption that a leader country of the world behaves benevolently to achieve the best state in the world. The leader country, or the hegemon, is supposed to provide a sufficient amount of public goods and build a **proper infrastructure such as international law and international** organizations.

Kindleberger attributes the main cause of the international disaster in the great depression to the lack of a leader country who could provide flow of capital to needed countries and serve as a lender of last resort. At least, for a quarter century after World War II, the United States played the role of a leader so that growth, international trade and investment flourished, and the monetary stability of the **Bretton** Woods regime was sustained.

Consider the following situation. Consider a manor where there is a feudal lord (a hegemon) and many small farmers. The manor requires the supply of public goods such as irrigation, roads, and court system. The lord occupies a large part of the land, and accordingly considers the state of affairs on the total manor as if it were his own state. Thus, the lord can take the total situation of the manor as his own and provide public goods service because doing so is advantageous to him. On the other hand, small farmers can get a free ride on the supply of public goods by their lord.

This story explains the nature of incentive mechanisms concerning the supply of public goods. By getting a free ride the small can take advantage of the large (Olson, Olson and Zeckhauser). On the other hand, so far as private goods are concerned, the large can exploit the small by exercising its monopolistic power.

The above story also tells that if the relative weight of a hegemon declines, then the provision of public goods will be increasingly deficient to the manor. The lord that has only a relatively small fraction of land will be less eager to provide public goods.

If we leave the dream land and come back to the present world economy, the decline of the relative weight of the United States, whether she is a selfish or a benevolent hegemon, will be a negative factor for the provision of public goods to the world.

A Simple Analytic of A Selfish Hegemon

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1. Introduction

After World War II, economic activities of the United States occupied a major part of the world's

economic activities. A large proportion of output was produced by the United States, and a large

proportion of trade originated from or was directed to it. In terms of the current account, it was

among the few major surplus countries in the world. Not only the magnitude of its economic

activities, but its political leadership excelled. The United States was the shepherd of international

agreements, cooperations, regimes, and international institutions.

The United States has joined military alliances such as the North Atlantic Treaty Organization

(NATO) and the Mutual Security Agreements with Japan, Korea and other countries. Moreover, it

has actively supported the General Agreement on Tariffs and Trade (GATT) and has remained a

crucial player in the Bretton Woods System. For at least a quarter century after World War II, the

United States played the role of a responsible leader of the world which promoted and supported

growth of output, international trade and investment, and international monetary stability.

Reflecting on the role of the United States, the concept of hegemonic stability was developed by

Kindleberger (1986a, 1986b), Gilpin (1987) and others.[1] This concept rests on the assumption that a

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[1]"Hegemony " or "Hegemon" **originated during the Greek era.** According to the _Larousse Dictionary_, in 224 B.C., Antigonos II of Macedonia organized the Hellenic Alliance of Greek cities and called it a hegemon Kindleberger (1986b) cites the Columbia Encyclopedia, which relates this word to the struggles for dominance between Athens and Sparta.

responsible leader country of the world behaves in such a way as to realize the desirable state in the world. The leader country, or the hegemon, is supposed to provide a sufficient amount of public goods and to build a proper infrastructure that includes international laws and international organizations. "World economic stability is a public good that has to be provided, if at all, by some country that takes charge, accepts responsibility, acts as a leader" (Kindleberger, 1988, Introduction, **pp. ix). Without the leadership of a country in charge, the world is devoid of crisis management** capacity.[2]

Beginning in the 1970s, the hegemonic role of the United States was overshadowed. The Bretton **Woods regime of fixed exchange rates depending on the dollar standard collapsed in 1971. The U.S.** current account started accumulating deficits on a yearly basis, and, consequently, the United States became a large debtor country. The country started to be involved in many trade restricting measures **such as voluntary export restraints (VERs) and voluntary import expansions (VIEs) instead of being a** guardian of the free trade regime.

In accordance with the relative decline of the role of the United States in the world economy, **academic discussions** of **hegemony** shifted **their focus as well. In the 1980s, the main theme was** what would stabilize the world system even the fact that the United States was losing some of the prerequisites of a hegemon. Hence come the discussions of what happens "After Hegemony" , (Keohane, 1984). or how a number of countries can form a privileged group for the supply of public goods (Snidal, 1985).

Moreover, reflecting the self-centered U.S. attitude toward trade issues, Bhagwati (1994a, b) argues that a previously altruistic hegemon, the United States, has recently stopped playing its responsive role by often disregarding the due processes required for providing international public

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[2]For example, the international disaster in the great depression was aggravated by the lack of a leader country who could and serve as a lender of last resort.

goods and that it has started playing the role of a selfish hegemon. He focuses on the recent patterns of U.S. trade diplomacy that rely on bilateral negotiations rather than multilateral negotiations through international agreements or organizations.

This paper is an attempt to reexamine the concepts of "international public goods" and "hegemony" from the standpoint of economics. I will focus my attention on the incentive structure that a large country or hegemon as well as other countries face while they make individual or collective decisions. I will ask what are and will be the economic consequences to the world if the United States loses further its position as a leader country.

Kindleberger has a paternalistic, if not benevolent, view of the leadership. "The father of family --- usually has important responsibility and is often a leader" (Kindleberger, 1988, pp. 154). Accordingly, he does not like the usage of "hegemony" which has overtones of force., threat and pressure. He prefers the word "leadership". This paper, however, will explore the economic implications of a hegemon who cannot be free from selfishness and clout for arm-twisting. The reason for this as follows. To the eyes of economists, who are accustomed to regarding economic hehavior as the outcome of rational or individually selfish endeavors, it is strange that a nation, which consists of an aggregate of selfish individuals, could behave altruistically. Thus, the concept of a selfish hegemon is a natural one (Bhagwati, 1994a). Bhagwati argues that the United States became a selfish hegemon because of the change in its position in the world economy. Instead, I would rather argue that the United States was selfish when even its power dominated the world, but during that time its selfish behavior roughly coincided with the world welfare. Now, however, the coincidence has disappeared, and U.S. conduct reveals obvious selfishness.

In order to illustrate the basic logic of hegemonic stability, let us consider a manor where a feudal lord (a hegemon) and many small farmers live. Suppose that the manor requires the supply of public goods such as irrigation, roads, and a court system, and that the provision of public goods has the

qualities of non-rivalry and non-exclusiveness. The lord occupies a large part of the land and, accordingly, considers the state of affairs on the total manor as if the manor were his own state. Thus the lord can rake the total situation of the manor as his own and will provide public goods because doing so is advantageous to him. On the other hand, small farmers can get a free ride on the public goods supplied by their lord.

This story explains the nature of incentive mechanisms concerning the supply of public goods. By getting a free ride, the small can take advantage of the large (Olson 1965, Olson and Zeckhauser, 1966). However, if the relative weight of a hegemon declines, the provision of public goods will be increasingly deficient. The lord that has only a relatively small fraction of land will be less eager to provide public goods. Furthermore, in the case of provision of private goods, the large may exploit the small by exercising monopolistic power.

If we leave this hypothetical land and return to the present world economy, the decline in the relative power of the United States, as long as it is a selfish hegemon, will be a negative factor for the provision of public goods to the world. Is there a self-enforcing mechanism to compel nations to provide international public good, or to commit to mutually beneficial rules without reneging?

On the one hand, the logic of collective action (Olson, 1965) effectively explains the incentive of a large hegemon to supply an adequate amount of international public goods, and that shows small countries can exploit large ones by free riding on the supply of public goods.

Models of international trade, on the other hand, give different answers. In the case of trade in private goods, monopolistic (monopsonistic) power is relevant (Conybeare, 1987), and the large exploit the small. In order to reconcile differences in predictions, we have to specify the situation precisely because the result depends crucially on whether we are talking about public goods or private goods.

To explain the present behavior of the United States and the world system, one needs to appeal to many theories in addition to the two basic paradigms described above, i.e., the theory of international' public goods and the theory of monopolistic behavior in the private goods domain. For example, I will appeal to the theory that a nation has multiple political, economic, and military goals (Gowa, 1989), to the logic of two-level games (Putnam, 1988), to the analysis of rules and games (Ostrom, 1991), and to the concept of international organization as an epistemotogical community (Haas, 1992, Keohane and Martin, 1994).

In this paper I will develop the following ideas:

(1) The negotiations needed for trade restrictions such as tariffs and quotas and those needed to create international public goods such as a security or trade regime are completely different kinds of games.   The first is associated with private goods; the second is concerned with public goods. In the latter case, the small exploit the large. In the first case the large may exploit the **small. The** controversy between Conybeare (1987) and international public goods proponents can be better understood if we are aware of these distinctions. Moreover, the role of regionalism in trade currency and foreign aid issues can be analyzed only in terms of this distinction between international private and public goods.

(2)   Using Nash equilibrium terminology, the trade restriction game can be a strategic-complements game, while the supply of public goods is always a strategic-substitutes game. In both cases, the Nash equilibrium outcomes will be worse than the Pareto optimal for negotiating countries.

(3)   At present, the United States is willing to exploit a part of its monopolistic power in trade even if giving up its advantages of being a hegemon that supplies international public goods.

(4) It is difficult to explain U.S. behavior without referring to domestic conflicts as the theory of the two-level game emphasizes.   It is barely possible to understand VERs and VIEs from merely the aggregate national economy point of view. The behavior of small nations must also be independent,

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in part, on the motives of some vest interest groups, because tariffs and other import restrictions usually hurt overall national welfare.

(5) **It** is misleading to treat many different situations equally with a simple concept like 'public goods' or 'hegemony.' Agreeing on an environmental treaty, agreeing on regional economic integration, agreeing on a trade or monetary regime, and establishing an international organization to manage a regime all involve different procedures and different degrees of commitment. One has to be careful about what kind of commitment to action or inaction is made, and what kind of incentive mechanism exists to impose sanctions on violators of rules.

(6) **A** dynamic framework is needed to account for the time-related distinctions among "once and for all" mutual provision of public goods, international agreement or commitment, an emergence of a regime (Krasner, 1982), and an establishment of an international organization. Concepts from dynamic and repeated games, such as reputation building and time consistency, help us understand the emergence process of an international regime.

This paper is organized as follows. Section 2 presents a brief account of the extent to which the United States, other advanced countries, and developing countries are either imposers or those being imposed upon. Sections 3 and 4 illustrate, with simple examples, the incentive structures for trade in private goods as well as for the provision of public goods among countries of different sixes in the world economy.

In Section 5, I point out that many international conflicts and cooperation that have been analyzed in terms of inter-national public goods, a hegemony, or a regime do differ in the dynamic properties and strategic structures of their political and economic processes. Based on the apparatus and considerations reviewed in these sections, we will discuss, in Section 6, the question of how we can explain the recent behavior patterns of the United States as a declining hegemon. The last section discusses the role of regional arrangements that fortify or augment the function of a declining

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hegemon.

2. The Quantitative Significance of the United States in the World Economy.

Before proceeding to the analysis of the role of the incumbent hegemon, that is, the United States,

I will briefly review quantitative indicators of the country's relative importance in the world economy.

Table 1 indicates the share of output, and trade (export and import), for the United States, Japan, and

several EC countries in the OECD for the decades since World War II. The shares of the United

States in that magnitude declined slightly, while that of Japan increased very rapidly. The table also

indicates that ratio of the current account deficit to GDP.

The degree of trade protection has also changed over time. With the success in trade

negotiations, in particular the Tokyo Round negotiations in GATT, tariff rates in many countries have

declined during the postwar period. Tariff rates on trade in manufactures in 1974 averaged 40 per

cent. The average rate had come down to 7 to 10 percent even before the Tokyo Round multilateral

trade negotiations during 1974-79 (The World Bank, 1987). The Tokyo Round tariff cuts made the

average tariff rate on manufactures 6.0 percent in the EC, 5.4 percent in Japan (it made it even

lower) and 4.9 percent in the United States (see Table 2). The Uruguay Round negotiations that

started in 1986 reinforced this trend according to World Bank (1995). By 1993, industrial countries

, had agreed on commitments on maximum tariffs for 99 percent of imports manufactured goods, and

had rendered 20 to 43 percent of imports duty free. The trade-weighted average tariff for

industrialized countries was cut by 40 percent, from 6.2 percent to 3.7 percent. The average tariff

rate for developing countries was cut by 30 percent (see Chart 1).

In spite of the progress in tariffs which have made it appear that the world is moving in the

direction of free trade, various nontariff barriers (NTBs) and "voluntary" restraints on exports have

plagued the world economy. Table 3 shows the degree to which imports of textiles and clothing, and,

for comparison, manufactured goods, were subject to nontariff barriers in 1983 (Goto, 1989). Table 4 indicates the prevalence of multitiber arrangements (MFA), and **VERs** (later **VIEs** should be **counted), which** the **World Bank calls** the "hard **core" nontrade barrier. Moreover, the degree that** the United States relied on the non-tariff barriers was increasing (Table 5). Thus the world's pace toward free trade was substantially disturbed by nontransparent restrictive measures. In fact, a hegemon, the United States, and large advanced countries like Japan and the major European countries were often engaged in imposing these types of nontariff trade restrictions on their imports from developing countries. One of the major achievements of the Uruguay Round was "to agree to **eliminate voluntary export restraints within four years and the MFA within ten." (World Bank, 1995).** Whether this perspective may be too optimistic, the success or failure in abolishing of nontariff barriers is important because large countries exercise their monopoly power in the world market in the form of "sophisticated" or "modern" protectionism. This is the area in which one can observe the monopoly power of large countries exercised, contrary to the common perception of public economics that large countries will serve the interest of small countries.

3. A Hegemon, Country Sizes and the Supply of Public Goods

In this section and in the next, I will examine the strategic nature of international interdependence in a world where countries are of different sixes. I will start with the case of public goods, which is the principal theme in the theory of the logic of collective action.

Consider a situation already exemplified by the parable of a manor. A large participant, the lord, is greatly affected by the supply of public goods and, accordingly, motivated to take responsibility of supplying public goods. Even a selfish lord takes care of necessary irrigation or defense. However, it does not always follow that he will be the privileged member (group) who provides a sufficient amount of public goods. Since small farmers are tempted to free ride, the public goods produced are

likely to be short of the most desired amount. A similar international situation can be analyzed by the following analytical model. (For a discussion of the calculus of public goods, see Sandler, 1992.)

Consider a two-country world in which good 1 is a private good and good 2 is a public good. The public good has, like environment or safety, the nature of non-rivalry and non-exclusiveness. Each citizen and, accordingly, nation contributes a certain amount of income to the supply of international public goods. The hegemon has the population (normalized by the world population) of $1 - \varepsilon$, and the smaller country, the periphery, has the population of ε.

Suppose the utility of representative individual in the two countries are respectively

(1) $c_1^{2/3} \, c_2^{1/3}$, and, $c_1^{*\,2/3} \, c_2^{*\,1/3}$,

where c_1, c_2 are respectively consumption of private goods and public goods by the citizen of the hegemon, and c_1^*, c_2^* are consumption of private goods and public goods by the citizen of the periphery country.[3]

To each individual, a unit of income is given like manna in the form of private good 1, a part of which she consumes as good 1, and the rest of which she contributes to the world community to provide public goods. (The effect of the difference in wealth, or income, will be discussed later.) Thus,

(2) $\quad c_1 + x_2 = 1$, $\qquad\qquad\qquad\qquad c_1^* + x_2^* = 1$.

Here x_2 and x_2^* are the per-capita contributions of citizens in the two countries. The world per-capita supply of the public good is assumed to be the weighted sum of these contributions:

(3) $\quad c_2 = c_2^* = (1 - \varepsilon)x_2 + \varepsilon x_2^*$.

The governments collect these contributions equally from individuals. They are assumed to play strategically under the assumption that the amount of the contributions of the periphery country is

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[3] The same qualitative results can be obtained without assuming specific forms of the utility function, but I rely on (1) for the sake of exposition.

given.

The Nash solution in this public goods game is given by the interaction of the reaction curves of the two countries. One can derive the reaction curve of each country in terms of the contributions. By maximizing utility (1), given the budget constraint (2) and public goods provision (3), and given the value of x^* or x^* of the other country, we obtain as country l's reaction curve.

(4) $\quad x_2 = \dfrac{1}{3} - \dfrac{2\theta}{3}x_2^*$, and $x_2^* = \dfrac{1}{3} - \dfrac{2}{3\theta}x_2$,

where θ is defined by $\theta \equiv \dfrac{\epsilon}{(1-\epsilon)}$. When $\epsilon < 1$, $0 < \theta < 1$. A smaller value of ε corresponds to a smaller value of θ, that is, a larger relative size of the hegemon.

Figure 1 illustrates these reaction curves. If ε and accordingly θ are small, the reaction curve of the hegemon does not diverge from the optimal provision of the public **good** $x_2 = 1/3$. In fact one can easily ascertain that the contract curve (cooperative solution) lies on a curve that passes through point $(1/3, 1/3)$. On the other hand, when ε and θ are small, the reaction curve of the smaller country diverges much from the optimal provision $x_2^* = 1/3$. The internal solution for the Nash equilibrium is given by $x_2 = \dfrac{3-2\theta}{5}$, and $x_2^* = \dfrac{3-2\theta}{5}$. **When the periphery country is so small such**

that $\theta \leq \dfrac{2}{3}$, or $\varepsilon \leq \dfrac{2}{5}$, the equilibrium strategy of the periphery country is $x_2^* = 0$, or to stop contributing completely. As is indicated in the diagram, the small can exploit the large in this analysis of the public goods.

Essentially, this approach was taken by Olson (1965) and in particular by Olson and Zeckhauser (1966), which draws a diagram like Figure 1. "There is a systematic tendency for "exploitation" of

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the great by the small" (Olson, 1965, p.29). Few seem to be aware of the fact that this exploitation property stems from the nature of public good. The exploitation by the small no longer holds in the case of private goods, as will be shown in the next section.

One can extend this approach to a scenario in which many small countries coexist with a large hegemon. Suppose that a small country occupies a fraction ε of the world economy, but that there are n small countries. Accordingly, the hegemon occupies the proportion $(1 - n\varepsilon)$ of the world. The hegemon's reaction function does not change except that θ is now defined as $n\varepsilon/(1 - ne)$. Reaction functions of the hegemon and the smaller countries are modified. That is, in the simplest

$$(5) \quad x_2 = \frac{}{2n+1} - \frac{2\theta}{(2n+1)} x_2^*, \quad x_2^* = \frac{1}{2n+1} - \frac{2}{(2n+1)\theta} x_2.$$

The behavior of larger periphery countries will diverge from optimal behavior, and that of smaller countries will diverge even further downward (Figure 2). The resulting supply of public goods falls short of the optimal, and smaller countries enjoy free-rider positions.

The Nash equilibrium supply of public goods is given by

$$(6) \quad x_2 = \left\{1 - \frac{2\theta}{(2n+1)^2}\right\} \Big/ \left\{1 - \frac{4}{(2n+1)^2}\right\},$$

$$x_2^* = \left\{1 - \frac{2\theta}{(2n+1)^2\theta}\right\} \Big/ \left\{1 - \frac{4}{(2n+1)^2}\right\}.$$

One can see that the hegemon increases its contribution as its selective population int he world increases (θ decreases), and that peripheries reduce their contribution as θ decreases. An increase in the number of small countries n increases keeping θ constant the contribution by the hegemon increases and the contributions by small countries decreases. All are expected from the "exploitation by the small" hypothesis. Incidentally, the per capita public good is expressed as

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$$(7) \qquad (1-n\varepsilon)x_2 + n\varepsilon x^*_2 = \left\{ 1 - \frac{2}{(2n+1)^2} \right\} \Big/ \left\{ 1 - \frac{4}{(2n+1)^2} \right\} .$$

and a decreasing faction of the number of small countries. I have been concerned thus far with countries of various sixes but have assumed that incomes are identical. The world consists of countries with different income levels among which burden sharing problems can be serious. The next step is to introduce different levels of income to the case of two countries -- extension to a **many-** country case would be straightforward. Let the hegemon receive per-capita income y and the other country receive per capita income y^*. I will assume $y > y^*$ for convenience but this assumption is not essential. Equation (2) will become:

$$(2A) \qquad c_1 + x_2 = y, \quad c^*_1 + x^*_2 = y*.$$

The resulting reaction functions are:

$$(4A) \quad x_2 = \frac{y}{3} - \frac{2\theta}{3}x^*_2, \quad x^*_2 = \frac{y^*}{3} - \frac{2}{3\theta}x_2 .$$

In terms of Figures 1 and 2, in this case the reaction curve of the hegemon starts from y/3 instead of 1/3, and that of the other country starts from $y^*/3$ instead of 1/3. From this one can conclude that a large country tends to spend a larger proportion of its income for international public goods than does a small country. This justifies the common procedure of testing the Olson-Zeckhauser hypothesis by checking whether a large country spends more proportionately on military expenditures as with income rises.

4. The Size of Countries in a Model of Tariffs

The story of the last section will be dramatically reversed if one considers the situation associated with trade of private goods (instead of public goods) and tariff wars. The nature of strategic

interdependence changes from strategic substitutes to strategic complements (Bulow, Geneakopolos and Klemperer, 1985.) Also, the exploitation of the large by the small becomes the exploitation of the small by the large.

Consider the simplest two-country Ricardian model where labor is the only factor of production. In production of two goods, 1 and 2, the larger country (hegemon) has input coefficients a_1, a_2; the smaller country has input coefficients a_1^*, a_2^*. The larger country has a comparative advantage in producing good 1 so that $a_1/a_2 < a_1^*/a_2^*$. The two countries have a labor endowment, L and L*, and the larger country is large enough to warrant: $\max\left[\dfrac{L}{a_1}, \dfrac{L}{a_2}\right] > \max\left[\dfrac{L^*}{a_1^*}, \dfrac{L^*}{a_2^*}\right]$. (Here L is

assumed to be large enough. Instead, one could interpret the first country as being more productive country so that either a_1 or a_2 is small enough to satisfy the inequality.) Finally, the utility function of the representative consumer is expressed as an identical function of per capital consumption c_1, c_2, and c_1^*, c_2^*, or $U(c_1, c_2)$ and $U(c_1^*, c_2^*)$. Both governments are assumed to conduct their tariff policies in such a way as to maximize the utility of the representative consumer.[4]

The offer curves for this model are shown in Figure 3. The case illustrated in Figure 3 is one in which the hegemon is so large that the smaller country's offer curve intersects with that of the hegemon on the straight line (with slope a_1/a_2) through the origin. The smaller country satisfies the definition of a "small country" and thus cannot take advantage of the elasticity of the hegemon's offer curve. The hegemon can, on the other hand, impose an optimal tariff to exploit its monopolistic power in export, or monopsonistic power in import, in such a way that its trade indifference curve

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"This is indeed a strong assumption because the interests of various sectors may be distinctly different.

will be tangent to the offer curve of the smaller country, that is, at T.

If the size of the smaller country is very small, the gain accrued to the hegemon from imposing the optimal tariff is also small. The gain in terms of trade does not bring substantial welfare gain because the amount of trade is limited (see point S in Figure 4). China would not gain much from imposing tariffs on imports from Monaco. The gain from a tariff is larger if the smaller country has some magnitude in the world economy (see point M).

The two country assumption can now be relaxed. Suppose there is one hegemon and n smaller countries. Point M of Figure 4 illustrates the case in which n = 2. There is no incentive for smaller countries to impose tariffs on imports, since they cannot change the terms of trade offered by the hegemon, and, therefore, the same utility level as point M can be enjoyed by the hegemon while the smaller countries are both left at point S.

The strategic situation can be depicted by reaction curves in the space of the tariff rate of the hegemon t and that of the smaller country (or countries) t* (Figure 5). In this Ricardian situation the reaction curve of the smaller country (or countries) coincides with the horizontal axis. The reaction curve of the hegemon starts upward from the optimal tariff $\hat{t}$. Therefore, the Nash solution N is the combination $(\hat{t}, 0)$, which coincides with the von Stackelberg solution with the hegemon as the leader. The smaller country (or countries) has no incentive to be a leader.

It is well known that when the two (or more than two) countries have similar size, more complex **situations emerge in which a tariff hy a single country triggers** retaliation **by the other.** Here the reaction curve may take the property of strategic complements rather than that of strategic substitutes (Bulow, et.al. 1985). The situation of strategic complements arises when the tariff rate of a foreign country triggers a rise in the tariff in the home country.

In this situation concerning private goods and tariffs, a large country is motivated to be a von Stackelberg leader and to exploit small countries. In a trade of goods situation with tariffs as instruments, the hegemon will thus be able to manipulate the terms of trade to its advantage. Therefore, we may say, contrary to Olson's expression, "the large exploit the small." If this case is generalized to one in which there is a productivity difference such that $a_1 << a_1^*$, and/or $a_2 << a_2^*$ ($<<$ indicates a large difference), then it is possible to say, "the rich exploit the poor. "

In the Heckscher-Ohlin model with multiple mobile factors of production as well in the Viner model with an immobile factor of production, the offer curve of a large country no longer has an exactly linear segment. Still, a large country has an almost linear segment and our strategic results will hold without qualitative modifications.

In a more modern version of international trade theory with increasing returns and with the oligopolistic situation, a similar situation will emerge. The only difference is that the case of strategic complements usually takes place. As demonstrated by Gros (1987), and developed by Krugman (1991), the reaction function of a large country starts with a certain tariff level and is then a declining function of the tariff rates of smaller countries. (See also Goto and Hamada, 1994)

Conybeare (1987) claims that trade issues are primarily the benefit and cost associated with private goods and relative prices. From the above discussions, it is possible to understand the reason that the logic of collective action ceases to hold there, and that the large may exploit the small. We will discuss later why, in the real world, large countries do not necessarily impose, or do not threaten to impose, high duties on the products of small countries.

On the other hand, agreeing on a rule with spillover clauses such as the most favored nation (MFN) clause, establishing a free trade regime like the GATT, and building an institution like the WTO is a process of creating public goods. Rules and institutions have externalities and possess the nature of public goods as will be discussed below. This is a different kind of game than the game

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that is played by tariffs, quotas, and non-trade barriers. The controversy between proponents of the hegemonic stability approach and proponents of the trade-taxing game (Conybeare, 1989) will be at **least clarified, and even resolved, by recognizing the distinction** between the creation **of public; goods** and the interplay of strategic instruments in the game that involves private goods.

5. Cooperation, Regimes, International Organizations and Public Goods

The strategic interaction of nations can have many different patterns from the two simplest abstract examples we have studied above. **The** first example is extreme in that the strategy is limited **to tariffs; the second is extreme in that it assumes the existence of a pure public good that is** completely nonexclusive and nonrivalry in consumption. Many conceptual issues need to be clarified in order to apply these analytical tools to actual problems.

In international political economy, the words "international public goods" are used quite ambiguously, resulting in many different meanings. whenever one hears the words "international public goods," their exact meaning should be scrutinized. Often the use of the concept "public goods" may be ultimately justified. but it may refer to many varied entities or situations, from concrete goods or environment, to conventions that countries find useful to follow, to agreements **with** or without sanctions against their breach, or to the functioning of an international institution in the management of public goods.

First, as many authors do, it is necessary to distinguish the pure public good, whose consumption is nonexclusive and unrivalry, from the "club" good, whose **consumption** can be exclusive and competitive.   The environment is probably an example of the first, and unified currency for a region or a free trade area are both examples of **the** second.   However, there is always a grey area in this distinction. For example, a unified currency for a region benefits primarily the residents in the region, but it also has a positive spillover effect to people outside the currency union by reducing

their calculation and transaction costs. Defense can be considered as a club good for an alliance. However, to the extent that spillover to nonmember nations is substantial, it can take the flavor of an international public good.

The incentive mechanism for a public good studied in Section 3 is modified if the good is a 'club good.' In addition to examining whether a scheme supplies the right amount of public goods, the question of whether there is an incentive scheme to keep the number of club members optimal needs to be asked.

Second, it is important to identify how the cost of providing an international public good is paid. In most cases, the cost is paid in terms of private (non-public) goods or services. To provide security, countries fund military budgets. To clean the air and produce better cars for the environment, countries add additional materials and labor.

However, in many cases, commitments to actions and, particularly, commitments to inactions constitute the substance of creating public goods. To clean the air, we may reduce the amount of driving; to clean water, we may restrict polluting industrial activities; and to protect the ocean, we may restrict fishing. In the field of international finance, the commitment to intervene, or the commitment not to intervene in the exchange market, decides the choice of an interactional monetary regime between the fixed and the flexible exchange rate. With respect to the main concern here, the commitment to inactions, that is, not to impose tariffs, is essential to the free trade regime.

In accordance with these remarks, international public goods can now be classified into the following categories: (i) pure public goods, like defense and the environment, which are produced by sacrificing some private goods of member nations, and which are nonexclusive and nonrivalry; (ii) club goods, like the monetary benefit of a currency union, which can be enjoyed by participants who pay the cost but cannot be fully exclusive; (iii) unilateral mutual commitments for certain actions or inactions; (iv) a combination of any of the above three elements that are organized in such a way

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as can be called a regime or an order; and (v) the services of international institutions that manage regimes.

(i) Pure Public Goods:

Safety from an (possible) enemy is certainly a public good. In order to attain the service of this public good, nations sacrifice a part of goods and services, The service from defense usually satisfies the nature of inexclusiveness and nomivalry. Here the logic of collective action (Olson, 1965; Olson and Zeckhauser, 1966) is applicable. Similarly, environmental activities such as protection against **pollution, congestion, or preservation of species should belong in this category. In** this case, as is illustrated above, a large country tends to bear more of the burden of producing public goods. The small exploit the large.

(ii) Club Goods:

Regional economic cooperation, regional economic integration, and regional currency integration **are typical international** club goods. **A** military **alliance in a particular reginn can partially** be a club good. Thus, the distinction between the pure public good and the club good can be subtle. Nevertheless, it seems to be useful to discuss regional trade or monetary cooperation in this category of club goods.

First, a participating country gives up certain private goods in order to participate in regional cooperation or integration. In the case of a regional free trade area or customs union, a country gives up the right to impose tariffs (often above a certain rate) on the goods from the member of the free trade area and, in the case of a customs union, the right to choose freely the rate of a tariff to the rest of the world. Once collective actions generate a public benefit, the benefit will be enjoyed mainly by participating members. In the case of the creation of a free trade area or a custom union, the

spillover effects are negative (e.g., Goto and Hamada, 1994). Trade is created within the area, but trade is diverted from the rest of the world according to Viner's 'trade diversion effect'. This implies that if the decisions left to the initiative of individual nations are too many, customs unions or free trade areas will be created and they can become too large (see, e.g. Krugman, 1984).

In the case of a monetary unification or close exchange rate coordination, the cost for a country is its sacrifice in stabilization policy. Countries give up the merit of domestic macroeconomic stabilization to attain stability or predictability in exchange rates. The sacrifice is in private goods in terms of the income losses due to restricted macroeconomic policies. The potential gains are public goods because the benefit of unified currencies is common to all the participating nations. Some benefits even extend to the rest of the world. In contrast to customs unions and free trade areas, the spillover effect is positive in the case of a currency union or currency unification. If European currency is unified, North Americans need not convert money while traveling, nor prepare for the currency risks among European currencies. Therefore, there will be too few currency unions, or currency unions will become too small, if their formation is left to national initiatives. (See, for its political-economy aspect, Hamada, 1987; Hamada and Porteous, 1993.)

The time profile of benefits and costs have to be considered as well. The economic cost of foregoing stabilization policy is immediate. On the other hand, the benefit from stable or fixed exchange rates, as well as the benefit from a unified currency, will come years after. Therefore, it is diffkult to reach an agreement for stable exchange rates and a unified currency. The recent European monetary turmoil, which began in 1992 and occurred just before the planned target date for integration, illustrates the diffkulties involved in monetary unification?

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[5]On the other hand, the German monetary unification seems to imply that unification of currency is feasible in the presence of political unity.

(iii) Commitments of Participants to Actions or Inactions:

In many of above examples, countries do not just provide private goods or public goods for a collective action. They promise **or commit themselves to engage in certain actions or to refrain from** them. In a free trade area, member countries commit themselves not to impose tariffs on the goods from member countries; in a customs union, member countries do the same as above and, in addition, they commit to impose identical rates of tariffs on the goods from non-member countries.

During the formation of a currency union, countries promise that they will intervene in the exchange rate market to keep their currencies at an agreed upon exchange rate or within an agreed **upon range. The flexible exchange rate is the regime in which countries promise that they will** not intervene in the exchange rate market. This is therefore often called a "non-system. "

In terms of a dynamic game framework, two questions are important. First, is the commitment or promise credible? The **Bretton** Woods Regime collapsed in 1971 because the credibility of the vehicle currency was in doubt. One of the reasons for the success of German monetary unification was that it was much more credible in advance in the case of the European union.

Second, does the presence of a hegemon help credibility? The answer to this is probably **affirmative.** Until the middle of **1960s,** the United States was the dominant economic power, and, accordingly, the commitment by the United States was taken with more credibility. It has taken the initiative to commit to free trade and the fixed exchange rate regime, and it seldom showed any sign of reneging on its commitment. Now that the relative importance of the United States has declined in the world, the country does not necessarily have sufficient incentive to play world leader, that is, to provide an adequate amount of international public goods. Nor do other countries trust completely the commitment of the United States to serve as a leader. This leaves the world in an age of uncertainty.'

(iv) International Regimes:

The definition of an international regime is frequently debated by political scientists and economists. Cooper (1975) defines a regime as a particular set of rules and conventions governing monetary and financial relations between countries. "Regime" is, in a sense, more general than "system" or "order" because the latter imply systematic and consistent rules and conventions. "Regime" is distinguished from "agreement," because one does not regard a once-and-for-all, ad hoc international agreement as a regime. The words "regime," and "rules" or "conventions" suggest a situation where agents themselves interact with each other repeatedly following specific patterns of behavior.

Some political scientists define a regime in a more strict fashion. Many authors in Krasner, ed. (1982) take a consensus view: A regime is "a set of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations. " Here principles are defined as "beliefs of fact, causations, and rectitude," and norms are "specific prescriptions or proscriptions for action." Decision-making procedures are "prevailing practices for making and implementing collective choice" (Krasner 1982. p. 2). The role of expectations is emphasized.

To understand the importance of expectations, we should pay attention to the dynamic nature of the role of international agreements, and regimes should be considered.[6] If countries agree on a certain set of rules, it is usually under situations in which economic activities can be repeated following these rules. Commitment to action or inaction already presumes some sequential or repeated behavior, and it is particularly reflected in the definition. In other words, the situation is

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[6]A popular common discussion in the dynamic theory of trade is that of the infant industry. If the industry to be protected is under increasing returns to scale, external economies, learning by doing, in such a way that competitive price mechanism cannot capture the total benefit, then there are cases for protection of an infant industry. Then some of the protectionistic attitude taken by smaller developing countries can become explicable.

usually that of a sequential game or repeated game. If nations precommit to their behavior in the future, trust others' commitments, and, in fact, deliver on their commitments, then the world will proceed without serious problems. If a country does renege its commitment, then the situation will becomes difficult if not more interesting.

In the above definition, the phrase "expectations converge" is crucial. People have expectations **about what will be going on, and the expectations are converging. Therefore, the regime, according** to this definition, essential entails a rational expectations equilibrium. Not only is an agreement made, but agents expect that other parties will follow the rules. A hegemon definitely helps to build a **regime. The role of common knowledge is important. If countries share common causal knowledge,** they will find it much easier to cooperate or coordinate economic policies (Haas, 1992). They will build an epistemic community, "a network of professionals with recognized expertise and competence in **a particular domain and authorities claiming policy-relevant knowledge within that domain or issue** area" (Haas, 1992). If these professionals can help create common knowledge on the economic mechanism, obstacles against coordination will be moderated. The common expectations on the part of the public, which a regime requires, will emerge more easily.

It is important not to be too optimistic, however. First, in economic issues, specialists do not always agree on what is policy-related knowledge (Frankel and Rockett, 1988). Second, if they agree on common knowledge, countries and/or groups within a country may have conflicts of interest among them. Under certain situations, agreement or the understanding of a regime should be left "incomplete" (Koehane and Martin, 1994), and the ambiguity from incomplete contracts may help to bind participants in a regime.'

'An oriental diplomat coined a phrase, "instrumental ambiguity. " According to him, nations cannot agree if everything is expressed clearly. By leaving ambiguity, nations are motivated to participate in a joint action.

The way to sustain the situation of repeated game is the trigger strategy. Sanctioning against the reneging is the means to achieve the **mutually** beneficial results. The low rate of time discount rate helps to sustain of the equilibrium. In a time of **peace, when the discount rate is low, this can be** done more easily.

Ostrom (1991) clearly illustrates this for "common-pool resource (CPR)." CPR is like a lake where the long-run public interest to conserve fish conflicts with the private interest to catch fish now. Most environmental problems belong to this category. She points out not only the need for coordination, but traces the emergence of coordination. She considers the situation to be the Kreps **finitely-repeated game in which one of the sequential equilibria is a desirable solution. "It will pay** one player to signal to other players an intention to cooperate, in the hope that they will reciprocate for a series of mutually productive plays" (Ostrom, 1991, pp. 43). In order for the commitments made by players to be credible, either external coercion is needed, or some self-organized mechanism of mutual monitoring should evolve. Almost all of Ostoy's discussions can be translated to the question of an international regime. General implications would be that the existence of a hegemon helps, hut that an appropriate regime may emerge in a synergic manner if agents are patient enough.

In the time of crisis, one becomes impatient.[8] At this time, some political leadership, rather than rules or a regime, is needed for discretion (Jackson, 1991). The savior at the crisis stressed by Kindleberger can be interpreted by this. "Rules are desirable on trend. In crisis the need is for decision" (Kindleberger, 1988, pp. 139).

When the United States was, by itself, a privileged country which could provide sufficient public goods independently, the United States could enjoy the stability of a **free** trade regime. It hardly had

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[8]**Talking** about fishery Ostrom (1991) **says,"Discount** rates are affected by the levels of physical and economic securities faced by appropriators. Appropriators who are uncertain whether or not there will be **sufficient** food to survive the year will discount future returns heavily ---."

any intention to break the rules. The recent selfish or regime-eroding U.S. attitude may be traced to its lack of patience. In other words, its political, if not economic, discount rate might have become higher in this more disturbing period.

(v) International Organizations

Building an international organization is also a subject of the calculus of participation. Nations agree to build an institution as long as the merit of building an institution exceeds the cost of creating it. The logic of collective action works in this case as well. When the positive spillover or externalities stemming from international organizations exist, as is often the case with the outset of an organization, the pace of formation of international organizations by voluntary national initiatives can be considered to be short of the desirable pace. Through an international organization, monitoring **national activities, giving sanctions against internationally illegal activities, and accumulating** knowledge for future prospects becomes easier. In many cases, international organizations will facilitate the creation of an environment in which commitments by nations become more credible.

Keohane and Martin (1994) ask why and under what circumstances countries are willing to delegate their functions to an international organization. Their discussion focuses on information and the distribution of welfare. By establishing an international organization, countries can improve the flow of information and can thus create the critical information required for the coordination of policies. When there are multiple equilibria, the sharing of information is crucially important to choose the best among these equilibria. The international organization is an epistemological community (Haas, 1992). By nature, some agreements have to remain "incomplete contracts." To keep fairness among members in case of an unforeseen contingency, the linkage among many issues is useful (cf., Gowa, 1989). The interaction between delegating issues to an international organization and delegating them to domestic politics is systematically described in Kwhane and Martin (1994).

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Economists often consider this issue from somewhat different angle. After an international organization is established, it begins behaving more or less **independently.**[9] Indeed, some **officials** of the **institution are from** member countries and advocate policies of their home countries, but the secretariat of an institution will develop and start developing independent ideas and then preferences. Delegation is considered as a common agency problem, in which many countries, as principals, delegate a task to an international organization. Economists are concerned **with** the principal agent relationship in this delegation (Grossman and **Helpman,** 1994). They ask how the contract between countries and the international organization can be written efficiently and how possible conflicts of **interest can he** resolved among principals who do not necessarily possess a common goal.

In this respect, bureaucracy is a necessary ingredient of an international organization. It is thus quite possible that an international organization may acquire, in time, the rigidity, in addition to the information advantages of a bureaucracy, and, therefore resist changes in the policy of the institution that becomes necessary when external conditions change. Bureaucracy may by itself "lock in" activities of the organization. Thus it becomes a serious task to build some possible incentive structure for the institution for participating nations to avoid the incidence of Parkinson's law, while keeping the useful functions of an international organization. It is difficult as well as important.

6. Can We Explain the Symptoms of A Declining Hegemon?

Sections 3 and 4 have shown two completely different implications for the effects of country size **depending on** whether the issue involves private goods or public goods. **Given these** possibly opposing effects, it is possible to explain typical phenomena of the present international order as symptoms of a "selfish" or rational declining hegemon?

'According to conventional view, the IMF is under European, the World Bank is under American, and the Asia Development Bank (ABD) is under Japanese control. The nationality of many presidents in these situations seem to support this view.

First, the logic of collective action seems to explain why the United States recently adopted protectionistic policies by the imposing VERs and VIEs as well as by its threats to impose them. Since the relative economic and political weight of the United States is declining, as shown in Section 2, one may argue that U.S. commitment to the responsibility of keeping a regime of free trade, which has the public good character, has also declined. The "new" protectionism measures are virtually a breach of the international economic order and erode the reputation of the United States. However, the United States seems to prefer reaping the instantaneous gains that accrue in the private good domain.

According to the model explained in Section 4, a large country has, in general, incentives to appeal to the optimal tariff in the trade negotiating game. The United States practiced free-trade policy presumably because the merit of providing a free trade regime and building a regime of pax americana was more important to the U. S. government than realizing the fruits of monopolistic tariffs. The benefit from public goods was supposedly more important than the opportunity cost in terms of private goods. Therefore, if the United States has recently shown reluctance to bear the major burden of providing international public goods, this would imply some of the following factors.

Therefore, the relative economic and political magnitude of the United States have recently declined. The United States no longer serves as the police for the world and, therefore, can hardly be a guardian of world peace or the environment, or be meddlesome in many economic and political conflicts around the world. On the other hand, neither Germany or Japan is fully ready to assume the leadership role and begin pax germanica or pax japonica.

Second, after the end of the Cold War, defense has lost some of its importance as an international public good. Therefore, it is no longer of eminent priority for the United States to provide the free trade regime as a means of sustaining the military stability under her initiative.

Incidentally, there has been a change in the strategic structure of the defense expenditure game

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since the end of the Cold War. When the Communist Bloc was considered to be the threatening enemy of the Western Bloc, led by the United States, the public good nature of defense expenditure could be analyzed by the Olson-Zeckhauser apparatus. Small countries could take advantage of the free ride possibility, and the United States bore the burden more than proportionately. Defense was certainly public "goods" for the Western Bloc.

Since the Cold War ended, defense expenditures are spent in order to defend each country from other countries. The loss to any nation can be considered to depend roughly on the difference between the average holding of weapons of a potential adversary nation and the holding of weapons of the particular nation. Under this situation, instead of trying to free ride, players try to accumulate weapons in order to beat their neighbors. The structure of the Nash game changed from that of strategic substitutes to that of strategic complements after the collapse of the Berlin Wall. (For these concepts, see Bulow, et.al., 1985; and for the application for strategic structure, see Hamada, 1995.)

Under the situation of strategic substitutes a country's defense expenditure discourages the other's expenditures, in other words, it creates free-riding incentives. Under strategic complements, a country's defense expenditures escalates the other's --- this generates a situation similar to a different type of prisoners' dilemma from that under the Cold War. Here the undesirable situation is excessive armament of countries. Defense loses its public goods aspect and assumes the public "bads" nature. Not only large countries, but also small countries, attempt to accumulate more weapons than are necessary. In contrast to the Olson-Zeckhauser result, a small country may spend a greater proportion of its income on defense than a large country. Acquisition of munitions in East and Southeast Asia may be seen as an example of the strategic complements structure.

Third, the role of the discount rate is important. Many interventions by the United States into the rules of free trade make one suspect that the U.S. national discount rate has increased. In the face of many internal problems, Americans no longer seem to be patient enough, at least in the political

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economic sense, to sacrifice present gains in order to sustain the free trade regime for the future benefit.

The consideration of the multiplicity of public goods and the linkage of trade issues to political public goods like defense (Gowa, 1989; Keohane and Martin, 1994) also help to explain the present phenomena. The temporary gain from new protectionism is one dimensional, all measured in present economic gains. However, there are many kinds of public goods that the United States provides as a hegemon: military security, trade regimes, investment regimes, protection of intellectual property rights, an international monetary system, and so forth. Even though material benefits from each international public good is not substantial, the consideration of a set of public goods, or a particular combination such as trade and security, could have been sufficient to make the United States behave well in trade issues. Now that the relative size of the United States has declined and that the external environment for security issues has changed because of the collapse of the Berlin wall, then the United States may prefer a present gain.

Basically, however, the above theories so far explained can fully explain neither the trade barriers in small countries nor the new protectionism in developed countries including the hegemon, the United States. The theories fail to explain the prevalence of protection in many small developing countries, because, according to trade theory, small countries do not gain by tariffs or quotas (with the possible exception of dynamic infant industry effect). If a country is small in economic scale, it cannot change the world terms of trade and, accordingly, its national income cannot be increased from trade restrictions. Only when the layers of conflict discussed in two-level games are introduced will it be possible to explain the protectionistic practices of small countries.

The above theories, based on the "Third Image" level (Gowa, 1994) fail to explain the prevalence of new protectionism, that is, the prevalence of commodity arrangements like MFAs, VERs, and VIEs by the initiative of advanced countries. The United States is instrumental in

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pursuing the last two arrangements. These arrangements usually decrease national incomes of advanced countries. In the first two cases, exporting countries are asked to limit the amount of export. **In contrast to the import restrictions by advanced countries, tariff revenues and the rent from** quotas will accrue to self-restricting exporting countries rather than to protectionistic importing countries. The national income as well as the national welfare of the country that requests such **restrictive devices will decline.**

Therefore, unless one refers to conflict of interest among domestic groups, it is hard to explain the motives for these arrangements of new protectionism. For the case of the VIEs again, the **national welfare of the exporting country that requests such an arrangement will decline.** In other words, if the United States imposes quotas on Japan's imports of American cars, the loss to American consumers of cars usually exceeds the gain in profits to American auto-makers.

As Figure 3 illustrates, in terms of national interest, small countries have little incentive to take the protectionistic policy. In reality, however, many developing countries have high duties. Also, a large country does not impose monopolistic tariffs. The United States as a nation will lose if it asks its trading partners to adopt the VERs. In reality the United States insists that its trading partners agree on the VERs. (The VIEs also distort the offer curve and national welfare of the partner country deteriorates. **VERs make the partner choose a preferable point on the original offer curve, but** VIEs force him to choose an inferior point.) These examples show that nations are not negotiating for their well-defined, unique, "national" interest.

To repeat, only by introducing the element of domestic conflict into the analysis of international economic negotiations (Putnam, 1988; Evans, Jacobson, and Putnam, 1993; Grossman and Helpman, 1994), in other words, only by combining the "Second Image" approach with the "Third Image" approach, can one fully account for the present state of international political economy. Interest groups in a domestic economy can exert influence strong enough to realize an economic outcome

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unfavorable to the national economy. Of course, if a nation can have a non-myopic perspective, opposing groups may reach some reconciliation for the benefit of national income. For this purpose as well, a relatively calm economic and political environment that leads to more (time) patient group behavior will be helpful.

The degree to which the two-level approach is indispensable for explaining the conditions of the present **world differs from topic to topic. For issues in which the interests of various groups within a** country differ greatly, the layers of interests at the international and at the domestic level are important. First, trade issues and the choice of a trade regime are the most relevant areas for the **two level concept because strong conflicts of interest exist concerning trade liberalization between** producers and consumers, and between exporters and importers. Here the interests of groups interact like cross-fire over the ocean. For example, Japanese automobile makers have much in common with American **consumers, and American farmers have much in common with Japanese consumers.** Producers' interests tend to be more than proportionately represented in the political process. This asymmetry drives **the** world to the protectionistic situation as a prisoners' dilemma outcome. Second, domestic conflicts of interest certainly affect international cooperation in environmental protection, but to a lesser degree. Since environmental protection exhibits external economies, national negotiations may lead to an outcome short of **sufficient** preservation. Therefore, the existence of environmental pressure groups in each country will help the international Nash equilibrium approach the Pareto optimal situation. Conversely, strong opposition from industrial groups may deter a desirable international environmental agreement. Third, in international monetary coordination, the effect differences in the interests of the treasury, central bank, and industrial circles (Putnam, 1988; Henning, 1994) are more subtle than in trade.

In this case, the balance of power between the Treasury Department (Ministry of Finance in some countries) and the Central Bank could affect the degree of monetary coordination and the choice of

the monetary regimes. Putnam (1988) describes how the balance of influence between the German Finance Ministry and Bundesbank was affected in favor of the Ministry's expansionary position when international coordination of macroeconomic policies after the Bonn Summit, where "locomotive," theory of international coordination was coined. One of the reasons Japan's economy fell into a prolonged recession could be traced to the continuation of the very low interest rate policy during 1987 to 1989. The policy was taken in order to, or by the excuse to, sustain the dollar to fulfill Japan's commitment to international policy coordination.

To summarize, the domestic political structure in the United States does not seem to allow the **attainment of the first best solution for the United States as a nation. Similarly, other countries are** bound by internal domestic conflicts. In case of trade, lobbying pressures from import competing industries, such as the American automobile industries and Japanese farmers, restrict the "win set," that is, the set of negotiation outcomes that sustain the political stability of the incumbent party, Without consideration of these domestic factors, the present situation would be more difficult to interpret. If there is a hegemon that has a transcendent power, it might be capable of mitigating the impasse created by domestic economic conflicts. Thus, political leadership by a hegemon may be a means of widening the "win set" by reducing uncertainty (for the role of uncertainty in the two-level game, see Iida, 1993), by changing the perception of pressure groups, or by creating credible threats.

If a country is not a democratic country where vested interests compete by means of political or economic (bribery) processes, the nature of a nondemocrat political system, such as dictatorship, may affect the trade policy."

"According to McGuire and Olson (1995), intensity of trade or openness of the economy may influence the need for and the availability of tariff revenues. The interaction of domestic political system and trade policy would thus be modified if a country is ruled by a dictator.)

7. The Prospect for the Future

When a hegemon begins to lose its power or its relative scale in the world, what kind of consequences follow? This is the main question presented in this paper.

In my opinion, any country, hegemon or not, should be regarded as selfish or rational at any time. Rationality here means, of course, the "bounded" rationality subject to domestic political constraints. The consequences of rationality depend on the relative size of a nation as well as on the situation in which a country is located. The United States could have been a (partially) altruistic hegemon because its selfish behavior happened to coincide with the adequate supply of international public goods. In any situation we need a careful study of incentive structures for nations and domestic groups in order to explain the course of events in international political economy.

Instead of repeating the main messages that were summarized in the introductory section, let me end this paper by referring to the role of regionalism in the future course of the world political economy. I discuss the two examples, the international monetary regime and the international trade regime, with a brief reference to the system of foreign aid. I emphasize again, the distinction between the strategic interaction with respect to public goods and with respect to private goods.

When a hegemon begins to lose its prominence, what are the mechanisms that will provide the an adequate supply the adequate amount of international public goods and under what conditions will the next hegemon emerge? Keohane (1984) proposed an answer to the first question, i.e., a world system or regime may emerge by the combination of rational choices of nations. Through the inertia of the pax americana, the world may continue to be a'viable system for some time. Snidal (1985) applies a k-stability theory to the problem and argues that a group of nations can be motivated to supply an adequate amount of international public goods.

The case of the international regime illustrates the case where the public good that the incumbent hegemon provides may not be the one the next challenger will provide. The choice of an

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international currency, or the existence of an international currency, is a public good, although the international money in your wallet is a private good. In other words, money, or more precisely the use of a common money, has a public good character. Like language, money is used because others accept the same money. Here the competition between monies such as the Pound Sterling, the Dollar, the Deutch Mark and the Yen is to be analyzed by analogy to the competition between languages or, even better, computer languages. A wider use of a certain computer language has strategic advantage because of the network externalities (see, e.g. Katz and Shapiro, 1985). Monies can then be called 'differentiated international public goods.' A wider use of a currency facilitates further its international use. As argued by Hayek (1984), a country with a more stable monetary and fiscal policy will be able to provide a more desirable international currency. Currently, the world seems to have developed doubts about whether U.S. fiscal policy is an adequate policy to give foreigners incentive to hold the dollar as an international money.

Because of the public good character of money, it is hard to take over the incumbent international currency. However, once another currency reaches the stage when its characteristics are attractive enough, the process of money selection may have the nature of a catastrophe in a dynamic nonlinear model (Krugman, 1984). The transition to another currency will occur like an avalanche.

In this context, the applicability of k-stability theory can be tested by looking at the process of the European monetary unification. First, the question remains whether European countries can agree and succeed in achieving monetary unification as a club good. Second, if unification is realized, will it provide a public guud to the world? The answer is negative except for the spillover effect to travelers and traders living outside Europe. The road from a club good or a regional public good to an international public good is still remote.

In passing, the case of the foreign aid is interesting. For example, Japan already exceeded the United States in the amount of aid given to developing countries. In this domain, the maintenance of

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world stability by reducing poorer nations can be a common goal for many countries. Therefore, unlike the international currency, the United States and Japan, among others, are providing the same public goods. Thus the analysis of Olson and Zeckhauser (1966) applies more naturally. However, after a while it may turn out that the international order that the United States envisions differs from the international order that Japan or Germany envisions. Then the burden-sharing game of foreign aid by cooperation will change its character into competitive aid for the donor's political control.

Finally, let me turn to the trade regime. I have already mentioned the changing attitude of the United States toward VERs and VIEs. In addition, a move towards regionalism has been observed. The benefit-cost structure in economic integration can be derived from the model discussed in Section 4. The European Union, the North American Free Trade Agreement (NAFTA) and a looser union like the Asia Pacific Economic Cooperation (APEC) can be interpreted thus as a move for creating cluhn and club goods. These movements are heneficial for those who join the union, because of the trade creation effect, but those outside the union may lose because of the trade diversion effect. In other words, trade will be created within a region with lower internal trade barriers, but trade with countries outside the region will be reduced because nations tend to buy more from nations within the region. The welfare of the world can be affected negatively by the trade diversion effect in spite of a clause like the GATT Article 24 which restricts the use of the increased bargaining power of a free trade area or a customs union."

The public-goods-providing capacity of an international organization like the WTO can be curtailed by the "selfish" bilateral behavior of a declining hegemon. In this case, the United States may erode the system of international public goods. In the case of NAFTA and APEC, the hegemon is trying to strengthen its potentially declining position by enlarging the domain of economic activities

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"GATT 24 forbids a customs union or free trade members to increase their tariff rates against the rest of the world after integration. For the economic implications of this clause, see Goto & Hamada (1994).

under its influence, That is, the United States is attempting to forge an "augmented hegemon," or "fortified hegemon." There is a gap between this phenomenon of regional agreements to create an augmented hegemon **and the analysis of k-stability. The k-stability theory is concerned with the** proper creation of international public goods. The creation of augmented free trade regions seems to reinforce the monopolistic power of the hegemon in the private goods domain. Only if these regional movements facilitate the **establishment** of an overall free trade regime for the world can they be considered as a step towards the adequate supply of international public goods.

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FIGURE 1
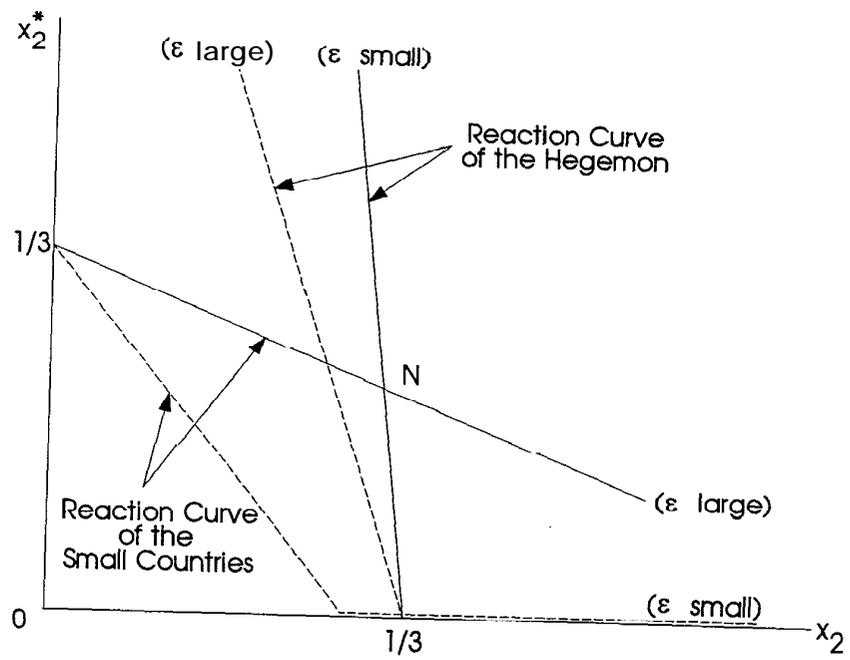
FIGURE 2
Many Small Countries

FIGURE 3

Good 2

Offer Curve
of the Hegemon

Trade Indiff erence Curve
of the Hegemon

T

Offer Curve of
the Smaller Country

a_1/a_2

0

a_1^*/a_2^*

Good 1
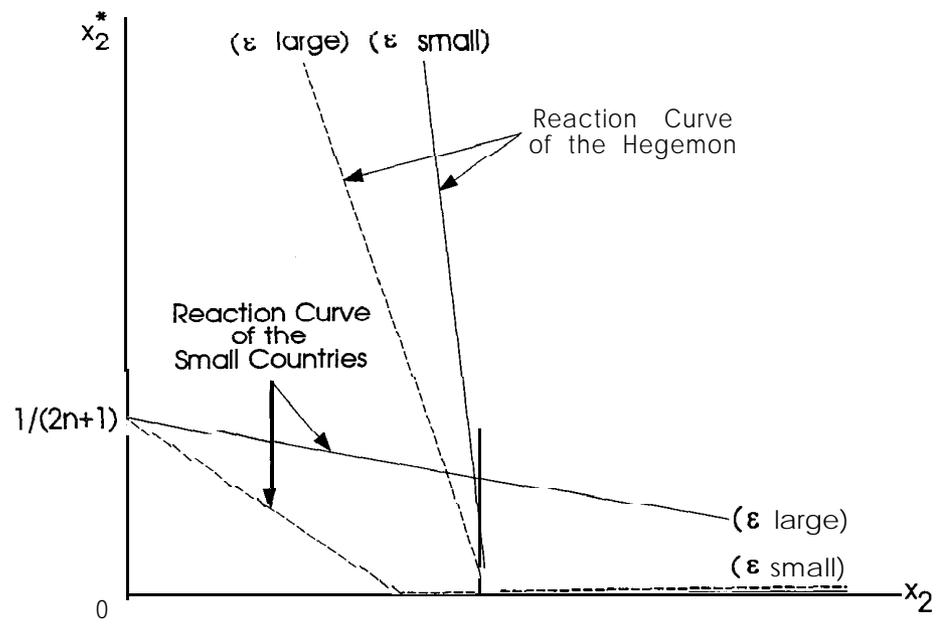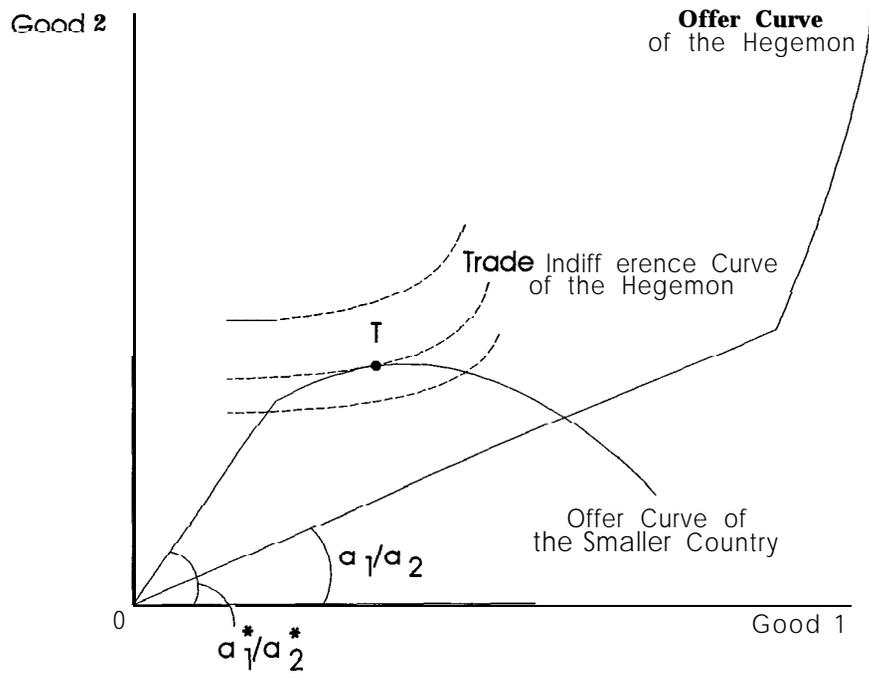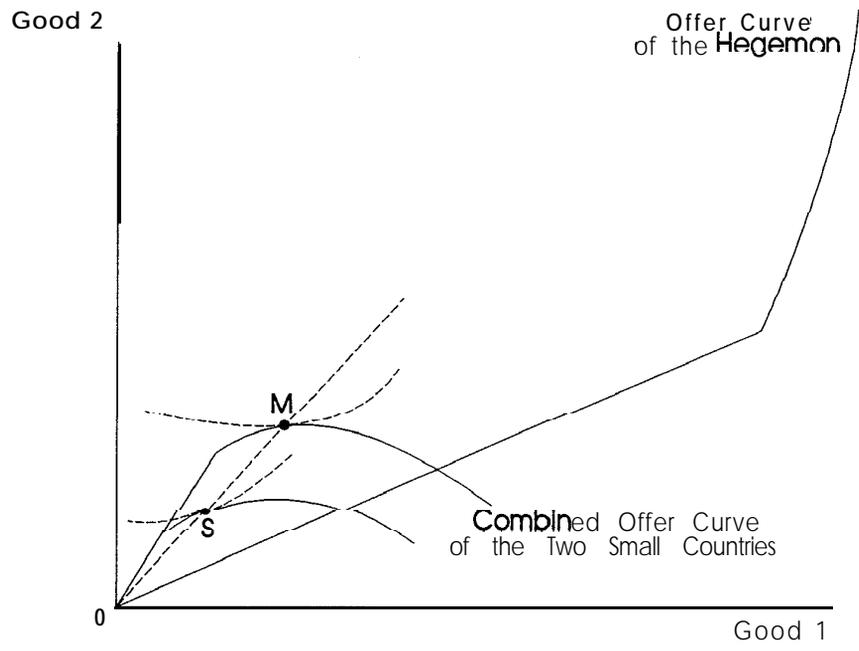
FIGURE 4

FIGURE 5
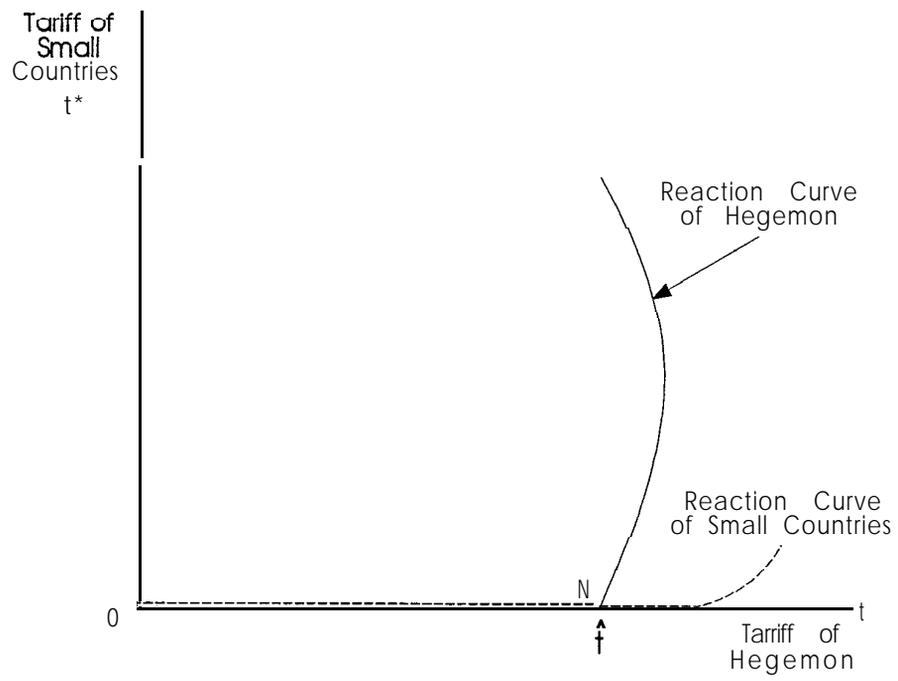
CHART 1

**Average Most-Favored-Nation Tariffs
in Industrial Countries on Imports
(percent)**

All industrial countries   Latin America   Asia   Africa   Developing Europe

Pre-Uruguay Round

Post-Uruguay Round
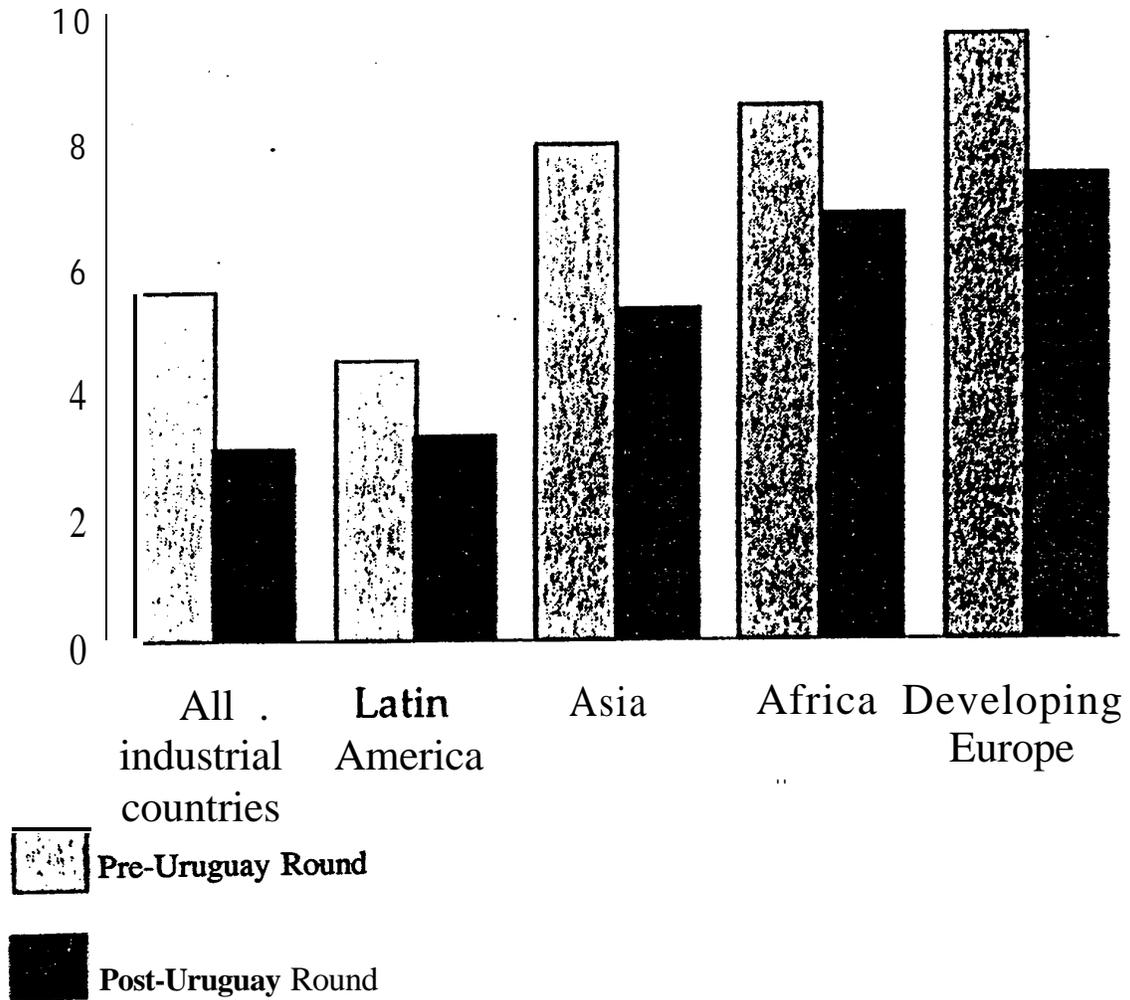
TABLE 1

Relative Shares of Nations

A. GDP

| Share (GDP)					
	1960	1970	1980	1990	1993
U. S.	52. 24%	46. 02%	33. 55%	32. 77%	32. 73%
Japan	4. 51%	9. 27%	13. 12%	17. 50%	22. 04%
U. K.	7. 35%	5. 64%	6. 66%	5. 82%	4. 92%
France	6. 18%	6. 50%	8. 23%	7. 14%	6. 55%
Germanv	7. 88%	9. 05%	10. 81%	9. 66%	9. 99%
Italy .	4. 03%	4. 89%	5. 61%	6. 54%	5. 18%
OECD	100. 00%	100. 00%	100. 00%	100. 00%	100. 00%
billion $	985. 32	2197. 99	8072. 60	16753. 82	19123. 52

B. Trade

Share (export)						
	1950	1960	1970	1980	1990	1994
U.S.	18.0%	18.0%	14.5%	11.9%	11.8%	12.2%
Japan	1.4%	3.5%	6.6%	6.9%	8.6%	9.4%
U.K.	11.1%	9.3%	6.6%	5.8%	5.6%	4.9%
France	5.4%	6.0%	6.1%	6.1%	6.5%	5.6%
Germany	3.5%	10.0%	11.7%	10.2%	12.3%	10.0%
Italy	2.1%	3.2%	4.5%	4.5%	5.1%	4.5%
World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(billion $)	57.1	114.6	293.4	1,895.6	3,334.4	4,201.3

Share (import)						
	1950	1960	1970	1980	1990	1994
U.S.	16.3%	13.6%	13.7%	12.9%	15.0%	15.9%
Japan	1.6%	3.7%	6.1%	7.1%	6.8%	6.4%
U.K.	12.4%	10.8%	7.1%	5.8%	6.5%	5.2%
France	5.2%	5.2%	6.2%	6.8%	6.8%	5.3%
Germany	4.6%	8.5%	9.7%	9.5%	10.0%	8.6%
Italy	2.5%	3.9%	4.8%	5.1%	5.3%	3.9%
World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
(billion $)	59.0	120.2	309.7	1,986.3	3,455.4	4,324.9

C. The Balance of Current Account

Current account (in percent of GDP)					
	1960	1970	1980	1990	1994
U.S.	0. 56	0. 24	0. 10	-1. 70	-2. 30
Japan	0. 32	0. 98	-1 . 00	1. 20	2. 80
U.K.	-1 . 00	1. 60	1. 30	-3. 40	-0. 10
France	n. a	0. 04	-0. 60	-0. 80	0. 70
Germanv	1. 53	0. 46	-1. 60	3. 20	-1. 20
Italy	0. 851	0. 901	-2. 30	-1.60	1. 40

TABLE 2

Tariff Averages Before and After the
Implementation of the Tokyo Round

Country or Country Group	Tariffs on Total Imports of Finished and Semifinished Manufactures		Tariffs on Imports from Developing Countries of Finished and Semifinished Manufactures	
	Pre-Tokyo	Post-Tokyo	Pre-Tokyo	Post-Tokyo
European Community				
Weighted	8.3	6.0	8.9	6.7
Simple	9.4	6.6	8.5	5.8
Japan				
Weighted	10.0	5.4	10.0	6.8
Simple	10.8	6.4	11.0	6.7
United States				
Weighted	7.0	4.9	11.4	8.7
Simple	11.6	6.6	12.0	6.7

Weighted: Trade Weighted Average
Simple: Simple Average

Source: World Bank, 1987

TABLE 3

Imports Subject to Nontariff Barriers, 1983
(Percent)

Country or Group	Textile & Clothing			Manufacturing		
	Total	From Industrial Countries	From Developing Countries	Total	From Industrial Countries	From Developing Countries
United States	57.0	31.1	64.0	17.1	16.5	18.6
European Community	52.0	15.6	68.9	18.7	15.2	29.9
Japan	11.8	11.0	13.0	7.7	9.7	4.4

Source: Goto, 1989

TABLE 4

Industrial Country Imports
Subject to "Hard-Core" NTBs,
1981 and 1986
(percent)

	Source of Imports			
	Industrial Countries		Developing Countries	
Importer	1981	1986	1981	1986
EC	10	13	22	23
Japan	29	29	22	22
United States	9	15	14	17
All Industrial Countries	13	16	19	21

NOTE: "Hard-core" NTBs represent the NTBs that are most likely to have significant restrictive effects. Hard-core NTBs include import prohibitions, quantitative restrictions, voluntary export restraints, variable levies, MFA restrictions, and nonautomatic licensing.

Source:

TABLE 5

Import Coverage Index of a Subgroup
of NTBs Applied by Selected Industrial Market Economies,
1981-1986

(1981 = 100)

Importer	NTBs (Hard-Core)				
	1982	**1983**	**1984**	**1985**	**1986**
Austria	100.0	100.0	100.0	100.0	99.3
Canada	108.6	106.0	108.4	112.1	121.3
EC*	105.7	110.9	113.9	120.8	118.3
Finland	102.5	102.5	102.5	101.0	101.0
Japan	99.2	99.2	99.2	99.2	98.6
New Zealand	100.0	100.0	100.0	92.6	86.1
Norway	101.1	96.4	94.4	86.6	85.3
Switzerland	100.4	100.4	100.8	100.8	100.8
United States	105.5	105.6	112.1	119.2	123.0
All	104.6	107.1	110.2	115.3	115.8

*Excluding Portugal and Spain

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Source: World Bank, 1995