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THE PUBLIC CHOICE VIEW OF
INTERNATIONAL POLITICAL ECONOMY

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February 1983
CP-83-7

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ABSTRACT

This paper surveys the applications of Public Choice theory (that is, the economic approach to politics) to international political economy. The central characteristics and the main theoretical concepts of this approach are discussed and its applications in various problem areas are described. The advantages and disadvantages of the Public Choice viewpoint compared with the traditional (political-science-based) view of international political economy are evaluated. It is concluded that the former approach represents an interesting and worthwhile complement to the latter.



THE PUBLIC CHOICE VIEW OF INTERNATIONAL POLITICAL ECONOMY

Bruno S. Frey*

I. The Neglect of Public Choice

There can be no question that the study of international political economy has received insufficient attention in both economics and political science. As one writer puts it:

"...in the twentieth century the study of international political economy has been neglected. Politics and economics have been divorced from each other and isolated in analysis and theory... Consequently, international political economy has been fragmented into international politics and international economics".¹⁾

Though this gap still exists today, it has been narrowed considerably by the emergence of a new field from international relations theory, a field commonly known as "International Political Economy". There is no need to survey it here, because this has recently been done²⁾ and because the basic contributions³⁾ are by now well known - at least among international relations scholars. There are also a number of collections of relevant articles⁴⁾.

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Political-science-based scholars quite outspokenly claim "International Political Economy" as their proper and exclusive domain. It is argued that "the foundation of a realistic study of the international political economy are not dissimilar to those of conventional political analysis"⁵⁾.

Accordingly, "power" and "authority" are taken to be the central concepts with which to study the problems. In addition, the analysis has to be "dynamic" and has to take historical processes into account⁶⁾. It is not surprising that, as a consequence, there is a marked tendency to reject any approaches based on economic theory. Thus it is stated:

"The bases of an effective analysis of the international economy must ... be rooted in a number of assumptions ... that are incompatible with neo-classical economic theory".⁷⁾

With respect to performance, a survey bluntly states:

"The 'textbook orthodoxy' of neo-classical [economic] theory is successfully challenged by the contrast with and the formulation of an alternative perspective".⁸⁾

This rejection of economic theory does not, however, seem to be based on an extensive knowledge of the literature. In particular, the economic approach to politics, usually called Public Choice, seems to be almost totally disregarded⁹⁾. The "classical" writers in Public Choice, such as Arrow, Downs, Buchanan, Tullock, Niskanen, are hardly, if ever, mentioned. It is only due to this oversight that a survey written as recently as 1981 can maintain:

"Neo-classical theory ... treats political and social processes

perfunctorily, as extraneous, and, at best, exogenous factors".¹⁰⁾

What Public Choice has done is exactly to treat political processes as endogenous factors¹¹⁾.

This paper endeavours to show that

- (1) Public Choice has been applied specifically to international political economy, and that there is a large, and rapidly growing literature on the subject;
- (2) Public Choice offers an interesting and worthwhile approach to the area, complementing the political-science-based views of "International Political Economy" in a useful way;

and that consequently

- (3) the claim for exclusivity made by some writers based in political science should be replaced by the realization of the need for mutual cross-fertilization of the two (partly competing) approaches.

Section II of this paper discusses the Public Choice approach, first outlining its central characteristics and then going through the main concepts from Public Choice used in international political economy. Section III surveys some of the major problem areas in international political economy to which Public Choice theory has been applied. The concluding Section IV provides a (preliminary) evaluation of the Public Choice approach, seeking to determine its advantages and disadvantages as compared to political-science-based international political economy.

II. The Public Choice Approach

1. General characteristics

Public Choice, sometimes called the Economic Theory of Politics or (New) Political Economy, seeks to analyze political processes, and the interaction between the economy and the polity by using the tools of modern (neo-classical) analysis. It provides an explicit study of the workings of political institutions and of the behaviour of governments, parties, voters, interest groups and (public) bureaucracies. Public Choice is part of a movement which endeavours to apply the "rational behaviour" approach to areas beyond (traditional) economics¹²⁾. In recent years, an increasing number of political scientists¹³⁾, sociologists¹⁴⁾ and social psychologists¹⁵⁾ have taken up this approach, thus constituting one of the rare successful examples of interdisciplinary research.

Both the "rational behaviour approach to social problems" and Public Choice theory are characterized by the following features:

- (i) The individual is the basic unit of analysis. He is assumed to be "rational" in the sense of responding in a systematic and hence predictable way to incentives: courses of action are chosen which yield the highest net benefits according to the individual's own utility function. Contrary to what is often believed by non-specialists, it is not assumed that individuals are fully informed. Rather, the amount of information sought is the result of an (often implicit) cost-benefit calculus, and it is indeed shown that in the political arena it often does not pay the individual to be well-informed ("rational ignorance").

- (ii) The individual's behaviour is explained by concentrating on the changes in the constraints to which he is exposed; the preferences are assumed to be constant. The individuals are assumed to be capable of comparing alternatives, to see substitution possibilities, and to make marginal adjustments.
- (iii) The analysis stresses rigour (and is sometimes formal¹⁶⁾), and the results must yield a proposition which (at least in principle) can be subjected to econometric (or politometric) testing.

There is no need to go into general Public Choice theory here¹⁷⁾; only its applications to problems of international political economy are relevant to this discussion.

2. The concepts applied in international political economy

In the international field, some theoretical concepts developed in Public Choice are used particularly often. Four such concepts will be briefly mentioned here in order to illuminate the Public Choice approach to international political economy.

2.1 Public goods theory

This is certainly the concept used most frequently within economics-based international political economy¹⁸⁾. Its usefulness is well illustrated in a contribution by Kindleberger¹⁹⁾, in which he looks at various aspects of the international economy from the point of view of public goods, and at the tendency for free riding (in which a public good is available to all, irrespective of whether they have contributed to its supply or not). Thus,

law and order can be considered a public good forming an important complement to foreign trade. Its absence can lead to a serious disruption in international exchange. The institution of the state may also be looked upon as a public good. The high costs arising when it does not exist may be illustrated by the example of Germany in 1790. At this time there were 1,700 tariff boundaries with 300 rulers levying tolls as they pleased. No wonder that the advantages of trade exchange could not be exploited to any degree! The existence of national monetary institutions may also be looked upon as a public good.

There are a great many other applications of the public goods concept and the concomitant free rider problem which come to mind, such as trade liberalization, nationalism, alliances and burden sharing. Another application is the preservation of the natural environment beyond natural frontiers, such as the campaign against whaling or the protection of the atmosphere.

The use of the public goods concept is extremely useful and intuitively plausible. The ease of application may, however, sometimes hide underlying problems. The exact conditions under which free riding occurs are still unknown; often it is simply assumed that actors do not contribute to the common cause. Laboratory experiments of public goods situations suggest that free riding does not occur as often as pure economic theory would have us think²⁰⁾. Moreover, institutional conditions are often such that free riding is discouraged.

Even when the national actors fully perceive that it is advantageous for them to cooperate for the provision of a public good, it is difficult and sometimes even impossible to coordinate some joint action. In view of the

general impossibility of forcing the independent national actors to cooperate, the free rider problem can be overcome by finding rules or constitutional agreements which lay down the conditions for cooperation²¹⁾. In order to find a set of "rules" which the participants are willing to accept in a state of (partial) uncertainty about the future, the actors must believe that obeying the rules will be advantageous to them. The agreement must lead to a result which is Pareto-superior with respect to the expectations of all actors, because only under these conditions is there voluntary cooperation, i.e. unanimity among the participants. These conditions are not easily set up and maintained in the international system. Once a rule or constitution has been agreed upon, the problem is to ensure that the rules are observed and that individual nations have no incentive to back out of or attempt to alter the agreement.

The "constitutional" approach has been applied to various problems in International Political Economy, e.g. environmental and fisheries pacts, international public health accords, cooperation about forecasting (and in the future possibly influencing) the weather, the use of outer space and the international judicial system²²⁾. There are two areas in which the establishment and enforcement of rules have occupied a central position:

First, international monetary arrangements may be considered to be rules which, if well designed, are advantageous to all, but where the incentives for deviation are also marked. It is therefore necessary to consider not only the Pareto-superiority of an international monetary scheme, but also the benefits and costs to the individual participating nations²³⁾. This aspect has been overlooked in the many proposals made in this area; they

usually (implicitly) assume that there is a "benevolent international dictator" who will put them into effect.

An important related question is why certain rules have not influenced behaviour as much as one might have expected. An example is provided by the Bretton Woods system, in which changes in exchange rates have been made too infrequently, and generally too late²⁴⁾. The reason is that there are forces against both devaluation and revaluation. Devaluation is believed to be interpreted by the voters as admitting financial failure, with negative consequences for the government in power. A revaluation is good for the voters (consumers) but very bad for the well-organized group of exporters and import competitors, so that the government may again run into trouble. In view of this unwillingness to adjust exchange rates, an agreement allowing freely flexible exchange rates may be preferable because the issue is then taken out of government (and central bank) politics.

The second area in which rules play an important international role is that of international common property resources. The need for international conventions and rules is obvious in view of the pollution of the atmosphere and the over-fishing and over-exploitation of the oceans²⁵⁾. The difficulty of reaching agreement on what these rules should be is equally well-known. It is hard to obtain a consensus because none of the countries involved can be forced to accept the rules. The only acceptable rules are those which produce such high aggregate (net) benefits that they can be distributed among the participating countries in such a way that everyone finds it advantageous to agree and to stick to the rules. Such rules do not usually exist; it is quite possible that agreement on some of the current proposals

concerning international common property resources would be worse than no agreement at all.

2.2. Voting theory

A second set of concepts used in the Public Choice approach to international political economy deals with the properties of both classical (in particular majority rule) and new voting procedures²⁶). Of the newly developed voting schemes, the following three are of particular interest for international political economy:

- (a) The voting by veto rule²⁷) allows each nation to include its own proposition in the set of alternatives. The decision is made by each nation (with one exception) deleting that alternative which it dislikes most. The order in which the nations "vote" is determined randomly. The alternative which is not deleted but remains is the collective choice. Obviously, each nation has an incentive not to introduce an alternative strongly disliked by one or more other nation(s); there is even an incentive to actively consider the interests of the other nations.

This voting rule has several good features: it allows the expression of preference intensities; it brings about Pareto-optimal outcomes; nobody can be exploited because of the veto right; and there is an unbiased revelation of preferences (i.e. there is no incentive for strategic voting). Voting by veto is, on the other hand, rather clumsy to administer and is open to undue influence by coalitions.

- (b) The voting rights of a group may be in proportion to the financial contribution it makes to an organization. Such a rule exists, for example,

for countries represented on the Board of Governors of the International Monetary Fund. The properties of such a voting system have been studied by observing it in operation in a number of water purification associations²⁸⁾.

This voting rule allows the use of votes which can be weighted according to a country's stake in a particular issue, i.e. the weighting can vary across issues. A flexible rule of this type may increase the acceptability of the decisions taken. When the traditional "one nation, one vote" rule is used, the largest and most severely affected countries may simply disregard the collective decision.

- (c) In the preference revealing mechanism²⁹⁾, each nation casting a vote and thereby negatively affecting the utility of any other nation (because without that country's vote the decision would have been different) must pay a tax equal to the disutility imposed on other nations.

This voting procedure has various advantages over simple majority rule: it allows the expression of preference intensity; it is nearly Pareto-efficient³⁰⁾; it is not subject to the voting paradox; and it provides an incentive for the participants to reveal their true preferences.

The disadvantages are similar to those of voting by veto: it is subject to coalition influence; it is complicated to administer and rather difficult to understand (at least for non-economists).

These three and other newly devised voting rules may be useful in those cases in which nations are unwilling to be subjected to the traditional simple majority rule (for example, in international institutions), or where traditional methods have not worked well. They obviously will

not be introduced in bodies where the decision-making is reasonably well-functioning, but may play a useful role in breaking deadlocks under other circumstances.

2.3. Theory of rent seeking

Rent seeking analyses the fact that scarce resources (labour and finance) are consumed in fights over trade restrictions which benefit those sectors protected from competition, but which otherwise serve no socially useful purpose³¹⁾. It is useful to differentiate between two activities, both of which from society's point of view waste resources³²⁾: "rent seeking" is the activity by which trade restrictions (tariffs, quotas) generate rents to one's advantage; "revenue seeking" is the fight over the distribution of revenues and is thus a general distributional phenomenon.

Rent and revenue seeking are of obvious importance for international political economy. Care should be taken, however, not to fall prey to the "nirvana syndrome", i.e. to compare a situation in which there is a competitive struggle over trade restrictions with an ideal situation in free trade. The relevant comparison is between different institutional conditions existing in real life, for example between a situation in which the interest groups fighting for (and against) tariffs are organized at the national level, and one in which the interest groups are organized at the industrial level.

2.4. Politico-economic modelling

Politico-economic models study the interdependence between the economy and the polity by explicitly analyzing the behaviour of actors and testing the resulting propositions using econometric (or rather politometric) tech-

niques³³⁾. The simplest such model analyzes the following circular system: The state of the economy influences the voters' evaluation of the government's performance, which is reflected by a vote or government popularity function. If it considers its chances of re-election to be poor, the government reacts by using economic policy instruments to influence the state of the economy and thus the voters' decisions. It should be noted that the government's actions may depend on its ideology if it considers its re-election chances to be good. The model is, of course, a great simplification of reality, but it has already been shown that the framework can be extended to incorporate additional actors and relationships, and further work on this is in progress.

A politico-economic model for an individual country can be extended in two ways to include international politico-economic relationships:

The first approach is to concentrate on the internal connections between the economy and polity but also to introduce international influences. In this case the politico-economic model outlined above is amended by factors emerging from the international sphere. One such factor is the state of the balance of payments, which may influence the voters' evaluation of the government's performance. A survey of over one hundred empirical studies of vote and popularity functions finds, however, that only six of them include the balance of payments among the indicators of economic conditions³⁴⁾. Only in the case of the United Kingdom does it influence voters' decisions in a statistically significant way. In the other cases (for Denmark and Australia) the coefficients are small and insignificant. It has to be concluded that even in countries with seemingly permanent and serious balance

of payments troubles the voters either do not perceive them, or do not (directly) punish the government for it to any significant extent³⁵⁾.

International political events may be another factor affecting votes and government popularity. It has been empirically shown in various studies for the United States ³⁶⁾ that when the country is subjected to an international political crisis, the population tends to "rally round the flag". A similar effect may hold for other countries.

Another influence which may be introduced into politico-economic models is the foreign intervention in the country's internal polity which may occur if the results of a particular election are considered undesirable by the foreign nation.

The government politicians may also have specific international political preferences and influence the internal economy accordingly, provided their re-election chances are not seriously diminished.

Finally, the use of the economic policy instruments is influenced by international economic conditions. The possibility of creating a "political business cycle" aimed at improving re-election chances also depends on institutional conditions within the international economy. It has been argued³⁷⁾ that an expansionary economic policy yields more favourable short-run inflation-unemployment (or real income) trade-offs with a system of adjustable pegs than with a depreciating exchange rate. A system of adjustable pegs may thus be expected to increase the government's incentive to attempt to gain votes by introducing an expansionary policy before elections, and devaluating thereafter.

The second approach goes one step further by considering the mutual interdependence of domestic and foreign economies and politics. This research strategy is particularly well-developed with regard to arms race models. Such models have traditionally analyzed the mutual responses of two nations to each other's defence outlays in a rather mechanistic way following the original Richardson³⁸⁾ ideas. In the last few years, however, the decision-making structure has been greatly improved by introducing elements of Public Choice. In particular, it has been realised that a nation's response to the armament of another nation depends on the government's utility, and is subject to the constraints imposed by the desire to be re-elected as well as by economic resources. The models have been econometrically estimated and their behaviour has been analyzed with the help of extensive simulations³⁹⁾.

Both of the aforementioned approaches are useful; the second approach is, of course, much more far-reaching and may therefore be difficult to apply to politico-economic interaction as a whole. It may therefore be advisable to restrict it to one particular issue at a time.

This section of the paper has examined the theoretical concepts often applied in the Public Choice approach to international political economy in the past - these include public goods theory (including rules and social contracts), voting theory, and the theory of rent-seeking - or which could fruitfully be applied in the future (such as politico-economic modelling). The application of existing theoretical concepts has the advantage that their properties and especially their limits are (at least in principle) known, that they "guide" the research, and that when they are used in an imaginative way interesting results are likely to be obtained. There is,

however, a danger that theoretical concepts may be applied to problems for which they are not suited, and that in the desire to obtain (quick) results the particular characteristics of the situation are not sufficiently considered. The intention of this section was to illustrate the type of explicit theoretical concepts underlying the Public Choice approach to international political economy using selected examples; the list of concepts given here is by no means complete. The use of such explicit theories is one of the main features distinguishing this approach from the political scientists' International Political Economy, which relies more on implicit theorizing.

III. Problems Analyzed

This section endeavours to illustrate the substantive contributions that have been made by Public Choice to the theoretical and empirical analysis of international political economy. Again, no complete survey of all the applications of Public Choice to the area is intended, nor would it be possible in an article of this length. The areas selected represent those in which the majority of, and in the author's view the most interesting, contributions have been made. They are (1) the formation of tariffs and trade restrictions, (2) foreign direct investment, (3) international aid and (4) international organizations and bargaining. The short discussions of these areas which follow should show that considerable work has been, and is being, done by economists in international political economy. This suggests that it would be useful to consider the economists' work in political scientists' International Political Economy.

1. Tariffs and trade restrictions

Most economists approach the analysis of tariffs (and other restrictions on trade) from the same standpoint: they start from the basic proposition of international trade theory that free trade leads to higher real income and is desirable not only for the world as a whole but also for individual countries⁴⁰). The problem for political economists is thus to explain why tariffs nevertheless exist, and why governments so rarely seem to take the welfare-increasing (Pareto-optimal) step of abolishing tariffs. It might be expected that the government would win votes by abolishing tariffs, either because a majority of the electorate benefits directly, or because it can redistribute the gains so that a majority of the electorate is bet-

ter off than in a situation with tariffs. If the citizens were to determine whether to have tariffs by a direct single majority vote in an assembly, the median voter would cast his vote in favour of free trade.

The simplistic assumptions of the median voter model must, however, be modified in a number of important respects if it is to represent reality, and this provides an explanation for the continuous existence and sometimes even growth of tariffs⁴¹⁾. At least five modifications must be considered.

The first is that the losers in any tariff reduction, the people engaged in the domestic production of the goods concerned, are not compensated. If they form a majority, they obstruct the reduction and/or elimination of tariffs.

The second modification necessary is to consider the fact that the prospective gainers have less incentives to participate in the vote, to inform themselves, and to organize and support a pressure group than do the losers. Tariff reductions are a public good whose benefits are received by everybody, including those not taking the trouble and incurring the cost to bring about the reduction. The prospective cost of tariff reduction to the losers is, on the other hand, much more direct and concentrated, so that it is worthwhile for them to engage in a political fight against tariff reduction. In addition, the well-defined short-term losses to be experienced by the losers are much more visible and therefore better perceived than uncertain gains to be made in the distant future by the winners⁴²⁾.

A third modification of the simple median-voter model would consider the possibility that the prospective losers in a free trade regime may be bet-

ter represented in parliament and in the government than the prospective winners, depending on the system of voting.

A fourth modification would reflect the fact that logrolling or vote trading can make it possible that two issues, each of which individually increases the country's welfare, can both be defeated by a majority. Vote trading may occur if groups of voters have unequal preference intensities for two issues⁴³). This is very likely to be the case where tariffs are concerned. Consider a group I of voters engaged in domestic, import-competing activities. Their main preference is against the reduction of tariffs for their own products (proposition A) and weakly in favour of reduction of tariffs for some other products (proposition B). Assume another group of voters II, whose main interest lies in maintaining the tariff for the products concerned in B, and who have a weak preference for tariff reduction in A. If neither of the two groups has a majority, and the other voters perceive the benefits of free trade, both propositions A and B would be accepted and free trade established. If, however, groups I and II combined have a majority, they can agree to trade votes: group I votes against the tariff reduction which group II strongly opposes (i.e. votes against B), provided group II votes against the tariff reduction which group I strongly opposes (i.e. votes against A). This then leads to a majority vote against tariff reductions, i.e. propositions A and B are both defeated.

The final modification of the median-voter model would include the fact that tariffs provide revenue for governments, which in their absence would find it even more difficult to finance public expenditure. This is especially true in developing countries, where due to the inefficiency of the

tax system there is little tax revenue. A government will therefore wish to secure this income source, and will for this reason oppose free trade.

These five modifications of the simple median-voter model combine to explain why free trade, which is optimal from the point of view of the country as a whole, is not actually found in reality. The discussion suggests that there is, on the contrary, a political market for protection. Protection is demanded by particular groups of voters, firms and associated interest groups and parties, and supplied by politicians and public bureaucrats. The Public Choice approach to international political economy also stresses the importance of interest groups. It is generally assumed that interests are industry-specific, i.e. that capital and labour have the same position vis à vis tariffs and free trade. Findlay and Wellisz⁴⁴⁾ have constructed a simplified model of tariff formation which considers only two goods: the agricultural good is produced with the factor land, and the manufacturing product with the factor capital. Labour is used in both sectors and is taken from a common pool (\bar{L}). Competition is assumed to be perfect. The country considered is taken to have a relative advantage in agricultural goods, which it exports; manufactured goods are imported. The political system is assumed to be democratic and pluralistic. The landed interests use labour L_T in order to promote free trade, while manufacturing interests use labour L_K in an attempt to increase tariffs t . The "tariff formation function" is thus

$$t = F(L_K, L_T), F_1 < 0, F_2 > 0. \quad (1)$$

The political struggle is described by a so-called Cournot-Nash process in which each group assumes that the resources used by the other group to

influence the tariff are constant, and then calculates its own optimal input of lobbying resources on this basis. Assuming that the process is stable, an equilibrium level and distribution of lobbying expenditures is reached at point E (see Fig. 1), the intersection of the reaction functions of the landed interest (anti-tariff) group TT' and of the capital interest (pro-tariff) group KK'.

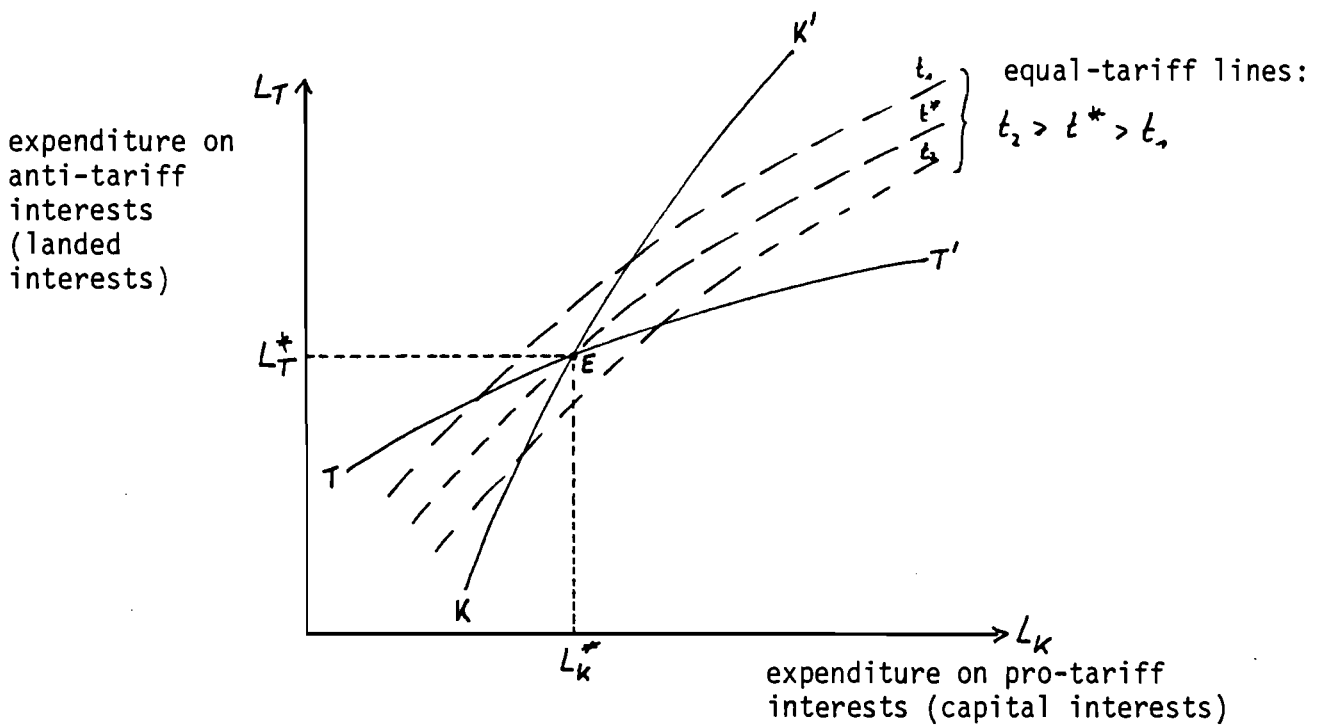


Fig. 1: Determination of lobbying expenditures and tariff level

This equilibrium determines not only the total level ($L_T^* + L_K^*$) and distribution (L_T^*/L_K^*) of lobbying expenditures, but also the level of the tariff t^* (see eq. 1). An equilibrium above and to the left of that shown would result in a lower tariff (because, given L_K^* , the anti-tariff groups use more resources L_T to influence the tariff). The labour force in productive (economic) use is $L^* = \bar{L} - (L_T^* + L_K^*)$, and the welfare loss due to political

strife (or rent seeking) is $w \cdot (L_T^* + L_K^*)$ (where w is the economic value of labour time).

This model elegantly analyses the endogenous determination of tariffs from a theoretical and highly aggregated point of view. One of its main weaknesses (and one which the authors are well aware of) is that the public goods character of tariffs and free trade, and the concomitant free rider effect, are not taken into account.

The factors influencing tariff policy discussed in the previous pages have also been the subject of econometric analysis. Baldwin⁴⁵⁾ seeks to explain the probability of a Congressman voting for (indicated by a dummy variable taking the value 0) or against (the dummy variable takes the value 1) the trade liberalizing bill introduced by a Republican president to the Congress in 1973. The explanatory variables are (i) the party affiliation (if the Congressman is a Republican the dummy variable takes the value 1, in the case of a Democrat, it takes the value 0, with a negative sign expected because the bill is introduced by a Republican president); (ii) the proportion of import-sensitive industries in the Congressman's constituency (with an expected positive sign); (iii) the proportion of export-oriented industries in his constituency (with an expected negative sign); and (iv) the contribution to the Congressman's campaign made by the three major unions opposing the bill (expected positive sign). The probit estimate yields the following equation:

Probability of supporting the 1973 trade bill

= - 0.40	(constant)
- 1.20**	(party affiliation)
(6.79)	
+ 3.49**	(import-sensitive industries)
(2.62)	
+ 1.16	(export-oriented industries)
(1.28)	
+ 0.0004**	(union campaign contribution)
(3.22)	

(The values in parentheses are the approximate t-values, i.e. the ratio of the maximum likelihood estimate of the coefficient divided by the standard error; the presence of one (two) asterisk(s) indicates statistical significance at the 95% (99%) level.)

According to the χ^2 -test, the equation is significant at the 99% level. The variables relating to party affiliation, import sensitivity, and union contributions all have the expected sign and are statistically significant. The proportion of export-oriented industries in a Congressman's constituency has no statistically significant influence on his voting behaviour (and even has the wrong sign). This suggests - as hypothesized in some of the earlier approaches - that the export interests are less intensive and less organized than the import-competing interests, who are well aware of the losses they will incur from a lower tariff barrier.

The development of protectionist pressure by interest groups in the United States from 1933 to 1979 is analyzed in another econometric study⁴⁶).

This pressure is (indirectly) measured by the number of dumping cases filed with the U.S. Bureau of Customs: the (prospective or actual) losses incurred by import-competing firms cause them to file dumping charges against foreign exporters. It is hypothesized that rising unemployment combined with a decline in business activity and profits raises the expected rate of return for political activity (i.e. the managers and capital owners are expected to switch from the area of low returns, economics, to one of relatively higher returns, politics). As a consequence, protectionist pressure is thus expected to rise with unemployment. Rising inflation is hypothesized to lead to pressures from households and consumer groups to liberalize imports. The protectionist pressure is thus expected to decrease with increasing inflation.

Econometric estimates with annual data yield the following result:

$\log(\text{protection})$

$$\begin{aligned} &= - 0.15 && (\text{constant}) \\ &- 1.38^{**} && (\text{dummy variable}) \\ &\quad (7.54) \\ &+ 0.92^{**} && \log(\text{unemployment, percent}) \\ &\quad (6.77) \\ &- 5.67^{**} && (\text{inflation, percent}) \\ &\quad (3.88) \end{aligned}$$

$R^2 = 0.72$ (the figures in parentheses are the t -values)

The dummy variable takes the value 1 for 1933-1952, and zero for 1953-1977, to account for an (unexplained) structural shift.

The coefficients for unemployment and inflation have the expected signs and are statistically significant. A ten-percent increase in the rate of unemployment (e.g. from 5% to 5.5%) is associated with a nine-percent increase in protectionist pressure; each percentage point rise in the rate of inflation (measured using the wholesale price index) (e.g. from 7% to 8%) lowers the protectionist pressure by 5.7%. Figure 2 shows the locus of constant protectionist pressure, which has a positive slope.

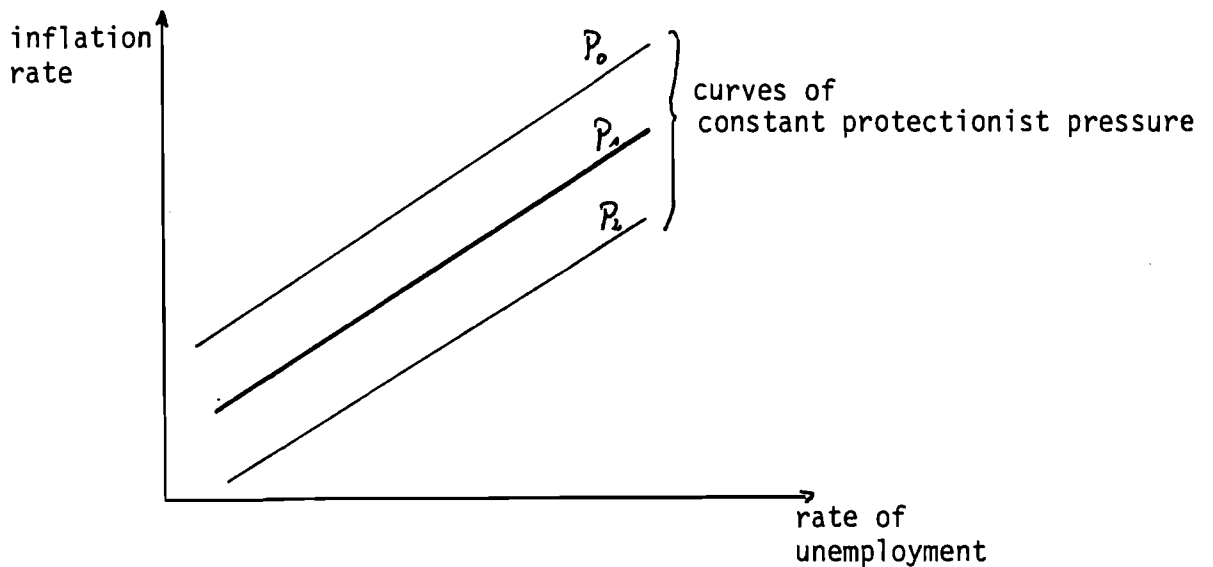


Fig. 2: Protectionist pressure as the result of unemployment and inflation

The figure shows three lines of constant protectionist pressure; the lower and further to the right such a line is located, the higher is the pressure for protectionism.

The econometric or politometric estimate sketched above may be criticized on various grounds. The behavioural assumptions underlying the politico-economic model are not made sufficiently explicit. The relationship between the pressure for protectionism as measured by the number of dumping cases

filed and other types of protectionist pressure (e.g. on members of the Congress or on public administrators) remains unexplained. The specification of the estimation equation is unsatisfactory because there is an (unexplained) mixture of logarithmic (unemployment) and non-logarithmic (inflation) quantities.

Despite the criticism which may be raised against these (first) econometric estimates in international political economy, this research demonstrates that the hypotheses derived from theoretical models can (at least in principle) be empirically tested.

Another actor which plays an important role in tariff formation is the public administration. This body has considerable influence on the "supply side" of tariff setting because it prepares, formulates, and implements trade bills once a decision has been made by government and parliament.

The activity of public bureaucrats with respect to tariffs may be analyzed with the help of the "rational" model of behaviour, e.g. by maximizing utility subject to constraints⁴⁷⁾. The main elements in the bureaucrats' utility function may be assumed to be the prestige, power and influence which they enjoy relative to the group of people they are officially designed to "serve", their clientele. In most cases this clientele will be located in a specific economic sector, e.g. in the case of public officials in the Ministry of Agriculture the clientele would be those groups with agricultural interests. They are moreover proud of being able to show that they are competent to perform their job ("performance excellence"). Public bureaucrats will therefore tend to fight for the interests of "their" eco-

conomic sector, and will work for tariffs and other import restrictions in order to protect it from outside competition. They will prefer to use instruments under their own control rather than to follow general rules imposed by formal laws. They will thus prefer various kinds of non-tariff protection and support (subsidies) to general tariffs.

The constraints faced by the public bureaucracy are imposed by parliament and government. However, both of these actors have little incentive to control public administration more tightly, because they are dependent on it in order to reach their own goals. In addition, the political actors have much less information available to them than the public bureaucracy, in particular with respect to the sometimes very complex issues of protection. The limited incentive of politicians to control the public administration gives bureaucrats considerable discretionary power which they use to their own advantage.

Public Choice theory has also been used to try to explain differences in international protection, i.e. the structure of tariffs between industries. It is hypothesized that the more concentrated industries find it easier to organize and to muster political pressure because a smaller number of enterprises is more willing to bear the transaction, organization and lobbying costs involved in getting tariff protection. This hypothesis has been empirically analyzed by Pincus⁴⁸⁾ for the U.S. tariff act of 1824. He finds that a higher industrial concentration of output is indeed associated with a higher tariff level, all other influences being constant.

Another study by Caves ⁴⁹⁾ examines three competing models in order to find the one best able to explain the existing tariff structures: in the first model the government maximizes the probability of winning the election given a geographically represented electorate; in the second model interest groups determine the structure of tariffs, the various industries having different benefits and costs of lobbying for protection; and in the third model the government sets tariffs in an attempt to produce a collective nationalistic feeling about the industrial composition of the economy ("national policy model").

Although the three models are not mutually exclusive, they emphasize different politico-economic processes for tariff setting. An econometric comparison with Canada's tariff rate structure in 1963 broadly supports the interest groups model.

An alternative interest group explanation of Canada's tariff structure by Helleiner ⁵⁰⁾ stresses international political influences. A time series analysis for the period 1961-1970 suggests that labour and multinational firms have the largest influence on tariffs: labour seeks increased protection because of the rising supply of industrial products from low-wage countries, while multinationals are interested in free trade. Similar studies have been undertaken for other countries ⁵¹⁾. These studies on the determinants of the tariff structure may be criticized because the underlying behavioural theory of the government and interest groups is not spelled out explicitly. Rather, the estimation equations are derived from an implicit theory of the politico-economic process. Nevertheless, the analyses represent an important advance over, on the one hand, attempts

to use a purely economic approach to explain tariff protection, and on the other, to attribute it to political factors alone.

The preceding discussion of the various factors which may be used to explain tariffs and other trade restrictions shows that the study of international political economy based on Public Choice is well under way, and that useful theoretical and empirical results have been achieved using an approach which differs strongly from political scientists' International Political Economy. The research is, however, only at a very early stage and there are various aspects of the analysis which must be improved. One is that the behaviour of the actors (government, interest groups and public bureaucracy) must be modelled more carefully, taking their characteristic preferences and constraints into account; a second is that the equations used for econometric estimation should be more closely and consistently linked with the theoretical models; a third is that the framework of the analysis should be extended, so that all the relevant causal relationships can be included in the analysis. Not only do politico-economic conditions affect tariffs, but tariffs also affect the state of the economy and polity. Thus, both directions of interdependence between tariffs and the political economy should be considered.

2. Foreign direct investment

There is a great amount of literature, both theoretical and empirical, dealing with the economic aspects of foreign investment⁵²). However, very few studies seem to recognize that the extent and direction of foreign direct investment depends on both economic and political factors. It has been

hypothesized that political instability discourages foreign direct investment. The empirical evidence is rather mixed. Most studies based on survey research stress the negative effect of political instability, but other scholars find that political conditions are of minimal concern to investors⁵³⁾. This type of research is rather impressionistic, unsystematic and tends to be superficial.

There are several studies based on statistical analyses. Much has been written on "Political Risk" and on the "Investment Climate" by business economists⁵⁴⁾. A great number of different measures have been developed by political scientists, the best known being the BERI (Business Environment Risk Index), which has been computed quarterly for 45 countries since 1972. International cross-section studies using such risk indices have found that political instability either exerts no significant effect⁵⁵⁾, or a significant, but small effect on foreign investment⁵⁶⁾. Time series studies have in general shown that political instability has a negative effect on foreign direct investment⁵⁷⁾. According to an extensive analysis by Thunell⁵⁸⁾, political instability does not affect the level but only the trend in foreign direct investment. The relationship is asymmetrical: a high level of mass violence precedes a trend away from investment, while it takes both a low level of violence and a change in government (i.e. a new policy) to generate a trend towards investment.

These studies can all be criticized on certain grounds:

First, what matters is the investors' expected cost from particular political conditions, not political instability as such. Even with a sharp change in the nature of the politico-economic system, foreign investments will not

necessarily be nationalized. Even if this happens, the owners are usually largely compensated for their losses. "Political risk" has to be more carefully defined. Secondly, only a small number of forced divestments have occurred in the last 20 years, so that there are only a few observations available for statistical analysis. The risk of expropriation varies considerably between economic sectors and even between firms⁵⁹⁾. Aggregate risk indicators may not capture this differential effect of investment risk, and this may lead to false conclusions. Thirdly, the studies do not bear in mind the possibility that foreign investors may be able to insure against losses, or that they may get investment guarantees in their home country⁶⁰⁾.

The most important criticism of the studies mentioned above relate to serious methodological weaknesses. No effort is made to check for economic influences when studying the political determinants. Such a procedure is necessary because it would be unwise to assume that political factors are the only, or even the main, determinants of the flows of foreign direct investment. A correct analysis would consider the impact of both political and economic variables simultaneously, e.g. by running a multiple regression. An example of this procedure is given by Dunning⁶¹⁾ who simultaneously considers a multitude of factors. The results are, however, difficult to interpret, and the author does not come forward with any intuitively comprehensible results.

Studies of foreign direct investment still lack a sound theoretical framework. This is obviously an area in which (business) economists have been very active, but in which the economic or 'rational' approach has not been sufficiently developed. What is needed is an explicit model of the behaviour

of investors (usually multinational firms), governments and public bureaucracy (in both investing and host countries), and of international institutions. A model of this type would help to overcome the overly empiricist bias of current studies.

3. International aid

The self-interest model developed in Public Choice may also be applied to behaviour in the field of international aid. Voters are not very interested in the aid going to foreign countries because they derive at best an indirect and non-monetary benefit from it, and they therefore make little effort to become well-informed on this issue. Few interest groups push for more aid, and compared to industrial pressure groups such as trade unions or producers' organizations they are much less tightly organized and have much smaller financial resources. The government is therefore able to use this discretionary room to further its own goals via international aid, in particular with regard to foreign policy. A country's "international standing" may be an important issue. In an international or general setting a government will tend to speak out for international aid but it will not make any firm commitments⁶²⁾. On the other hand, when financial decisions have to be made, the government will be rather reluctant to grant a large amount of international aid because it usually benefits more from allocating the funds to groups within the country.

The recipient countries may actively influence the amount of aid given to them by donor countries who are interested in their support in the international sphere. A country is likely to receive little aid if it already

supports the donor country politically, or if it will not support the donor country under any circumstances. It can expect to get the highest amount of aid if it makes clear that the political position it will take depends on the amount of aid granted. A country wishing to maximize the amount of foreign aid it receives should thus not be a permanent member of any international bloc but should rather signify that it can be "bribed"⁶³).

4. International organizations

Interesting contributions have been made within Public Choice to the study of the benefits and costs of joining international organizations, their decision rules, and their internal bureaucracy, as well as to the study of bargaining in an international setting.

4.1. Benefits and costs of joining international organizations

An international organization may perform various services: it may provide public goods and services, coordinate the activities of actors in the international system, and form an institutional setting for alliances. International organizations may also be used to further private (i.e. national) aims; it would therefore be a mistake to assume that they maximize the collective economic welfare either of the individuals of a particular country or of the world as a whole.

Much of the output of international organizations has the character of a public good, which provides an incentive for countries to behave as free riders. Under these circumstances the organization will not be able to

operate effectively unless: (i) it involves only a small group of countries, permitting direct interaction and imposing high costs on free riders; or (ii) private goods are offered selectively to the members of the organization, providing an incentive for individual countries to join and participate in the financing of the organization; or (iii) participation is achieved by coercion⁶⁴).

It has been empirically shown that small, especially regional, international organizations are indeed more successful than large ones⁶⁵). Creating selective incentives for members is very common in international organizations. The existence of such private goods is a very important bargaining tool used by governments in persuading parliaments to agree to join. Considerable effort is therefore devoted to transforming public goods into private goods owned by the organization⁶⁶). Coercion is difficult and often impossible in an international context, because the member countries are unwilling to give up their independence. The assumption that coercion is possible therefore solves the problem of international organizations by definition, as long as the international system is composed of sovereign states.

An organization may also be formed if the potential participants' perception of the advantages of membership and the social pressure to belong to it can be increased by education and propaganda. As in the case of coercion, this approach has very little chance of success in the international system.

The pathbreaking contribution by Olson and Zeckhauser⁶⁷) takes defence to be a typical international public good provided by NATO. The benefits go

to all democracies, and especially to the European members which are nearer to the (likely) front line than the United States. Due to the incentive for free riding, the small nations contribute a disproportionately low share of the cost, while the large nations, especially the United States, bear a disproportionately high share (even allowing for the higher per capita GNP). The same principle holds for the UN, where the large countries have made a better job of meeting and overfulfilling their quotas than the smaller nations.

A more recent model⁶⁸⁾ of the formation of international organizations takes the total benefits b_T and the total costs c_T as a function of the amount of its cooperative activity or output Q . Each nation is treated as an individual actor i who is trying to maximize its own net gain g_i , the difference between individual benefits b_i and individual costs c_i . Taking B to be country i 's share in total benefits ($B = b_i/b_T$) and C to be its share in total costs ($C = c_i/c_T$), the optimal amount of international activity is given by

$$\left(\frac{B}{C}\right) \cdot \frac{db_T}{dQ} = \frac{dc_T}{dQ} .$$

The left-hand side shows the marginal policy contribution depending on the relative shares in total benefits and costs (B/C), the right-hand side the marginal cost of the organization's output. The equilibrium is shown in Figure 3.

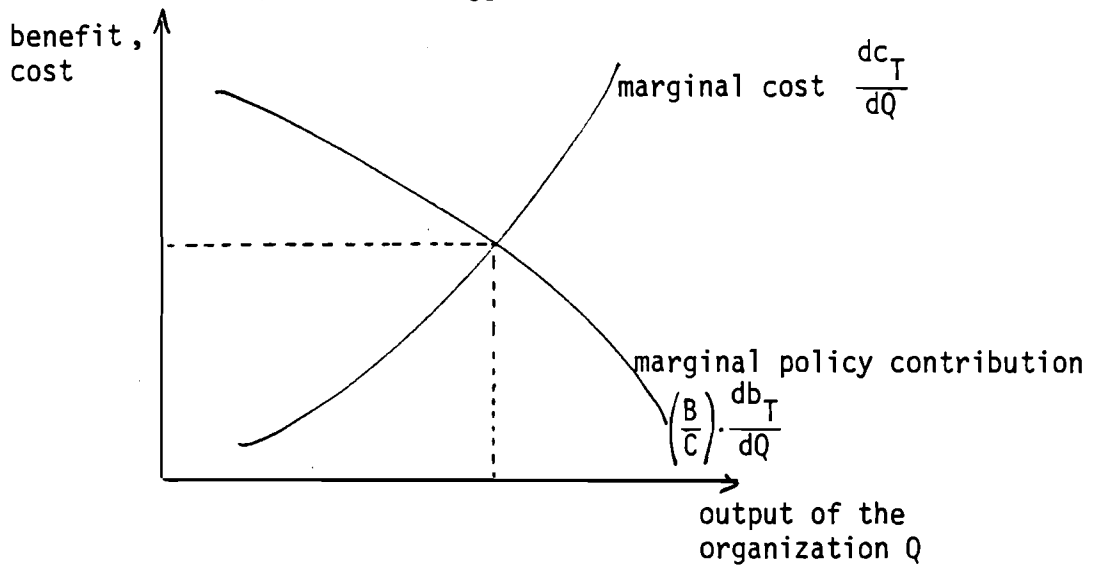


Fig. 3: Organizational equilibrium

Empirical application of the model has shown that the marginal cost curve rises steeply; this is because it becomes increasingly difficult to reach agreement, and to take the interests of all parties into account, as the international organization's activity expands. The marginal policy contribution curve (MPC) is found to fall steeply. Moving from the "Group of Five" countries (US, UK, FRG, France, Japan) to the "Big Seven" (adding Canada and Italy), to the "Group of Ten" (which also includes Belgium, The Netherlands and Sweden), to the OECD (which includes thirteen additional countries) adds a successively diminishing amount to the benefits received by each country (assumed to be positively related to that country's share in world GNP or in world trade). The authors conclude that because the ratio B/C has fallen strongly for the United States, this country has a smaller interest in the public goods produced by international organizations (i.e. its equilibrium has moved to the left because of a downward shift in the MPC-curve in Figure 3). On the other hand, the B/C ratio has

increased for nations such as Japan, Germany, the Benelux countries or the European Community, leading to a demand for international organizations to increase their output.

Another implication of the model is that large international organizations have become less effective because the share of the benefits taken by the dominant country (formerly the United Kingdom, now the United States) has decreased, leading to less cooperation. Instead of a "leader" providing international public goods partly in its own interest, the dominant force is now a group of relatively small countries, each of which is unwilling to provide public goods⁶⁹).

The model outlined above provides an interesting formalization of the system but it is still only a first step towards an economic theory of international organizations. The operationalization of the theoretical concepts is rather weak, particularly with respect to the measurement of benefits.

4.2. Decision rules in international organizations

The formal rules defining how decisions are to be taken within an (international) organization can have an important effect on the (expected) costs of providing a public good, from the point of view of an individual country. Consider Figure 4, which is an extension of Figure 3.

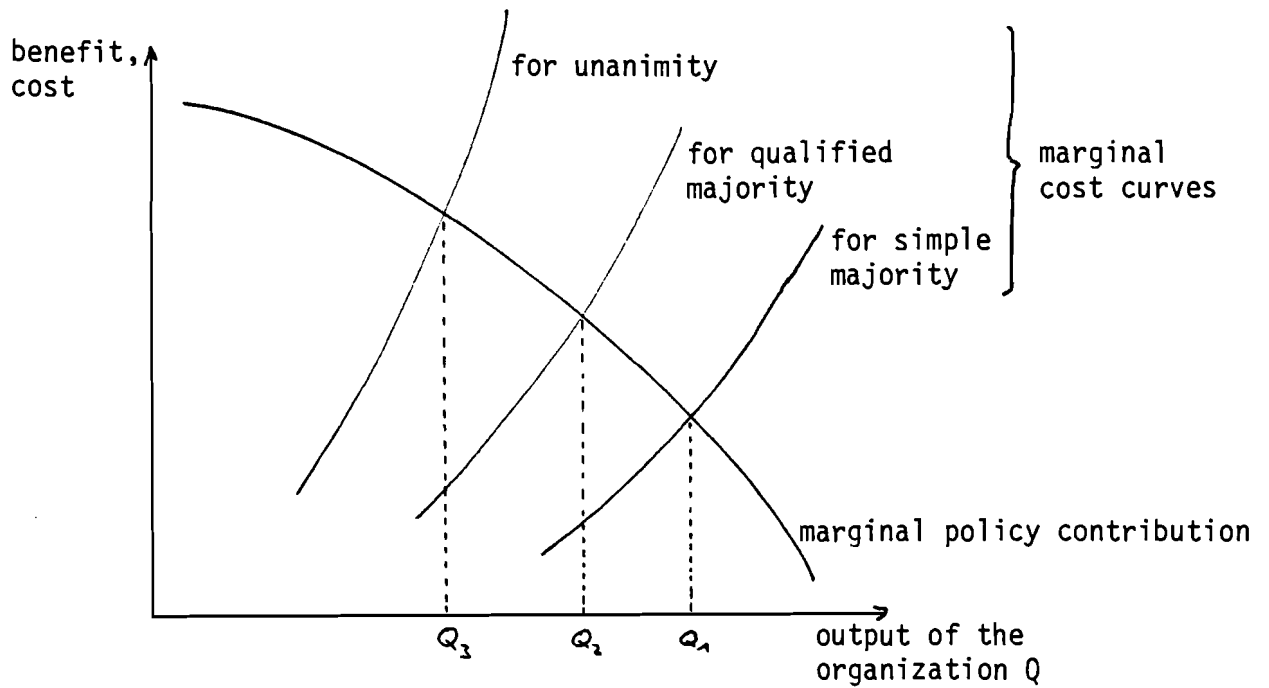


Fig. 4: The effect of alternative decision rules

Given the marginal benefit or marginal policy contribution curve, the output of the organization Q optimal from the point of view of a particular country declines from Q_1 when decisions are taken by simple majority, to Q_2 when a qualified majority is required, and to Q_3 when the decision has to be unanimous. The reason is that the marginal cost curve shifts upwards and to the left due to the increasing cost of decision making: it becomes more and more difficult to reach an agreement as the rules become stricter (with the unanimity rule everyone can block a decision) and the interests of the other members must increasingly be taken into account⁷⁰⁾.

The number of voters from a particular country (or group of countries), given the formal decision rule, determines the "power" of that country within an international organization. "Power" - which is generally quite an

elusive concept - may be defined in an operational way to be the chance of affecting the outcome of a decision. A decision is influenced by control of the "pivotal" vote, i.e. if one is able to transform a non-winning coalition (e.g. a minority in the case of simple majority voting) into a winning coalition (a majority). A number of different power indices based on this concept have been developed in game theory. Using the Banzhaf index, it has been shown⁷¹⁾ that the recent change in voting rules at the International Monetary Fund, which became effective in 1978, has resulted in a surprising, counterintuitive change in the power structure: four major countries (Federal Republic of Germany, Japan, The Netherlands and Belgium) whose vote was increased to keep pace with their increased weight in the world economy, suffered a decline in power, while 38 countries whose vote was reduced experienced an increase in power.

4.3. The bureaucracy of international organizations

It has been suggested that the characteristics of bureaucracies are more pronounced in the international than in the national setting. The main reason for this is that they have greater room for discretionary action because there is neither the possibility nor the incentive to control them. Control is difficult because the "output" of an international organization is undefined and cannot usually be measured. There are no political institutions which would gain by tightly controlling an international organization: national governments would only run into trouble with other national governments if they tried to interfere with the workings of such institutions. They therefore prefer to let things go and only intervene if they feel that their own nationals employed in the organization are being un-

fairly treated or that their national interests are being threatened by the organization's activity. The lack of incentives is another example of the free riding problem.

Due to the lack of effective control in an international organization, none of the layers in the hierarchy has any real incentive to work towards the "official product" because their utility depends hardly at all on their contribution. The national quotas for a great number of positions that are a feature of many international organizations drive a further wedge between the individuals' utility and the organization's official function. This particular incentive structure leads to a growth of the international bureaucracies quite independent of the tasks to be performed, because all bureaucrats benefit from larger budgets and a greater number of employees⁷²⁾. International bureaucracies are also characterized by a low degree of efficiency and a profusion of red tape because the formalized internal workings of the organization become dominant. A considerable share of the budget will be used for internal purposes, and to provide side benefits for the bureaucrats themselves.

This theory of international bureaucracy has still to undergo empirical testing.

4.4. International bargaining

Modelling international bargaining is a more formidable task due to the fact that the process has little structure and involves many variables. There have therefore been few Public Choice studies of international bargaining, each of which has concentrated on a particular aspect of the problem.

In international negotiations, linkages between various issues are quite a common feature. It has been shown⁷³⁾ that linkages are more important when the distribution of benefits from agreements is highly biased towards a small number of countries. The linkage of issues whose distributional consequences offset each other can help promote agreements which would otherwise fail because of the distributional effects. On the other hand, linkages play a small role when the benefits from an agreement are considered to be "fairly" distributed across countries. In this case a consensus can be reached without introducing an additional dimension in the form of linked issues. These results are plausible but again have not yet been empirically tested.

IV. Concluding Remarks

The aim of this survey was to show that Public Choice economists have made considerable and valuable contributions in the area of international political economy. This approach has shed some new light on the field and should be of interest to all social scientists concerned with bridging the gap between international economics and international (political) relations. Due to the limitations of space, this survey has only been able to provide some characteristic examples, and some selected fields of application, of the Public Choice approach to international political economy. Other theoretical concepts will doubtlessly be applied, and additional problem areas covered, in the future.

The economic approach to international political economy has both strengths and weaknesses (which is true for any approach, including that adopted by

political scientists):

First. The Public Choice view provides fresh insights into the area, in the same way that the economics-based approach illuminated general politics. This does not, of course, mean that this approach is superior to any other but rather that it is able to illuminate particular aspects of international political economy (while being unable to contribute much in other areas). As will become clear from these concluding remarks, the specific strengths of the Public Choice view are also responsible for its specific weaknesses. This is also true when considering the advantage of applying a new method to an already established field, such as International Political Economy. There is a tendency to use theoretical and empirical methods without paying sufficient attention to the particular historical and institutional conditions existing in the field of study. A quick application is tempting because it is seemingly easy to undertake, and the shortcomings of the analysis may not be obvious. It is necessary, however, to investigate thoroughly whether a particular theoretical concept (such as public goods and free riding) really captures the essential features of reality.

Second. An advantage of the economic approach to international political economy is that the analysis is based on an explicit and unified theory of human behaviour, and on a technical apparatus capable of producing theoretical solutions and empirically testable propositions. This technical elegance leads, however, to a tendency to sacrifice relevance for rigour. There are already some areas of economists' international political economy where the heavy formalistic apparatus used is out of all proportion to the resulting advances in knowledge.

Third. The economic approach concentrates on specific aspects of international political economy, making it possible to isolate and analyse relatively simple relationships. The high degree of abstraction allows the economist to gain major insights into complex problem areas but also involves the danger of leaving out relevant aspects or of keeping constant (by the "ceteris paribus" assumption) variables which are so closely and importantly connected with the problem studied that they should really be an endogenous part of the model. While this survey has concentrated on micro-analytical and partial analyses, it has been shown that there are approaches within Public Choice which attempt to provide an overall view (in particular the politico-economic models).

Fourth. The emphasis on deriving propositions which are at least in principle amenable to empirical testing is healthy because it forces reality on the researcher. The econometric, or rather politometric, analyses also provide important factual knowledge about the relationships between the variables studied. The disadvantage of this empirical orientation is that aspects difficult (or impossible) to measure quantitatively are easily excluded and that the relationships for which data are easily available are those that tend to be studied. A common shortcoming of empirical economic research is that the operationalization of individual theories is often done in a rather cavalier way. In that respect economists could certainly learn from quantitative political scientists, as well as from other social scientists.

Empirical research has so far been predominantly concerned with the United States. This makes it more difficult to evaluate the contribution of eco-

nomists to international political economy because it is difficult to know what part of the results is due to the Public Choice view, and what part to the particular conditions obtaining in the United States. It is therefore important that empirical tests of the theories should also be undertaken for other nations.

Fifth. The Public Choice view is interdisciplinary in a specific sense of the word: it combines the economic and political aspects of international political economy but uses only one theoretical approach. (Usually, interdisciplinarity is understood to mean that theoretical approaches have to be combined.) This has the advantage that the two areas can be fused together, but it carries the (already mentioned) danger that only some aspects of the interrelationship will be treated. There can be little doubt, however, that the economists engaged in research on international political economy can gain from the work done by political scientists, especially in terms of their experience of the institutions and political processes encountered in the international sphere. Up to now, there has been relatively little contact between the Public Choice researchers and other scholars in the field. This survey has achieved its goal if it has convinced the reader that the opposite proposition is also true: that political science scholars would benefit from considering and studying the Public Choice approach to international political economy.

- 1) J.E. Spero, The Politics of International Economic Relations (London: Allen and Unwin, 1977), pp. 1-2.
- 2) R.J. Barry Jones, "International Political Economy: Problems and Issues - Part I", Review of International Studies 7 (1981), pp. 245-260, and "International Political Economy: Perspectives and Prospects-Part II", Review of International Studies 8 (1982), pp. 39-52.
- 3) See in particular: R. Keohane and J. Nye, Power and Interdependence (Boston: Little, Brown, 1977); St. Krasner, Defending the National Interests (Princeton: Princeton University Press, 1978); S. Strange, Sterling and British Policy. A Political Study of an International Currency in Decline (New York: Oxford University Press, 1971); P.J. Katzenstein, "Transnational Relations and Domestic Structures: Foreign Economic Policies of Advanced Industrial States", International Organization 30 (1976).
- 4) F.C. Bergsten and L.B. Krause, eds., World Politics and International Economics (Washington D.C.: Brookings Institution, 1975); Ch.W. Kegley and P. McGowan, eds. The Political Economy of Foreign Policy Behavior (Beverly Hill: Sage, 1981).
- 5) Barry Jones, "International Political Economy - Part II", p. 50.
- 6) See e.g. R. Tooze, "Economics, International Political Economy and Change in the International System". In: B. Buzan and B.R.J. Jones, eds., Change and the Study of International Relations. The Evaded Dimension. (London: Pinter, 1981), pp. 120-137.
- 7) Barry Jones, "International Political Economy - Part II", p. 47.

- 8) Barry Jones, "International Political Economy - Part I", p. 128.
- 9) The only exception seems to be the analysis of the conditions for interest representation in questions concerning public goods and its application to cost sharing in alliances as developed by M. Olson, The Logic of Collective Action: Public Goods and the Theory of Groups (Cambridge, Mass.: Harvard University Press, 1965); M. Olson, "Increasing the Incentives for International Cooperation", International Organization 25 (1971); M. Olson and R. Zeckhauser, "An Economic Theory of Alliances", Review of Economics and Statistics 48 (1966), pp. 266-279.
- 10) R. Tooze, "Economics, International Political Economy and Change in the International System", p. 130.
- 11) It should be stressed that the "classical" Public Choice writers, including Olson, as well as almost all other writers in Public Choice, consider their work to be neo-classically based.
- 12) See, in particular, G.S. Becker, The Economic Approach to Human Behavior (Chicago and London: University of Chicago Press, 1976).
- 13) See e.g. W.M. Riker and P.C. Ordeshook, An Introduction to Positive Political Theory (Englewood Cliffs, N.J.: Prentice Hall, 1973); N. Frohlich and J.A. Oppenheimer, Modern Political Economy (Englewood Cliffs, N.J.: Prentice Hall, 1978).
- 14) J.S. Coleman, Introduction to Mathematical Sociology (New York: Free Press, 1964), K.D. Opp, "Das oekonomische Programm in der Soziologie". In: K. Albert und H. Stapf, eds., Theorie und Erfahrung (Stuttgart: Klett), pp. 313-349.

- 15) For a survey see W. Stroebe and B.S. Frey, "In Defense of Economic Man: Towards an Integration of Economics and Psychology". Schweizerische Zeitschrift für Volkswirtschaft und Statistik 116 (1980), pp. 119-148.
- 16) Utility maximization lends itself particularly well to a formal analysis, but the Public Choice approach is by no means incompatible with 'satisficing'.
- 17) See e.g. B.S. Frey, Modern Political Economy (Oxford: Martin Robertson, 1978); D.C. Mueller, Public Choice. (Cambridge: Cambridge University Press, 1979).
- 18) As has already been noted, following Olson, the public goods concept has been introduced into political-science-based International Political Economy; for examples see e.g. J.G. Ruggie, "Collective Goods and Future International Collaboration", American Political Science Review 66 (1972), pp. 874-893; D. Snidal, "Public Goods, Property Rights, and Political Organizations", International Studies Quarterly 23 (1979), pp. 532-566; J. Oppenheimer, "Collective Goods and Alliances", Journal of Conflict Resolution 23 (1979), pp. 387-407. See also the collection of articles by W. Loehr and T. Sandler, eds., Public Goods and Public Policy (Beverly Hills and London: Sage, 1978), T. Sandler, ed., The Theory and Structure of International Political Economy (Boulder, Colorado: Westview Press, 1980).
- 19) C.P. Kindleberger, Government and International Trade (Princeton: Princeton Essays in International Finance 129, July 1978).
- 20) G. Marwell and R.E. Ames, "Economists Free Ride, Does Anyone Else? Experiments on the Provision of Public Goods". Journal of Public Economics 15 (1981), pp. 295-310; F. Schneider and W.W. Pommerehne, "Free Riding and Col -

lective Action: A Laboratory Experiment in Public Microeconomics",
Quarterly Journal of Economics 96 (1981), pp. 687-704.

- 21) There is a close analogy to the "social consensus" or "constitutional contract" among individuals and groups within a country. See J.M. Buchanan and G. Tullock, The Calculus of Consent (Ann Arbor: University of Michigan Press, 1962); J.M. Buchanan, Freedom in Constitutional Contract. Perspectives of a Political Economist (College Station and London: Texas A & M University Press, 1977); B.S. Frey, The Theory of Democratic Economic Policy (Oxford: Martin Robertson, 1983).
- 22) See e.g. the collection of articles in T. Sandler, ed., The Theory of International Political Economy. The "rules approach" has only recently been applied in classical International Relations, see R. Cohen, International Politics. The Rules of the Game (London and New York: Longman, 1981). In political scientists' International Political Economy, on the other hand, it has always played an important role, see, for instance, R. Keohane and J. Nye, Power and Interdependence on rules about money and oceans, and in general the survey by Barry Jones, "International Political Economy - Part I".
- 23) This has been done in particular by B.J. Cohen, Organizing the World's Money: The Political Economy of International Monetary Relations (London: Macmillan, 1977); K. Hamada, "On the Political Economy of Monetary Integration: A Public Economics Approach", in R.Z. Aliber, ed., The Political Economy of Monetary Reform (London: Macmillan, 1977).

- 24) See T.D. Willett, "Some Aspects of the Public Choice Approach to International Economic Relations", paper prepared for the European University Institute Conference on "New Economic Approaches to the Study of International Integration: Applications of Economic Analysis to Political Decision Making", Florence, May 31 - June 2, 1979, revised 1980.
- 25) See in particular R.D. Tollison and T.D. Willett, "Institutional Mechanisms for Dealing with International Externalities: A Public Choice Perspective", in R.C. Amacher and R.J. Sweeney, eds., The Law of the Sea: U.S. Interest and Alternatives (Washington, D.C.: American Enterprise Institute, 1976); P.M. Wijkeman, "Managing the Global Commons", International Organization 36 (1982), pp. 511-536. International resources should not always be considered as common property, but sometimes as private property, as argued by R.J. Sweeney, R.D. Tollison and T.D. Willett, "Market Failure, the Common-Pool Problem, and Ocean Exploitation", Journal of Law and Economics 17 (1974), pp. 179-192.
- 26) Basic treatments are K.J. Arrow, Social Choice and Individual Values (New York: Wiley, 2nd ed. 1963); A.K. Sen, Collective Choice and Social Welfare (Edinburgh and London: Oliver and Boyd, 1970).
- 27) D.C. Mueller, "Voting by Veto", Journal of Public Economics 10 (1978), pp. 57-75.
- 28) A. Klevorick and G.H. Kramer, "Social Choice in Pollution Management: The Genossenschaften", Journal of Public Economics 2 (1973), pp. 101-146.

- 29) N. Tideman and G. Tullock, "A New and Superior Process for Making Social Choices". Journal of Political Economy 84 (1976), pp. 1145-1159; applications to international problems are suggested by W. Vickrey, "Demand Revealing Procedures and International Disputes", Papers, Peace Science Society (International) 28 (1978), pp. 97-104.
- 30) It is only "nearly" Pareto-efficient because the tax receipts must be wasted in order not to bias the vote. It has been proved that this problem is of little practical importance.
- 31) The original idea is due to G. Tullock, "The Welfare Costs of Tariffs, Monopolies and Theft", Western Economic Journal 5 (1967), pp. 224-232, and to A.O. Krueger, "The Political Economy of the Rent-Seeking Society", American Economic Review 64 (1974), pp. 291-303. Pertinent articles are collected in J.M. Buchanan, R.D. Tollison and G. Tullock, eds., Towards a Theory of the Rent Seeking Society (College Station and London: Texas A & M University Press, 1980).
- 32) J.N. Bhagwati and T.N. Srinivasan, "Revenue Seeking: A Generalization of the Theory of Tariffs", Journal of Political Economy 88 (1980), pp. 1069-1087; J.N. Bhagwati, "Directly Unproductive, Profit-seeking (DUP) Activities", Journal of Political Economy 90 (1982), pp. 988-1002.
- 33) A collection of articles may be found in P. Whiteley, ed., Models of Political Economy (London: Sage, 1980) and in D.A. Hibbs and H. Fassbender, eds., Contemporary Political Economy. Studies on the Interdependence of Politics and Economics (Amsterdam: North-Holland, 1981), or in the survey by B.S. Frey, "Politico-Economic Models and Cycles", Journal of Public Economics 9 (1978), pp. 203-220.

- 34) M. Paldam, "A Preliminary Survey of the Theories and Findings on Vote and Popularity Functions", European Journal of Political Research 9 (1981).
- 35) This does not, of course, exclude any effect of the balance of payments on the polity through other macroeconomic variables, such as the rate of inflation or the rate of unemployment.
- 36) First by J.E. Mueller, "Presidential Popularity from Truman to Johnson", American Political Science Review 64 (1970), pp. 18-34.
- 37) T.D. Willett, "Some Aspects of the Public Choice Approach to International Economic Relations".
- 38) L.F. Richardson, Arms and Insecurity (Chicago: Quadrangle, 1960).
- 39) See e.g. U. Luterbacher and P. Allan, The Economic and Social Burden of Arms Races: A Computer Simulation of Interactions Among Major Powers. (Geneva: Graduate Institute of International Studies, Mimeo, 1978); U. Luterbacher and A. Imhoff; The U.S. Politico-Economic System: An Analysis of Interactions Between Popularity and Governmental Military and Civilian Expenditures (Geneva: Graduate Institute of International Studies, Mimeo, 1980).
- 40) This statement has to be qualified somewhat. It only holds if the shift to free trade does not cause a country's terms of trade to deteriorate so much that its real income falls. This would not happen for small countries, and even for very large countries (such as the United States) the possible terms-of-trade effect is very unlikely to dominate the welfare-increasing effect of free trade.

- 41) For the following see R.E. Baldwin, The Political Economy of U.S. Trade Policy, The Bulletin, (New York University: Center for the Study of Financial Institutions, 1974-1976).
- 42) This has already been pointed out by A. Downs, An Economic Theory of Democracy (New York: Harper, 1957) and by M. Olson, The Logic of Collective Action.
- 43) See e.g. St.J. Brams, Game Theory and Politics (New York: Free Press) or D.C. Mueller, Public Choice.
- 44) R. Findlay and St. Wellisz, "Endogenous Tariffs, The Political Economy of Trade Restrictions and Welfare", in J.N. Bhagwati, ed., Import Competition and Response (Chicago: University of Chicago Press, 1982), pp. 223-243; R. Findlay and St. Wellisz, "Some Aspects of the Political Economy of Trade Restrictions", Mimeo, Dept. of Economics, Columbia University, Discussion Paper Nr. 125, 1982.
- 45) R.E. Baldwin, The Political Economy of U.S. Trade Policy, pp. 29-37.
- 46) St.P. Magee, "Protectionism in the United States", Mimeo, Dept. of Finance, University of Texas at Austin, 1982.
- 47) See the economic theory of bureaucracy as developed by G. Tullock, The Politics of Bureaucracy (Washington D.C.: Public Affairs Press, 1965), A. Downs, Inside Bureaucracy (Boston: Little, Brown, 1967), W.A. Niskanen, Bureaucracy and Representative Government (Chicago: Aldine, Atherton, 1971).
- 48) J.J. Pincus, Pressure Groups and Politics in Antebellum Tariffs (New York: Columbia University Press, 1977).

- 49) R.E. Caves, "Economic Models of Political Choice: Canada's Tariff Structure", Canadian Journal of Economics 9 (1976), pp. 278-300.
- 50) G.K. Helleiner, "The Political Economy of Canada's Tariff Structure: An Alternative Model", Canadian Journal of Economics 10 (1977), pp. 318-326; G.K. Helleiner, "Transnational Enterprise and the New Political Economy of U.S. Trade Policy", Oxford Economic Papers N.S. 29 (1977), pp. 102-116.
- 51) E.g., P.K.M. Tharakan, "Political Economy of Protection. An Empirical Investigation of the Belgian Case", World Bank Staff Working Paper Nr. 431, 1980; H.H. Glismann and F.D. Weiss, "On the Political Economy of Protection in Germany", World Bank Staff Working Paper Nr. 427, 1980.
- 52) An excellent general account has recently been given by J.P. Agarwal, "Determinants of Foreign Direct Investment: A Survey", Weltwirtschaftliches Archiv 116 (1980), pp. 739-773 .
- 53) See F. Root, International Trade and Investment. Theory, Policy, Enterprise (Cincinnati: South Western Publ. Co., 4th ed., 1978); G. Reuber, H. Crockell, M. Emerson and G. Gallais-Hamonno, Foreign Direct Investment in Development (Oxford: Development Centre of the OECD, 1973).
- 54) See e.g. St.J. Kobrin, "Political Risk: A Review and Reconsideration", Journal of International Business Studies 10 (1979), pp. 67-80.
- 55) For instance R.T. Green, Political Instability as a Determinant of U.S. Foreign Investment (Austin, Texas: Bureau of Business Research, University of Texas, 1972); St.J. Kobrin, "Political Risk: A Review and Reconsideration", Journal of International Business Studies 10 (1979), pp. 67-80.

- 56) F.R. Root and A.A. Ahmed, "Empirical Determinants of Manufacturing Direct Foreign Investment in Developing Countries", Economic Development and Cultural Change 27 (1979), pp. 251-267, among many others.
- 57) P. Juhl, "Beeinträchtigen Enteignungen die Attraktivität eines Landes für Auslandsinvestitionen?", Jahrbücher für Nationalökonomie und Statistik 197 (1982), pp. 337-348.
- 58) L.H. Thunell, Political Risk in International Business. Investment Behavior of Multinational Corporations (New York: Praeger, 1977).
- 59) M.L. Williams, "The Extent and Significance of the Nationalization of Foreign-Owned Assets in Developing Countries, 1956-1972", Oxford Economic Papers N.S. 27 (1975), pp. 260-273; St.J. Kobrin, "The Environmental Determinants of Foreign Direct Manufacturing Investment: An Ex-Post Empirical Analysis", Journal of International Business Studies 7 (1976), pp. 29-42.
- 60) An exception is M.T. Rock, Cross-Country Analysis of the Determinants of U.S. Direct Foreign Investment in Manufacturing in Less Developed Countries (Pittsburgh: University of Pittsburgh Ph.D. Dissertation, 1973).
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- 64) M. Olson, The Logic of Collective Action.
- 65) B.M. Russett and J.D. Sullivan, "Collective Goods and International Organization", International Organization 26 (1971), pp. 845-865.
- 66) This has been demonstrated empirically by D. Frei, Internationale Zusammenarbeit. Theoretische Ansätze und empirische Beiträge (Königstein: Hain, 1982).
- 67) M. Olson and R. Zeckhauser, "An Economic Theory of Alliances". For the subsequent work in this direction see e.g. G. Kennedy, Burden Sharing in NATO (London: Duckworth, 1979).
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- 72) W.A. Niskanen, Bureaucracy and Representative Government.
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