The public choice view of international political economy  Bruno S. Frey

There can be no question that the study of international political economy has received insufficient attention in both economics and political science. As Joan Spero 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 done.² The basic contributions are by now well known—at least among international relations scholars—and there are also a number of collections of articles.³

Political science-based scholars quite outspokenly claim international po-

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political economy as their proper and exclusive domain. R. J. Barry Jones, for example, argues that "the foundations of a realistic study of the international political economy are not dissimilar to those of conventional political analysis." Accordinly, "power" and "authority" are taken to be the central concepts with which to study problems. In addition, the analysis has to be "dynamic" and has to take historical processes into account. It is not surprising that, as a consequence, there is a marked tendency to reject any approaches based on economic theory. Thus Jones states that "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." With respect to performance, the same survey bluntly says that "The 'textbook orthodoxy' of neo-classical [economic] theory is successfully challenged by the contrast with and the formulation of an alternative perspective." 6

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 disregarded.7 The "classic" writers in the public choice tradition, such as Arrow, Downs, Buchanan, Tullock, and Niskanen, are hardly, if ever, mentioned. It is due to this oversight that Roger Toose, writing as recently as 1981, can maintain that Roger Toose, writing as recently as 1981, can maintain that neo-classical theory . . . treats political and social processes perfunctorily, as extraneous, and, at best, exogenous factors." Yet what public choice has done is exactly to treat political processes as endogenous factors.8

6. Jones, “International Political Economy,” Part II, p. 47, and Part I, p. 128. It is, of course, difficult to assess how far views such as those of Jones and Toose are representative for political scientists engaged in international political economy. The author’s impression is that they are rather widespread.
9. It should be stressed that almost all writers in public choice, including Mancur Olson, consider their work to be neoclassically based.

In this article I endeavor to show that, first, public choice has been applied specifically to international political economy, and that there is a large and rapidly growing literature on the subject. Second, public choice offers an interesting and worthwhile approach to the area, an approach that complements the political science-based views of international political economy in a useful way. Consequently, 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 1 provides a short survey of those parts of the public choice approach most relevant for international political economy.

1. The public choice approach

a. 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 (neoclassical) analysis. It provides, on the one hand, an explicit positive approach to the workings of political institutions and to the behavior of governments, parties, voters, interest groups, and (public) bureaucracies; and it seeks, on the other, normatively to establish the most desirable and effective political institutions. Public choice is part of a movement that endeavors to apply the "rational behavior" approach to areas beyond traditional economics.10 In recent years, an increasing number of political scientists, sociologists, and social psychologists have taken up this approach.11 It thus constitutes one of the rare successful examples of interdisciplinary research.

Both the rational behavior approach to social problems and public choice theory are characterized by three major features. First, the individual is the basic unit of analysis. The individual is assumed to be "rational" in the sense

10. See, in particular, G. S. Becker, The Economic Approach to Human Behavior (Chicago: University of Chicago Press, 1976). Political scientists frequently raise the concern that the "rational" behavior approach has a tautological character. Public choice scholars do indeed try to explain behavior by assuming that individuals act consistently on the basis of known, and well-ordered, preferences. However, they are aware of the danger of simply introducing some new element into the preference function in order to be able to stick to the rationality assumption. As will be seen, the public choice view produces testable propositions, which are not tautological as they can be (and sometimes are) proved wrong by empirical analysis.
of responding in a systematic and hence predictable way to incentives: courses of action are chosen that yield the highest net benefits according to the individual's own utility function. Contrary to what nonspecialists often believe, 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. Indeed, in the political arena it often does not pay the individual to be well-informed—this is known as "rational ignorance."

Second, the individual's behavior is explained by concentrating on the changes in the constraints to which he or she is exposed; that is, the preferences are assumed to be constant. Individuals are assumed to be capable of comparing alternatives, of seeing substitution possibilities, and of making marginal adjustments.

The third characteristic is that the analysis stresses rigor (and is sometimes formal). The results must yield a proposition that (at least in principle) can be subjected to econometric or politico-centric testing.

There is no need to go into general public choice theory here; only its applications to problems of international political economy are relevant to this discussion.

b. The concepts applied in international political economy

In the international field, some theoretical concepts developed in public choice are used particularly often. Public goods theory and politico-economic modeling will be briefly mentioned here in order to illuminate the public choice approach to international political economy.

Public goods theory. Public goods is the concept most frequently used within economics-based international political economy. Its usefulness is well illustrated in a contribution by Charles Kindleberger, 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. 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 regarded as a public good. The high costs arising when it does not exist are illustrated by the example of Germany in 1790. At that time there were 1,700 tariff boundaries with three hundred rulers levying tolls as they pleased. Under such circumstances it was no wonder that the advantages of trade exchange could not be exploited to any great 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, such as trade liberalization, nationalism, alliances, and burden sharing. A further application is the preservation of nature beyond national frontiers, such as the campaign against whaling or the protection of the atmosphere.

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 on public goods situations suggest that free riding does not occur as often as pure economic theory would have us think. Moreover, institutional conditions are often such that free riding is discouraged.

Even when national actors fully perceive that it is advantageous for them to cooperate in the provision of a public good, it is difficult and sometimes even impossible to coordinate joint action. In view of the general impossibility of forcing independent national actors to cooperate, the free-rider problem can be overcome by finding rules or constitutional agreements that lay down the conditions for cooperation.

In order to find a set of rules that the participants are willing to accept in a state of (partial) uncertainty about the future (i.e., beyond the veil of ignorance), the actors must believe that obeying the rules will be advantageous to them. The agreement must lead to a beneficial change according to the expectations of all actors (Pareto-superiority), because only under these con-

12. Utility maximization lends itself particularly well to a formal analysis, but the public choice approach is by no means incompatible with "satisficing."
conditions will there be voluntary cooperation—that is, unanimity among the participants. These conditions are not easily set up and maintained in the international system. Once a set of rules or a 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, among them 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 system. 18

The establishment and enforcement of rules occupied a central position in two areas. First, international monetary arrangements may be considered to be, if well designed, advantageous to all, but 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 nations. 19 This aspect has been overlooked in the many proposals made in this area; they usually assume (implicitly) that there is a “benevolent international dictator” who will put them into effect.

An important related question is why certain rules have not influenced behavior as much as one might have expected. One example is provided by the Bretton Woods system, in which changes in exchange rates have been made too infrequently, and generally too late. 20 The reason is that forces militate against both devaluation and revaluation. Voters, it is believed, interpret devaluation as an admission of financial failure, with negative consequences for the government in power. Revaluation is good for the voters (as consumers) but very bad for well-organized groups of exporters and import competitors; so 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.

18. See, for example, the articles in Sandler, 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: Longman, 1981). In political scientists’ international political economy, it has, on the other hand, always played an important role; see, for instance, Keohane and Nye, Power and Interdependence; on rules about money and oceans, O. R. Young on Resource Regimes (Berkeley: University of California Press, 1982), and in general the survey by Jones, “International Political Economy,” Part I.


The second international area in which rules play an important 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 overfishing and overexploitation of the oceans. 21 The difficulty in reaching agreement on what these rules should be is equally well known. It is hard to obtain consensus because no country can be forced to accept rules. The only acceptable rules are those that 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 for participating countries than no agreement at all.

Politico-economic modeling. Politico-economic models or, as they are often called, political business-cycle models, study the interdependence between the economy and the polity by explicitly analyzing the behavior of actors. They test the resulting propositions using econometric, or rather politometric, techniques. 22 The simplest such model analyzes a 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 the government considers its chances of re-election to be poor, it uses economic policy instruments to influence the state of the economy and thus the voters’ decisions. (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.

A politico-economic model for a closed country can be extended in two ways to include international politico-economic relationships. The first approach concentrates on the internal connections between the economy and the polity but also introduces 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 included the balance of payments among the indicators of economic conditions. Only in the case of the United Kingdom did it influence voters’ decisions in a statistically significant way. In the other cases, Denmark and Australia, the coefficients were small and insignificant. Thus, 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 them to any significant extent.

International political events may also affect votes and government popularity. Empirical studies of the United States show that, when the country is subjected to an international political crisis, the population tends to “rally round the flag.” Another influence that may be introduced into politico-economic models is the foreign intervention in a country’s internal polity that may occur if a foreign nation considers the results of a particular election undesirable. Government politicians may also have specific international political preferences and influence the internal economy accordingly, provided that their re-election chances are not thereby seriously diminished.

Finally, the use of economic policy instruments is influenced by international economic conditions. The possibility of creating a political business cycle aimed at improving re-election chances depends on institutional conditions within the international economy. Thomas Willett has argued that an expansionary economic policy yields more favorable 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 devaluing thereafter.

The second approach goes one step further, by considering the mutual interdependence of domestic and foreign economies and polities. This research strategy is particularly well-developed with regard to arms race models. Such models have traditionally been analyzed for their mutual responses to two each other’s defense outlays in a rather mechanistic way, following Louis Richardson’s original ideas. In the few last years, however, the decision-making structure has been greatly improved by the introduction of elements of public choice. In particular, it has been recognized that a nation’s response to another nation’s armament 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 economometrically estimated and their behavior has been analyzed with the help of extensive simulations.

Both of the aforementioned approaches are useful; the second 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.

The next two sections illustrate the substantive contributions that public choice has made to the theoretical and empirical analysis of international political economy. No complete survey of all the applications of public choice is intended. I omit, for example, public choice’s applications to the interdependence between foreign trade flows and political conditions, and the determinants of foreign direct investment and of international aid. Rather, I concentrate on two particular areas, the formation of tariffs and trade restrictions (section 2) and international organizations (section 3).

2. 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 countries. The problem for political economists of the neoclassical public choice orientation, therefore, is to explain why tariffs nonetheless exist, and why governments so rarely seem to take the welfare-increasing (Pareto-optimal) step of abolishing tariffs. A government might be expected to win votes by abolishing tariffs, either because a majority of the electorate would directly benefit or because the government could redistribute the gains so that a majority of the electorate would be better off than in a situation with tariffs. If citizens


24. This does not, of course, exclude effects of the balance of payments on the policy through other macroeconomic variables, such as the rate of inflation or the rate of unemployment.


27. L. F. Richardson, Arms and Insecurity (Pittsburgh: Boxwood, 1960).


29. This statement has to be qualified. 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. The issue of the optimality of free trade also looks somewhat different if the role of reciprocity in contemporary international trade relations is taken into account; see, for example, F. Reeser, “The Rationale for Reciprocity in Trade Negotiations under Floating Currencies,” Kyklos 31 (1978), pp. 258–75.
were to determine tariffs by a single direct majority vote in an assembly, the median voter would vote in favor 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. This provides an explanation for the continuing existence and possibly even growth of tariffs. 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 will obstruct the reduction or the elimination of tariffs.

The second necessary modification is to consider the fact that prospective gainers have less incentive than prospective voters to participate in the vote, to inform themselves, and to organize and support a pressure group. 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, however, much more direct and concentrated, so that it is worth their while 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 winners. The fight over trade restrictions benefits those sectors protected from competition but otherwise serves no socially useful purpose, because it wastes scarce resources. This aspect is the subject of the theory of rent seeking. It is useful to differentiate between two activities, both of which, from society's point of view, waste resources. '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.

A third modification of the simple median-voter model considers the possibility that the prospective losers in a free-trade regime may be better represented in parliament and in the government than the prospective winners, depending on the system of voting.

A fourth modification reflects the fact that logrolling or vote trading can make it possible for two measures, each of which would increase the country's welfare, both to be defeated by a majority. Vote trading may happen if groups of voters have unequal preference intensities for two issues. This is very likely to be the case where tariffs are concerned. Consider a group I of voters engaged in domestic, import-competing activities. The group's main preference is against the reduction of tariffs for its own products; it weakly favors the reduction of tariffs for some other products. Assume a group II of voters whose main interest lies in maintaining the tariff for the latter products, and who have a weak preference for a tariff reduction for the former products. If neither of the two groups commands a majority, and the other voters perceive the benefits of free trade, the tariff reduction would pass and free trade would be established. If, however, groups I and II combined have a majority, they can agree to trade votes: group I votes against the tariff reduction that group II strongly opposes provided group II votes against the tariff reduction that group I strongly opposes. This leads to a majority vote against tariff reductions, reducing overall welfare. Voting, however, does not always decrease social welfare. The fact that a market is established in which mutually advantageous trades can take place may increase social welfare, provided all the actors affected by the relevant activity take part in the vote-trading process.

The final modification of the median-voter model recognizes 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 hence will 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 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. Thus, the public choice approach to international political economy stresses the importance of interest groups. It is generally assumed that interests are industry-specific, that capital and labor have the same position vis-à-vis tariffs and free trade. A simplified model of tariff formation considers two goods: the agricultural good is produced with the factor land, and the manufacturing product with the factor capital. Labor is used in both sectors and is taken from a common pool. The country considered is taken to have a relative advantage in agricultural goods, which it exports; manufactured goods are imported. The landed interests use labor in order to promote free trade, while manufacturing interests

31. This has already been pointed out by A. Downs, An Economic Theory of Democracy (New York: Harper, 1957), and by Olson, Logic of Collective Action.
34. See, for example, S. J. Brams, Game Theory and Politics (New York: Free Press, 1975), or Mueller, Public Choice.
use labor in an attempt to increase tariffs. The political struggle between pro- and anti-free-trade interests is described by the so-called Cournot-Nash process. Each group assumes the resources used by the other group to influence the tariff will be 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. This equilibrium also determines the level of the tariff resulting from the political struggle.

This model elegantly analyzes the endogenous determination of tariffs from a theoretical and highly aggregated point of view. One of its main weaknesses (and one of which its authors are well aware) 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 preceding paragraphs have also been the subject of econometric analysis. R. E. Baldwin seeks to explain the probability of a Congressman voting for (indicated by a dummy variable taking the value 1) or against (the dummy variable takes the value 0) the trade-liberalizing bill introduced in Congress by a Republican president in 1973. The explanatory variables are, first, 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—a negative sign is expected because the bill is introduced by a Republican president); second, the proportion of import-sensitive industries in the Congressman’s constituency (with an expected positive sign); third, the proportion of export-oriented industries in the constituency (with an expected negative sign); and finally, 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.

\[
\text{Probability of supporting the 1973 trade bill} = -0.40 \text{ (constant)} - 1.20^{**} \text{ (party affiliation)} + 3.49^{**} \text{ (import-sensitive industries)} + 1.16 \text{ (export-oriented industries)} + 0.0004^{**} \text{ (union campaign contribution)} \\
(6.79) \hspace{1cm} (2.62) \hspace{1cm} (1.28) \hspace{1cm} (3.22)
\]

(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 two asterisks indicates statistical significance at the 99% level.)

According to the \( \chi^2 \) test, the equation is significant at the 99 percent 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 constituency has no statistically significant influence on its Congressman’s voting behavior (and even has the wrong sign). This suggests—as some earlier approaches hypothesized—that export interests are less intensive and less organized than import-competing interests, which 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 study, by Magee. 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. That is, 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 expected to rise with unemployment. Rising inflation is hypothesized to lead to pressures from households and consumer groups to liberalize imports. Protectionist pressure is thus expected to decrease with increasing inflation. Econometric estimates with annual data yield the following result.

\[
\text{Log (protection)} = -0.15 \text{ (constant)} - 1.38^{**} \text{ (dummy variable)} + 0.92^{**} \text{ (log (unemployment, percent))} - 5.67^{**} \text{ (inflation, percent)} \\
(7.54) \hspace{1cm} (6.77) \hspace{1cm} (3.88)
\]

\( R^2 = 0.72 \) (The figures in parentheses are the t-values. The dummy variable takes the value 1 for 1933–52 and zero for 1953–77, to account for an [unexplained] structural shift.)

The coefficients for unemployment and inflation have the expected signs and are statistically significant. A 10 percent increase in the rate of unemployment (e.g., from 5% to 5.5%) is associated with a 9 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 percent.


37. S. P. Magee, “Protectionism in the United States,” mimeo (University of Texas at Austin, Dept. of Finance, 1982).
sector; in the case of public officials in the ministry of agriculture, for example, 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" economic 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 nontariff protection and support (subsidies) to general tariffs.

The public bureaucracy faces constraints imposed by parliament and government. However, both of these actors have little incentive to control public administration more tightly, because they depend on it to attain their own goals. In addition, political actors have much less information available to them than the public bureaucracy does, 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, that is, the intersectoral structure of tariffs. 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. J. J. Pincus has empirically analyzed this hypothesis for the U.S. Tariff Act of 1824. He finds that a higher industrial concentration of output was indeed associated with a higher tariff level, all other influences being constant.

Another study, by R. E. Caves, examines three competing models to identify the one best able to explain the existing tariff structures. In the first model, the government maximizes the probability of winning an 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. 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 com-

comparison with Canada's tariff rate structure in 1963 broadly supports the interest-group model.

G. K. Helleiner's alternative interest-group explanation of Canada's tariff structure stresses international political influences. A time-series analysis for the period 1961-70 suggests that labor and multinational firms have the largest influence on tariffs: labor 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. These studies on the determinants of the tariff structure may be criticized because they do not make explicit their underlying behavioral theory of the government and interest groups. 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, attempts to attribute it only to political factors.

This discussion of the various factors that 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 that differs strongly from political scientists' international political economy. Research is, however, only at an early stage, and various aspects of the analysis must be improved. First, the behavior of the actors (government, interest groups, and public bureaucracy) must be modeled more carefully, taking their characteristic preferences and constraints into account. Second, the equations used for econometric estimation need to be more closely and consistently linked with the theoretical models. Third, the framework of the analysis should be extended, so that all the relevant causal relationships can be included in the analysis. Politico-economic conditions do not only affect tariffs; tariffs also affect the state of the economy and polity. Thus, both directions of the interdependence between tariffs and the political economy should be considered.

3. 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.

a. 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, thus providing an incentive for countries to behave as free riders. Under these circumstances the organization will only be able to operate effectively if it involves a small group of countries, permitting direct interaction and imposing high costs on free riders; if 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 if participation is achieved by coercion.

It has been empirically shown that small, regional or international organizations are indeed more successful than larger ones. The second option, creating selective incentives for members, is very common in international organizations. The existence of such private goods is 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 organization. Finally, coercion is difficult and often impossible in an international context, because the member countries are unwilling to give up their independence. However, as long as the international system is composed of sovereign states, the assumption that coercion is possible solves the problem of international organization by definition.

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 solution of international politico-economic problems is therefore not to be found in one or several supranational authorities. The public choice approach to international political economy is in this respect sharply different from the political science approach because, as John C. H. Miller notes of the latter,


44. Olson, Logic of Collective Action.


46. This has been demonstrated empirically by D. Frei, Internationale Zusammenarbeit: Theoretische Ansätze und empirische Beiträge (Königstein: Hain, 1982).
“It would not be an unfair caricature to infer from the modern IO [international organization] literature a clear prescription that the world needs more supranational authority to manage interdependence, public goods, and international externalities in general.”

The pathbreaking contribution by Mancur Olson and Richard Zeckhauser takes defense to be a typical international public good, provided by NATO. The benefits go to all democracies, and especially to the European members, who 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 costs, while the large nations, especially the United States, bear a disproportionately high share (even allowing for their higher per capita GNP). The same principle holds for the United Nations, where the large countries have made a better job of meeting and overfulfilling their quotas than the smaller nations.

A more recent model of the formation of international organizations takes the total benefits \( b \) and the total costs \( c \) as a function of the amount of cooperative activity or output \( Q \). Each nation is treated as an individual actor \( i \), which 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 (\( B = b_i/b \)) and \( C \) to be its share in total costs (\( C = c_i/c \)), the optimal amount of international activity is given by

\[
\left( \frac{B}{C} \right) \cdot \frac{db_i}{dQ} = \frac{dc_i}{dQ}.
\]

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 1.

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) falls steeply. Moving from the “Group of Five” countries (U.S., U.K., FRG, France, Japan) to the “Big Seven” (adding Canada and Italy), to the “Group

47. Conybeare, “International Organization and the Theory of Property Rights,” p. 308. The author dismisses the supranational authority approach, calling it “impractical” and “undesirable.”


of Ten” (adding Belgium, the Netherlands, and Sweden), to the OECD (including thirteen additional countries) adds a successively diminishing amount to the benefits received by each country. (A country's benefits are assumed to be positively related to its share in world GNP or in world trade). M. Fratianni and J. Pattison conclude that because the ratio B/C has fallen strongly for the United States, the 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 1). On the other hand, the B/C ratio has increased for countries such as Japan, Germany, the Benelux countries, or the European Community’s members, 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 goods.

This model provides an interesting formalization of the system, but it is still only a first step toward an economic theory of international organizations.
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"—generally an elusive concept—may be defined in an operational way as the chance of affecting the outcome of a decision. A decision is influenced by control of the "pivotal" vote, the vote that transforms a nonwinning 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, J. S. Dreyer and A. Schotter have shown 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.\textsuperscript{52} 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; thirty-eight countries whose vote was reduced experienced an increase in power. Such a counterintuitive result may arise when the redistribution of votes has the effect that the major countries with additional votes increasingly obstruct each other from casting the "pivotal" vote, while each of the countries losing votes has a higher chance of casting the decisive vote. If, however, the major countries with more votes were taken to be a bloc always voting in the same way, this bloc's "power" would increase in relation to the countries with reduced votes.

Public choice may not only be useful in analyzing the consequences of decision rules in international organizations. It may also help in the choice of the most advantageous voting rules for given circumstances.\textsuperscript{53} Recently, several new voting schemes have been devised. For international political economy, three are of particular interest.

The first is the voting by veto rule, which allows each nation to include its own proposition in the set of alternatives.\textsuperscript{54} The decision is made by each nation except one deleting that alternative from the set which it dislikes most. The order in which the nations "vote" is randomly determined. The alternative that is not deleted but survives the vote is the collective choice. Obviously, each nation has an incentive not to introduce an alternative strongly disliked by one or more other nations; there is even an incentive actively to consider the interests of the other nations. This voting rule has several desirable features: it allows the expression of preference intensities, it brings about Pareto-optimal outcomes, nobody can be exploited because

\textsuperscript{51} This is an application of the general analysis provided in Buchanan and Tullock, Calculus of Consent.


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.

Second, 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 using the example of water purification associations in which this system is used.55 This voting rule allows the weighting of votes according to a country’s stake in a particular issue; 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.

Third, in the preference-revealing mechanism, 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.56 This voting procedure has various advantages over simple majority rule: it allows the expression of preference intensity, it is nearly Pareto-efficient; it is not subject to the voting paradox, and it provides an incentive for the participants to reveal their true preferences.57 The disadvantages are similar to those of voting by veto: it is subject to coalition influence, and it is complicated to administer and rather difficult to understand (at least for noneconomists).

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 decision making functions reasonably well. However, they may play a useful role in breaking deadlocks under other circumstances.

c. 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 is that they have greater room for discretionary action, because there is neither the opportunity nor the incentive to control them. Control is difficult because the “output” of an international organization is undefined and usually cannot be measured. There are no political institutions that 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 unfairly 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 toward the “official product,” because their utility depends hardly at all on their contribution. The national quotas for 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 international bureaucracies quite independent of the tasks to be performed, because all bureaucrats benefit from larger budgets and a greater number of employees.58 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 still has to undergo empirical testing.

d. International bargaining

Modeling international bargaining is a formidable task, because the process has little structure and involves many variables. There have therefore been few public choice studies of international bargaining. Those that do exist have each concentrated on a particular aspect of the problem.

In international negotiations, linkages between various issues are quite a common feature. R. D. Tollison and T. D. Willett have shown that linkages are more important when the distribution of benefits from agreements is highly biased toward a small number of countries.59 The linkage of issues whose distributional consequences offset one another can help promote agreements that would otherwise fail because of 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

57. It is only “nearly” Pareto-efficient because the tax receipts must be wasted in order not to bias the vote. This problem is of little practical importance.
58. Niskanen, Bureaucracy and Representative Government.
consensus can be reached without introducing an additional dimension in the form of linked issues. Such hypotheses are plausible but, again, have not yet been empirically tested.

4. Concluding remarks

The aim of this survey has been to show that public choice has made considerable and valuable contributions to international political economy. The 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 limitations of space, I have only been able to provide some characteristic examples, and some selected fields of application, of the public choice approach to international political economy.

The public choice approach to international political economy has both strengths and weaknesses, a proposition, of course, true for any approach, including that adopted by political scientists. Five points merit amplification.

First, the public choice view provides fresh insights into the area, in the same way that the economics-based approach illuminated general politics. This is not to claim that the approach is superior to any other; 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 true whenever one considers the advantages 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 particular theoretical concepts such as public goods and free riding really capture the essential features of reality.

Second, an advantage of the public choice approach to international political economy is that the analysis is based on an explicit and unified theory of human behavior, 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 rigor. There are already some areas of this type of international political economy where the heavily formalistic apparatus used is out of all proportion to the resulting advances in knowledge.

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

Fourth, the emphasis on deriving propositions that are at least in principle amenable to empirical testing is healthy, because it forces reality on the researcher. Econometric, or rather politometric, analyses also provide factual knowledge about the relationships among the variables being studied. The disadvantage of this empirical orientation is that aspects difficult or impossible to measure quantitatively are easily excluded. Thus, 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 public choice to international political economy, because it is difficult to know what part of the results is due to the public choice view, what part to the particular conditions obtaining in the United States. It is therefore important that empirical tests of the theories should be undertaken for other nations.

Fifth and finally, 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 a single 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 selected aspects of their interrelationship will be treated. There can be little doubt, however, that economists engaged in research on international political economy can gain from the work done by political scientists, especially from their experience of the institutions and political processes encountered in the international sphere. Up to now, there has been relatively little contact between public choice researchers and other scholars in the field. This survey will have achieved its goal if it has convinced the reader that the opposite proposition is also true: political scientists would benefit from considering and studying the public choice approach to international political economy.