

I. Introduction: International Political Economy

A. There are several areas of international research in the public choice research program.

i. **First, there is a literature that attempts to analyze international relations using public choice and other models.**

- ◆ That literature addresses such matters as trade barriers, international law, international treaties, international organizations, and war using public choice types of analysis.

ii. **Second, there a strand of research that analyzes the political and economic institutions of countries other than the United States.**

- a. For example one might analyze the British parliament, Swiss Federalism, the Swedish welfare state, or Japanese Corporatism.
- b. Such studies are not really international in the sense of focusing on multiple countries, but cover a wide range of countries and institutions.

iii. **Third, and partly as a consequence of the institutional literature, there is a fairly broad “comparative” literature that compares and contrasts the performance of alternative ways of organizing government.**

- a. That literature, at least as practiced by economists, deals mostly with such matters as the size of the resulting government, the extent to which particular political institutions contribute to economic welfare, growth, inflation, or unemployment.
- b. [A good deal of this analysis is done by persons whose training is in international trade or development economics. Some is done by macro economists: is there or is there not convergence in long term income and growth rates (there isn't), does central bank independence reduce inflation rates (it does), do democracies grow faster than dictatorships (generally, but not always).]

iv. **Fourth, and partly as a consequence of the third, there is a practical interest in revising institutions (constitutions) to promote economic development.**

- a. The constitutional reform agenda has intensified the second and their lines of research, but also addresses other issues having to do with the extent to which “outsiders” can actually induce significant reforms of preexisting political institutions.

b. In this area of research, *problems in public choice and constitutional political economy* are a pressing practical concern not an abstract exercise of interest only to political philosophers.

- ◆ For example, in Europe there has been an actively debate over the proper constitutions for a “European Union.”
 - ◆ Even greater interest in the properties of alternative democratic constitutional designs was present in Easter Europe after “the wall fell” in 1989.
 - ◆ (It was in this period and on these sorts of topics that much of the “new political economy” literature emerged in the 1990s.)
- v. **Today’s lecture focuses on international policies, relations, and organizations.**
- ◆ We take up some of the rational-choice based comparative literature next week.

II. Nations as Actors in International Relations

A. From the perspective of public choice, political economy, and most political science, **the part of a nation that can be said to act is its government.**

- i. **That is to say, when a person says country X does Y, it really means country X’s government does Y.**
- ii. **Most groups requires some collective decisionmaking process to act, because actions require choices about which goals to advance and how to advance them.**
- iii. **The collective decisionmaking process of a nation (or state) is called its government.**
 - ◆ This public choice interpretation of countries as actors applies to both domestic and international policies.

B. In the first lecture, we developed two models that allow national governments to be modeled as individuals: the pure dictatorship model and the median voter model.

- i. **Within the context of these models, when a person says country X want Z, it really means the median voter wants Z or the dictator wants Z, rather than the “country” wants Z.**

- ii. **These single actor models of government have their limitations, because public policy choices in both pure sorts of government involve other actors as well such as interest groups and the bureaucracy.**
- When the interests and/or influence of these other groups affect the policies chosen by the median voter or dictator--simple forms of single actor models may still be used, but they will not work as well.
 - In cases in which the effects of other groups is systematic, the models will make biased predictions--not simply less than perfectly accurate ones.
- iii. **As one takes account of more institutional detail, even near polar forms of government begin to include roles for other actors besides the pivotal voter or the most powerful person in a junta or polit buro.**
- iv. **For example, in parliamentary systems the Prime Minister requires continued support in parliament to retain his post.**
- In cases in which there are two parties in parliament or very stable coalitions, the median voter model is a reasonable first approximation of his/her "institutionally determined" policy interests, which can be taken to be "constants" for all policy makers holding that post.
 - In such cases, the government can reasonably be modeled of as a single actor.
 - However, in settings in which person holding the office of prime minister requires the ongoing support of an unstable coalition, it is less clear that the median voter ultimately determines the identity and goals of the prime minister.
- v. **In presidential systems, governmental authority is often divided between an elected legislature and president.**
- Insofar as the median legislature is determined by the "same" voter as the president, as would tend to be the case if voters in every state or province had the same distribution of ideal points as every other, the median voter model can again be used to characterize the "institutionally induced" preferences of the policy makers who are pivotal in both branches of governments.
 - However, if state electorates vary and the institutions themselves (Congress vs. the President) create additional interests that affect policy decisions, the median voter model will have to be augmented by the effects of both state electoral factors and other institutional (nonelectoral) factors.
- vi. **Similarly, in dictatorships in which there is a clear top member of a government, that expects to continue in office regardless of the policies adopted--in effect a "king"-- that person's institutionally induced preferences can be represented as simply his/her own utility maximizing choice.**
- However, if his/her policies affect the probability that he/she remains in office, then there are additional (institutional and non-institutional) constraints on the dictator's policy choices.
 - In most cases, for example, a dictator needs to retain the support of the army (security services), which requires sufficient tax revenues (and/ or other resources) to assure that they follow his/her orders.
 - Moreover, there is often a more complex quasi-constitutional structure to dictatorships with advisory councils and parliaments, whose support is necessary to continue in office.
- vii. **Nonetheless, most of the rational-choice based literature on international policies and relations assumes that governments can be modeled as "single actors."**
- ◆ Indeed, many analyses do not even distinguish between dictators and liberal democracies.
 - ◆ (The more "fine grained" research on the architecture of government and other institutions on public policies will be taken up next week.)
- C. We began the course by talking about anarchy and how governments might arise from a setting where both persons and personal property were constantly at risk.
- We left that setting behind to analyze standing governments that resemble modern Western liberal democracies.**
 - We now return to that setting, insofar as the international setting resembles that imagined by persons interested in anarchy and the emergence of governments from anarchy.**
 - There is yet no world government, however, nor enforced international civil law, and there remains a good deal of conflict.
 - There is nonetheless a great deal of "civilized" order in the pattern of international relations.

- c. Norms, implicit property rights, and “international law” etc. have emerged without the necessity of an international government empowered to tax.
- ◆ Indeed, international laws are normally enforced by domestic courts.
- iii. **Much of that pattern of international relations (at least during times of relative peace) has involved formal contracts of various kinds.**
 - a. Contracts between and among nations are called **treaties**.
 - b. Many of the agreements adopted seem to be compatible with the Coase theorem, insofar as international treaties have bound their signatories to particular courses of action.
 - ◆ However, international Coasian contracts, in contrast to domestic contracts, have to be self-enforcing to operate in contrast to domestic contracts.
 - ◆ (Contracts between international firms are, as noted above, normally enforced in domestic courts, although in some cases special courts are set up for this purpose.)
- iv. **During the period following WW II, a broad range of international organizations have been formed, each with their own voluntary memberships and constitutions.**
 - a. Most of these organization are delegated little policymaking authority.
 - ◆ For example, none have the power to tax.
 - b. For those interested in contract-based theories of government, the charters of international organizations provide an empirical basis for speculating about the limits of voluntary delegated authority.
 - ◆ Two exceptions to this rule (e.g. of very limited delegation of policymaking authority) are the WTO and EU.
 - ◆ The IMF and World Bank may also be exceptions.
 - ◆ [Is there an explanation for these outliers?]
 - c. [Relatively little work has been done on the plethora of treaty organizations that have been formed in the past few decades.]
- v. **Evidently, the enforcement of many of the contracts between governments and international commercial organizations are based on**

mutual gains and continuous dealings (trust?), insofar as they actually bind the behavior of the contracting parties.

- ◆ However, not all treaties actually change behavior (Murdock and Sandler 1997).

D. There is also a rational choice-based literature on warfare which is the setting that seems closed to the Hobbesian jungle, which has mostly been worked out by political scientists.

- ◆ See, for example, Tullock (1974), Wittman (1979, 1991), De Mesquita (1981, 1994)

III. International Policy (Regulatory) Externalities, Social Dilemmas, and the Coase Theorem

A. There are a number of policy areas in which governments policies cannot fully solve externality problems even if they want to.

- i. **Many externality problems span national boundaries.**
- ii. **Note that at the level of nations, many of these can be considered policy or regulatory externalities.**
- iii. **An international regulatory externality occurs whenever the policy decisions of one country affect the welfare of persons living in another country.**
 - a. Such externalities are analogous to those generated by many organized markets but imply “government” rather than market failures, if we apply the usual tools of welfare economics.
 - b. Even simple one actor models of the state imply that the most relevant externalities are those that affect the “government” of the countries of interest--since these effects may induce actions to overcome them.
 - ◆ (E.G., when the policies of one median voter or dictator affects the welfare of the median voter or dictator in another country.)
- iv. **Overcoming regulatory externalities requires many of the same problems to be overcome as in the usual Olsonian analysis of domestic externality problems.**
 - a. However, in the international setting the organizational costs are often smaller, because there is already a standing organization that to some extent represents the interests of those affected, namely the government.

- ♦ In such cases, there are far fewer actors (e.g. the governments) than there are persons affected by the externalities.
 - b. The latter makes Coasian approaches to international externality problems feasible, even though there are millions--indeed billions--of persons affected.
- v. **It also bears noting that some international externalities are intentional: as with trade barriers and wars, rather than simple accidents or incidental effects of domestic policy decisions, as might be said of a nation's environmental policies or quality standards.**
- ♦ The latter may nonetheless create prisoner's dilemmas or what Tullock calls social dilemmas.
 - ♦ [Illustrate with game matrices and/or continuous models.]
- B. Coasian solutions to international regulatory externalities are called treaties.
- i. **It bears noting that many domestic and international policies create prisoner's dilemma-like games, that other nations (essentially) have to play.**
- a. For example, if one country **militarily** threatens another defense is essentially necessary if the country (government) is to survive.
 - b. Similarly, **trade barriers** and the like can create asymmetric market opportunities for firms on opposite sides of trade barriers that affect opportunities for jobs, profits, and, what might be **most important** in the long run, **specialization and economies of scale**.
 - c. There are also cases in which one nation's regulations are adjusted with the current policies of other nations in mind, which generate PD like settings:
 - ♦ the race to the top (NIMBY) and race to the bottom games
- ii. **A variety of international public goods and regulatory externality problems share the structure of free rider - PD games.**
- ♦ An implication of the PD game setting (in both one-shot and repeated forms) is that the welfare of the participants (dictators or median voters) cannot be maximized by independent policymaking decisions.
 - ♦ [Illustrate with game matrices and/or continuous models.]
- iii. **In the case of national governments, no appeal can be made to a higher levels of government (except perhaps in the EU).**
- a. So, the only way to address such externality problems is through Coasian contracts--that is to say with **voluntary international agreements**.
 - b. To be effective, such treaties have to be self-enforcing (e.g. completely incentive compatible).
- C. **The rational-choice based literature on international relations is relatively small, but addresses both the source of the PD problems and their solutions.**
- i. **The origin of many intentional international externality problems is in many, perhaps most, cases a consequence of interest group politics.**
- ♦ For example, a domestic interest group attempts to block imports from other countries to reduce competition in the domestic market and increase profits.
 - ♦ (This suggests that single agent models of governments are not the appropriate ones for such problems, although such models do simplify analysis.)
- ii. **This explanation of the erection of trade barriers has a long history, in the public choice and political economy literature, beginning with Gordon Tullock (1967) and continuing through Anne Krueger (1974), Bhagwati (1982), Hillman and Ursprung (1988), Grossman and Helpman (1994), etc.**
- ♦ Empirical follow ups include Krueger's original work, and recent papers by Goldberg and Maggi (1999), Mitra Thomakos and Ulabasoglu (2002), Gawande, Krishna, and Olarreaga (2009), etc.
 - ♦ (Many of the recent tests of the Grossman and Helpman model are quite consistent with Olson's work on encompassing interest, although Olson's work tends to be unmentioned.)
- D. **Solutions will advance the interests of governments, although not necessary most citizens of the countries they rule.**
- i. **In democracies, rational ignorance, interest groups, and "full line forcing" are obvious problems, although these are mitigated to some extent by fire alarms.**

- ◆ Even in dictatorships, Olson theory of “encompassing interests” suggest that the self interest of rulers are somewhat aligned with those of other citizens in their countries, if not perfectly so.
- ◆ (For example, the national tax base expands as RGNP increases, although opportunities for rent-extraction may fall.)
- ii. **A surprisingly large number of international treaties are negotiated, signed, and ratified every year, and nearly each one constructs new international organizations.**
 - a. All of these organizations must make collective choices.
 - b. [Perhaps unsurprisingly given how small the treaty literature is, there are a wide variety of unexplored public choice issues involving the conduct and origins of these new often very specialized international agencies.]

IV. International Alliances and Warfare

A. There are clear economies of scale in warfare as well as clear deadweight losses (literally in this case) from military conflict.

- ◆ Both these phenomena create opportunities for Coasian contracts.
- ◆ In the first case, the aim is to realize economies of scale and/or share the cost of a public good.
- ◆ In the second case (paradoxically) the aim is to avoid the consequences of warfare by such alliances.
- ◆ [There is only a very small public choice literature on arms reduction, as far as I know; see for example Brito and Intriligator (1981).]

B. There is a relatively large literature on **international alliances, treaties, and treaty organizations** that attempts to explain why alliances and treaty organizations are formed, and whether the agreements are, in fact, effective once they are negotiated.

- i. The public choice literature on alliances begins with a paper by Olson and Zechhauser (1966), and proceeds through papers by Sandler and Cauley (1975), Tollison and Willet (1979), and Sandler, Cauley, and Forbes (1980).

ii. **Just before the Olson and Zeckhauser piece was published (although probably after it was written), Buchanan published a “Theory of Clubs” (1965, *Economica*) .**

- ◆ The club good hypothesis was subsequently applied by Todd Sandler and various coauthors to explore alliance size and cost shares.
- ◆ See ,for example, Sandler and Hart 1999 for a book length analysis of NATO.

iii. **A good survey of the literature on alliances was written by Sandler and Hartley (2001, *JEL*), which focuses mostly on defense alliances.**

- ◆ [The NATO focus of much of this literature doubtless reflects the importance of NATO at the time, the availability of data on cost sharing etc., and NATO’s budget for research grants.]

C. Olson and Zeckhauser (1966) **propose an explanation for disproportionate contributions to treaty organizations** such as the United Nations and NATO by larger countries such as the US.

- i. **The first part of the paper focuses on the problem of funding a pure public good: “When a nation decides how large a military force to provide in an alliance, it must consider the value it places upon collective defense and the other, nondefense, goods that must be sacrificed to obtain additional military forces.” (pg 268).**
- ii. **“In an alliance, the amount a nation spends on defense will be affected by the amount its allies provide. ... The intersection point of the two reaction curves indicates how much of the alliance good each ally will supply in equilibrium.” (pg 268-69).**
- iii. **“In equilibrium, the defense expenditures of the two nations are such that the “larger” nation the one that places the higher absolute value on the alliance good - will bear a disproportionately large share of the common burden. It will pay a share of the costs that is larger than its share of the benefits, and thus the distribution of costs will be quite different from that which a system of benefit taxation would bring about.” (pg 269)**
- iv. Exceptions, however, occur during crises. **“During periods of all-out war or exceptional insecurity, it is likely that defense is (or is nearly) a superior good, and in such circumstances alliances will not have any tendency toward disproportionate burden sharing.” (pg 270)**

- v. Empirically, for what they regard as pure public goods, they find that “There is a significant positive correlation indicating that the large nations in NATO bear a disproportionate share of the burden of the common defense. Moreover, this result holds even when the level of per capita income is held constant.”
- vi. The last part of their paper addresses joint provision of more private (or club) goods. They note that for private goods (in their case, infrastructure located in particular countries), the public good argument does not hold and cost sharing is predicted to be closer to proportionate--indeed there are cases in which smaller nations that directly benefit from a jointly provided private good (Much of NATO infrastructure in their paper is a private good at the level of nations), may contribute more than proportionately. (pg 277)
 - ◆ In their analysis, this is induced by shifts in the respective “reaction curves” (now called best reply functions) of the member states in the public and private good cases.
- vii. Consistent with that distinction, they find that: “not only is it the case that the larger nations pay a smaller share of the infrastructure costs than of other alliance costs; it is also true that there is a significant negative correlation between national income and the percentage of national income devoted to the NATO infrastructure, which is in vivid contrast to the positive correlation that prevails for other NATO burdens.”

V. International Treaties and Escape from Social Dilemmas

- A. Both the alliance and treaty literatures focus, for the most part, on potential gains to trade among governments who can trade *policies for policies!*
- B. *In many cases, such negotiations and treaties attempt to escape from social dilemma that result from intentional international policies.*
 - i. For example, mutual tariff reductions can be negotiated that are mutually beneficial for a broad range of countries.
 - ◆ *The many rounds of negotiation leading to and extending the authority of the World Trade Organization are examples of this sort of social dilemma reducing Coasian bargaining.*

- ◆ Arms limitations is another policy area in which treaties are used to try to escape from international social dilemmas created by domestic policies concerning other nations that make perfectly good sense for the countries that adopt them.
- ii. In other cases, international agreements may be negotiated as a method of creating national cartels.
 - ◆ OPEC, for example, is a treaty organization.
 - ◆ Some would argue that the EU’s effort to “harmonize” tax policies among its member states is an effort to reduce tax competition.
 - ◆ (These sorts of treaties, however, **tend not to be entirely self-enforcing.**)
 - ◆ (Illustrate with a game or game matrix.)
- C. In other cases, treaty negotiations attempt to address “incidental” international regulatory externality, public goods, and commons problems.
 - i. *For example, one nation may adopt stricter environmental policies in exchange for increases in the stringency of regulation by other.*
 - ◆ As it turns out, democracies are more likely to sign (binding) environmental treaties than are dictatorships.
 - ◆ However, not every treaty seems to actually change governmental behavior
- D. During the past twenty years, a new area of treaty research has emerged, namely that dealing with international environmental externalities, and area that may prove to be economically as important as free trade and open market agreements..
 - i. For work on the politics and economics of international environmental treaties see: Congleton (1992, 1995), Barrett (1994, 2001), Sandler, Murdoch, and Sargent (1997), Murdoch and Sandler (1997), Schulze and Ursprung (2003), etc.
 - ii. In general, the public choice approach to environmental treaties differs from other approaches (e.g. the usual one adopted implicitly by most environmental economists) by assuming that nations have

separate interests and so do not necessarily a joint payoff (welfare) function when negotiating international treaties.

iii. **The public choice based research also tends to stress the effects of political institutions and free rider problems that exist even after a treaty is negotiated, signed, and ratified.**

- ◆ See Congleton (1992) for an early analysis of the effects of political institutions on environmental regulations and participation in international environmental agreements.
- ◆ See Sandler and Murdoch (1997, *J Pub Econ*) for an empirical analysis of the policy effects of international agreements.

E. Sandler and Murdoch (1997, *JPubE*)

i. **This paper applies the theory of the voluntary provision of a pure public good to the behavior of nations to curb chlorofluorocarbon (CFC) emissions during the late 1980s.**

- a. By devising an empirical test, they determine that these cutbacks in emissions are consistent with Nash behavior.
- b. When taste parameters are controlled, the relationship between emission cutbacks and national income is nearly linear as implied by the theory. If the sample is purged of potential outliers, then the linear relationship results.
- c. A significant taste parameter is the extent of political and civil freedoms, while a marginally significant parameter is geophysical position in terms of latitude.

ii. **Their analysis is noteworthy because it provides the first statistical application of the group self-selection process as derived from the modern theory of the voluntary provision of pure public goods.**

iii. **Their findings suggest that the Montreal Protocol may be more symbolic than a true instance of a cooperative equilibrium, since nations' CFC reductions prior to the treaty taking effect appear to fit the predictions of a single-shot Nash equilibrium.**

iv. **This is a well-crafted paper with theory, institutions, and solid empirical work. with a controversial result (at least for non economists).**

v. **Their data set is summarized on pages 340 and 342,**

vi. **Sandler and Murdoch note four reasons: for rejecting a cooperative model:.**

a. **“First, only 38 of these 61 nations (some 54%) ratified the Montreal Protocol during the time period covered by our data. If emission reductions are simply a reflection of the treaty mandate and, therefore, assumed to be generated by a model of cooperative behavior, we would expect a much larger percentage to have ratified. In fact, nonratifiers would have no institutionalized reason for reducing their emission levels as they were not party to the Protocol.**

◆ **If, however, emission reductions reflect a nation's voluntary subscription level, then the fact that a CFC-reducing nation is almost equally likely to be a ratifier or nonratifier is not unexpected.**

b. **Second, recall that the Montreal Protocol mandated that ratifiers achieve 1986 levels by 1 July 1993. However, for the sample nations, the average percent reduction from 1986 to 1989 is greater than 41% implying voluntary behavior.**

c. **Third, there is the variation in the DEMIT data. The Protocol called for equal percentage reductions in CFCs; however, the standard deviation of DEMIT is greater than 17%. If a cooperative solution were responsible for the observed behavior, we would expect the standard deviation to be close to zero.**

d. **Finally, there is the behavior of the Article 5 countries. Because the Protocol excuses them for ten years from complying with the mandates, it would not be unexpected if none of the Article 5 nations appeared in our data set. Surprisingly, 22 of these Article 5 nations are among the contributors. Moreover, their average percentage reduction in emissions is greater than 45%, which is somewhat greater than the overall average!”**

vii. **Sandler, Murdoch, and Sargent (1997) find mixed results for two other treaties.**

◆ **In one case, treaties appear to change behavior; in the other case treaties did not.**

◆ **Even treaties without obvious enforcement mechanisms may affect public policies. (See also Congleton (2006, *RIO*)).**