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# **Post Negotiation Impasses in the Environmental Domain. The Influence of Some Political and Economic Factors on Environmental Treaty Acceptance**

**Korula, A.**

**IIASA Working Paper**

**WP-92-086**

**November 1992**





Korula, A. (1992) Post Negotiation Impasses in the Environmental Domain. The Influence of Some Political and Economic Factors on Environmental Treaty Acceptance. IIASA Working Paper. WP-92-086 Copyright © 1992 by the author(s). <http://pure.iiasa.ac.at/3614/>

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# Working Paper

**Post-Negotiation Impasses  
in the Environmental Domain  
The Influence of Some Political and  
Economic Factors on Environmental  
Treaty Acceptance**

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WP-92-86  
November 1992



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## Preface

In many cases, the severity of imminent environmental damage demands that global or regional solutions be found and multinational action be taken quickly. But of what use is negotiating environmental agreements among nations if those agreements are not implemented faithfully or expeditiously?

Certainly, being able to reach a multilateral agreement at the bargaining table can be a major achievement; analysis of the negotiation process that facilitates such outcomes is important in providing insights and lessons learned to practitioners involved in future negotiations. Of equal importance is analysis of the post-agreement process, some of which involves additional negotiation activities at domestic and international levels. Treaty ratification and acceptance is one such post-agreement negotiation process.

The purpose of this paper is twofold:

- To diagnose the extent of the problem of treaty ratification delays.
- To evaluate the situational correlates of such delays.

In so doing, this paper provides new insight into the dynamics of an important phase of the post-agreement negotiation process. By understanding the problems involved in treaty ratification and their correlates, it may be possible to devise new structures and procedures to avert these problems at an earlier phase: during the negotiation itself. For instance, perhaps the drafting of agreements, the composition of national delegations, and the framing of issue linkages need to undergo a major overhaul.

This research was funded, in part, by a grant from the United States Institute of Peace. It is part of a larger study being conducted by the Processes of International Negotiation (PIN) Project concerning the post-agreement negotiation process.

## Acknowledgements

I am grateful to Dr. Bertram Spector, Leader of the *Processes of International Negotiation* Project at IIASA, Ambassador Winfried Lang, Permanent Mission of Austria to the United Nations, Geneva; Professors Jeffrey Z. Rubin, Program on Negotiation, Harvard Law School, Cambridge, Massachusetts; Gunnar Sjöstedt, The Swedish Institute of International Affairs, Stockholm, and I. William Zartman, The Paul H. Nitze School of Advanced International Studies, The Johns Hopkins University, Washington, D.C., for their incisive comments and criticism.

## Abstract

This paper assesses some of the implications of certain national economic and political factors on the likelihood and degree of treaty acceptance (ratification, accession, etc.) in the post-agreement negotiation period. The purpose of the study is to analyze the problem of delays in treaty acceptance with a view to suggesting how the negotiation and post-negotiation processes may be restructured so as to facilitate acceptance. The aim is to draw conclusions that have implications for policy making—to highlight what it is in the treaties themselves or in the conditions surrounding them that cause delays in acceptance and subsequent implementation.

International environmental agreements entered into by European countries between 1972–1992 are examined in this context. The data set includes 61 multilateral treaties, and the independent sovereign state is the unit of analysis.

A literature review identifies what has been done in this area and enables focus on a few specific questions.

The following types of variables are operationalized and measured in the study:

### *Dependent Variable*

- The extent of ratification problems. *Measure:* Average years to ratify (from adoption to entry into force).

### *Independent Variables*

- Issue saliency. *Measure:* R & D expenditure on environmental protection;
- Popular pressure. *Measure:* Public concern on environmental issues at the local, national and international level;
- National wealth. *Measure:* GDP/capita;
- Quality of life. *Measure:* Human Development Index.

This paper provides data on the initial step of the post-negotiation or post-agreement cycle, namely acceptance, so as to suggest further directions for investigation and to provide the background for a next phase of research on the behavioral implementation and compliance that follow on acceptance.

Some alternatives to ratification discussed in the literature are also presented.



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# **Post-Negotiation Impasses in the Environmental Domain**

## **The Influence of Some Political and Economic Factors on Environmental Treaty Acceptance**

*Anna Rebecca Korula*

### **1 Introduction**

#### **1.1 Environmental Negotiations, Treaty Making and Implementation**

The recognition by governments that environmental issues transcend national boundaries has been accompanied by the realization that *ad hoc* and disparate responses by individual states will not solve these pressing problems. Global warming, ozone depletion, deforestation, air and marine pollution, nuclear waste, and the destruction of living natural resources are some of the interrelated threats facing the planet. States are now grappling with environmental issues and are increasingly entering into a number of bilateral and multilateral agreements (Sands, 1989).

Environmental negotiations are critical, important, unavoidable, if the earth is to maintain sustainable development. A major objective of environmental negotiations is treaty-making, so that the term may be regarded as roughly synonymous to environmental law making; treaties are the outcomes of the negotiation process. In Sjöstedt (1993) it emerges that environmental negotiations differ from other negotiations in that they exhibit the following characteristics, which add an extra level of complexity to reaching agreement: multiple parties with multiple roles, multiple issues, meaningless boundaries, scientific and technological uncertainty, power asymmetry, negative perceptions of immediate outcomes, long time frame, changing actors, inclusion of public opinion, the institutionalization of solutions, lobbies at the national, as well as intergovernmental level, the role played by the media, and the need for scientific evidence. New regimes and rules, as well as the inclusion of the scientific community, the participation of nongovernmental organizations (NGOs),

and the nature of the issues require an unprecedented degree of international cooperation (in coordinating research, monitoring trends, harmonizing measures and regulations).

Treaty-making is the most advanced type of negotiation. It is also the most common type of negotiation, because it provides the only means of arriving at legally binding rules. Treaty-making has three optional outcomes, taking the environmental domain for example, first, it may codify measures to control the environment, second, it may set a precedent that can be used in similar cases elsewhere, and third, it may turn the outcome of negotiations into a symbiosis of legal and scientific data, in which law provides the binding power. However, unless accepted and implemented, they remain impotent and ineffective. From the outset, environmental treaties have to meet the concerns of all parties involved, to assure their full compliance (Kremenjuk and Lang, 1993) and they must engage sufficient interest at the national level to result in acceptance and implementation. Treaties should be drafted such that they are strict enough to be useful but not so strict that it makes participants and non-participants unwilling to ratify them.

International environmental agreements are the predominant legal method for addressing transboundary environmental problems. As the problems become increasingly global in nature, broader agreements pertaining to the oceans, atmosphere, forests, global climate, Antarctica and endangered species will assume a greater role in the preservation of the earth's environment. Before the issue of ratification arises, states must decide how to prepare and conduct negotiations. Voting procedures, scientific and technical information to be used, the form and scope of the agreement are all features that have to be determined before proceeding to the negotiations. The negotiations of the Law of the Sea Convention of 1982 demonstrates that these choices have considerable impact on the success of the negotiations and the effectiveness of the ultimate agreement (Harvard Law Review, 1991).

The issue areas are of international concern and often of global importance. However, a potential source of uncoordinated activity stems from the fact that while environmental issues, by their very nature, may have to be negotiated at the international level, they are implemented and regulated at much lower levels. For implementation to be a faithful representation of the intent of negotiated agreements, existing local regulations must be adaptable and local authorities induced to be compliant. Again, to cause these local actors to behave as intended may require extensive domestic negotiations. For example, in the case of acid-rain regulations in the United States and Canada, the standards imposed by

Clean Air Acts or any future negotiated agreement must be implemented by the states and provinces, respectively, who will not be direct participants in the negotiations themselves. In biological conservation negotiations, local and regional authorities, of necessity, play a significant role in the implementation of land use and natural reserve plans that are agreed to in negotiation. Coordination problems can often be solved through restructuring the formal institutions or informal processes of negotiation, although further study into reorganization and reformulation approaches is warranted (Sjöstedt and Spector, 1993).

Barratt-Brown (1991) in discussing the Montreal Protocol notes that international negotiations are multidimensional and heavily influenced by domestic politics. Multilateral negotiations are complicated by the almost automatic addition of the national political dimension. The political repercussions have both domestic and international dimensions. The situation is made even more complex when the issue area is the environmental domain.

Domestically, environmental issues inevitably involve the interests of industry and labor. A nation's ability to deal with environmental issues is influenced by its existing internal and external situation; the more this situation is beset by tension and confrontation, the less the prospects of a solution, and *vice versa*. Therefore, environmental issues may generate either confrontation or cooperation in international relations, depending upon political circumstances (Kremenjuk and Lang, 1993). The importance of binding agreements in potentially conflictual situations therefore can not be denied, and the criticality of effectiveness in the post-agreement period can not be emphasized enough. Treaties that result from international negotiation are subject to domestic politics and parliamentary processes in democratic countries; herein lies the problem of treaty acceptance, and ultimate compliance with its provisions. These are typical issues in post-agreement processes, which are discussed further in section 2.

The difference between multilateral treaty making and lawmaking in democratic societies is that parliamentary proceedings have the force of law and have to be followed by all government officials, the courts, corporations, and individuals. An international treaty however, is part of international law and whether it is complied with or not depends on the political will of the parties, since no international central authority exercises jurisdiction over this area. However, new directions are beginning to emerge in this regard. Some of these are discussed briefly below (see p. 5).

The period from 1960 to 1989 was a period of gestation for international environmental

law, whereas the 90s and beyond will witness the development of international cooperation through a number of new conventions. One of the main trends will be to implement, complete and reinforce the many existing agreements;<sup>1</sup> another trend will be to rely more frequently on quantified targets in order to describe more precisely the responsibilities of the contracting parties, which should subsequently become internationally verifiable. Sanctions could be provided in order to discourage inadequate reporting, and conversely, economic incentives might be introduced in order to induce countries to implement their undertakings fully (OECD, 1991a).

Therefore, successful negotiation of environmental treaties, while of utmost importance, should not downplay the even more critical areas of the post-negotiation process, i.e., ratification, implementation, verification, monitoring and compliance. Governments, and the public, should come to realize that, as with human rights issues, international cooperation, the subjugation of sovereign rights in the interests of the commons and the creation of vigorous mechanisms for monitoring can only serve to further the interests of the parties, and ultimately of mankind.

This paper examines some of the factors that, in addition to the political will of parties, influence the process that ideally begins as soon as signatures are appended to a multilateral document.

## 1.2 International Environmental Law and the Issue of Sovereignty

It is an established principle of international law that sovereign states can bind themselves through international agreement and that treaties thus made are meant to be observed (*pacta sunt servanda*). States do assent to treaties and cede some of their sovereign authority to other states or to international organizations, however, in practice they do not always translate this into action. States often vigorously defend their sovereignty because they perceive their physical integrity and political existence to be more important.

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<sup>1</sup>UNEP's 1991 Register of International Treaties and Other Agreements in the Field of the Environment lists 152 multilateral treaties. If bilateral instruments and legal instruments other than formal agreements are included, e.g., the FAO International Code of Conduct on the Distribution and Use of Pesticides or the London Guidelines for the Exchange of Information on Chemicals in International Trade, the number of international legal instruments with environmental provisions is in the range of 850 and above (Brown Weiss, et al. 1992; Sand, 1991; and Chayes and Chayes, 1991b).

Sovereignty concerns are not the only barriers to effective international environmental commitments. Environmental treaties often require substantial economic sacrifices on the part of the state parties. These economic concerns may both inhibit treaty ratification and undermine treaty compliance.

Concerns regarding sovereignty and economic pressures currently hamper the ratification and enforcement of international environmental treaties. Traditional techniques of encouraging treaty enforcement, such as publicity and political pressure, may solve some of these problems, but they make treaty enforcement more difficult. To enhance treaty compliance, some observers have emphasized the role of international adjudication. However, this is largely consensual and states that are unwilling to bind themselves to coercive sanctions are just as wary of compulsory adjudication. Agencies that can monitor treaty compliance, gather and analyze information, and lower information costs without significantly reducing state sovereignty offer a more realistic alternative for enhancing treaty enforcement. Monitoring by international agencies can partially address these difficulties. Effective international environmental agreements must therefore establish institutional arrangements for continuous cooperation (Harvard Law Review, 1991).

The question of sovereignty is treated also in Lang et al. (1991). In the chapter on Environmental Security and Global Change, Günther Handl (pp.85-87) suggests that sovereignty is being redefined. Decision-making powers which had been exclusively in the national domain are increasingly shared with other states or have completely devolved upon the international community. Concepts such as "intergenerational equity", "sustainable development" or "global commons" hint at restrictions on state autonomy and have been invoked to limit the freedom of nation-states in the interests of the larger community. The rights that emanate from the concept of sovereignty are not unfettered freedoms but powers shared between the holder of the power and the community of states. Sovereignty no longer is a legal basis for exclusion, but has become the legal basis for inclusion, or of a commitment to cooperate for the good of the international community. From an environmental point of view states are now bound together in a global "community of necessity" which has given rise to an increasingly complex matrix of mutual rights and obligations. Handl further suggests that ultimately the failure or success of the mission to secure global environmental security will be a function of the determination to press for timely structural adjustment.

Luzius Wildhaber, in a commentary on the Handl paper, notes that in environmental

matters, as in others, absolute sovereignty and unfettered freedom of nation-states to act as they wish within their territorial limits are incompatible with global survival and with the rule of law. Absolute sovereignty he holds is incompatible with present day interdependence and solidarity, and it conflicts strangely with the transterritoriality of the economy, media, traffic, tourism, ideologies, the depletion of the ozone layer, global warming, vanishing whales, elephants, gorillas or the tropical rain forests. He concludes, that sovereignty must be mitigated by the exigencies of interdependence. Further, he suggests it is a relative notion, adaptable to new situations and needs, a discretionary freedom within, and not from, international law. It is high time to recognize that it is quite unacceptable still to conceive of sovereignty as an absolute right to pollute and cause injury to other states and their inhabitants, to endanger the global environment: the duty to prevent such interference, pollution and deprivation must become a part of modern international law. The erosion of sovereignty is also discussed in Springer (1983).

With regard to sovereignty, a significant point made by Sands (1989) is that the Declaration of the Hague of 1989 proposes that decision-making procedures be made effective even in the absence of unanimous agreement and thereby accepts the need to move away from the principle of state sovereignty. It implicitly recognizes environmental degradation as a human rights issue affecting "the right to live in dignity in a viable global environment" and also implicitly recognizes the role of the private sector in international environmental protection. Although the Hague Declaration is not legally binding, it is important as a statement of intent from 24 states representing diverse political views. French (1992) also comments on the Hague Declaration being revolutionary because it goes well beyond traditional concepts of international law, which are based on the notion of a compact between sovereign states that cannot be bound to an international agreement without their express consent; with the Hague Declaration the signatories were assenting that sovereignty must be "pooled" when it comes to the global environment.

Craig and George (1983) recognize the "complex interdependence" between states extant in the economic sphere, as well as in the ecological and biospheric systems. They suggest that complex interdependence is causing important modifications of traditional "realist" premises regarding the essential characteristics of international systems and politics. One of the changes is that the long-standing assumption that states are the dominant actors in world politics has been challenged by the growth in numbers and strength of non-governmental actors. States also no longer act as coherent units in international relations



as they now interact with each other as subunits on specific issues with little direction or control by their own governments.

The most important objective of treaty-making is to encourage acceptance and subsequent compliance. The question of sovereignty invariably surfaces in this context. It affects the acceptance process, for states are generally quite sensitive on this point and use it to fight shy of agreement or acceptance.

To ensure compliance, several mechanisms have been suggested in the literature. Special committees, commissions and the submission of national reports (as stipulated in certain human rights treaties) have been used for decades to monitor compliance. Reaching agreement on a treaty is only half the battle, notes French (1992); implementation of the treaties or compliance is the other half. Most treaties do not even stipulate any sanctions and as international agencies do not have police powers, there is little enforcement and little data on compliance. Regime building is increasingly being regarded as critical to compliance and attendant commitment. There is a growing literature on monitoring, compliance and regime building (Young, 1989; Hajost, 1990; Brown Weiss, 1991; Victor, Chayes and Skolnikoff, 1992; USGAO, 1992). There is mounting concern that treaties, even though accepted, are not always complied with, even though it is generally recognized (Henkin, 1968) that most nations abide by their agreements most of the time. Even when the political will exists, in reality things turn out differently: As French (1992) reports, a recent poll resulted in discouraging news that Norway, widely viewed as a world leader on international environmental issues, is likely to fall short of meeting its commitments in 12 of the 27 major international agreements to which it is a party. It is increasingly urgent therefore, to investigate reasons behind non-acceptance and subsequent compliance.

## **2 Problem Description**

Some of the most critical problems relating to treaties, especially environmental ones, occur in the post-agreement negotiation period. Acceptance, the first step in the post-agreement phase, can take several years and implementation of the agreements may often be complex or fraught with problems. If a treaty requires a certain number of ratifications to enter into force, the entire process can stall for want of this legal technicality. Acceptance, then, obscures a range of economic, political and cultural factors that either singly or in combination serve to obstruct the passage of a treaty into binding law. It is

important therefore to understand the factors behind long acceptance times.

Once an agreement is ratified by a nation its provisions have to be put into effect behaviorally, passed as legislation, enforced, obeyed and monitored. The long time frame for acceptance and behavioral implementation, in apposition to the pressing nature of many of the issues addressed by environmental agreements make successfully negotiated outcomes result in being too late, and mostly inadequate to the problem by the time they finally come into effect. This aspect is likely to worsen with the increasing complexity of environmental problems. International mechanisms required to monitor compliance with the agreements also have to be negotiated and implemented, drawing out the process even more. This slow pace of international cooperation when placed in juxtaposition with scientific problems whose consequences may become irreversible by the time agreed upon limits become effective, highlights the urgency of the problem (Spector, 1992a).

As discussed above, a recent estimate of the number of environmental treaties is close to 900, with more agreements being concluded as new aspects or fresh problems are revealed by scientific and technological advances. The need for better approaches to negotiations and treaty making, as well as more efficient acceptance times hardly needs justification. The Salzburg Initiative (1991) and Chayes (1991) recognize this: The former points out that key groups left out of the negotiation process may even try to block ratification, thereby preventing the real problem from being addressed.

Spector (1992b) suggests that international conflict resolution can be viewed as a multi-staged and interactive system for joint problem-solving. First, disputants engage in *prenegotiation* to diagnose and plan for a full-fledged negotiation in search for mutually acceptable solutions. In the second phase, the negotiation itself, disputants express their need for agreement. Finally, in post-agreement negotiation, disputants engage in intensive joint problem-solving activities focused on ratifying, implementing, complying with, and if necessary, renegotiating a solution. The stages played out in the international setting may be replicated at the domestic level, as a precursor to ratification.

A preliminary framework for the post-agreement negotiation process is shown in Figure 1. In this figure the two interactive components of the post-agreement process are depicted, namely, the domestic and the international segments, in which negotiations continue at multiple levels, in new fora, with new actors, ultimately resulting in compliance or non-compliance. In the *domestic* component there are three subprocesses: First, *acceptance* by each national government is generally required, during which various domestic

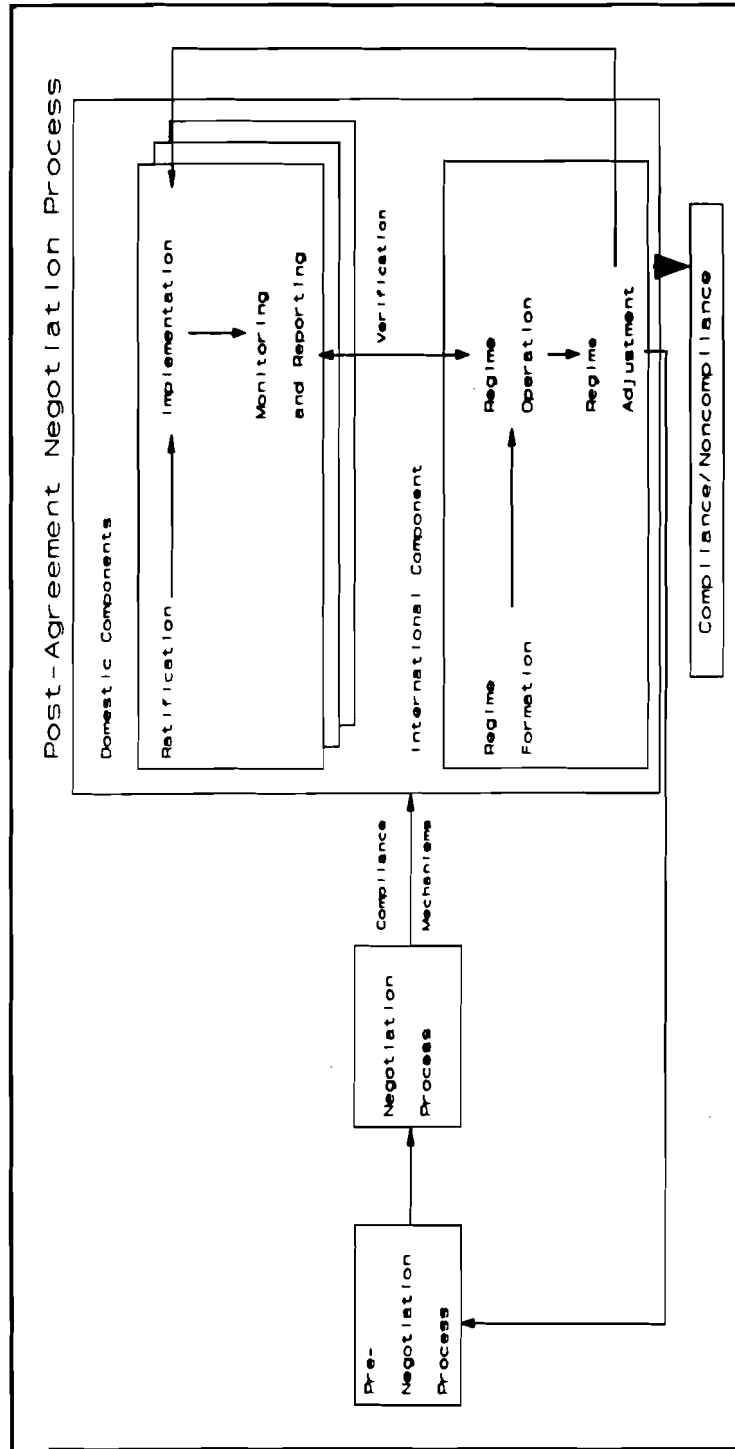


Figure 1: The post-agreement negotiation process. Source: Spector (1992b)

stakeholders come together in a negotiation process. After acceptance implementation is required at a national level, by which laws and regulations are enacted to conform with the stipulations of the agreement. Monitoring and reporting are the final functions at the domestic level.

At the *international* level of the post-agreement negotiation process first there is *regime formation* during which the rules and procedures of the agreement are institutionalized and implemented. This is followed by *regime operation*, when data concerning participant actions are collected, compliance is monitored, verified and enforced, and disputes resolved. The final subprocess is that of *regime adjustment*, in which the rules, procedures and targets originally established in the negotiated agreement might be modified to accommodate scientific advances or fresh information gathered on the effects of compliance.

The subprocesses of the post-agreement negotiation process, namely, ratification, implementation, monitoring and reporting, and regime formation, operation and adjustment have received relatively little attention by researchers. These processes are crucial to achieving compliance or noncompliance with the treaties negotiated. Compliance with an agreement's provisions is the ultimate measure of the success of international negotiation. However, compliance is a difficult phenomenon to observe and measure (Chayes and Chayes, 1991a; Chayes, 1991; Brown Weiss, 1992; Fischer, 1991; Sand, 1991). Compliance is a function of the dynamics of post-agreement negotiation. If domestic stakeholders, for example, take tough positions against a treaty and form blocking coalitions during the post-agreement negotiation subprocess of ratification, it is likely to result in major problems in achieving compliance if the treaty barely achieves entry into force (Spector, 1992b).

Other problems in the post-agreement period are made evident in an OECD (1991a) study which concludes that the environmental problems of today in the OECD countries are mostly problems remaining from the *unfinished agendas of the 1970s or 1980s*. The relatively slow pace of progress in dealing with and solving them, the study suggests, can be partially explained by two sets of factors:

- Certain weak and inefficient aspects of environmental policies;
- The close interdependencies between the state of the environment and the state of the economy, nationally and internationally.

In this research project only the first step of the post-agreement negotiation process

is examined, namely, ratification, as understood in the wider context of acceptance, as defined on p. 11. More specifically, some economic and political factors are examined so as to assess their impact on acceptance. The second step, behavioral implementation, or the action to be taken by state parties, in accordance with treaty provisions, to prevent environmental pollution or to preserve the levels of pollution so that they do not regress or worsen, is not considered here.

The objective of this pilot study is to identify some of the correlates of the problem of delays in acceptance so that the situation might be restructured, thereby highlighting ways of facilitating acceptance.

Only the acceptance of multilateral treaties is considered in this study as it is meaningless in the case of bilateral treaties; in the case of bilateral treaties ratification by both parties is imperative. It is not assumed here that ratification is the end all; compliance, further down the road, is of far more importance, but is beyond the scope of this investigation.

Some of the common problems associated with acceptance, as evident in the literature, are presented below (p. 18).

### **3 Legal Processes**

#### **3.1 Acceptance**

The term "acceptance" is used in a generic sense, as formulated in the Schachter et al. (1971) study, to connote ratification, accession, succession or any other form by which a state expresses its consent to become a party to a treaty. The term includes "definitive signatures" but excludes signatures that do not constitute definitive consent. The term also covers adherence by signatory states as well as by states that had not participated in the treaty negotiations or had not signed the resulting instrument.

#### **3.2 Adoption, Signature, Ratification, Entry into Force<sup>2</sup>**

In international law *adoption* is taken to mean that step of the treaty-making process wherein the final form and content of the agreement is agreed upon. Adoption of a treaty text at an international conference takes place by the vote of two-thirds of the states

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<sup>2</sup>This section is drawn largely from Starke, 1989.

present and voting, unless by the same majority these states decide to apply a different rule (Vienna Convention, art.9(2)). The adoption of multilateral instruments by the organs of international institutions has also become accepted practice in certain subject areas. Provisions of a treaty may also be adopted by consensus, as in the case of the 1982 Convention on the Law of the Sea.

When the final draft of a treaty has been agreed upon, the instrument is ready for *signature*. It is generally effected at a formal closing session, by each of the delegates signing at the same time and place and in the presence of each other. Unless there is an agreement to dispense with signature, this is essential for a treaty, because it serves to authenticate the text. The effect of signature of a treaty depends on whether or not the treaty is subject to acceptance—ratification, adherence or approval. If this is the case, signature means no more than that the delegates have agreed upon a text, are willing to accept it and refer it to their governments for action that the governments may choose to take, which could be either acceptance or rejection of the treaty. Signature therefore is a governmental act, whereas ratification requires the approval of parliament (see Figure 2). If the treaty is not subject to ratification, acceptance, or approval, or is silent on this point, it is generally understood to mean that in the absence of contrary provision, the instrument is binding as from signature. The date of the treaty is usually taken to be the date on which it was signed.

*Ratification per se* is the approval by the head of state or government of the signature appended to the treaty by appointed plenipotentiaries. In modern practice, however, it has come to possess more significance than a simple act of confirmation, being deemed to represent the formal declaration by a state of its consent to be bound by a treaty. In Article II of the Vienna Convention, ratification was defined to mean 'the international act...whereby a State establishes on the international plane its consent to be bound by a treaty'. In consistence with this, ratification is not held to have retroactive effect, so as to make the treaty obligatory from the date of signature.

More than two-thirds of currently registered treaties make no provision whatever for ratification, although treaties do stipulate whether or not signature, or signature subject to ratification, acceptance, etc. is the method chosen by the states concerned. The acceptable view today is that it is purely a matter of the intention of the parties whether a treaty does or does not require ratification as a condition of its binding operation. Article 14 of the Vienna Convention provides that the consent of a state to be bound by a treaty is

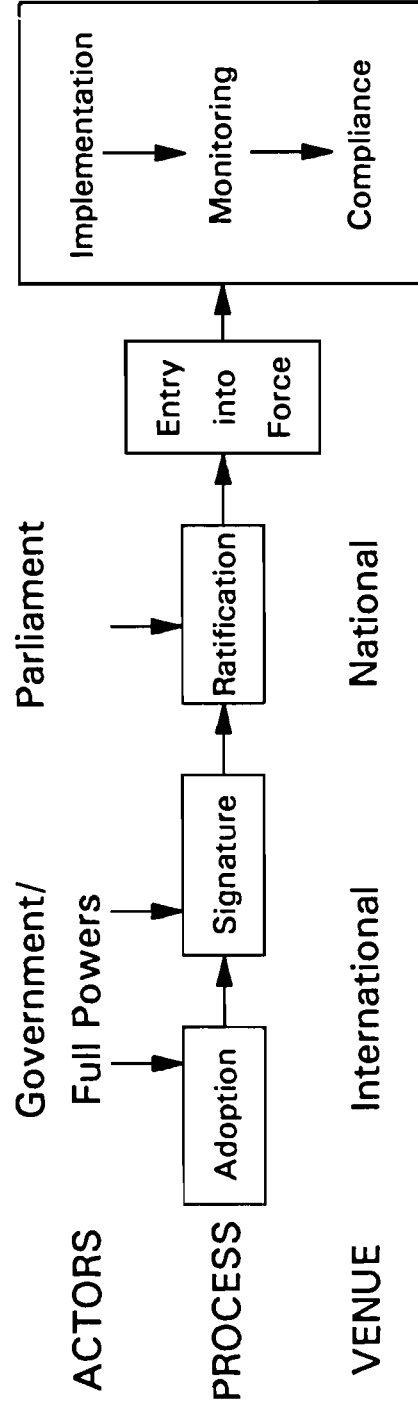


Figure 2: The processes of acceptance

expressed by ratification if:

- (a) the treaty so expressly provides; or
- (b) the negotiating states otherwise agree that ratification is necessary; or
- (c) the treaty has been signed subject to ratification; or
- (d) an intention to sign subject to ratification appears from the Full Powers or was expressed during negotiations.

Starke (1989) suggests that the practice of ratification rests on the following rational grounds:

- (a) States are entitled to have an opportunity of re-examining and reviewing instruments signed by their delegates before undertaking the obligations therein specified.
- (b) By reason of its sovereignty, a state is entitled to withdraw from participation in any treaty should it so desire.
- (c) Often a treaty calls for amendments or adjustments in municipal law. The period between signature and ratification enables states to pass the necessary legislation or obtain the necessary parliamentary approvals, so that they may thereupon proceed to ratification. This is important in the case of federal states, where, if legislation to carry into effect treaty provisions falls within the powers of the central government, the states may have to be consulted by the central government before it can proceed with ratification.
- (d) There is also the democratic principle that the government should consult public opinion either in parliament or elsewhere as to whether a particular treaty should be confirmed.

In practice however, ratification can mean different things to different societies, as economic, political, social and cultural factors are intricately intertwined in the process of acceptance.

The power of refusing ratification is deemed to be inherent in state sovereignty, and accordingly, at international law there is neither a legal nor a moral duty to ratify a treaty. There is also no obligation, other than common courtesy, to convey to other states concerned a statement of the reasons for refusing to ratify.



The *acceptance formula clause* is a recent practice that allows an instrument to be open for an indefinite time. It is the act of becoming a party to a treaty by adherence of any kind, in accordance with a state's municipal constitutional law. The term acceptance, used here in a sense different from the Schachter et al. definition on p. 11, is employed by states not wishing to use the term ratification, as this might imply an obligation to submit a treaty to the legislature for approval, or to go through some undesired constitutional procedure. Therefore, the formula 'signature subject to acceptance' is used in the case of treaties where ratification would be inappropriate or legally inconvenient for certain of the states that are signatories.

*Entry into force* is dependent upon the provisions of a treaty, or upon what the contracting states have agreed on explicitly. Many treaties become operative on the date of their signature, but where ratification, or approval is necessary, the general rule of international law is that the treaty concerned comes into force only after the exchange or deposit of ratifications, acceptances, or approvals by all the states signatories or on the deposit of a prescribed number of ratifications. Sometimes, a precise date for entry into force is fixed without regard to the number of ratifications received, or at the occurrence of a specific event, e.g., even after its ratification by all states signatories, the Locarno Treaty of Mutual Guarantee (1925) was to enter into force only after Germany's admission to the League of Nations.

It is generally provided in the treaty that it will enter into force for each state party on the date of deposit of the appropriate instrument of consent to be bound, or within a fixed time—usually 90 days—after such deposit.

### **3.3 The Processes of Acceptance**

Treaties are mostly permanent records of the outcomes of negotiations; critical guidelines, inviting commitment and compliance. However, myriad processes are at work on the international and domestic plane. In the process of acceptance, a host of political, social, economic and cultural factors, for example, during the enactment of domestic legislation, in combination or singly, feed into the process. Simply stated, international agreements are created in two stages: representatives first meet to negotiate a text of the agreement, and states then ratify it. International law, however, does not specify how to implement this two-step process. The primary source of law governing the creation of international

agreements are the 1969 Vienna Convention on the Law of Treaties and the 1986 Vienna Convention on the Law of Treaties Between States and International Organizations or Between International Organizations. Under both conventions, states and international organizations have the capacity to enter binding agreements but cannot be bound by any agreement without their consent. A state or international organization that seeks to enter into an agreement must send a valid representative to negotiate an authentic text of the agreement. Once the negotiations produce an authentic text, each state may express its consent to be bound by the agreement, usually ratifying it, and may enter reservations that alter the terms of the agreement. Beyond these basic requirements, the Vienna Conventions do not mandate any particular processes of negotiation or ratification. Thus, each state is free to select its own method of ratifying agreements (Harvard Law Review, 1991). In states with parliamentary systems, ratification procedures may differ from more autocratic systems of government.

Given the diversity of methods, it may take several years before enough parties ratify an agreement for it to enter into force. Although every state that signs an agreement has an obligation to "refrain from acts which would defeat the object and purpose of the [agreement]" until it enters into force, the details of this obligation remain vague. As formulated in the Restatement (Third) of the Foreign Relations Law of the United States paras 311-339, 1986, "it is often unclear what actions would have [the] effect [of defeating the object and purpose of the agreement]". Moreover, signatory states are not required to take affirmative actions to comply with agreements that have not yet taken effect. Thus, delay pending ratification can render environmental agreements ineffective if the underlying environmental problem worsens or becomes irreversible. States occasionally even reverse their position and refuse to ratify agreements they have negotiated (Harvard Law Review, 1991).

The signing of a treaty customarily completes the first phase of a formalized effort toward institutionalized international environmental cooperation, for example. A signed treaty generally represents the professed intent of signatory governments, but governments, particularly democratic ones, are complex and their authority sometimes divided, as in the United States, between executive and legislative branches. Treaties negotiated under the authority of the President of the United States, for example, do not bind the nation until ratified by a two-thirds majority of the Senate. Treaties are negotiated by representatives of governments of the day, but negotiations subsequently move to the

respective national capitals and may encounter either inertia or resistance.

In the phases of ratification and implementation other agencies of governance enter the process—notably parliaments and bureaucracies (Caldwell, 1988). A new contributory source to the process of acceptance is parliamentary debates, which are viewed as useful fora for airing scientific theories and exploring conflicting economic and social interests. New mechanisms have arisen linking parliamentarians of North and South on environmental issues, providing fora for mutual education, exchange of information and coordinated lobbying on specific issues such as climate change or biological diversity. These bodies range from subcommittees of a large, formal and traditional institution (the Interparliamentary Union) to smaller groups (Parliamentarians for Global Action), to informal *ad hoc* networks or conferences. All of these serve to bring national parliaments and parliamentarians closer to the actual process of intergovernmental negotiations than ever before (Benedick, 1993). This could put pressure on governments to accept treaties faster, especially in cases where it is the North–South divide that causes negotiations or acceptance to stall.

The USA's ratification process illustrates how problems of delay or reversal may arise. As most multilateral environmental agreements are article II<sup>3</sup> treaties and not executive agreements, two thirds of the Senate must consent for the USA to ratify them. There have been instances where the Senate has explicitly rejected international agreements reached by the President. On other occasions, as in the case of SALT II, the President had not attempted to obtain the Senate's consent in light of indications that the treaty would be rejected. This aspect of the non-ratification of SALT II is also examined by Caldwell (1991) and is discussed further on p. 23. The Senate has also imposed conditions on its consent to ratification, which might lead the President to formulate a reservation, in which case the USA can become a party to the agreement only if other parties accept the reservation (when another state makes a reservation to an agreement to which the USA is a party, the USA cannot accept the reservation without the Senate's consent. However, for multilateral agreements, the Senate's consent may be inferred from its tacit acceptance of the President's acquiescence to the reservation). The formulation of such a reservation may reopen political issues resolved during the original negotiations, thus the

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<sup>3</sup>Article II in the constitution of the USA, where it provides that the President of the United States "shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur."

USA's ratification process may not only delay the entry into force of an agreement, but also could jeopardize its existence (Harvard Law Review, 1991).

## 4 Political & Economic Factors Associated with Acceptance: A Literature Survey

Numerous causes for non-acceptance or delayed acceptance have been advanced in the research literature which may be drawn upon to formulate hypotheses for testing. Some of these are described briefly in this section. Most of the studies offer qualitative descriptions. Only three studies stand out as having made attempts at quantification, based on empirical evidence, namely, Schachter et al. (1971), Smart and Murray (1984) and Spector (1992a). The studies are discussed chronologically, by date of publication.

The Schachter et al. (1971) UNITAR study of 81 multilateral UN treaties appears to be the most important examination of the acceptance of treaties. A statistical analysis of the acceptance record of UN treaties was carried out and some conclusions drawn on some of the reasons behind non-acceptance. They maintain that delay in acceptance or non-acceptance often does not result from deliberate decisions on the part of governments, but from circumstances that are *extraneous to the substance of the treaties*, such as administrative problems, enactment of domestic legislation, inadequacy of economic and human resources, which do not imply disagreement with the aims of the treaties (see Table 1, p. 27). The information about extraneous factors detailed in the study, some of which are noted below, was obtained through interviews with representatives of member states, legal advisers, UN experts and officials familiar with the area, as well as other sources.

Schachter et al. (1971) also found that certain objective factors were related to the ratification of international treaties. They determined that small countries and newer UN member states rarely ratified treaties. *Administrative problems* were mentioned as major impediments retarding greater acceptance of international treaties. The *inadequacy of economic and human resources* of individual countries were considered important deterrents. Some countries lacked the expertise and trained personnel needed for the essential preliminary tasks connected with treaties, such as translation into local languages. Some countries could not deal with treaties because of limited staff and budgets.

Schachter et al. (1971) also examine the national administrative machinery of some twenty countries so as to identify factors that cause delays in ratification, and suggest ways to improve the process.

Endicott (1977) investigates the 1975–76 debate over ratification of the Nuclear Non-Proliferation Treaty (NNPT) in Japan and highlights reasons for the six-year delay in ratification. He concludes that the *composition of the Diet* over most of this period was important to the fate of the NNPT. Another domestic factor was that at the time the leading party advocated the ratification, *other issues came to the front on the domestic scene*, namely the revision of an election law and a political funds control measure, which took precedence over two other pressing issues, an antimonopoly law reform and ratification of the Japan–South Korean Continental Shelf Agreement. The impact of the Lockheed Affair was also felt in the Diet in 1976 and served to bring all substantive deliberations to a halt, including those on the NNPT.

While the Lockheed Affair monopolized the attention of most of Japan's political world, the importance of the NNPT was underscored by a visiting Parliamentary delegation from Canada. The Canadians supposedly relayed the very real possibility of future nuclear fuel supply disadvantages for Japan if ratification of the treaty was not forthcoming. This pressure, plus that of the Soviet delegation to the Geneva Disarmament Committee and indications of growing concern from Mongolia, Indonesia and Bulgaria of Japanese intentions made increasing impressions on the Japanese government. In addition, the U.S. Department of Commerce required special export procedures on 24 nuclear power industry related items. These caused shipment delays and increasing inconvenience to the nuclear power industry.

Some *external events* also influenced the process of ratification, namely, the convening of the International NNPT Review Conference in Geneva. If Japan did not ratify the pact it would only receive observer status and would be the only major industrial power, together with France, not to be a full member of the NNPT system; and Japan wanted its concerns regarding the security of non-nuclear nations to be incorporated into the final declaration.

Other possible determinants were the International Atomic Energy Agency (IAEA) agreement with Japan that granted it equality with EURATOM states and the 1975 Review Conference, which incorporated Japanese desires into its final declaration; both had some direct influence. Further, the Indian explosion of a "nuclear device" increased

the pressure from those concerned about nuclear proliferation. The USA, USSR, Great Britain and Canada made special efforts to highlight the possible disadvantages of not joining the NNPT. Soviet displeasure was expressed at the time when the USSR was also asking for bids from Japanese firms to participate, at a time when the Japanese nuclear industry had considerable idle capacity, in a venture worth over two billion dollars to build nuclear generating units for the current Soviet five-year plan. The pressure from the Canadians carried weight as well because about a third of the 100,000 tons of uranium contracted for purchase up to 1990 was to come from Canada.

In considering why 1976 was *the* year for ratification Endicott implies that the forces that came to bear on the Japanese decision-making process in 1976 as well as events specific to 1976 created pressure to ratify. The impact of a draft Defense White Paper and the political imperatives of an election year are examples on the domestic scene. The Diet had to be dissolved that year and candidates wanted to be able to point to some accomplishments. Besides, in a nation that had suffered a nuclear blast, people had strong feelings on the subject of nuclear weapons. A December 1975 poll revealed that 51.4% of the respondents favored ratification, while only 17.2% opposed it. The ratification of the NNPT represented a national desire never to relive the horrors of 1945.

Other reasons for acceptance have also been advanced. For example, in his Ph.D. thesis, Cho (1981) suggests that it was the functional and positional centrality of the Japanese Prime Minister Takeo Miki that brought about the ratification of the Nuclear Non-Proliferation Treaty. *The Prime Minister played a central role in bringing about Japan's ratification of the treaty.* The critical variables considered in this study were *hierarchical groupism and collectivist norms of consensus decision-making* that are deeply rooted in the cultural tradition of Japan, as well as leadership style.

Weissbrodt (1982) reviews a United Nations mechanism for encouraging the ratification of treaties, namely, the Working Group on the Encouragement of Universal Acceptance of Human Rights Instruments, established in 1979 by the Sub-Commission on Prevention of Discrimination and Protection of Minorities. One of the reasons for non-ratification of treaties presented to the Working Group was *federalism*, which was viewed as being an impediment to ratification in Australia and the United States. The Working Group was to determine the extent of the problem and to consult with countries such as Australia and Canada, which had overcome federalism difficulties in ratifying some of the principal human rights treaties.

Other problems that the above Working Group identified at its 1981 session regarding the Optional Protocol to the Covenant on Civil and Political Rights were the following reasons given by governments: (1) the word "optional"; (2) the fact that individuals would be entitled to file complaints against states; and (3) the overlap between the procedure in the Protocol and certain human rights structures. Yet another obstacle to ratification involved the Slavery Convention: one government expressed concern as to the compulsory jurisdiction of the International Court of Justice. With regard to the International Convention on the Suppression and Punishment of the Crime of *Apartheid*, the Working Group noted the reasons often given by states for not becoming parties were as follows: (1) the states were already parties to the International Convention on the Elimination of All Forms of Racial Discrimination; (b) in their view the definition of the crime of *apartheid* itself was rather vague; (c) the Convention established extraterritorial criminal jurisdiction for the crime of *apartheid*; and (d) there was incompatibility between the obligations imposed by the Convention and domestic legislation. Incompatibility with domestic legislation was evoked by States as a reason for not adhering to several other instruments as well.

A significant study by Smart and Murray (1984) examines the social and economic conditions in 152 countries and relates them to the ratification of two major international drug control treaties. They found that *socio-economic factors* relating to the higher likelihood of ratification of drug treaties are countries which had: (i) a substantial drug problem; (2) higher economic development; (3) larger populations; (4) many ratifications of non-drug treaties; (5) higher spending in health and education; and (6) longer membership in the United Nations.

Ratifications of the Single Convention on Narcotic Drugs and the Convention on Psychotropic Substances were examined using the above hypotheses and conclusions were drawn that (1) countries which ratified only the Single Convention on Narcotic Drugs have greater drug problems than those which ratified both or none, and those ratifying both are more similar to those ratifying the Single Convention than those ratifying neither; (2) ratifications are more common among developed than developing countries, although countries ratifying only the Single Convention are the most developed; (3) ratifications are not more common among larger countries nor among those with a higher spending on health and education; (4) ratifications are more common among older UN member countries and, to a lesser extent, those having more ratifications of non-drug treaties;

(5) the discriminant analysis showed that it is possible to predict a substantial number of ratifications on the basis of data from only three variables: *life expectancy, degree of economic development and degree of drug problem*. In other words, the likelihood of a particular country ratifying these treaties could be predicated by observing changes in these three variables, i.e., that as a country's life expectancy, economic development and degree of drug problem increase, so too will its likelihood of ratifying these treaties (Smart and Murray, 1984).

Caldwell (1988) points out that several factors may defeat or delay ratification. *Other issues of higher priority* may displace consideration of a treaty on political agendas, especially when no pressing national exigency is felt. Delay tends to work against ratification, providing time for *mobilizing opposition*. During a period of delay *governments may change*, as happened in the US after the negotiating, but before the formal signing of the Convention on the Law of the Sea in 1981. Ministries and bureaucratic departments whose orientation is essentially national frequently object to treaty provisions that they regard as prejudicial to their missions. Agencies for agriculture, commerce, natural resources development and military defense have often opposed national environmental commitments that would or could compromise their objectives or operations. The US Navy, for example, objected to restrictions relating to whaling, alleging the need for whale oil for certain types of lubrication. State and provincial fish and game departments in Canada and the USA opposed provisions in the Convention on International Trade in Endangered Species (CITES) that would have restricted the activities of fur trappers. Further, budget and treasury officials tend to be especially unenthusiastic about appropriations for international organizations and programs where there is no directly visible domestic economic payoff. Private manufacturing and commercial interests have also opposed international agreements that would impose trade restrictions either in relation to prohibited products, as under CITES, or require changes in their customary methods of operation. In cases where interpretation of the language of a treaty is concerned, adversely affected interests may also attempt to influence its implementation.

Starke (1989) notes that the delays of states in ratifying or their unexpected withholding of ratifications have caused concern and raised serious problems. He indicates that the principal causes of delay were acutely investigated and reported on by a Committee appointed by the League of Nations. The causes reported in that study are summarized below:



- The complicated machinery of modern government involving protracted administrative work before the decision to ratify or accede to a treaty.
- The absence of thorough preparatory work for treaties leading to defects which entitle states to withhold or delay ratifications.
- The lack of time in parliament in countries where constitutional practice requires submission of the instrument to the legislature.
- Serious difficulties disclosed by the instrument only after signature and therefore requiring prolonged examination.
- The need for new national legislation or the need for increased expenditure as a result.
- Lack of interest on the part of states.

Caldwell (1991) suggests that some of the reasons that the SALT II treaty was not ratified could be grouped into four principal categories:

(1) President Carter's personality and his relations with his administration, as well as the appointments he had made; (2) public opinion and interest groups; (3) the Senate and executive-congressional relations, and (4) external events (Cuba, Iran, Afghanistan). He examines each of these in detail to substantiate his argument. Timing also appears to have been a critical factor, for he maintains that the Senate would likely have ratified the treaty had a vote been taken before the discovery of the Soviet Combat brigade in Cuba and the politicization of this issue by Senator Stone and Senator Church. Despite this he felt there was still a chance for ratification, if the treaty had not been linked to Soviet international behavior in the minds of senators and the public. Several members of the Carter administration (notably Zbigniew Brzezinski) had worked to link the arms control issue to Soviet foreign policy. The subsequent underlying shift in public opinion was a very important factor.

Yet another issue brought up by Caldwell (1991; p.191) is Article II, section 2 of the U.S. Constitution, which grants the president the power to make treaties, "*...provided two-thirds of the Senators present concur...*" [emphasis added]. The issue has been long debated at Constitutional Conventions, and in fact the motion to substitute a simple majority vote for the two-thirds requirement failed by one vote. Critics of the two-thirds

majority point out that this requirement is undemocratic and one which "...no other democracy has seen fit to adopt...". This in effect also means that assuming that the senators from the seventeen smallest states vote as a bloc, it is theoretically possible for thirty-four senators representing 7.1 per cent of the total U.S. population to block a treaty.

Cook (1990) found that the presence of organized citizen opinion, quality of life, population dynamics and level of development are some of the national attributes that explain the variance in ratification rates. His hypothesis that ratification or non-ratification of global environmental treaties is conditioned by a state's position in the world economy, its need profile, its type of government and the level of organized citizen opinion is tested using multiple regression analysis on data on 38 global environmental treaties. The historical ratification record, he notes, shows that developed states are high ratifiers while the poorer countries are generally low ratifiers.

Greilsammer (1991) probes the reasons behind the initial non-ratification and subsequent ratification of the EEC-Israel Protocols by the European Parliament while discussing the question of economic sanctions in the political context. Since 1975 Israel had signed several significant agreements with the EEC on trade, industrial, technological, scientific and agricultural cooperation. With the prospect of the entry of Spain and Portugal into the Common Market, Israel, anxious to protect its agricultural sector, sought to consolidate its position through three additional protocols to a 1975 agreement. Trade with the EEC represented approximately 40 per cent of Israel's total imports and exports.

In keeping with the Venice Declaration of June 1980 which insisted on the right of Palestinian self-determination and the necessity of including the PLO in the peace process, the EEC insisted that products from the West Bank and Gaza Strip be labelled as Palestinian and not 'made in Israel'. This hardening of the stance toward Israel was *triggered by three events*: (1) The Hindawi affair, which provoked tension between the Community and Syria; (2) The replacement of Shimon Peres by Itzak Shamir as Prime Minister of Israel, and (3) Yasser Arafat's declaration in Harare that he was ready, under certain conditions, to accept Resolution 242. From the European point of view the insistence on 'direct exports' was an effort to put into practice principles long since announced within the framework of European Political Cooperation, i.e., non-recognition of the occupation or quasi-annexation of the territories, and recognition of the right of the Palestinians to manage their own affairs during a preparatory stage leading to self-determination. Israel feared that direct Palestinian exports could undermine Israeli exports and insisted that if

the Palestinian farmers did export directly they would have to use Egyptian or Jordanian ports.

Greilsammer also notes that the protocols were turned down precisely when the European Parliament, after the Single Europe Act (1986), was seeking to affirm and strengthen its role in the framework of Community decision-making. There was therefore, a strong temptation for the *Parliament to use the affair* to insist on its new prerogative and the useful role it could play.

In 1987, through the Brussels Declaration, the EC foreign ministers for the first time formally supported the convocation of an international conference for Middle East peace under UN auspices. This represented a hardening of the European position toward Israel.

However, it was the outbreak of the *intifada* in December 1987 and the response by the Israeli authorities, Greilsammer maintains, that lead to a radicalization of the European positions. He suggests that if it were not for the events in the occupied territories, the protocols would probably have been approved without debate. The debates were held in March with strong points made for and against ratification, which ended with Parliament refusing to agree to the conclusion of the protocols.

In April Israel showed flexibility on the question of direct exports and had agreed to drop the practice of demanding export licences for Palestinian farm exports. In June 1988, ratification of the protocols was once again put before Parliament, but was postponed to October. Between July and October two events occurred: Gaza citrus growers were granted 'direct' export licenses by an Israeli inter-ministerial committee and Arafat was invited to Strasbourg by the socialist group of the European Parliament. According to Greilsammer, these two developments contributed to Parliament agreeing to give its assent to the protocols: 314 deputies voted in favor of the ratification, 25 against and 19 abstained.

Looking at the substantive issues in treaties, Spector (1992a) postulated that as *complexity and the multi-sectoral nature of agreements* increase, it is likely that ratification and implementation result in impasses. Spector's empirical analysis suggests that the growing body of multilateral legal instruments on environmental issues, as well as the potential for global and regional disputes over these issues, makes this an important topic for analysis and policy recommendations. Spector found that the average time for ratification of international environmental agreements was close to 6 years. He also found that long ratification times were strongly related to issue complexity in the agreement,

and that the linkage of business issues to environmental issues in the treaties probably resulted in increased ratification delays, due to powerful business-based blocking coalitions in the domestic arena. This delay results in successfully negotiated environmental agreements achieving "too little, too late" when they finally come into effect. Therefore, new strategies to implement negotiated environmental agreements need to be identified that reduce national ratification delays and increase the probabilities of compliance.

The following reasons for delays in the acceptance of treaties were suggested by Ambassador Winfried Lang.<sup>4</sup> Some of the reasons treaties are not ratified are: (1) Administrative red tape; (2) Lack of interest i.e., no pressure of public opinion; (3) Opposition from industry; (4) Circumstances—political and economic—have changed since conclusion of the negotiations. He mentioned that the lack of interest was also evident in the nature of the parliament in a country; there are countries (for example in Latin America) where the parliaments are indifferent to the terms of treaties concluded so that there is no incentive to pursue the matter further than the negotiation stage. Further, it is hard to expect certain African or Asian countries to favor ratification of say, a convention that seeks to prevent deforestation, when the life-styles and livelihood of considerable sections of the population rely on wood as fuel for cooking. Recommendations for solar cookers, for example, would not find favor in a society that mainly uses fuel for cooking either early in the morning or late at night. Professor Manfred Nowak<sup>5</sup> noted that, for example in Austria, administrative inertia and the complex requirements of the parliamentary process serve to delay ratification, whereas in other countries ratification could proceed more quickly just because there is no elaborate parliamentary process. Coalitions and bloc behavior were other reasons suggested for delays in ratification.

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<sup>4</sup>Professor, University of Vienna. Personal communication, March 1992.

<sup>5</sup>University of Vienna. Personal communication, June 1992.

Study/Year of Publication	Factors Influencing Acceptance	Direction of Influence (+ more time; or - less time to acceptance)
Schacter et al. (1971) 81 Multilateral UN treaties	<ul style="list-style-type: none"> <li>•Administrative problems</li> <li>•Factors extraneous to substance of treaty</li> <li>•Inadequacy of economic and human resources</li> <li>•Consultations and special Committees</li> <li>•Participation in the treaty conference</li> <li>•Treaty participants coordinate administrative work for acceptance</li> <li>•Better translation facilities and intergovernmental consultations on translation</li> <li>•Facilitative role played by permanent missions to the UN</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>+</li> <li>-</li> <li>-</li> <li>-</li> <li>-</li> <li>-</li> </ul>
Endicott (1977) Japan - NNPT	<ul style="list-style-type: none"> <li>•Composition of Japanese Diet</li> <li>•Other priorities at national level</li> <li>•Pressure from other nations</li> <li>•External events</li> <li>•Japan's interest in contributing to draft of treaty</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>-</li> <li>+</li> <li>-</li> </ul>
Cho (1981) Japan - NNPT	<ul style="list-style-type: none"> <li>•Leadership</li> <li>•Hierarchical groupism</li> <li>•Collectivist norms of consensus decision-making</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> </ul>
Weissbrodt (1982) Human Rights instruments	<ul style="list-style-type: none"> <li>•Federalism</li> <li>•Treaty language; "optional"</li> <li>•Overlap with other treaties</li> <li>•Incompatibility with domestic legislation</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>+</li> <li>+</li> </ul>
Smart and Murray (1984) 2 International Drug Control Treaties	<ul style="list-style-type: none"> <li>•Substantial problem, e.g., drugs</li> <li>•High economic development</li> <li>•Higher spending on health &amp; education</li> <li>•Longer membership in UN</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> <li>-</li> </ul>

Table 1: Summary of findings in the literature survey

Study/Year of Publication	Factors Influencing Acceptance	Direction of Influence (+ more time; or - less time to acceptance)
Starke (1989) Committee of the League of Nations	<ul style="list-style-type: none"> <li>•Complexity of modern government</li> <li>•Lack of preparatory work</li> <li>•Lack of time in parliament</li> <li>•Obstacles in treaty discovered after signature requiring study</li> <li>•New national legislation</li> <li>•Increased expenditure</li> <li>•Lack of interest on the part of states</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> </ul>
Caldwell (1988) Law of the Sea, CITES	<ul style="list-style-type: none"> <li>•Other issues of higher priority</li> <li>•Government change</li> <li>•Opposition mobilized</li> <li>•Inter-departmental rivalry</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>+</li> <li>+</li> </ul>
Caldwell (1991) SALT II	<ul style="list-style-type: none"> <li>•Leader's personality and relations with administration</li> <li>•Two-third vote of US Senate (art. II)</li> <li>•Public opinion and interest groups</li> <li>•Senate/Congress relations</li> <li>•External events</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> </ul>
Greilsammer (1991) EEC - Israel Protocols	<ul style="list-style-type: none"> <li>•Israeli intransigence re. Palestinian products</li> <li>•External events - Hindawi affair, Arafat's acceptance of Res.242, <i>intifada</i></li> <li>•Change in government</li> <li>•Internal politics and image building in EC</li> <li>•Flexibility in Israeli position re. Palestinian products</li> <li>•Arafat invited to Strasbourg by European Parliament</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>+</li> <li>-</li> <li>-</li> </ul>
Spector (1992a) 33 International environmental agreements	<ul style="list-style-type: none"> <li>•Issue complexity</li> <li>•Multisectoral nature of agreements (linkages)</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>+</li> </ul>

Table 1: Summary of findings in the literature survey (contd.)

## 5 Hypotheses for Testing

Few hypotheses concerning reasons for acceptance/nonacceptance of treaties have been tested systematically, as was evident from the literature. A few hypotheses on some salient features relevant to environmental treaties were selected for this study, based on the preceding literature and the availability of data. They are presented below.

### 5.1 Across the Entire Sample of Countries

Europe, an admixture of pluralistic and autocratic governments, capitalist and socialist systems, democracy and communism, with differing rates of economic growth and different legal or judicial systems, as well as large differences in the size and population of states, presents the possibility of heterogenous approaches to common issues. Would Europe present a united front regarding environmental issues, and if so, would examining the rate of acceptance of environmental treaties disclose some of the disparities? It was anticipated that *European countries, when examined closely, would reflect significant differences in the rates of acceptance of environmental treaties.*

### 5.2 Differences across Blocs

#### 5.2.1 East–West:

It was hypothesized that *there are differences in the acceptance period between the East bloc and the West, on account of the vastly different systems of government, namely autocratic versus pluralistic. Pluralism, it was expected, would generate more interaction and debate between the groups affected or involved, or during the parliamentary process of democratic government, thus causing delays in the process of acceptance of treaties. In autocratic societies on the other hand, if acceptance fitted in with the ruling party's objectives, the process of acceptance would be greatly simplified. In any case, significant differences in the rate of acceptance were anticipated.*

#### 5.2.2 EC, EFTA, Small States:

*The EC, known for its stringent regulations and extensive environmental legislation, it was hypothesized, would take considerably shorter to accept international environmental treaties than non-EC states, such as the EFTA countries. Small states' acceptance would*

*be dependent on the patterns of their closest allies with whom their interests are invariably tied, thereby tending to shorter acceptance times.*

### **5.2.3 Nordic countries versus the rest of Europe:**

*The Nordic states, with their relatively homogenous populations and patterns of government and their outspoken concern on environmental issues, it was hypothesized, would be significantly different from the rest of Europe in that the time taken for the acceptance of environmental treaties would be considerably shorter.*

## **5.3 Differences in Acceptance Rates due to Public Pressure**

It was postulated that if the issues predominant in environmental treaties were broken down into categories such as climate change, atmospheric degradation (including concern over the ozone layer), forestry and natural resources depletion, *the level of public concern over the various issues would differ from country to country or bloc to bloc, as well as at the local, national and international levels, thereby affecting the acceptance times of treaties in the different issue areas.*

### **5.3.1 Public opinion on environmental issues**

The public opinion evident in a country indicates the saliency of environmental issues among the population at large. Pluralism makes for the participation of domestic and national stakeholders and popular concern increasingly finds a voice in determining the legislation passed on environmental issues. Parliamentary debates (see p. 17) are also viewed as useful fora for airing scientific theories and exploring conflicting economic or social interests.

An OECD (1991a) study notes that over the past two decades governments have formulated policies, passed laws and created new institutions to control pollution and manage natural resources, while industry has introduced changes in products and production processes. In the OECD countries this happened largely in response to public awareness and persistent demands for a better environment. A co-ordinated opinion poll carried out in the 1980s in the USA, Japan and 14 European countries showed clear public support for environmental protection, even at the expense of reduced economic growth.



The importance of public opinion therefore should not be underestimated. Public opinion plays a role in most environmental issues (Lang, 1991; Benedick, 1991; Sjöstedt and Spector, 1993). Modern governments are sensitive to public opinion (Henkin, 1979). Too little publicity, which would exclude or foreclose public comment, is considered undemocratic, since it could leave room for shady deals, and in the end probably be inefficient. At some point in the process of acceptance the press and other media will comment on the agreement and bring it under public scrutiny (Zartman and Berman, 1982). It is for these reasons that the impact of public participation, as expressed through public opinion, was formulated as hypotheses and tested for all European countries.

#### *5.3.1.1 At the local and national levels*

It was hypothesized that *increased public concern shortens the acceptance times for treaties*, as governments are anxious to please their constituencies.

#### *5.3.1.2 At the international level*

It was postulated that *public opinion regarding issues at the international level, such as forestry depletion, climate change and global warming, have a strong positive impact on the acceptance process*, as NGOs and even industrial lobbies (e.g., the Basel Convention, as discussed in Kempel, 1993) can favor participation in international environmental treaties. Further, at the international level, high NGO participation could decrease the time to acceptance.

## **5.4 Issue Saliency, Wealth and Quality of Life**

### **5.4.1 Research & Development Expenditures**

Features such as the creation of environmental ministries and public expenditure on environmental concerns imply the saliency of environmental issues in a country. The hypothesis may be formulated as follows: *The higher the public R & D expenditures on environmental protection the greater the likelihood of reduced time to acceptance.*

### **5.4.2 Gross Domestic Product**

It was assumed that *the wealth of a country would create differences in acceptance*, as wealthier nations, more able to respond to stringent measures imposed by treaty requirements, would be in a better position to comply, thereby *reducing the time taken for*

acceptance. The GDP of a country, or the total value of all goods and services produced by a country (GNP less net investment incomes from foreign nations), may be taken to be an indicator of the wealth of a nation. A hypothesis regarding the impact of the wealth of a nation on the acceptance time for environmental treaties may be formulated as follows: *The greater the GDP of a country the more likely it is that acceptance times will be reduced.*

### 5.4.3 Human Development Index

A quality of life indicator, for example, the Human Development Index (HDI)<sup>6</sup> is taken to be an indicator of the quality of life. The HDI could also be a factor in determining the rate of acceptance of treaties, in reasoning parallel to that above, regarding wealth.

The hypothesis could be stated as: *The greater the HDI of a country, the higher the public concern on environmental issues, and the more likely it is that acceptance times will be reduced.*

These propositions are examined further on pp. 36 *et seq.*

## 6 Methodology

First, *acceptance time* was operationalized as the average time taken by a country to ratify the agreement. The variable was measured for a country by calculating the number of years between adoption of the treaty and entry into force for each country and averaging it over the number of treaties each country had accepted. Ideally, the period should be measured from the date of signature by a state party, to the date of deposit of instruments of acceptance. However, in most cases, only the date of adoption and date of entry into force were available.

The unit of analysis was the country. Several variables were measured for each country. The independent variables measured were public opinion at the local, national and international levels, the wealth of a country measured by the Gross Domestic Product (GDP), the quality of life as indicated by the Human Development Index (HDI), and the percentage of total public appropriations spent on R & D for environmental protection.

A total of one dependent and four independent variables were analyzed.

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<sup>6</sup>see section on Data p. 35

Europe being easily divisible into blocs, the data was also analyzed according to the blocs shown below:

1. European Communities/European Community (EC)
2. European Free Trade Association (EFTA)
3. Eastern Europe (Bulgaria, CSSR, GDR, Hungary, Poland, Romania, Yugoslavia),  
and
4. Small States/Principalities (Cyprus, Lichtenstein, Malta, Monaco, San Marino),  
with populations less than 1 million.

The contents of the 61 treaties were also analyzed and categorized according to issue categories, as follows, so as to gauge the importance of issues and the impact issue substance may have on the period required for acceptance. The treaties were by and large multiple-issue, and thus were double-coded, meaning they fell into more than one category. While in general, conservation and protection were the underlying objectives of all the treaties, nevertheless, in the following categorization only the treaties which specifically mentioned conservation or protection were allocated to the first category below. The treaties on atmospheric degradation include the agreements on the ozone layer, and some of the International Labour Organization (ILO) treaties were counted in the category on restrictions on commerce and industry.

1. Conservation and protection
2. Riparian and marine pollution
3. Atmospheric degradation
4. Nuclear and security issues
5. Restrictions on commerce and industry
6. Information exchange and technical cooperation.

Analyses were conducted in two ways:

1. Based on the entire sample of treaties;

2. Based on each issue category, i.e., for all conservation treaties separately, or all atmospheric treaties, etc.

The SYSTAT (Wilkinson, 1987) program was used for the correlations and statistical tests run on the data. The results are discussed on pp. 36 *et seq.*

## 7 Data: Sources and Types

Data on multilateral environmental treaties was extracted from the May 1991 UNEP Register of International Treaties and Other Agreements in the Field of the Environment (UNEP/GC.16/Inf.4). Only Conventions, Protocols and Agreements were taken. Data on amendments was not always complete, and was therefore not included in the sample, with the exception of the Amendment to the Montreal Protocol. Only those treaties that were adopted after 1972 and entered into force thereafter (up to 1992) were included, and only those where at least one European country is or was a party. Data on acceptances deposited after May 1991 was not always available, although efforts were made to obtain as much information as possible. As of June 1992, the Law of the Sea had not yet entered into force,<sup>7</sup> therefore it was not included in this sample.

A sample of 61 environmental treaties was selected using the above criteria. 1972 was selected as the starting point because it was felt that it would be interesting to measure acceptance in the period after the 1972 Stockholm Conference, when environmental awareness was likely to be on the rise.

The countries of Europe (n=31) in the sample excludes Turkey but includes the European Community as a bloc. By the Single European Act (art. 130), in 1987 formal responsibility for environmental matters was transferred from the member states to the EC; although there is controversy and dissatisfaction among the states regarding this, the EC has signed treaties as a bloc.

Standard UN, as well as World Resources Institute (1992), listings of the countries of Europe were taken to be the norm in determining this list. The USSR was omitted from this analysis because often it is treated as a separate category in the above listings. Albania, Andorra, Gibraltar and the Holy See were excluded due to lack of data.

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<sup>7</sup>Information received from Dr. K. Opoku, Senior Legal Liaison Officer, Office of the Director General, United Nations Office at Vienna.

Data on public opinion on environmental problems was drawn from OECD (1991a), on public R & D expenditures for environmental protection from OECD (1991b), the Human Development Index (HDI)<sup>8</sup> from UNDP (1991). The HDI index for 1991 was used for this analysis. All the countries of Europe in this sample were in the "high human development" group with the exception of Romania, which was in the "medium human development" group with an index rating of 0.762.

Data on GDP per capita (PPP\$ 1985–1988) was taken from UNDP (1991). The figures represent real GDP per capita (purchasing power parities [PPP]). As noted in the UNDP report, the use of official exchange rates to convert the national currency figures to US dollars does not attempt to measure the relative domestic purchasing powers of currencies. Therefore the UN International Comparison Project (ICP) developed measures of real GDP on an internationally comparable scale using purchasing power parities instead of exchange rates as conversion factors, expressed in international dollars.

Public R & D expenditures (in million US\$ at 1985 prices and PPPs and as a per cent of total R & D budget appropriations) for environmental protection in 17 European countries was taken from OECD (1991b). Data refer to government R & D budget appropriations. The mid-point selected for the data was 1981. Environmental protection includes R & D intended to protect the physical environment from degradation. It includes all research

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<sup>8</sup>The concept of human development, first introduced in the 1990 UNDP report, established that the basic objective of human development is to enlarge the range of people's choices to make development more democratic and participatory. These choices should include access to income and employment opportunities, education, health, and a clean and safe environment. Individuals should also have the opportunity to participate fully in community decisions and to enjoy human, economic and political freedoms. The creation of the concept was motivated by the realization that people's priorities are not fixed, but change as circumstances and aspirations change, so that they must all be taken together, with no single dimension pursued at the expense of the other. Policy makers frequently concentrate on just one dimension, namely, income, which is a gross oversimplification and distortion of reality. The human development index is a more realistic statistical measure of human development than mere gross national product (GNP) per head. The human development indicators take into consideration factors such as life expectancy at birth, adult literacy, years of schooling, income beyond the poverty level, etc.

The HDI has caused controversy, for it has been enthusiastically received in some circles and just as vehemently denounced, presumably for political reasons, in other milieux. This is not surprising, as some countries that enjoyed higher rankings in purely GNP/GDP oriented statistics now fall into a lower rank order. Other criticism (The Economist, May 26, 1990) is directed at its subjectivity and arbitrariness, i.e., the weighting of purchasing power, life expectancy and literacy. A strength, it is admitted, is that it reminds those who cannot see beyond the end of their statistics that there is more to life than GNP.

relating to pollution: study of origins and causes, diffusion and transformation as well as the effects on man and the environment, research on end-of-line pollution controls, but excludes research on changes in the production process (the development of clean technologies) that result in the generation of less pollution. The research was assigned to the relevant category (e.g., industry, energy, etc.) relating to the activities causing the pollution.

Data on public opinion on environmental problems (OECD, 1991a) was for 14 European countries and the EC, and was gathered in the period 1988–1990. It represents the percentage of persons “very concerned” about environmental problems at the local level (on waste disposal, drinking water quality and air pollution); at the national level (on water and air pollution) and at the international level (on the depletion of world forest and natural resources and possible climate changes brought about by  $CO_2$ ). Separate measures were available for each of these levels and issue areas of concern.

## 8 Analysis

### 8.1 Descriptive Results

#### 8.1.1 Across the entire sample of countries

On calculating the average number of years that the countries of Europe required for the acceptance of environmental treaties in the sample under consideration, it was observed that the range for all of Europe ( $n=31$ ) averaged between 3.000–6.462 years (see Figure 3). It may be noted that small states and Eastern European countries were not limited to one end of the scale, but were distributed across the range.

The overall average obtained for all the countries of Europe ( $n=31$ ) was **4.162 years** for the period 1972–1992. In the Spector (1992a) study the average time, over seven decades, to ratify environmental agreements was 5.8 years. The sample used in that study was 33 agreements which had already entered into force, which dealt with international environmental issues (as opposed to regional issues) and which were not restricted to certain countries or specific geographic regions.

# Average Years for Acceptance

Europe: 1972 - 1990

Countries

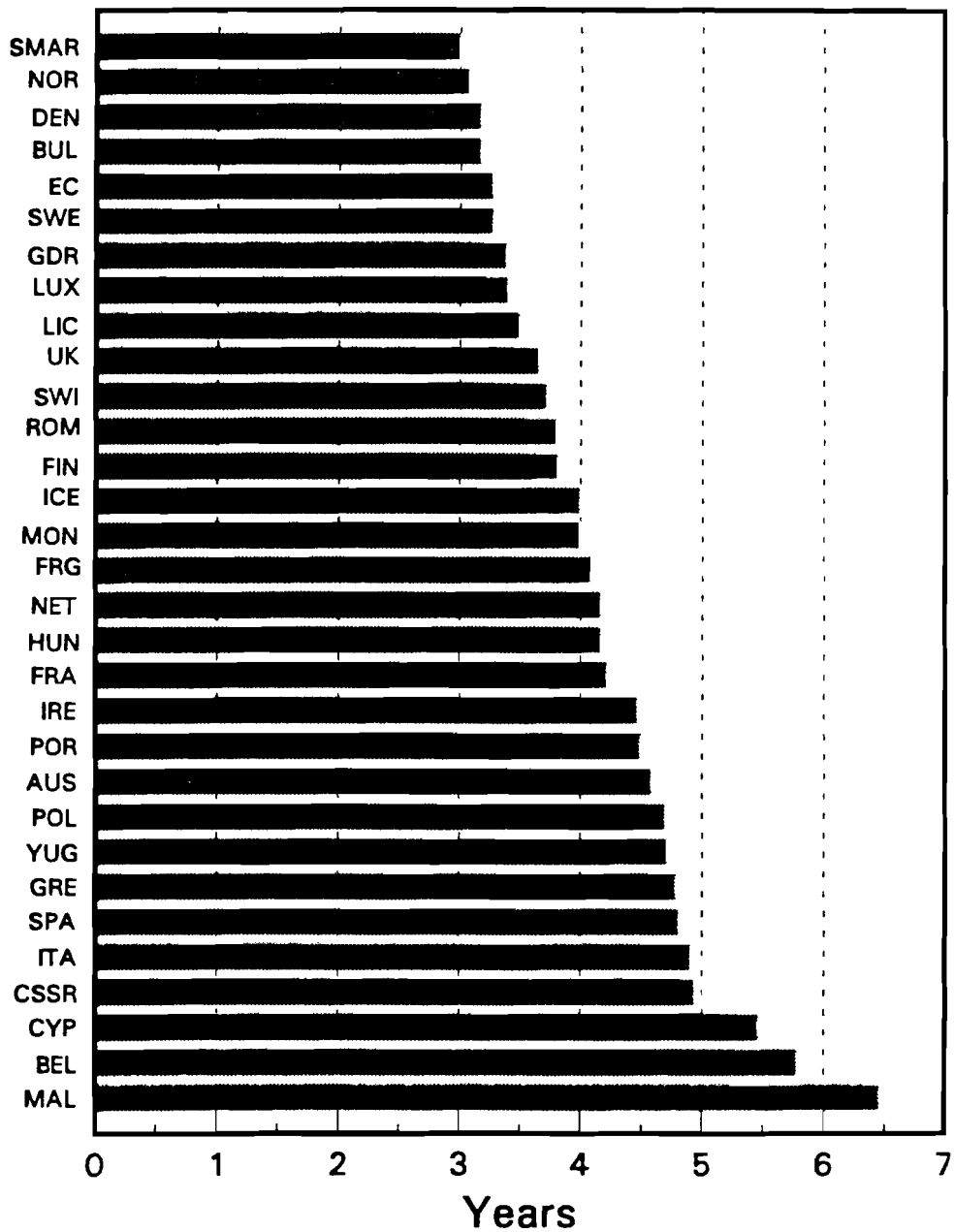


Figure 3: Average acceptance rates for Europe

### 8.1.2 Inter-bloc variations

Bloc variations were another feature that was anticipated in this study as being a product of the heterogeneity that is Europe. However, the results of the average number of years required for acceptance when analyzed by blocs were:

1. EC (n=13) 4.250 yrs.
2. EFTA (n=6) 3.745 yrs.
3. Eastern Europe (n=7) 4.127 yrs.
4. Small States/Principalities (n=5) 4.486 yrs.

There was no statistically significant difference between the 4 groups ( $p=.515$ ).

It can only be surmised here that the greater interest in environmental issues shown by EC and EFTA countries, hypothesized to produce acceleration in the time to acceptance, is slowed down by the parliamentary process. In parallel, in the former East bloc, where only a rubber-stamp parliamentary system existed, there were interest groups and stakeholders in bureaucracy—each vying for influence—which slowed down acceptance processes as well. Small states would be inclined to follow the patterns set by their more powerful allies, hence the lack of significant differences between these four blocs.

#### 8.1.2.1 East-West:

It was hypothesized that *there are differences in the acceptance period between the East bloc and the West*, on account of the vastly different systems of government, namely autocratic versus pluralistic.

A t-test run on the sample, however, did not yield any statistically significant results. As suggested above, this could be because delays caused by the realities of both systems even out in practice.

#### 8.1.2.2 Nordic countries versus the rest of Europe:

*The Nordic states*, with their relatively homogenous populations and patterns of government and their outspoken concern on environmental issues, it was hypothesized, *would be significantly different from the rest of Europe in the time taken for the acceptance of environmental treaties.*

An independent samples t-test resulted in means of 3.468 years for the Nordic countries (n=5) and 4.296 years for the rest of Europe, which represents a statistically significant



difference ( $p=.006$ ) between the means for the Nordic countries and the rest of Europe, thus confirming the hypothesis.

### 8.1.3 Differences in acceptance rates due to issue

When the treaties were analyzed by issue category, the average years to acceptance across all the countries were as follows:

- Conservation and protection: 4.079 yrs.
- Riparian and marine pollution: 5.190 yrs.
- Atmospheric degradation: **2.526** yrs.
- Nuclear and security issues: 3.918 yrs.
- Restrictions on commerce and industry: 4.129 yrs.
- Information exchange and technical cooperation: 3.693 yrs.

This indicates that the willingness to accept treaties dealing with atmospheric degradation is significantly higher.

An analysis of variance (ANOVA) test was run on these means by treaty category to determine differences between the four blocs, issue by issue (see Table 2).

There was only one statistically significant difference (F test,  $p=.012$ ) between the average number of years for acceptance between the four blocs, on treaties dealing with atmospheric issues.

Small states accepted treaties on atmospheric issues much faster than all other groupings.

Overall, as can be seen in Table 2, atmospheric degradation treaties compare favorably with all the other categories of treaties. This may be due to the fact that treaties dealing with the atmosphere received considerably more media exposure, NGO lobbying and input from the scientific community than other categories of treaties (Benedick, 1991).

BLOCS	EC	EFTA	Eastern Europe	Small States
ISSUES				
Conservation & Protection	4.509	3.464	3.460	4.567
Riparian & Marine	5.598	6.528	4.607	3.338
Atmospheric Degradation	2.658	2.663	3.195	1.080*
Nuclear & Security	4.038	4.231	3.607	3.667
Commerce & Industry	3.969	3.208	4.664	4.900
Info. Exc. & Tech. Coop.	3.727	3.598	3.647	3.787

\*(p = .012)

Table 2: Average acceptance rates for Europe, broken down by issue

## 8.2 Hypotheses Testing

### 8.2.1 Public opinion on environmental issues

#### 8.2.1.1 *At the local and national levels*

It was hypothesized that increased public concern shortens the acceptance times for treaties, as governments are anxious to please their constituencies .

Several tests were run to evaluate the impact of public opinion at the local and national level. The following were the findings:

There was a significant correlation ( $r=.268$ ) between public concern regarding local air pollution, and the average acceptance times of treaties, which increases with increased concern at the local level.

This indicates that concern over local issues, manifested by local lobbies and coalitions *contribute to delays in the acceptance of international environmental treaties.*

A much stronger correlation ( $r=.768$ ) was obtained between public concern regarding local drinking water quality and the average acceptance times of international treaties.

This again implies that concern over local issues and local pressure-groups or coalitions *contribute to delays in the acceptance of environmental treaties.*

This last could be due to factors such as stakeholders' fear of regulation, limited attention span on the part of the public to issues that directly affect their lives, and on the part of the negotiators themselves, when the issues are too numerous and complex. In addition, all too often the political, as well as bureaucratic, resources are not concentrated enough, or available (Winham, 1992).

Statistically significant results were not obtained when tests were run using data on the percentage of people interviewed who were concerned with issues such as water pollution and air pollution at the national level.

#### 8.2.1.2 *At the international level*

It was postulated that *public opinion regarding international issues, such as forestry depletion, climate change and global warming, have a strong positive impact on the acceptance process, decreasing the time to acceptance.*

The hypothesis regarding public concern, at the international level, with respect to depletion of world forest and natural resources, as well as climate change, was tested for possible impacts on acceptance and the findings were as follows:

There was a significant correlation ( $r=-.377$ ) between public concern regarding global depletion of world forest and natural resources on the acceptance times of treaties.

This implies that *public opinion*, national lobbies and coalitions focused on international issues *do indeed contribute to accelerate the acceptance of international environmental treaties*.

A yet stronger correlation ( $r=-.492$ ) indicated that public concern regarding global climate change induced by carbon dioxide covaries with reduced acceptance periods for environmental treaties.

This again indicates that public concern, national lobbies and coalitions on global issues such as climate change *do contribute to speed up the acceptance of environmental treaties*. Public concern about international environmental issues all display negative correlations (see Table 3), indicating that as public concern increases, the average time to accept treaties decreases.

### 8.2.2 Gross Domestic Product

The hypothesis was: *The greater the GDP of a country the more likely it is that acceptance times will be reduced*.

A statistically significant correlation ( $r=-.340$ ) was obtained, indicating that the higher a country's GDP per capita, the shorter the acceptance times of countries.

*This implies that the higher the GDP, the more likely it is that acceptance times are reduced, or that wealth does co-vary with shorter acceptance periods*.

### 8.2.3 Human Development Index

The HDI<sup>9</sup> was taken to be an indicator of the quality of life. The hypothesis was: *The greater the HDI of a country, the higher the public concern on environmental issues and the more likely it is that acceptance times will be reduced*.

Correlations that were statistically significant were obtained for treaties in the categories of conservation and protection, riparian and marine pollution, atmospheric degradation, and restrictions on commerce and industry ( $r=-.489$ ,  $-.433$ ,  $-.505$ ,  $-.509$ , respectively) between the HDI of a country and the average time to acceptance, indicating that *the HDI co-varies with shorter acceptance periods* (see Table 3).

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<sup>9</sup>see section on Data p. 35

## 8.2.4 Research & Development Expenditures

The hypothesis was as follows: *The higher the public R & D expenditures on environmental protection, the greater the likelihood of reduced time to acceptance.*

There was a statistically significant correlation ( $r = -.492$ ) between the average acceptance time for riparian and marine pollution treaties with public R & D expenditures for 1981.

R & D expenditures for 1989 generated similar results ( $r = -.413$ ).

This implies that as R & D expenditures increase, the time required for the acceptance of treaties in the category of riparian and marine pollution decreases.

## 9 Conclusions and Recommendations

An attempt has been made in this study to replicate some of the findings discussed in the literature regarding the acceptance or non-acceptance of treaties, with special reference to environmental treaties.

### 9.1 Findings

Interestingly, some of the findings of this study corroborate those arrived at by Smart and Murray (1984) and Cook (1990). Smart and Murray (see p. 21) found that countries with higher economic development and higher spending on health and education were more likely to ratify the drug treaties in their sample. Cook (see p. 24) concluded that organized citizen opinion, quality of life, population dynamics and level of development are national attributes that explain high and low ratification rates.

In this study it was found that the higher the GDP and HDI, as well as R & D expenditure, the more likely it is that acceptance times are reduced.

In reviewing how the hypotheses stood up to empirical testing it appears that most of them, with the exception of a few, were substantiated by the data analysis. The exceptions were that public concern at the local level *increased* acceptance time. It was anticipated that the reverse would be the case; however, when tested, this hypothesis was turned on its head. Some possible reasons for this are noted on p. 41 *et seq.*

Further, it had been hypothesized that significant differences in the acceptance times of East and West would result, due to differences in domestic and political processes.

Dependent Variable : Average Years

Independent Variables	All Treaties	Conservation Treaties	Marine & Riparian Treaties	Atmospheric Degradation Treaties	Nuclear & Security Treaties	Commerce & Industry Treaties	Info. Ex. & Technical Coop. Treaties
R & D Expenditure 81	-.104	.185	-.492	.225	-.222	.155	.064
R & D Expenditure 89	-.119	-.094	-.413	.017	-.192	-.044	-.190
HDI	-.168	-.489	-.433	-.505	-.181	-.509	-.670
GDP	-.340	-.285	-.325	.114	.232	-.469	-.538
Pub. Op., Air, Local	.268	.374	-.024	.315	.010	.300	.344
Pub. Op., Waste, Local	.768	.818	.187	.637	.272	.516	.815
Pub. Op., Water, National	.045	-.150	-.304	-.111	-.150	.478	-.181
Pub. Op., Air, National	.086	.061	-.190	.025	.019	.369	-.015
Pub. Op., Forestry, International	-.377	-.144	-.260	-.419	-.274	-.141	-.195
Pub. Op., Climate Change, International	-.492	-.388	-.382	-.321	-.417	-.137	-.368

Table 3: Correlations between dependent and independent variables

However, there was no clear indication that this indeed was the case.

Public opinion on national-level environmental issues yielded some correlations that were positive and some negative; the reasons for this are not clear and calls for further research. Similar discrepancies were noticed in the case of maritime treaties, as well as those on nuclear and security issues. This too calls for further investigation.

However, many significant results for the total sample were reinforced by the issue-by-issue analysis.

## 9.2 Next Steps

Given below are some suggestions for possible future work in this area.

First, some of the conclusions of this preliminary diagnosis of the first step in the post-agreement cycle are that it may be worthwhile examining the reasons behind the quicker acceptance times of the Nordic countries.

Lang (1991) remarks on the leadership shown by the Scandinavian countries in the environmental domain. In this context Professor Gunnar Sjöstedt<sup>10</sup> suggests several political, legal, institutional and cultural factors. For example, the power vacuum left by the lack of interest on the part of the USA and Japan in taking the leadership on environmental issues (it not being of interest to their constituencies), which the Nordic countries filled, is an example of the political priorities of the one set of countries versus the political will of the other. Further, Norway and Sweden were disproportionately influential on environmental issues and took the initiative unhesitatingly. For example, the acid rain problem was first recognized and formulated by a Swede; the Brundtland reports formed the intellectual premise for the United Nations Conference on Environment and Development and the process was initiated by the Swedish proposal to the UN General Assembly. The fact that the government of Sweden, for instance, represents the mainstream views on environmental issues, whereas the opposition's position is that not enough is being done to preserve the environment, is indicative of the high degree of concern and public pressure exerted on the government for higher standards. The differences in the protestant and catholic ethic also present interesting reasons for the Scandinavian countries, together with Britain and the Netherlands, pushing to achieve high goals, whereas the catholic perspective would be to accept high goals as excellent but unattainable standards. This

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<sup>10</sup>The Swedish Institute of International Affairs, Stockholm. Personal communication, September 1992.

could be an alternative hypothesis for further investigation.

Second, another interesting direction would be to investigate the reasons behind the quicker ratification times required for atmospheric treaties, especially in contrast to the riparian and marine pollution treaties. Third, other post-agreement processes such as regime formation, regime operation, regime adjustment, monitoring, reporting and subsequent compliance are areas requiring urgent investigation. Either diagnostic analysis, such as this study, or case studies could be used as methods for analysis.

Schachter et al. (1971) on reviewing their evidence, suggest that treaties be submitted to governments for scrutiny at the draft stage (i.e., during the negotiation itself) and that governments set up special committees to advise on these, drawing on non-governmental experts as well, to review the drafts. Further, if states participate in the treaty conference and play a role in the negotiation process, they are in a better position to appreciate the substance, objectives and scope of the treaties, which works to facilitate the acceptance process. If the team of experts that attends the treaty conference is also charged with the task of coordinating the preparatory administrative work for the country's acceptance of the treaty, it acts as a catalyst in the process. Centralization of the administrative work in one unit of the foreign ministry, special inter-departmental coordination committees and referral to the cabinet to resolve inter-departmental disputes are other ways in which the process can be hastened. Better translation facilities for countries that do not use one of the five UN languages and inter-governmental consultations on translations in common languages could help speed treaty acceptance. Better mechanisms for coordination on the domestic scene and recognition of the promotional role that permanent missions to the UN have played in facilitating acceptance were other factors mentioned in the study. Suggestions on international measures to foster acceptance, as well as specific areas requiring further research, are listed in this study.

Smart and Murray (1984) recommend, in their study of drug treaties, that with improvements in life expectancy, economic development and degree of drug problem increase, the chances of ratifying these treaties will increase. However, these are long-term solutions. In the shorter term, solutions such as expert legal or translation help could increase the understanding and acceptance of treaties. Consultants could be used to advise on the mechanisms needed for ratification, thereby enhancing the process, as also would strong support from international agencies, as well as funding.

Weissbrodt (1982) suggests that regulatory mechanisms for encouraging acceptance



would be more effective than mere exhortations. He examines the initial period of the Working Group on the Encouragement of Universal Acceptance of Human Rights Instruments and concludes that the reasons (see p. 20) for non-ratification should be investigated further and that the Working Group could be more effective if it were given specific authority to solicit governmental reports. This might have been effected if either ECOSOC or the General Assembly had given it an uncontestable mandate, as well as higher visibility.

In the climate change negotiations cost-effectiveness is viewed as more important at present than that of ecological desirability.<sup>11</sup> Therefore, states, especially those of the south, have little interest in negotiating a treaty, let alone considering the intricacies of acceptance, domestic legislation and implementation.

The recommendations in Spector (1992a) apply here:

- Modify the negotiation process by actively involving domestic stakeholders and thereby providing them with a sense of ownership over the internationally negotiated treaties.
- Fractionate issues creatively into manageable, independent elements and resolve easier issues first; this disentangles the issues that are linked. Too many issues and linkages result in longer ratification times.
- Provide incentives, especially economic ones, which could be incorporated in treaties to make for better ratification time and implementation.
- Modify the post-agreement process by educating national political actors or stakeholders, using NGOs, the media and the scientific community.

Some of the conclusions arrived at by Sjöstedt and Spector (1993) regarding environmental negotiations are also of relevance here. They suggest that public consciousness raising, i.e., educating the public regarding potential damages to the environment, and the associated costs, could mobilize actors who would then increase public pressure, leading to shorter lag time to the acceptance of treaties. Another recommendation they make is to develop the institutional structure and administrative support to epistemic communities, as such transnational groups could also function as driving forces, much like the impact made by NGOs.

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<sup>11</sup> Ambassador W. Lang, personal communication.

## 10 Alternatives to Ratification: An Aside

Having examined some of the factors that cause undue delays in acceptance, it may be worthwhile looking at ways of sidestepping the tedious and long-winded process of ratification. It is not strictly true that ratification is the only way to attain the commitment to a treaty's provisions as may be achieved through it.

Starke (1989) suggests that delays in ratification may explain the recent tendency in treaty practice to dispense with such a requirement and the growth in the practice of concluding arrangements between governments in more simplified forms.

Schachter et al. (1971) have pointed out that the General Assembly has used devices other than treaties in order to promote the aims of the UN. Such mechanisms include resolutions declaratory of international law, the creation of UN bodies for the performance of particular functions (e.g., UNICEF and UNWRA) and declarations of the General Assembly. These devices do not require specific ratification or acceptance by states.

The Harvard Law Review (1991) draws attention to the possibilities offered by international agencies that can help bypass the state level. By maintaining contacts with environmentalists and experts, the agencies can influence national policy from within the state, working with and within national governments to train officials and foster an environmental ethic. This would also increase the likelihood that environmental treaties will be signed and enforced. International agencies could undertake these activities without significantly impinging on sovereignty. NGOs could play a role at the grass roots level, while epistemic communities of environmental experts inside and outside state government who have the scientific and political power to transform international environmental regimes, could combat the traditional, less effective state-to-state level of international law. UNEP, by establishing direct links that bypass foreign ministries, with permission from the relevant states, has achieved successful projects such as the Mediterranean Pollution Monitoring and Research Programme. By giving international agencies broad regulatory powers much can be accomplished via routes that provide alternatives to the traditional approach.

Susskind and Ozawa (1992) point out that several mechanisms exist that can be used to bolster traditional treaty-making, e.g., some treaties include annexes or appendixes stipulating procedures for revising a treaty as new information becomes available. This makes it possible to avoid a new round of ratification. Signatories can also take exception

to clauses in one or another annex while signing the general treaty and the ratification of one or more protocols could be required as the price of membership in a framework convention.

Chayes and Chayes (1991b) note the inherent deficiencies of using the traditional lawmaking treaty as the principle legislative instrument in an international environmental regime. Each new treaty has to be ratified in accordance with the domestic procedures of the members, resulting in delay, at best. At worst, the political battles that attend the adoption of any important international agreement affecting domestic economic interests may prevent ratification altogether. They go on to describe numerous examples where, in practice, mechanisms have evolved to bypass ratification. The key requirement in each of these cases is an international institution or organization created by a treaty that grants it the necessary powers and stipulates the processes for action. The *interpretation* of the agreement is one of the ways by which the organization can bind members without further reference to national legislatures. By ratifying this constitutive treaty, the state accepts the powers and processes specified in it, thus satisfying the international law requirement of consent to the obligations that may be created. Some examples discussed by Sand (1991) are recalled below.

Sand (1991; pp. 250–256) lists several options for bypassing the long drawn out treaty method which results in time lags between drafting, adoption, ratification and entry into force. He suggests how “fast tracks” can be devised that can beat the slowest boat rule. They are, provisional treaty application, soft law options and delegated lawmaking.

Provisional treaty application is a recognized procedure under the Vienna Convention on the Law of Treaties (art.25) A classic example is the General Agreement on Tariffs and Trade (GATT) which has operated for more than forty years on the basis of a Protocol of Provisional Application.

The signatories to the 1979 Geneva Convention on Long-range Transboundary Air Pollution also decided, by separate resolution, to “initiate, as soon as possible and on an interim basis, the provisional implementation of the convention” and to “carry out the obligations arising from the convention to the maximum extent possible pending its entry into force.” The Interim Executive Body subsequently held annual meetings, created subsidiary working groups, and so on, well before the Convention came into effect in 1983. When adopting the first protocol under the convention, in 1984, on long-term financing of the European Monitoring and Evaluation Programme (EMEP), the signatories again

decided by resolution, pending the entry into force of the protocol, "to contribute to the financing of EMEP on a voluntary basis, in an amount equal to the mandatory contributions expected from them under the provisions of the protocol if all signatories had become parties." Thus voluntary interim funding to the tune of 3.4 million dollars was generated, enabling the program to operate effectively until the protocol entered into force in 1988.

The final act of the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes took a similar approach with its resolution that until the convention came into force, all states would "refrain from activities which are inconsistent with the objectives and purpose of the convention," and with other resolutions established preparatory technical working groups, and an interim secretariat with voluntary funding.

States may decide to forgo the treaty method altogether and to recommend, by joint declaration, common rules of conduct, generally referred to as soft law. Their practical advantage is that they are not subject to national ratification and therefore can take immediate effect. UNEP has been a prolific soft-law maker, with its series of environmental law guidelines and principles, in typical treaty language, but with the use of the verb "should" instead of "shall". After initial adoption by *ad hoc* groups of experts nominated by governments, these provisions are normally approved by the UNEP Governing Council for submission to the UN General Assembly, which either incorporates them in a resolution (as in the case of the 1982 World Charter for Nature) or recommends it for use in the formulation of international agreements or national legislation.

Delegated lawmaking is another way of bypassing ratification. This may be achieved by delegating powers to adopt and regularly amend "technical" standards to a specialized intergovernmental body. This technique was gradually refined and used by several global and regional organizations in order to cope with frequent technological change. The International Telecommunication Union (ITU), the Universal Postal Union (UPU) and a number of European conventions on rail and road transport placed their international standards in separate technical annexes or regulations that are periodically revised in intergovernmental meetings without having to go through ratification. The international health regulations of the World Health Organization (WHO), the standard meteorological practices and procedures of the World Meteorological Organization and the standards for facilitation of international maritime traffic are well known for being smoothly functioning regulatory regimes.

Others share this view. For example, Young, Demko and Ramakrishna (1991; p.23) suggest that there is no need to be restricted by either/or choices in the debate over formal instruments and informal arrangements in the guise of soft law. They recommend that negotiators responsible for drafting specific provisions should frame conventions in such a way as to encourage parties to exceed formal standards and to allow states' standards to evolve continuously, without calling for formal ratification at every step.

However, avoiding formal acceptance raises the issue of democratic controls over the delegated standard-setting. Sand (1991) discusses this and suggests that one option, which seems practicable only under conditions of close regional integration, is to create a supranational parliamentary body for the purpose of exercising controls. The Environment Committee of the European Parliament is an example of this; it has begun to play an important role as watchdog for the community. An alternative to this would be to retain a measure of national endorsement, short of parliamentary ratification, for common standards agreed upon, either by requiring affirmative acceptance by governments (the international food standards of the Codex Alimentarius Commission being an example), or by providing the possibility for dissenting states to opt out of an agreed standard or amendment within a specified time period (as stipulated in the constitutions of the WHO, the WMO, the UN convention on narcotic drugs and in several international fisheries agreements).

A good example of the opting out procedure relating to a problem of global pollution control is the adoption and amendment of technical annexes under the 1944 Chicago Convention on International Civil Aviation. Arts. 37 and 54 worldwide standards on aircraft noise and aircraft engine emissions have been laid down since 1981 by the Council of the International Civil Aviation Organization (ICAO). Once adopted by this body, an annex becomes mandatory, without ratification, for all states who do not within sixty days notify the council of their intention to apply different national rules, and for all air traffic over the high seas. This flexible tacit-consent procedure, which was designed with the view to reconciling the divergent requirements of developed and developing countries, facilitates progressive technical adjustment of standards by majority decision, without forcing complete uniformity. This may be the closest thing to global environmental legislation.

Young, Demko and Ramakrishna (1991) note that the science of climate change, for example, is characterized by profound uncertainties and rapid advances in research. Therefore, any governance system must seek not only to stimulate the growth of knowledge, but

also provide mechanisms for integrating new insights into the system, without triggering a time-consuming and highly politicized ratification process. However, beyond this, the success of governance systems is linked to the development of broader cognitive constructs capable of providing the intellectual underpinnings for institutional arrangements. In the case of climate change, it is likely to result in a new worldview, that is, an integrated set of principles, propositions and norms that would redefine human aspirations and give rise to a restructured ethical system to guide human–environment relations. The initiation of processes in parallel to ongoing negotiations aimed at accelerating the dissemination of new perspectives on human–environment relations is essential.

Therefore, whilst encouraging the ratification process, it is also critical to explore alternatives to acceptance during the process of treaty-making.

## 11 References and Selected Bibliography

Barratt-Brown, Elisabeth P. (1991) Building a Monitoring and Compliance Regime Under the Montreal Protocol. *Yale Journal of International Law*, Vol.16:519.

Benedick, Richard (1993) Perspectives of a Negotiation Practitioner. In: G. Sjöstedt [ed.] *International Environmental Negotiation*. Sage Publications, Newbury Park, California.

Benedick, Richard E. (1991) *Ozone Diplomacy. New Directions in Safeguarding the Planet*. Harvard University Press. 302p.

Brown Weiss, Edith (1991) *International Environmental Agreements and National Compliance*. Workshop notes of a meeting jointly organized by the International Institute for Applied Systems Analysis and the Swedish Council for the Coordination of Research, held at Abisko, Sweden, May.

Brown Weiss, Edith, P.C. Szasz and Daniel B. Magraw (1992) *International Environmental Law: Basic Instruments and References*. Transnational Juris Publications, Inc.

Caldwell, Dan (1991) *The Dynamics of Domestic Politics and Arms Control. The SALT II Treaty Ratification Debate*. University of South Carolina Press. 234p.

Caldwell, Lynton K. (1988) *Beyond Environmental Diplomacy: The Changing Institutional Structure of International Cooperation*. In: John E. Carroll [ed.] *Interna-*

- tional Environmental Diplomacy. The Management and Resolution of Transfrontier Environmental Problems. Cambridge University Press. 291p.
- Chayes, Abram (1991) Managing the Transition to a Global Warming Regime or What to Do til the Treaty Comes. In: Greenhouse Warming: Negotiating Global Regimes. World Resources Institute, Washington, D.C.
- Chayes, Abram and Antonia H. Chayes (1991a) Compliance Without Enforcement: State Behavior Under Regulatory Treaties. *Negotiation Journal*, July. pp.311–330.
- Chayes, Abram and Antonia H. Chayes (1991b) Adjustment and Compliance Processes in International Regulatory Regimes. In: Jessica Tuchman Mathews [ed.] Preserving the Global Environment. W.W. Norton & Co., New York and London. 362p.
- Cho, Paul Byung-Chan (1981) Japan's Ratification of the Nuclear Non-Proliferation Treaty: A Study of the Diffusion of Policymaking Power and Consensus Politics in Japanese Foreign Policymaking. West Virginia University, Ph.D. Thesis. Vol.42/03A Dissertation Abstracts International p.1303.
- Cook, David William (1990) The State in Nature–Society Relations: Explaining Patterns in the Ratification of Global Environmental Treaties. Master's Thesis, Dept. of Geography, University of Colorado, Boulder.
- Craig, Gordon A. and Alexander L. George (1983) Force and Statecraft. Diplomatic Problems of Our Time. First edition. Oxford. 288p.
- Endicott, John E. (1977) The 1975–76 Debate over Ratification of the Nuclear Non-Proliferation Treaty in Japan. *Asian Survey*, Vol.17, No.3, pp.275–292.
- Fischer, Wolfgang (1991) The Verification of International Conventions on Protection of the Environment and Common Resources. Forschungszentrum, Programmgruppe Technologiefolgenforschung, Jülich, Germany.
- Frei, Daniel and Dieter Ruloff (1989) Handbook of Foreign Policy Analysis. Methods for Practical Application in Foreign Policy Planning, Strategic Planning and Business Risk Assessment. UNITAR, Martinus Nijhoff Publishers.
- French, Hilary F. (1992) After the Earth Summit: The Future of Environmental Governance. Worldwatch Paper 107. March. Worldwatch Institute.
- Greilsammer, Ilan (1991) The Non-Ratification of the EEC–Israel Protocols by the European Parliament (1988). *Middle Eastern Studies*, Vol.27, No.2. pp.303–321.

- Hajost, Scott and Quinlan J. Shea, III (1990) An Overview of Enforcement and Compliance Mechanisms in International Environmental Agreements. In Proceedings of the International Enforcement Workshop, May 8-10, 1990, Utrecht, Netherlands. Ministry of Housing, Physical Planning and Environment (VROM), The Netherlands.
- Handl, Günther (1991) Environmental Security and Global Change: The Challenge to International Law. In: W. Lang, H. Neuhold and K. Zemanek [eds.] Environmental Protection and International Law. International Environmental Law & Policy Series. Graham & Trotman/Martinus Nijhoff.
- Harvard Law Review* (1991) Development in the Law. International Environmental Law. Vol.104:1484. Harvard Law Review Association.
- Henkin, Louis (1979) How Nations Behave. Law and Foreign Policy. Second edition. Columbia University Press. 400p.
- Hurrell, Andrew and Benedict Kingsbury [eds.] (1992) The International Politics of the Environment. Clarendon Press, Oxford. 492p.
- Kempel, Willy (1993) Transboundary Movements of Hazardous Wastes. In: G. Sjöstedt [ed.] International Environmental Negotiation. Sage Publications, Newbury Park, California.
- Kiss, Alexandre and Dinah Shelton (1991) International Environmental Law. Transnational Juris Publications, Inc., New York and Graham & Trotman, London.
- Kremenyuk, Victor A. and Winfried Lang (1993) The Political, Diplomatic, and Legal Background. In: G. Sjöstedt [ed.] International Environmental Negotiation. Sage Publications, Newbury Park, California.
- Kremenyuk, Victor A. [ed.] (1991) International Negotiation. Analysis, Approaches, Issues. Jossey-Bass Publishers, San Francisco and Oxford. 486p.
- Lang, Winfried (1991) Negotiations on the Environment. In: V. A. Kremenyuk [ed.] International Negotiation. Analysis, Approaches, Issues. Jossey-Bass Publishers, San Francisco and Oxford.
- Lang, Winfried, Hanspeter Neuhold and Karl Zemanek (1991) Environmental Protection and International Law. International Environmental Law and Policy Series. Graham & Trotman/Martinus Nijhoff, London/Dordrecht/Boston. 244p.



- Lewis, David and Helen Wallace (1984) *Policies into Practice. National and International Case Studies in Implementation.* Heineman Educational Books, London and Exeter.
- Miles, E. and J.K. Gamble (1977) *Law of the Sea: Conference Outcomes and Problems of Implementation.* Ballinger Publishing Co. 425p.
- Muller, John E. (1969) *Approaches to Measurement in International Relations.* Appleton-Century-Crofts, New York.
- Nordquist, Myron H. (1985) *United Nations Convention on the Law of the Sea. A Commentary.* Martinus Nijhoff Publishers.
- OECD (1991a) *The State of the Environment. Organisation for Economic Co-operation and Development, Paris.*
- OECD (1991b) *Environmental Data Compendium. Organisation for Economic Co-operation and Development, Paris.*
- Rummel-Bulska, Iwona and Seth Osafo (1991) *Selected Multilateral Treaties in the Field of the Environment. Vol.2 UNEP, Grotius Publications Ltd.*
- Sand, Peter H. [ed.] (1992) *The Effectiveness of International Environmental Agreements.* Grotius Publications Ltd. Cambridge.
- Sand, Peter H. (1991) *International Cooperation: The Environmental Experience.* In: Jessica Tuchman Mathews [ed.] *Preserving the Global Environment.* W.W. Norton & Co., New York and London. 362p.
- Sand, Peter H. (1990) *Lessons Learned in Global Environmental Governance.* World Resources Institute.
- Sands, Phillippe J. (1989) *The Environment, Community and International Law.* *Harvard International Law Journal*, Vol.30, No.2.
- Schachter, Oscar, Mahomed Nawaz and John Fried (1971) *Toward Wider Acceptance of UN Treaties. A UNITAR study.* Arno Press, New York. 190p.
- Sebenius, James K. (1993) *The Law of the Sea Conference: Lessons for Negotiations to Control Global Warming.* In: G. Sjöstedt [ed.] *International Environmental Negotiation.* Sage Publications, Newbury Park, California.
- Sjöstedt, G. [ed.] (1993) *International Environmental Negotiation.* Sage Publications, Newbury Park, California.

- Sjöstedt, G. and Bertram I. Spector (1993) Concluding chapter in: G. Sjöstedt [ed.] *International Environmental Negotiation*. Sage Publications, Newbury Park, California.
- Smart, Reginald G. and Glenn F. Murray (1984) *International Drug Treaties: The Connection Between Ratification and Social and Economic Conditions*. *Drug and Alcohol Dependence*, 13, pp.107–116.
- Spector, Bertram I. (1992a) *Post-Negotiation: Is the Implementation of Future Negotiated Environmental Agreements Threatened? A Pilot Study*. WP-92-22. International Institute for Applied Systems Analysis, Austria.
- Spector, Bertram I. (1992b) *The Post-Agreement Negotiation Process: Analyzing the Effectiveness of International Negotiation as a Conflict Resolution Mechanism*. Proposal accepted by The United States Institute of Peace, Washington, D.C. April.
- Springer, Allen L. (1983) *The International Law of Pollution. Protecting the Environment in a World of Sovereign States*. Quorum Books. 218p.
- Starke, J.G. (1989) *Introduction to International Law*. Tenth Edition. Butterworths. 694p.
- Susskind, Lawrence and Connie Ozawa (1992) *Negotiating More Effective International Environmental Agreements*. In: Hurrell, Andrew and Benedict Kingsbury [eds.] *The International Politics of the Environment*. Clarendon Press, Oxford. 492p.
- The Salzburg Initiative (1991) *Ten Recommendations for Enhancing the Effectiveness of International Environmental Negotiation*. Secretariat, International Environmental Negotiation Network, Harvard Law School, Cambridge, MA.
- UNDP (1991) *Human Development Report*. Published for the United Nations Development Programme. Oxford University Press, New York and Oxford. 202p.
- UNEP (1991) *Register of International Treaties and Other Agreements in the Field of the Environment*. UNEP/GC.16/Inf.4. United Nations Environment Programme, Nairobi.
- UNEP (1985) *Register of International Treaties and Other Agreements in the Field of the Environment*. UNEP/GC/Information/11/Rev.1. United Nations Environment Programme, Nairobi.
- UNGA (1992) *Preparations for the United Nations Conference on Environment and Development on the Basis of General Assembly Resolution 44/228 and Taking Into*

- Account Other General Assembly Resolutions. Survey of Existing International Agreements and Instruments and its Follow Up. Report of the Secretary General of the Conference. Preparatory Committee for the UNCED, Fourth Session, New York, March 2–April 3, 1992, Working Group III, Item 2. Doc. 103.DFT.
- USGAO (1992) International Environment. International Agreements Are Not Well Monitored. Report to Congressional Requesters. GAO/RCED-92-43. January. United States General Accounting Office. 60p.
- Victor, David G., Abram Chayes and Eugene B. Skolnikoff (1992) Pragmatic Approaches to Regime-Building for Complex International Problems. In: N. Choucri [ed.] *Global Change: Environmental Challenges and International Responses*. MIT Press, Cambridge, MA. In print.
- Weissbrodt, David (1982) A New United Nations Mechanism for Encouraging the Ratification of Treaties. *Human Rights Quarterly*, Vol.4, pp.333–352.
- Wettestad, Jørgen and Steinar Andresen (1991) The Effectiveness of International Resource Cooperation: Some Preliminary Findings. R:007-1991. Fridtjof Nansens Institute, Lysaker, Norway.
- Wilkinson, Leland (1987) SYSTAT: The System for Statistics. SYSTAT, Inc., Evanston, IL.
- Winham, Gilbert R. (1992) Asymmetrical Power Negotiation: The Case of the Canada–United States Free Trade Agreement. Draft chapter for a book on Power and Asymmetry, International Institute for Applied Systems Analysis, Laxenburg, Austria. Forthcoming.
- World Resources Institute (1992) World Resources 1992–93. A Guide to the Global Environment. Oxford University Press, Oxford.
- Young, Oran (1993) Perspectives of International Organizations. In: G. Sjöstedt [ed.] *International Environmental Negotiation*. Sage Publications, Newbury Park, California.
- Young, Oran (1989) International Cooperation. Building Regimes for Natural Resources and the Environment. Cornell University Press. 248p.
- Young, Oran, George J. Demko and Kilaparti Ramakrishna (1991) Global Environmental Change and International Governance. Summary and Recommendations of a

Conference held at Dartmouth College, New Hampshire, June. Dartmouth College.  
33p.

Zartman, I. William and Maureen R. Berman (1982) *The Practical Negotiator*. Yale University Press, New Haven and London.