

CLUBS ARE TRUMP: THE FORMATION OF INTERNATIONAL REGIMES IN THE ABSENCE OF A HEGEMON

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INTRODUCTION

Recent years have witnessed a growing debate among students of international relations as to why international regimes form.¹ The purpose of this chapter is to suggest that the formation of regimes is rooted in several types of international failure which prompt the development of governance structures either by states and/or by markets. Building on the recent work on international institutions and transactions cost economics by Yarbrough and Yarbrough, this chapter extends their argument of the study of international regimes (Yarbrough and Yarbrough, 1990).

We argue that state intervention represents one among many possible forms of organizing economic or political activity. Where structural failures exist at the domestic level some form of governance response, ei-

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ther by firms (albeit as decentralized as the competitive market system) and/or by states may be required.²

Similarly, at the international level it may be necessary to devise institutions to facilitate cooperation in the presence of structural failures (Caporaso, 1993). Unlike some political economists who narrowly focus on transactions costs as if they were the only kind of market failure (Keohane, 1983, 1995), we identify four different types of structural failure that can contribute to the formation of international regimes: efficiency failures, distributional conflicts, macroeconomic instabilities, and security dilemmas.³ As strategic rational actors, nation-states may respond to the presence of these structural failures by creating international regimes or some other kind of governance structure. In addition, we argue that, absent a hegemonic leader(s), coalitions of like-minded states, or *clubs*, may be the principal agent behind regime formation.⁴

REGIMES AS INTERNATIONAL GOVERNANCE STRUCTURES

Transactions costs have been used to explain both the formation of firms (Coase, 1937; Schnieberg and Hollingsworth, 1988; Williamson, 1975, 1985, 1986) and the formation of international regimes (Keohane, 1984, 1995). These two approaches treat governance structures as devices through which political and economic actors organize and manage their interdependencies. As a way of bridging these two approaches, we define *governance* as the set of practices whereby interdependent political and/or economic actors coordinate and/or hierarchically control their activities and interactions (Schnieberg and Hollingsworth, 1988; Williamson, 1975). *Governance structures* are therefore formal and informal institutional devices through which political and economic actors organize and manage their interdependencies. The purpose of such structures is to organize negotiation processes, set standards, perform allocative functions, monitor compliance, reduce conflict, and resolve disputes. These interdependencies can arise in firm-to-firm, firm-to-state, and state-to-state relations.

All governance structures are therefore formed in order to manage and stabilize the internal and external relations, both vertical and horizontal, of firm and/or state actors with other firms and/or states. We can think of a continuum of possible governance structures, either by firms and/or by states, and either at the domestic and/or international level. At the domestic level, state governance structures can vary from a low control form such as a nation of individual city states providing minimal public services (e.g.,

the city-states of early Greece) to a high control structure like a single tier command economy where the state produces most commodities (the USSR in the 1970s).

In terms of domestic governance by firms, the two polar cases are markets (perfectly competitive firms, the lowest control structure) and hierarchies (horizontally and vertically integrated firms, the highest control structure), with trade associations as an intermediate form between markets and hierarchies. Trade associations include alliances, such as cartels, peak associations, chambers of commerce, and employers' associations, that are designed to "promote and protect common interests by ordering, managing and stabilizing both the relations within the industry as well as the relations between industry members and those whose strategies and activities can decisively affect the industry's fortunes" (Schnieberg and Hollingsworth, 1988: 4).

The choice among domestic governance structures by firms is very much state driven; i.e., governments, through their constitutions and laws, determine the appropriate level and types of governance.⁵ There is no inherent presumption that firm governance structures must be efficiency-improving. Firms are profit maximizers; hence they have incentives to reduce transactions costs (which is efficiency-enhancing), but they also have incentives to cartelize markets (efficiency-reducing).⁶ Nor is there any presumption that firm governance structures can handle society's other goals (e.g., a fair distribution of income, stable macroeconomy, national security). As a result, assuming a given level of political failure, there is an inherent bias towards state governance to ensure efficiency, equity, stability, and security.

When structural failures go across national borders, they become international. Just as national failures create a demand for national governance structures, so too, it is argued here, do international failures create the need for international governance structures (*IGSs*). International failures create needs for international efficiency, stability, equity, and security. For example, social goods, transactions costs, and uncompetitive firm behavior all exist at the international level and therefore generate allocative failures. Global efficiency is not synonymous with an equitable distribution of world income and wealth. The global macroeconomy can be dysfunctional in the presence of financial panics (e.g., stock market crashes), unregulated money markets (e.g., the Eurocurrency market), or macroeconomic shocks (e.g., the oil shock). The security dilemmas posed by the proliferation of nuclear weapons, international terrorism, and ethnic conflicts all imply the need for international political order.

At the international level, these are perhaps more severe than at the domestic level. Domestic policy actions (e.g., beggar-thy-neighbor trade poli-

cies) can have negative spillover effects on trading partners; the larger and more open the economy, the larger the international spillovers (Cowhey, 1993a, 1993b). Trade wars and competitive devaluations can and have created global depressions (Gowa, 1994). Tax havens can siphon tax bases and revenues, wreaking havoc with the tax and expenditure policies of other countries. Too rapid monetary growth by large countries can spread inflation globally.

Given the potentially wide range of international failures, the likelihood that IGSs will form across a broad scope of international transactions is considerable. Possible types of firm IGSs can range from the lowest control structure, international transactions between unrelated firms, to high-control structure, hierarchies such as transnational corporations (TNCs) or cartelized TNC markets.⁷ Middle-control governance structures would include international trade associations such as international cartels among unrelated firms.⁸ Firm IGSs may be either welfare-improving (e.g., if global transactions costs are reduced) or -reducing (e.g., TNCs cartelize international markets). There is no presumption that firm IGSs are distributionally neutral or reduce security risks. Therefore there is a need for state IGSs, as regulatory devices either that prescribe and proscribe certain types of firm governance structures or that substitute state coordination and cooperative arrangements for firm IGSs.

State IGSs can also vary from low-control structures (i.e., competing nation-states and balance of power, the billiard ball analogy) to high-control structures (supranational governments, colonial empires). International regimes (or institutionalized norms and rules for cooperation) can be seen as middle-control state international governance structures, somewhat analogous to international trade associations among unrelated firms.⁹ As such, regimes represent one set of governance options, but obviously not the only one, for coordinating and managing the vast array of relations among states.

We assume that, as strategic rational actors, states act so as to maximize their own objective functions given their constraints (history, place, resources, domestic politics) in the international system. As Snidal (1985: 594) argues, “[s]tates are better characterized by strategic rationality, which takes into account the likely reactions of other states as well as the pursuit of interests across a wide range of issues and through time.” Governance structures are ways that nation-states can act so as to manage the global interdependencies generated by the politicoeconomic structures in which they find themselves.

However, this does *not* imply a presumption that all state IGSs must improve global welfare; they can be either global welfare-improving or -distorting. State IGSs, including regimes, may be used to offset interdependen-

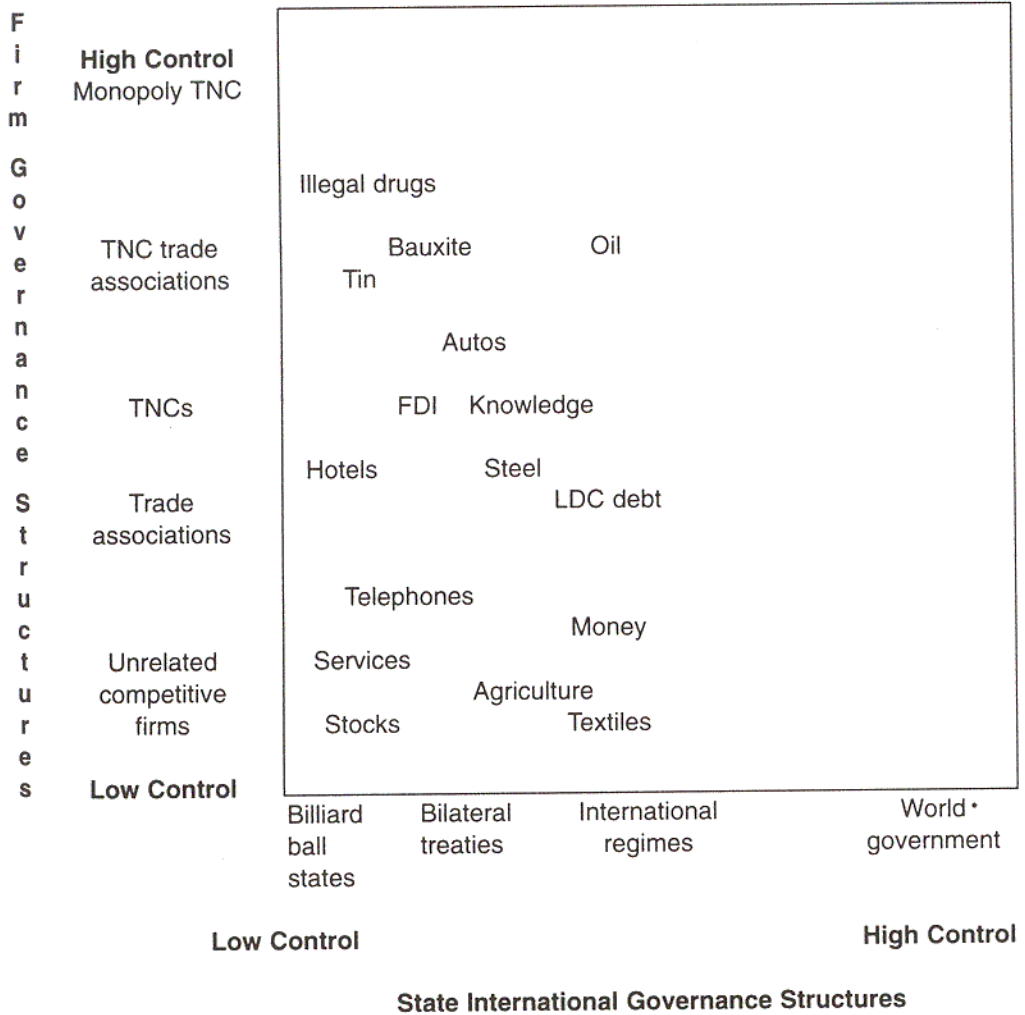


Figure 12-1. Governance Structures in International Markets

cies through ways that are welfare-reducing. For example, if a regime is set up to cartelize an international market or to shift the terms of trade in favor of members, global welfare may decline; cartelization and market rigging are not limited to firms. As Strange (1983: 345–6) notes, the focus on creating order in the international system ignores the questions of order for whom and whether greater order and managed interdependence are desirable.

In Figure 12-1 we make a preliminary attempt to categorize particular global markets in the 1990s in terms of their state and firm international governance structures. This figure characterizes (with a very broad brush!) only the international, not the domestic, governance structures. Firms may be state enterprises since the important issue here is not the ownership of the firm but

the international relations between firms and between states, i.e., how much international regulation by states and how much international coordination among firms. We suggest that low-control IGSs include financial stock markets and business services where most international transactions are between unrelated firms and there is little international state governance. A high-control IGS, although clearly less so than in the 1960s, would be oil with three associations (OPEC, IEA, and the oil TNCs) managing international oil trade. It would appear from our figure that “mixed” government structures involving both states and firms are most common.

In summary, whether particular types of international politico-market failures tend to lead to the development of particular firm or state governance structures is a fascinating line of inquiry, but one that is not pursued in this chapter. Here we focus on one form of IGS, the international regime, a structure run by states in order to correct for various forms of international system failure. Why regimes form thus depends on the types of underlying structural failures to which we now turn.¹⁰

STRUCTURAL FAILURES: EFFICIENCY FAILURES

INTERNATIONAL SOCIAL GOODS

International social goods can be broken into four main categories depending on their jointness and nonexcludability characteristics. Private goods are one polar case (nonjoint and excludable); pure public goods the other polar case (joint and nonexcludable). Between the two extremes are joint goods (joint and excludable) and externalities (nonjoint and nonexcludable). Each of these three market failures (i.e., public goods, joint goods, externalities) has implications for international regimes.¹¹

International Pure Public Goods. While the two characteristics do not need to occur simultaneously, in the polar case – the pure public good – both jointness and nonexcludability coexist. Pure public goods are those whose benefits are consumed by all members of a community as soon as they are produced for, or by, any one member.

Relevant examples of the polar case of pure public goods are hard to find; one good example of a public good is knowledge, a public intermediate input into the production functions of all firms. Modern communications and information systems have made it relatively easy for firms to take technological innovations developed elsewhere and incorporate them into

their own product lines. In the absence of patents or licensing laws, companies making use of these innovations have acted as free riders because they have been able to make use of those innovations at no extra cost to themselves and without having to compensate the original knowledge producers. In addition, many kinds of know-how are not patentable (e.g., management and processing trade secrets). In the absence of such protection, too little knowledge will be produced.

At the domestic level, the failure in the market for knowledge has led governments to establish patent and copyright legislation and laws to punish counterfeiting, to govern the provision and production of certain kinds of knowledge (e.g., in agriculture), to subsidize university research, and to encourage cooperative strategic partnering by firms. The most common firm governance structure to protect a "firm specific advantage" in knowledge is the hierarchy, i.e., horizontal and vertical integration. At the international level, governance structures include transnational corporations.¹² There is also an evolving intellectual property rights regime based on the extension of domestic patent legislation to cover foreign firms, bilateral treaties, and the World International Patent Organization (WIPO), set up to register patents and copyrights internationally.

Pure public goods represent one polar case of social goods. The other polar case is the private good, characterized by perfect nonjointness (or rivalry) and perfect excludability. Ignoring the other forms of market failure just listed, in the case of private goods no intervention is required to achieve efficiency. Figure 12-2 illustrates these two polar cases.¹³ This figure shows a box with combinations of two characteristics: jointness and nonexcludability. Point A represents the polar case of private good, point C the polar case of a pure public good.

However, most social goods fall between the polar extremes. Normally either or both of the nonexcludability and jointness characteristics will be violated to some degree. For example, generally the marginal cost of extending provision to an additional consumer may be low, but not zero. As more and more consumers are added, it is likely that congestion costs will increase until in the limit the good becomes rival. In addition, jointness may be location-specific. Local public goods are public goods where the benefits are spatially limited to a particular area (Eden and McMillan, 1991). Thus one can speak of local, national, and international public goods depending on the area over which jointness exists. Similarly, the excludability characteristic depends on the costs of excluding relative to the demand for the service given the available techniques of exclusion, e.g., exclusion from a little-used bridge is feasible but costly, or scramblers can be used to exclude households from pay television.

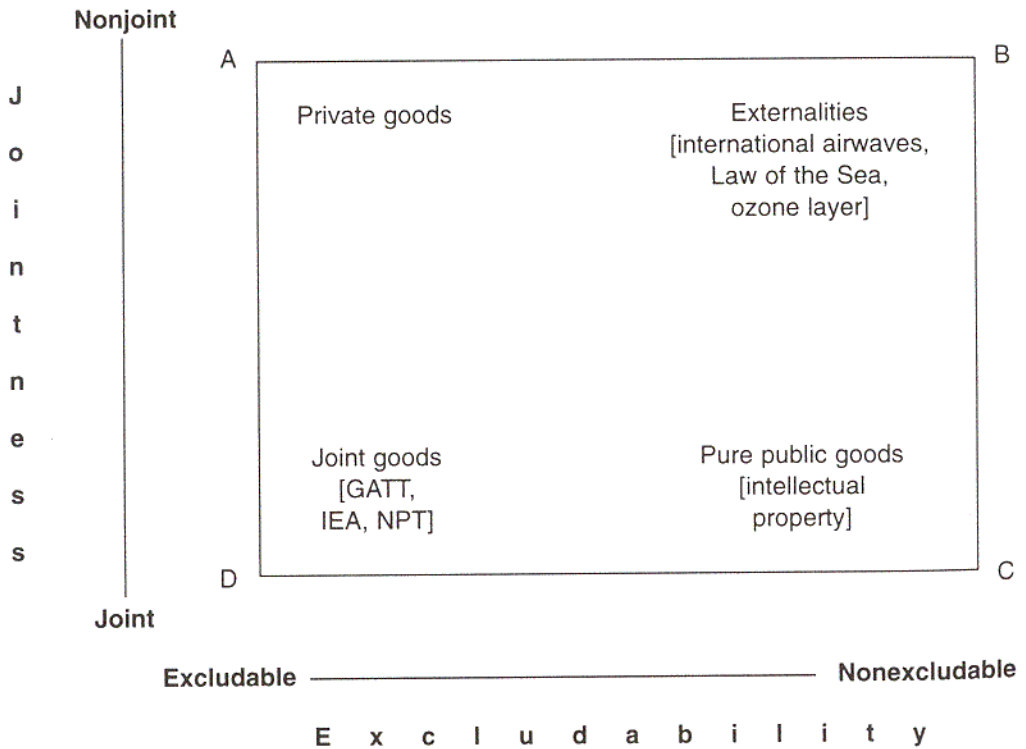


Figure 12-2. *International Social Goods: Excludability and Jointness*

International Joint Goods. Although mixed goods encompass a wide variety of these two characteristics, economists have focused on two particular mixed good cases, determined by their relative shares of the jointness and nonexcludability characteristics: externalities and joint goods. Joint goods are characterized by the jointness and excludability characteristics. Since the benefits from joint goods are excludable through the price mechanism, they can be provided through the private sector, e.g., cable and pay television, movie theatres, recreational facilities. Joint goods, by definition, can be extended or provided to somebody else without raising marginal costs.

When jointness extends to the international level but benefits remain excludable, the optimal club size is international.¹⁴ Such international governance structures can be private (e.g., trade associations such as cartels) or state (e.g., international regimes). Many international economic regimes bear the hallmarks of joint goods. For example, the creation of the International Energy Agency (IEA) emergency oil sharing system in the mid-1970s was intended to dampen speculation in international oil markets in the event of sudden shortfall or disruption in oil supplies. The IEA is an oil con-

sumer's club directed at mitigating the effects of a supply disruption among member oil-consuming, import-dependent states. While nonmembers may have benefitted from reduced oil price instabilities, the primary benefits from this insurance regime accrue to the members (Keohane, 1984: 217-40).

Likewise the GATT system, which has extended trade liberalization, facilitated multilateral consideration of commercial policy issues, and lowered tariff barriers among its members, also represents a kind of international club where the benefits are joint but excludable. GATT rules apply only to its members, and those who are not members are denied the key benefits of membership, e.g., the extension of most-favored-nation trading status. The formation of the GATT was driven by lessons from the 1930s tariff wars (Simmons, 1994); GATT has been called a peace treaty among warring states. Through international cooperation and restraints on noncooperative behavior, the GATT sought to prevent such instabilities from reoccurring (Goldstein, 1993).¹⁵

Similarly, the growing system of preferential trading areas represents the development of joint, but excludable, trade clubs in international political economy. These include the emerging North American free trade area, which is seeing the gradual removal of trade and tariff barriers among the United States, Canada, and Mexico, and Europe 1992, which has witnessed the effective removal of most border controls within the European Union. Even with the creation of a World Trade Organization (WTO) as a result of the successful completion of the Uruguay Round, we may still nevertheless expect to see the formation of "mini-GATTs" as small coalitions of like-minded nations, centered on North America, Europe, and Asia-Pacific, develop their own trade clubs.

The desire to establish clubs is not restricted to the field of international economics and trade relations. It can be argued that in international security certain arms control regimes have also established international joint, but excludable, clubs. The NPT (Nuclear Non-Proliferation Treaty) represents an international club in this sense. It is also a general club insofar as those states that have signed and ratified the treaty will not be denied access to nuclear technology and know-how provided it is put to peaceful purposes and they submit to the safeguard provisions of the IAEA (International Atomic Energy Agency).

International Externalities. Externalities are unintended and uncompensated byproducts arising out of transactions among private agents, households, and/or firms, i.e., the so-called "third-party effects."¹⁶ If private actions yield nonexcludable benefits to third parties for which the transactors cannot

be compensated, we have a positive externality or an external economy. Similarly, if private actions create nonexcludable and uncompensated costs for third parties, we have a negative externality or an external diseconomy.

One example of an international aggregate external economy (or diseconomy, depending on one's views) is the spillover of cable television signals between countries. In the absence of bilateral or international agreements, consumers in the receiving country cannot be forced to pay for such spillovers. For example, Canadian cable television stations have retransmitted signals from American television stations to their Canadian customers without absorbing any of the U.S. programming costs.

Most international pollution problems are negative aggregate externalities or what might be termed "collective social bads."¹⁷ This may represent one of the new and growing areas of demand for regimes. Ocean and air currents and river boundaries do not respect national borders and can carry harmful emissions from sources in one state into another. There are 214 river and lake basins globally that are shared by two or more states, and many of these represent some of the world's most important sources of fresh water, e.g., Great Lakes, Rhine, Amazon, Ganges, and Bramaphutra. At the same time they are used as general dumping grounds for the disposal of untreated sewage, industrial wastes, and agricultural runoffs (e.g., pesticides and fertilizers).

The externality problem is perhaps most severe in the case of common property resources: the "tragedy of the commons." An efficient property rights structure has four characteristics: universality (all resources are privately owned), exclusivity (no spillovers), transferability, and enforceability (Tietenberg, 1984). In the case of most externalities, the market failure is in the exclusivity characteristic. However, for common property resources the universality characteristic is also not met. As a result, these resources tend to be overexploited, their scarcity rent dissipated, and the net benefit from these resources to society competed down to zero.

The creation of the International Telegraph Union in 1932 by merging the International Telegraph Union and the International Radio Telegraph Convention was motivated, in part, by the problems of congestion and overcrowding in the use of the international airwaves (a global commons) (Cowhey, 1990; Krasner, 1991). The third Law of the Sea negotiations also have direct relevance in illustrating the tragedy of the international commons. The proposal for a new Law of the Sea was first made in 1967 by Dr. Arvid Pardo, the Maltese delegate to the United Nations. He urged that the seabed beyond the limits of national jurisdiction be declared "the common heritage of mankind." Ironically, however, much of the subsequent attention and effort in international negotiations had to do with the establishment of

national property rights in the form of a 200-mile exclusive economic zone for coastal states while allowing provision for unimpeded transit through straits and archipelagos (Sebenius, 1984). The Vienna Convention for the Protection of the Ozone Layer (1985) and its related Montreal Protocols (1987) are illustrative of one such approach to an externalities problem that has global consequences.

International Transactions Costs. In a perfectly competitive, private goods world, characterized by perfect certainty, no efficiency failures would occur and therefore there would be no need for market regulation. However, the future is uncertain and perfect futures markets do not exist that allow traders to completely offset such uncertainties. As a result there are several obstacles to transactions-making that generate inefficiencies.

Casson (1982) provides a taxonomy of the various sequential obstacles to making a market: no buyer-seller contact, no knowledge of reciprocal wants, no agreement over price, no confidence that goods correspond to specification, difficulty in exchanging custody of goods, border taxes and regulations on trade, no confidence that restitution will be made for default. The costs incurred in attempts by traders to overcome these obstacles are called transactions costs. Thus transactions costs themselves are not a source of market failure, but reflect inherent structural failures of transactions-making in an uncertain world.

It was the recognition of these costs that led Williamson (1975, 1985, 1986) to propose the hierarchy as a governance method to economize on transactions costs and thus internalize uncertainty as a source of market failure. Teece (1981), Buckley and Casson (1976), Casson (1982), and Rugman (1986) have extended transactions cost economics to explain the existence of transnational corporations in what is now called the theory of internalization. These authors argue that transactions in an uncertain world are characterized by bounded rationality of the players, information impactedness of the goods, and asset specificity of the transactions. Buyers and sellers often have asymmetric information. Where numbers are small, players realize their interdependence and use opportunistic behavior to improve their terms of trade at the expense of their trading partners (Kydd and Snidal, 1995). Thus moral hazard and adverse selection problems are endemic to uncertain markets. By vertically and horizontally integrating, TNCs can reduce uncertainty and opportunistic behavior and thus improve global efficiency. Hierarchies are thus most likely to form where transactions are frequent, small numbers of players are involved, and high-cost fixed assets are involved.¹⁸

Similar arguments have been used to explain the formation of regimes. Keohane (1983) argues that regimes are useful when (a) a clear legal frame-

work establishing liability is missing, (b) the market for information is imperfect, and (c) there are positive transactions costs. He goes on to discuss the issues raised in the previous paragraph and argues that regimes can be used to reduce international transactions costs. Such regimes are of two types: insurance regimes designed to reduce the effects of uncertainty, and control oriented regimes designed to create internal and environmental regularities, i.e., to reduce incentives for opportunistic behavior.

Our notion of transactions costs, based on Casson (1982), focuses on the costs involved in market making under uncertainty. Thus state international governance structures, such as regimes, can function as a way to improve market making. The international trade regime has a transactions cost reducing function. For example, the creation of international standards or harmonization of national standards through the GATT and bilateral treaties can reduce transactions costs. National tax and tariff policies can act as barriers to international trade. Harmonization or reduction of such barriers, increasing their transparency, and the substitution of rule making for managed trade through the GATT all act to reduce transactions costs. The movement to reduce border controls under Europe 1992 is an attempt to reduce interregional transactions costs. The private trade law regime is designed to reduce transactions costs incurred in commodity trade.

Another response to uncertainty is to reduce asymmetric information through the dissemination of information. One can argue that there are elements of an information-sharing regime through the activities of organizations like INTERPOL, UNEP, and UNESCO, which perform useful functions by encouraging the sharing of information globally.

International Noncompetitive Markets. Most international markets are not competitive but rather dominated by small numbers of TNCs and/or state enterprises, e.g., oil, autos, telecommunications equipment, and semiconductors. Hymer (1976) was the first economist to explain the rise of TNCs by a monopoly power argument.¹⁹ He argued that TNCs had firm-specific advantages that could be used to offset the higher costs of producing in foreign markets. These intangible, wholly-owned assets such as knowledge, brand names, and access to capital could be used to generate monopoly rents. Given that most TNCs operate in oligopolist markets, there would be either continual rivalry and strategic behavior, or attempts to cooperatively divide and cartelize the global market. Large TNCs thus can create international market imperfections through monopoly pricing, market segmentation, the erection of barriers to entry, the truncation of subsidiaries, and the exertion of bargaining power over small countries.

In addition, states in the 1980s exacerbated these conflicts through the use of strategic trade policies, the creation of national champions, and the competitive devaluations of domestic currencies. States have in the past formed international cartels, e.g., in uranium, oil, bauxite, and coffee, as methods of shifting the terms of trade in favor of domestic producers. The European Community has so heavily subsidized its agricultural sector that an industry which on comparative advantage grounds should be a net importer is now a large net exporter, as a result setting off a food subsidy war with the United States.

Thus noncompetitive international markets have both economic and political origins. International regimes can be used to reduce and/or control TNCs. For example, the foreign direct investment (FDI) regime includes bilateral FDI treaties designed to ensure national treatment and right of establishment for foreign firms. International tax treaties are designed to reduce TNC tax evasion through tax havens. In addition, there are TNC codes of conduct, albeit voluntary, such as the United Nations code.²⁰

GATT can be seen as a way to control state attempts to use mercantilistic policies to increase their share of world exports. GATT may promote global efficiency by reducing the use of strategic trade policies and discouraging state cartelization of markets. For small countries, GATT has functioned to limit noncooperative behavior by larger members, effectively proscribing certain behaviors and forcing big states to play by the rules. However, derogations from the GATT have limited its effectiveness and induced other governance responses; e.g., the Cairns Group of small exporting nations was formed in response to the EC-U.S. food subsidies war allowed under GATT derogations in agriculture (Gilpin, 1987; Hampson with Hart, 1995; Jackson, 1989).

STRUCTURAL FAILURES: MACROECONOMIC INSTABILITIES

Even if all the conditions for efficient markets were met, there is still no assurance that markets will clear in an aggregate sense, i.e., there may be inherent tendencies in both capitalist and command economies towards systemic market failure. John Maynard Keynes was the first to argue that capitalistic economies could get stuck in an underemployment equilibrium, and since the 1940s most DMEs have made a formal commitment towards providing full employment, stable prices, and economic growth to their citizens. Domestic state governance structures are clearly necessary to achieve these internal domestic goals.²¹

However, domestic macroeconomic policies neither fully insulate economies from external shocks, nor protect neighboring economies from macroeconomic spillovers. The fully autonomous policies practiced in the 1930s, including competitive devaluations, bank panics, and insufficient money creation, were a prime cause of the Great Depression. The IMF and World Bank were formed as parts of the Bretton Woods monetary regime to cushion and control the effects of autonomous macroeconomic policies. As Ruggie argued, under the "compromise of embedded liberalism" inherent in Bretton Woods, nation-states were supposed to pursue Keynesian macroeconomic policies internally without disrupting international stability (Gilpin, 1987; Ruggie, 1983).

The collapse of Bretton Woods has been much studied; however, the international monetary regime that has emerged from it is less well charted. It consists of regional clubs (the EMS and the G-7), unregulated markets (the Eurodollar market), old international organizations (the IMF and World Bank), and the Bank for International Settlements (BIS) which acts as the central bankers' bank, particularly for European banks (Andrews, 1994; Goodman, 1992; Goodman and Pauly, 1993). International monetary coordination through central banks, particularly by the big G-7 members, Japan, West Germany, and the United States, has also played a role in dampening international macroeconomic instabilities (Helleiner, 1994).²²

Whether or not international macroeconomic coordination is necessary is addressed by Cooper (1986). He argues that such coordination is useful because of time lags between the choice of a policy direction and its effects on the system, and the iterative nature of the policy process as it moves from one equilibrium to another. Given these problems, if disturbances continually disrupt the global economy, the time between equilibria will be lengthened and the amplitudes of the business cycle higher than necessary. As a result, international state coordination of macropolicies can reduce these time delay costs. However, Cooper argues that a macroeconomic stabilization regime built on policy cooperation does not exist and will probably be more difficult to form than other regimes. This is due to the lack of general consensual knowledge among academic and policy economists within and across countries.²³

Recent cooperation in financial markets may be creating an international financial regime. Underhill (1990) has argued that states are making new international regulations and reregulating financial and credit markets. The European Union is introducing new banking, insurance, and credit regulations designed to harmonize domestic regulation of banking and financial services. The BIS has introduced capital adequacy requirements for its

members that are designed to ensure national banks have sufficient equity capital to act as precautionary balances against bank panics. Underhill notes that part of these changes are designed to harmonize existing macroeconomic regulations; part are designed to reregulate previously unregulated financial markets. In each case the purpose is to reduce possible international macroeconomic instabilities and international transaction costs.

STRUCTURAL FAILURES: DISTRIBUTIONAL CONFLICTS

We argue that nation-states are rational actors with national interests. These interests are reflected in each state's social welfare function which records its goals and their rankings. Based on our previous analysis, states have a four-fold objective function: one that includes efficiency, equity, stability, and security. Even in an efficient and stable economy, states must be concerned with distributional conflicts, both internal (rich versus poor citizens) and between countries (DMEs [Developed Market Economies] versus LDCs [Less Developed Countries]). Different states will give varying weights to the variables in their preference functions, and these weights can change over time depending upon history, each nation-state's position in the global economy, and internal political structures (Cowhey, 1993a; Cowhey, 1993b).

It is legitimate to argue that states will be concerned with international income redistribution. Thus the international aid regime through, for example, foreign aid programs under the World Bank, LDC trade preferences in the GATT, and the Lomé conventions, can be seen as expressions of state concerns with income distribution. The LDC debt regime through the World Bank, the Paris Club, and the Baker and Brady plans can be seen as attempts to deal with LDC developmental needs, as well as managing the potential instabilities LDC defaults could generate.²⁴

STRUCTURAL FAILURES: SECURITY DILEMMAS

The anarchic structure of the international system may also create a political demand for international regimes. This has typically been referred to by international relations scholars as the "security dilemma," rooted in the absence of a supranational authority in international politics and the fact that individual states are forced to provide for their own survival and welfare (Jervis, 1978, 1983).²⁵ Moreover, in the process of providing for their own security through various military measures, states may set in motion an es-

calatory dynamic as they seek not only to provide for their own security, but also to achieve a relative advantage over the military capabilities of other states (Solingen, 1994). This can lead to arms races and technological competition which can exacerbate political tensions and further heighten security problems (Downs et al., 1986).

A desire to curb this dilemma through the creation of arms control regimes and confidence-building measures represents one kind of international governance structural response to the security dilemmas of nation-states in an anarchical system. However, it is important to note that these regimes represent only one governance option in a variety of possible responses (Price, 1995). The escalatory dynamics of the security dilemma "can be checked by unilateral measures designed to reduce critical uncertainties for the other side regarding its own actions" (George, 1988: 671). Political concerts (e.g., Concert of Europe), balances of power, and proposals for world government represent other alternatives to the pathologies associated with the security dilemma (Jervis, 1983; Kupchan and Kupchan, 1991).

The security dilemma may also not be the only reason why arms control regimes emerge. The demand for these regimes may also be affected by a variety of contingent factors or constraints such as time urgency, fiscal constraints, presidential level leadership, etc., as noted by George (1988), but these represent second-level as opposed to first-level or structurally induced causes of a security regime. Arms agreements like SALT I and II, the INF Treaty, the Seabed Arms Treaty, the Nuclear Accidents Agreement, the Incidents at Sea Agreement, etc., can all be viewed as regime oriented, international governance responses to the political failures of an anarchical world.²⁶

ISSUES AND IMPLICATIONS

In summary, the preceding discussion has developed a taxonomy of regimes as one form of state IGS designed to respond to four international politico-market failures: efficiency failures, distributional conflicts, macroeconomic instabilities, and security dilemmas. A number of important issues and implications follow from the preceding argument. These will be discussed in the following order:

- The role of hegemony versus clubs in the creation of international regimes.
- The role of search costs, uncertainty, and information in regime creation when N is large.

- The relationship between structural factors (or variables) and learning and cognition in regime formation.
- The treatment of contingent (or nonsystemic, nonstructural) factors in explanations about the origins of international regimes.

Before turning to these issues, two caveats are in order. First, in stressing the differential impact of markets and states as structural causes of international regimes, we do not wish to fall prey to a kind of economic determinism in drawing attention to the role of these factors in regime formation. As noted in the introduction, these represent first-level causal variables in regime formation. We argue the dynamics of the negotiation process and other proximate variables are of second-level order of importance. In the absence of these underlying structural conditions, it is hard to explain why regimes form; regimes are not "spontaneous" or "randomly generated" political orders (as suggested by some), but represent formal institutional responses to specific allocational, distributional, stabilization, and/or security problems in international relations. At the same time, it is important to realize that regimes represent only one kind of governance response to the kinds of market and political failures noted, and that regimes may not necessarily be optimal in terms of their efficiency, resource allocation, security, or distributional impacts.

Second, we wish to emphasize that the categories of politico-market failure as noted represent an idealized model of the structural conditions under which international regimes may form, as illustrated in Table 12-1. In reality, more than one of the preceding conditions may be reflected in the creation of a particular regime. Thus, typically, international regimes may be created to address a variety of political and market failures including social goods, transactions costs, distributional considerations, etc.

CLUBS ARE TRUMP: HEGEMONS VERSUS CLUBS IN REGIME CREATION

Keohane (1984) and Snidal (1985) have argued forcefully (and we believe correctly) that hegemons are not necessary to the maintenance and continuation of international regimes. They have challenged the theory of "hegemonic stability" on the ground that it fails to explain the lags between changes in power structures and changes in international regimes. They attribute the persistence of regimes in the presence of declining hegemons to the fact that regimes provide public goods and also lower transaction costs between their members. Thus it is in the rational self-interest of states to continue to abide by regimes even if there is no hegemon to enforce the rules.

Table 12-1. International Regimes and Structural Failures

Structural failures	Examples of international regimes
<i>Efficiency Failures</i>	
1. <i>Social Goods</i>	
a. Pure public goods	<i>Intellectual property regime</i> WIPO, bilateral patent treaties
b. Joint goods	<i>Trade regime:</i> GATT/WTO, preferred trading blocs, mini-GATTs <i>Nuclear regime:</i> NPT
c. Externalities	<i>Global commons regimes:</i> Law of the Sea, ozone layer, international airwaves
2. <i>Transactions costs</i>	
	<i>Trade regimes:</i> Europe 1992, GATT/WTO <i>Standards regimes:</i> private trade laws, GATT/WTO standards <i>Information-sharing regimes:</i> UNEP, UNESCO, INTERPOL
3. <i>Noncompetitive markets</i>	
	<i>Foreign investment regime:</i> bilateral investment treaties, TNC codes of conduct <i>Oil regime</i> Seven Sisters, OPEC, IEA
<i>Macroeconomic Instabilities</i>	
	<i>Monetary regime:</i> IMF, World Bank, BIS, G-7, EMS
<i>Distributional Conflicts</i>	
	<i>Trade regime:</i> UNCTAD, NIEO, GATT preferences to LDCs <i>LDC debt regime:</i> World Bank, IMF, Baker/Brady plans, Paris Club
<i>Security Concerns</i>	
	<i>Arms control regime</i> SALT I, SALT II, INF, NPT

Does the same argument apply to the creation of new regimes in the absence of a hegemon that is willing to provide international social goods? The question is of more than passing theoretical interest. Many analysts have pointed to the decline of the United States as the world's hegemonic leader. Although the exact magnitude of that decline is a matter of lively debate, most are in agreement that the 1950s and 1960s represented an exceptional period unlikely to be repeated in the near future (Kennedy, 1987, 1990; Nau, 1990; Nye, 1990).

Are hegemons necessary to the creation of international regimes? Our answer to this question is a qualified no. As the preceding discussion about the different sources of and responses to various kinds of politico-market failure suggests, if social preferences are sufficiently homogeneous among a group of actors (i.e., convergent), there may well be a shared desire or demand for regimes. But we argue that this demand usually goes beyond the desire to reduce uncertainty (which is ubiquitous) to include other disequilibria such as monopoly power, inequitable income distributions, macroinstabilities, etc. If small numbers exist, even in the absence of a hegemon, we argue that it is possible to develop governance structures that correct for international politico-market failures. This is true in the case of social goods and it is also likely to apply to other cases.

In any regime-building exercise – in any of our four categories of regimes – as the number of parties and interests increases (i.e., where N is large), the number of potential free riders also goes up and, in the absence of a hegemon, cooperation becomes increasingly difficult (Hardin, 1982: 38–49; Kahler, 1993). In addition to the free rider problem, rising N also raises the probability of increasingly divergent social preferences among the potential members of a new regime, thus posing an additional obstacle to international cooperation and negotiation, e.g., the difficulties of reaching agreement in the Uruguay Round of the GATT as noted. As N increases, the likelihood of different preference orderings among state actors grows, with some states favoring efficiency over equity considerations, others security over macroeconomic stability, etc.

Due to these sorts of structurally induced cleavages, cooperation in large numbers is difficult, and international regimes that are comprehensive or inclusive in terms of their membership will be difficult to form. Instead, the way to deal with diversity when faced with the problem of large numbers is through the club approach, i.e., through the coalition of small numbers of "like-minded" states, banding together to correct for structural politicomarket failures, share the benefits from exploiting economies of scale and the costs of providing social goods, and/or satisfy a taste for association with other like-minded states. To the extent that such benefits are

fully or mostly excludable, clubs can capture the full benefits of such cooperation internally. Unlike Kahler who argues that minilateral leadership by great powers is the solution to achieving cooperation in large numbers, we argue that large groups have a natural tendency to break up into smaller groups as members enjoying similar social preference functions band together (Kahler, 1993). Such clubs provide rewards to their members in the form of direct benefits as well as enforceable penalties for noncompliant or recalcitrant behavior even though their membership may expand later on in response to political pressures from within and from without from nonmembers who wish to join the club. Clubs therefore should be viewed as dynamic institutions whose membership may well change over time.

As noted, there is some evidence that the club approach maybe the hallmark of the new international political economy, in addition to characterizing the approach increasingly being adopted to address external diseconomies in the areas of transboundary air and water pollution. The growing emergence of trading blocs in Europe, North America, and the Pacific is reflective of a club approach to the problems of coordinating divergent preferences and interests in international trade, investment, and even monetary relations (Sandholtz, 1993). The club approach has also been taken to address the problems of ozone depletion and acid rain, and may even come to characterize international approaches toward the complex problems of global warming (Hampson, 1989–90; Hampson, 1995). Similarly, in international security, regional (as distinct from global or transregional) approaches have been the hallmark of arms control and confidence-building regimes in spite of calls by some to expand regimes like the confidence-building regime in the OSCE (Organization for Security and Cooperation in Europe) to regions like the Pacific.

What may be a tendency in international relations to form coalitions of the "like-minded" is symptomatic of the structural difficulties associated with the formation of regimes which can effectively accommodate divergent state preferences toward regime goals. For example, bridging the acute imbalances in economic and political power between the world's poor and rich in international economic and environmental regimes may require distributional mechanisms and income reallocations that richer states are not prepared to accept.

Moreover, with small numbers, strategic behavior may make it difficult to form cooperative alliances since trust is a necessary input into such ventures. As Buckley and Casson (1988) have shown, all cooperative ventures are subject to strong and weak cheating pressures and ventures that start without trust and goodwill are likely to fail. Hence many international regimes may fail because the necessary consensus building and cooperative

will be nonexistent. The failure to form an international debtors' club and the weakness of UNCTAD may also reflect such difficulties within LDCs where preferences and situations differ considerably. Given that there is an optimal club size, current groups such as the Group of 7 may be too large and disparate to act effectively (Mahler, 1984; Rothstein, 1984a, 1984b). In addition, inexpedient bargaining strategies, bad tactics, poor timing, and inadequate preparation may also frustrate regime formation.

Whether club approaches to international regime-building and cooperation are inherently good or bad is obviously a matter for debate and discussion, and one that we will not engage in here other than to point out that clubs are not necessarily bad things if the alternative is no cooperation at all (or, worse still, a growing spiral of mutual distrust, hostility, and conflict). As we have shown, international regimes are formed both for welfare-improving and welfare reducing reasons. Attempts to offset allocative failures such as international transactions costs and social goods are inherently welfare-improving; however, attempts to create order through cartelization and managed trade are global welfare reducing. For example, Europe 1992 has both effects: Border controls are reduced, but nonclub members may face more discrimination.

The "open club," which leaves room for the inclusion of additional members once resource allocation and distributional concerns are settled, may allow for some flexibility in addressing these sorts of conflicts. For example, the London agreement setting up a fund for developing countries to substitute ozone-friendly agents in industrial and consumer uses represents just such an approach in current efforts to get developing countries to sign on to the Montreal protocols of the Vienna Convention for the Protection of the Ozone Layer. Open clubs offer the advantage of allowing "voting with one's feet," i.e., a variety of international club regimes with varying memberships allow the possibility for states to choose regime clubs that best suit their interests and needs. As Tiebout (1956) first recognized some years ago, regional clubs may be more efficient and equitable than multilateral clubs. This has implications for the current debate over the relative merits of regional trading blocs as substitutes for the GATT.²⁷

There is an obvious tension in any club agreement between the optimal size of the club and the marginal cost savings for existing members. Adding members may have other consequences too (e.g., inducing changes in distributional and allocative relations) which may be deemed undesirable by current members. Some of these tensions are evident in current concerns about the implications of a united Germany within the EU, particularly among the smaller states of the Community who worry openly about the political and economic clout of the new Germany and the diversion of investment funds away from the Community's poorer members (Spain, Portugal).

SEARCH COSTS, UNCERTAINTY, AND INFORMATION-SHARING REGIMES

A second implication that follows from our discussion is that the creation of international information-sharing regimes, which allow parties to develop, share, and distribute new information in a timely manner, may be a necessary precondition for the subsequent creation and formation of regulatory or stabilization regimes. The reason for this is related to numbers in regime formation and issue complexity and density. As the number of parties involved in the negotiation and construction of new international regimes goes up, so too do search costs and uncertainty. This is because each party must have some understanding about the interests and concerns (or value preferences) of the other parties to the negotiation, which is complicated by large numbers.

Moreover, as noted by Putnam and others, international negotiations involve two-level games between a "domestic" and an "international" constituency. The creation of "win-win" sets (i.e., intersecting points on the contract curve) in international negotiation involves some understanding of each other actor's domestic constraints and freedom of maneuver, in addition to one's own (Putnam, 1988).

The large number of domestic and international actors involved either directly or indirectly in most international negotiations is further complicated by issue density and complexity. Whether the problem is one of ozone depletion or intellectual property, these are enormously complex problems not only in terms of their technical and scientific implications but also in the number of social and economic interests they affect.

The science of some issues has given rise to what Haas (1989) has called "epistemic communities," i.e., communities of technical specialists or experts who are conversant with the scientific or technical nature of the problem and who lobby their governments to take action on these issues. However, there are often major asymmetries in knowledge on any given issue, and state capabilities may vary substantially. Furthermore, experts in one country may not enjoy the same sort of access to political elites and policy makers that they do in another. In these circumstances there may be a greater need to share information and resources and to ensure that policy elites and diplomatic negotiators are on the same point on the learning curve (Young and Oshrenko, 1995).

A different kind of problem has to do with the reduction of scientific and technical uncertainties before deciding what is the relevant course of action on any given problem. Problems like global warming, toxic pollution, Arctic haze, etc., involve major uncertainties as to their causes, conse-

quences, magnitude of effects, and social, economic, and biological impacts. These kinds of uncertainties will be reduced only through joint scientific research and cooperative undertakings involving experts from many countries. The creation of an international consensus among the experts as to the exact nature and magnitude of the problem may be a necessary precondition for subsequent policy intervention because policy makers will be reluctant to make tough policy choices when faced with high social, economic, and political costs of adjustment unless they are all convinced the problems are real and the costs of inaction outweigh the costs of action. This is akin to Cooper's notion about the requirements for "consensual knowledge" in macroeconomic policy coordination between states (Cooper, 1986).

These informational asymmetries across (and within) states, and the uncertainties associated with problems which are both complex and often nested within other problems (implying issue density), may require the establishment of institutionalized mechanisms at the international level for fostering research and sharing information prior to the formal creation of a regulatory regime. Likewise coordinated instruments for sharing information among parties who may not necessarily share interests may also be required. Thus much of the early efforts in regime building may be first directed at getting a handle on the problem. In this case information-sharing regimes can help reduce uncertainty in both the short run and the long run.²⁸

STRUCTURES, COGNITION, AND LEARNING

The structural conditions just identified represent ideal types. Typically state actors will be in the position of determining whether or not they want to negotiate new international regimes. The possibilities will depend, *ceteris paribus*, on their preference functions and the manner in which they address the trade-offs between equity, efficiency, stability, and security. Each state is also likely to address these trade-offs somewhat differently because of domestic politics and other situational factors. We believe that the factors that determine how states define their regime goals is a rich area for future research and investigation. Although we only briefly sketch them here, among the relevant factors in any such examination are the following.

Positional Hierarchy. Positional hierarchy, i.e., how the political elites of any given country perceive their country's overall position in the global order, can influence willingness and ability to form international regimes. It may be the case that poor states are likely to judge membership in new regimes in terms of their distributional consequences; conversely, states that

see themselves as being relatively well situated may be more concerned about efficiency and stabilization. While the prevailing view argues that hegemony is necessary to regime formation, in spite of their relative weak positioning, small states may be able to act as leaders and innovators in the formation of regimes.

Intrastate Coalitions and Bargaining. Newly created international regimes will typically have allocational and distributional consequences for affected domestic constituencies and interests within states (i.e., there are bound to be winners and losers). This point will not be lost on affected parties in the negotiation and bargaining processes associated with the establishment of new regimes. Domestic coalitions, intrastate bargaining processes, and interest group behavior will affect a state's negotiating position in international forums and the way it assesses efficiency-equity-stability-security trade-offs. As domestic coalitions shift over time, these trade-offs may well be assessed differently (Putnam, 1988).

Lessons of History and Learning. The roles of cognitive images and beliefs in decision making have been amply documented by students of foreign policy decision making, crisis management, and cognitive psychology (Jervis, 1983; Jervis et al., 1985; Larson, 1985; Neustadt and May, 1986). There are sound reasons for believing that many of these same factors will influence decision makers' values, beliefs, and attitudes towards new international regimes. Unfavorable experiences at the negotiating table or with the past performance of other regimes are likely to color preferences and predispositions in new exercises at regime creation. For example, it is argued by some that the perceived failure of the NIEO (new international economic order) in UNCTAD in the 1970s has made many LDCs skeptical about the first world's objectives in current efforts to combat the international drug trade, international terrorism, and environmental problems – the so-called “new” security agenda – through new regimes (Pratt, 1990; Runnalls, 1989).

Cognitive variables including ideas and perceptions based on historical experience are therefore likely to exert an important independent effect on new efforts at regime creation (Goldstein and Keohane, 1993). Although these factors do not clearly fall within the domain of “structural” conditions, they are clearly linked at the level of domestic politics and perceptions. The relationship between these two clusters of variables is obviously a dynamic one that merits close examination.

It is also important to address the issue of “learning” in the broader sense as discussed by Haas (1983, 1990). That is, how do certain problems

come to be viewed as international problems that can no longer be ignored or simply dismissed? How do perceptions about market or politically induced failures form? What role do genetics, physics, etc. play in galvanizing public consciousness that there is a problem warranting political attention? Haas suggests that cybernetic principles can be used to discover these identity relationships and that the "organization, storage, and diffusion of information" may be crucial to the formation of particular mind sets. The ability of organizations to learn is also a fruitful area because, as Haas notes, "actor interests themselves may change in response to new knowledge; organizations may autonomously feed the process of change by the information and ideas they are able to mobilize" (1983: 57).

THE ROLE OF CONTINGENCY IN REGIME FORMATION

Some observers, notably Young (1989a: 107–90, 193–236), argue that certain factors like political leadership, the presence (or absence) of a crisis, and other aspects of the actual negotiating process may be important to the creation of international regimes. We would argue that these variables should be treated as stochastic or nonergodic elements insofar as their influence upon outcomes reflects the dominance of historically decisive, contingency dependent elements rather than systematic forces. David (1985) labels these "QWERTY factors" after the awkward layout of the typewriter keyboard that he points out was the product of a unique set of historical "happenings" rather than a socially optimal design.

Crises should also be treated as contingent events. Almost by definition they represent a class of uncontrollable events (if they were controllable then they could be prevented), but their specific role in regime formation obviously depends upon close scrutiny of the circumstances of the crisis itself and its subsequent consequences for the formation of a particular regime. We believe that the role of contingency in any theoretically-based, predictive model of regime causation should not be ignored and our preceding discussion about structural causes clearly represents only part of the story. Deductive, structurally-based explanations therefore must be complemented by inductive, historical analysis in order to understand fully why particular regimes have formed. However, path analysis and the uncovering of the historical sequence of events that led to a regime's creation requires more than just casual narrative.

In summary, we argue that structural causes are of first-level importance whereas contingency factors are only of second-level importance to the formation of international regimes. Since regimes are the results of willful

human actions and not accidents of nature, their rise requires a close examination of underlying conditions (or perceived conditions) that make them necessary, even though proximate factors may first appear dominant.

CONCLUSIONS

The purpose of this chapter was to set out a taxonomy of underlying, structural factors that influence the formation of international regimes. We first developed a theory of state and/or firm governance structures in response to politico-market failures. We then extended this theory to the international level, and situated regimes as an intermediate form of state international governance structure, run by states in order to correct for various forms of international system failure. This chapter has outlined four structural failures: efficiency failures, distributional conflicts, macroeconomic instabilities, and security dilemmas.

In so constructing regimes as an intermediate form of state governance structure, we explicitly defined regimes as *state-run* governance structures: i.e., we argued that privately-run structures are not regimes. Second, we argued that international regimes are one of many governance responses to international politico-market failures, not necessarily the most likely to emerge. In some sense there are alternative substitutes for regimes – which may involve only firms and not states – and the choice of governance form depends on the underlying structural causes of system failure. Third, we argued that regimes do matter since international governance structures can affect outcomes. However, according to our taxonomy, regimes are not Groatian, i.e., they do not permeate international life, but are only one response among many to market failures. Last, we argued that governance structures, including regimes, in their management of interdependencies due to politico-market failures, may either enhance or reduce global welfare.

Our theory thus encompasses and clarifies many of the existing theories of international regimes found in the literature. In particular, it clarifies the distinction between the structural causes and the proximate factors that generate regimes. We have tried to relate the importance of these structural-functional variables within a broader, sequential understanding of regime formation. Our model has drawn from several different intellectual and theoretical traditions: public finance, transactions cost economics, international business, international relations theory, and regime theory. Although this construct may seem eclectic, we argue that there are systematic linkages that clearly argue in favor of a transtheoretic approach to the rise of regimes.

Lastly, we note that it may be necessary to redefine the term "regime" in the light of our analysis. We argue that regimes are more than principles, norms, rules, and procedures around which actors' expectations converge. Regimes generally take the form of international clubs whose members enjoy certain privileges as well as incurring specific rights and obligations. In international affairs clubs are trump!

ENDNOTES

1. Regimes are usually defined as "sets of principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations" (Krasner, 1983:2). On this debate, in addition to Krasner, see Haggard and Simons (1987), Keeley (1990), Strange (1988), and Young (1986, 1989a, 1989b).
2. The market failure approach to the functions of government was first developed by Musgrave (1959). It is now a recognized part of general public finance theory. Straightforward treatments of the various categories of market and political failures can be found in Boadway and Wildasin (1984), Brown and Jackson (1986), Musgrave, Musgrave, and Bird (1987), Rosen (1988), Stiglitz (1986). More advanced treatments of this subject can be found in Atkinson and Stiglitz (1980), Boadway and Bruce (1984), Cornes and Sandler (1986), Starrett (1988), and Tresch (1981). A useful compendium of readings on market failure is Cowan (1988).
3. This three-fold characterization of the functions of government was first developed by Musgrave (1959) in his multiple theory of the public household. See Chapters 1 through 3, pp. 3-57.
4. The strand of the international business literature which is necessary for our approach is the application of transactions cost economics to the theory of the multinational enterprise, i.e., the so-called "internalization theory." See Buckley and Casson (1976), Casson (1982), Rugman (1986), and Teece (1981).
5. Schneiberg and Hollingsworth (1988) argue that countries with strong antitrust laws, such as the United States, discourage the formation of trusts and cartels and thus tend to encourage their replacement with oligopolies and integrated firms. States can choose to substitute government production and provision (i.e., replace firm governance structures with state ones). Each country therefore chooses its governance structures as responses to domestic interdependencies among state and nonstate actors.
6. See Schneiberg and Hollingsworth (1988) for more detail on the anticompetitive use of trade associations as a governance structure. This is their major criticism of the Williamson transactions cost school, i.e., the implication that firm governance structures must be efficiency improving. Note the relation to one common criticism of regime theory.
7. Teece (1981) extended Williamson's transactions cost approach to analyze transnational corporations. This approach, now called the internalization approach, argues that TNCs are faced with transactions costs in intermediate

product, capital, and technology markets. By vertically and horizontally integrating, firms can internalize or arbitrage these transactions costs. Hence, this approach implies that TNCs are efficiency improving.

8. On the choice between TNCs and cartels, see Casson (1985).
9. Note that international regimes can vary considerably within themselves as an IGS in terms of their control characteristics. Keohane (1983) notes that regimes can be either for control or insurance purposes with insurance regimes focusing on coping with uncertainties rather than controlling members' behavior. Our definition of control has to do with control of the market through managing the interdependencies among state and/or nonstate actors that are vertically and horizontally interlinked. Control of members' behavior is one possible method of managing interdependencies; another is reduction of uncertainties. Hence our definition of control includes both of Keohane's regime types.
10. Most theories of regimes have focused on the public goods and/or transactions costs arguments. See Keohane (1984). Given that the definitions used in the literature have often been somewhat imprecise and confusing, in this next section we attempt to be explicit about the links between politico-market failures and the regimes they generate.
11. See endnote 2 for readings dealing with social goods.
12. On knowledge as a public good and the motivation for using hierarchies see Johnson (1970). See also Eden (1988).
13. This figure is based on one in Eden and McMillan (1991).
14. Club theory was developed by Buchanan (1965). A fuller treatment can be found in Buchanan (1968). A recent treatment is Cornes and Sandler (1986). A shorter review can be found in Boadway and Wildasin (1984).
15. The seminal chapter is Coase (1960). Good treatments of the externality literature can be found in Boadway and Wildasin (1984), Cornes and Sandler (1986), and Tresch (1981).
16. For good treatments of the literature on the economics of environmental externalities see Hartwick and Olewiler (1986) and Tietenberg (1984).
17. This analysis has been extended by Buckley and Casson (1988) to explain the rise of international equity joint ventures.
18. For a later, more radical view see Hymer (1975).
19. See the United Nations (1988) for a detailed discussion of the current regulations of foreign direct investment.
20. For a discussion of the stabilization function of government see Musgrave, Musgrave, and Bird (1987).
21. See Buiters and Marston (1986) on macroeconomic coordination.
22. See, however, Webb (1990). Webb argues that an international macroadjustment regime exists that consists of trade and capital controls, exchange rates, international financing for payments imbalances, and monetary and fiscal policies. This regime definition encompasses several of the regimes we have discussed above (i.e., the regimes are nested in a broader macroregime), but ignores the difficulties noted by Cooper in terms of the monetary regime. On the "nesting" of regimes within one another, see Keohane (1984: 90–91) and Aggarwal (1985).
23. See, for example, Crane (1984).

24. The responses of states to international anarchy are the subject of Oye (1986) and Axelrod and Keohane (1986).
25. For a discussion of partial security regimes see George, Farley, and Dallin (1988) and Carnesale and Haas (1987).
26. See Gilpin (1987), Chapter 5, for a review of the GATT and its problems. A detailed analysis can be found in Jackson (1989). Also see Finlayson and Zachar (1983).
27. It is interesting to note, for example, that much of the recent effort and energy within UNEP's (United Nations Environment Programme) Intergovernmental Panel on Climate Change has been directed at these two objectives; it has struck three panels involving a wide range of participants from member countries that are examining the science and modeling, social and economic impacts, and policy implications of global warming.
28. Higgott (1991) argues this with respect to the Cairns group in agricultural negotiations at the Uruguay Round.

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