NBER WORKING PAPER SERIES

INTERNATIONAL COORDINATION OF TRADE POLICY

J. David Richardson

Working Paper No. 2293

NATIONAL BUREAU OF ECONOMIC RESEARCH 1050 Massachusetts Avenue Cambridge, MA 02138 June 1987

This paper has benefitted immeasurably from the detailed comments of Robert E. Baldwin and Geoffrey Carliner on an earlier draft. It was supported as part of a Ford Foundation project on International Coordination of Economic Policy. The research reported here is part of the NBER's research program in International Studies. Any opinions expressed are those of the author and not those of the National Bureau of Economic Research.

NBER Working Paper #2293 June 1987

International Coordination of Trade Policy

ABSTRACT

The General Agreement on Tariffs and Trade (GATT) is a coordination compact. Tariff bindings illustrate a mechanism for making commitments credible. Reciprocity illustrates a means for redistributing cooperative gains. The Most-Favored-Nation (MFN) principle illustrates an attempt to keep coordination "virtuous" (cooperative) rather than "vicious" (collusive).

Yet international trade policy coordination has clearly become more difficult. The postwar hegemonic environment has evolved into a more general strategic environment with several influential governments and blocs. Such coalitions are a natural evolutionary development, yet one that inexorably undermines MFN. Economic developments make a country's comparative advantage increasingly sensitive to sectoral predation by others, especially through subsidies and performance requirements aimed at mobile multinational firms, which are themselves internationally coordinated. Immobile workers and others correspondingly bear the burdens of sharper adjustments, and look to government to turn its trade policy narrowly inward in order to ease their load. Such "domestication" of trade policy is the antithesis of international coordination, and runs the risk of creating a strategic paralysis of recurring unproductivity.

What changes might restore the liberalizing impetus of trade policy coordination? Several are considered in the paper. One is extension of the "Codes" approach to multilateral negotiations under the GATT, especially to Subsidies and Safeguards.

Many reflections in the paper are framed in categories from recent economic thinking about policy coordination in "strategic" environments -- those with small numbers of self-consciously interdependent agents. The paper argues that these are the appropriate environments in which to analyze international coordination of trade policy.

J. David Richardson Department of Economics University of Wisconsin, Madison Madison, Wisconsin 53706 (608) 263-3867/3876

CONTENTS

INT	FROD	JCTION AND OVERVIEW	1
I.		STWAR TRADE POLICY COORDINATION IN STRATEGIC PERSPECTIVE	4
	Α.	Introduction	4
	в.	Retrospective Insights from a Simple Structure	6
		(1) Coordination Compacts (2) Common Objectives (3) Common Structural Understanding	10 12 14
	c.	Deeper Dimensions of Postwar Trade Policy Coordination	16
		 (1) Scope (2) Virtue (3) Instrument (4) Motive Force 	16 18 22 23
II.		NGING ENVIRONMENTS AND PROSPECTS OR COORDINATION OF TRADE POLICY	25
	Α.	Introduction	25
	Β.	Shifts in the Policy Environment	27
		(1) Relative National Strengths(2) New Instruments, Institutions, and Principles	27 36
		(a) Administered Intervention (b) Minilateralism (c) GATT Codes	36 39 43
	c.	Shifts in the Economic Environment	45
		(1) Mobile Multinational Firms (2) Adjustment	45 52

REFERENCES

Page

INTERNATIONAL COORDINATION OF TRADE POLICY

J. David Richardson

INTRODUCTION AND OVERVIEW

The post-World-War II record of sovereign governments coordinating their international trade policies is really quite impressive. Yet it seems recently to have lost the luster that characterized its early life. Some recent initiatives have seemed to cartelize rather than liberalize. Others have failed to achieve coordination of any kind, dissolving in disarray. Fears cannot easily be calmed that the conventions and structures of postwar trade policy coordination are crumbling. Open hostility, military metaphors, and an air of frontier vigilantism are today quite common in trade policy discussions.

International trade policy coordination has clearly become more difficult. The postwar hegemonic environment has evolved into a more general strategic environment with several influential governments and blocs. New patterns of initiative and response have been slow to develop. New temptations have arisen for governments to abandon seemingly outdated conventions of cooperation, causing the system to retreat toward uncoordinated hostility. The growth of administered protection, aggressive reciprocity, and selectivity all illustrate.

International trade policy coordination is further complicated by economic developments. Some make a country's comparative advantage increasingly sensitive to sectoral predation by others, especially through subsidies and performance requirements aimed at multinational firms. Workers and others correspondingly bear the burdens of sharper adjustments, and look to government

to turn its trade policy narrowly inward in order to ease their load. Such "domestication" of trade policy is the antithesis of international coordination.

What changes might restore the liberalizing impetus of postwar trade policy coordination at its best? Several are considered in the paper. One is extension of the "Codes" approach to multilateral negotiations under the General Agreement on Tariffs and Trade (GATT). The Subsidies Code in particular seems ripe for refining, and ideas for development of a Safeguards Code are assessed. Standing GATT committees, with representative membership and regular meetings are discussed, as are several ways that their independent leadership might be enhanced. A case is made that European and Japanese capacity to <u>initiate</u> coordinated liberalization is much greater and more promising than is generally acknowledged, as is that of even quite small countries in "minilateral" settings. Discreet preferential coordination is viewed as a way to rebuild trust and to write new rules and establish new precedents in administrative trade policy -- rules and precedents that could eventually come to be accepted even by currently combattive countries.

Many reflections in the paper are framed in categories from recent economic thinking about policy coordination in "strategic" environments -- those with small numbers of self-consciously interdependent agents. I am hopeful that commentators on the paper will provide balancing admixtures of complementary perspective, institutional detail (e.g., beyond the GATT), and operational feasibility. They will no doubt also provide important insight on other tradepolicy issues, not all of which concern coordination. Readers with limited interest in an introduction to "strategic" perspectives should find it easy to skim Part I and read Part II with more care.

At the cost of lengthening the discourse, I have tried to make it minimally "acronomyous." Thus I have resisted adopting IPC (eye-pick), ITPC (it-pick),

and NITPC (nit-pick) as shorthand for international (trade) policy coordination or lack thereof. At the cost of exposing my ignorance, I have tried to draw a few insights from game theory, political science, history, and law. The nature of the topic seemed to compel it. I suspect I will be thanked for the first, and hope I can be forgiven for the second.

I. POSTWAR TRADE POLICY COORDINATION IN STRATEGIC PERSPECTIVE

A. Introduction

It seems quite natural to address a paper on coordination to international trade policy. It is a border policy that discriminates between foreign and domestic residents in goods and services transactions, thus always involving at least two countries and governments. There are many varieties. Free trade is properly understood as the absence of any domestic/foreign discrimination (not the absence of government regulation), and national treatment as the absence of any added discrimination once border barriers have been "cleared." Mostfavored-nation (MFN) treatment is the absence of discrimination among foreign residents of differing nationalities, and tariffs are discriminatory taxes.

Because trade policy always involves choices concerning international discrimination, it is fitting to ask about policy coordination -- or its lack. Rules, aggression, unfair treatment, and similar terms all have natural use-fulness in discussing trade policy.

At first blush, monetary and fiscal policy seem different from trade policy; they are really not. Monetary, fiscal, and trade policies all have discriminatory border effects that are quite similar. Monetary structure is a quintessential border policy, delineating regions of differing legal tender. Many taxes fall on residents of one country but not others. The ratio of government to private purchases can affect an economy's internal price ratio of domestic to foreign goods just like trade policy, because government purchases are usually concentrated on domestic goods. These similarities suggest that students of trade policy coordination and students of macroeconomic policy

coordination have lessons to learn from each other.¹ Several are suggested below.

¹ So, too, might students of other kinds of international policy coordination; see Cooper (1986) for an instructive linking of public health to macroeconomic coordination.

B. <u>Retrospective Insights from a Simple Structure</u>

The word "coordinate" is defined by Webster to be

to bring into a common action, movement, or condition: regulate and combine in harmonious action: HARMONIZE

The key words in the definition suggest interdependence and mutuality. When applied to trade policy the idea of coordination suggests that each country's government fashions it conscious of its effect on other governments' trade policy, and that the intended outcome is mutually advantageous to all.

Interdependence and mutuality are hardly revolutionary traits. They have permeated the past forty years' trade agreements among governments, most significantly under the General Agreement on Tariffs and Trade (GATT). Interdependence and mutuality grew out of abhorrence of the consequences of world economic war followed by full-scale world war.²

²See Cooper (1987, pp. 299-301) or Baldwin (1984b, pp. 5-9) for an account along these lines of the growth of the U.S. Trade Agreements Program. It is easy to forget that the genesis of those agreements was the burden of trade repression during the hostile trade wars of the early 1930s. For the United States, which legislated the infamous Smoot-Hawley tariffs in 1930, the constant-dollar value of trade (exports plus imports) fell 35 percent between 1929 and 1934, almost half again further than real GNP, which fell 24 percent (U.S. Department of Commerce (1976), p. 324). Overall world trade volume declined 25 percent (GATT (1986a, p. 31)) during the same period.

Today there is malaise that interdependence and mutuality are being abandoned world-wide, and especially in the United States. Interdependent consciousness is on the defensive ("other countries be damned, we've got to <u>do something</u> about our trade deficit"), and mutuality is waning ("we've let ourselves passively be pushed around long enough; now it's time to teach those guys a lesson").

Are there good reasons for malaise? Is the future for trade-policy coordination quite bleak? If so, is that so bad? These questions are addressed at many points below.

It is remarkable that the most familiar economic apparatus for analyzing trade policy is ill-suited for answering these questions. It applies to perfectly competitive environments with independent governments. Coordination questions arise only in "strategic environments." These insights were obscured in the early postwar period by the dominance of the United States in global trade. Yet even that period can be instructively described from strategic perspectives (see Section IIB).

Strategic environments are those in which the number of economic agents making interdependent decisions is relatively small. Each agent takes into account some counterresponse from rivals in calculating its best course of action. Actions include threats and promises, bluster and bluff, collaboration and commitment, all aimed at influencing the outcome of an endeavor toward one's objectives. These are familiar features of games, war, and policy coordination. They have little place in the environment traditionally employed by economists to analyze trade policy.

In the perfectly competitive environment, each of many agents considers itself too small to influence market outcomes and, therefore, too small to be noticed. Each, therefore, makes choices assuming that all rivals' variables are given. Governments in the traditional framework are independent. They presume that their policies affect market equilibrium, but do not account for the way that they may affect the behavior of other governments.³ When agents take

³Framers of trade policy are always quite mindful of other governments, as are a few analyses as well, most notably Johnson (1954). Otherwise brief mentions of retaliation, but little analysis, appears in traditional economic commentary.

their rivals' actions to be immutable, strategic behavior plays no role, and coordination cannot even be characterized. Furthermore, there are only weak analytical defenses for trade policy of any sort except free trade.

Thus the analysis of policy coordination must begin in strategic environments.⁴ The "prisoner's dilemma" model of Table 1B.1 is a primitive strategic

⁴There are fundamental insights about policy coordination from analysis of competitive environments, but such analysis nevertheless begs the central question. Traditional competitive analysis can generate the ideas that open international trade is a global public good, that some governments may be tempted therefore to "free ride," and that a country's trade barriers create impacts abroad of the same character as externalities (spillovers). Some sort of mechanism would be desirable to alleviate the public good/free rider/externality problems and seems on the face of it to require international policy coordination. The crucial question being begged, though, is what incentive motivates any one of a large number of competitive governments to create and maintain coordination with others. What "internalizes the externalities"? Perfectly competitive assumptions rule out much of the motivational impetus for policy coordination from the start. If someone protests that in reality a number of governments are large, not atomistic, then such a protestor has implicitly accepted the need for strategic analysis, perhaps without realizing it, and has also pointed to the kind of strategic bargaining (pricing) that does internalize the externalities in the fashion of Coase (1957).

environment in which to draw some simple first insights about historic tradepolicy coordination. One is that uncoordinated trade policy -- policy that independently takes other countries' policy strategy as given -- can lead to an outcome that, although rationally chosen, is unfortunate in the retrospective evaluation of each government. Each would prefer the cooperative outcome, but

TABLE 1B.1

GAINS AND LOSSES FROM ALTERNATIVE TRADE POLICIES IN A "PRISONER'S DILEMMA"

	"Their" nation's trade policy					
"Our" nation's trade policy	Cooperative initiative (reciprocally liberalize)	Noncooperative initiative (actively protect or_promote)				
Cooperative initiative	+ 1 for us	- 2 for us				
(reciprocally liberalize)	+ 1 for them	+ 3 for them				
Noncooperative initiative	+ 3 for us	- 1 for us				
(actively protect or promote)	- 2 for them	- 1 for them				

TABLE 1B.2

"GAINS" AND "LOSSES" FROM ALTERNATIVE TRADE POLICIES WITH A HOSTILE OPPONENT FOR THE <u>SAME</u> PRISONER'S DILEMMA

	"Their" nation's trade policy					
"Our" nation's trade policy	Cooperative initiative (reciprocally liberalize)	Noncooperative initiative (actively protect or promote)				
Cooperative initiative	+ 1 for us	- 2 for us				
(reciprocally liberalize)	0 for th em	+ 5 for th em				
Noncooperative initiative	+ 3 for us	- 1 for us				
(actively protect or promise)	- 5 for them	0 for th em				

some form of coordination is necessary to attain and maintain it -- specifically some communication and guarantee that each government will "play" the cooperative initiative and not "cheat." Without such a guarantee, uncoordinated national self-interest suggests that each government play non-cooperatively. Each will be better off whether rival governments do the same ("we" would lose -1 instead of -2) or try to cooperate (we gain 3 instead of 1). Without coordination the grim outcome is trade war, well illustrated by early 1930s.

The outcome of uncoordinated policy is less grim in a <u>succession</u> of encounters like that modelled in Table 1B.1. Experience and analysis show that a good uncoordinated trade-policy strategy (called TIT for TAT) is to play cooperatively unless cheated, then to retaliate (play non-cooperatively), but only once until cheated again.⁵ Nevertheless, it is obvious that a

⁵ See Brander's (1986, pp. 36-43) or Richardson's (1986, pp. 270-274) account, each of which applies to trade policy the extensive research of political scientist Robert Axelrod (1983) to repeated prisoner's-dilemma games.

succession of coordinated cooperative outcomes would be even better for each country than TIT for TAT, or certainly no worse. Thus coordination still looks desirable for the richer, dynamic version of this model.

The past forty years provide many illustrations of the apparent desirability of coordination, and also of what helps attain it.

(1) <u>Coordination Compacts</u>. The General Agreement on Tariffs and Trade is a fine illustration of a coordination compact, in which governments coordinate by: (i) negotiating rules of cooperative play (e.g., "fair trade"), defining non-cooperation (cheating, e.g., "nullification and impairment") and potential penalties for non-cooperation (compensation, retaliation); (ii) exchanging pledges of cooperative behavior (by becoming signatories), and agreeing thereby to consult and ultimately to accept the stipulated penalties if they violate their pledge. Penalties for non-cooperation are complemented by rewards for cooperation, often involving redistribution (side payments) of the collective gains. In the GATT such redistribution is reflected in the principle of reciprocity introduced in its Preamble (in practice, the value of concessions offered and advantages received should be approximately equal), and also in the major exception to the principle (developing countries are freed from strict reciprocity in order to redistribute gains toward them --implicitly the side payment for their continued cooperation).

In brief, the GATT is a compact that establishes communication and conventions to facilitate coordination. A tighter compact might also have established an institution that monitors and/or polices trade policy, with independent power to reward cooperation and penalize non-cooperation. This the GATT is <u>not</u>, except for very limited monitoring. It contrasts with the International Monetary Fund (IMF), which is a quasi-independent (yet representative) institution with greater ability to monitor (surveillance)⁶ and limited powers to

⁶The word "surveillance" in GATT parlance entails each signatory's obligations to publish all trade measures, to consult, and if necessary, to participate in dispute settlement procedures. In essence, each member thereby monitors all the others; no central institution does so.

police (quota requirements, interest charges and payments, conditionality, limits on cumulative access). Had the International Trade Organization (ITO) not been aborted in 1950 (see Diebold (1952)), the institutional support for trade policy coordination might be closer today to that for monetary coordination. (Whether this would necessarily be a "good" thing is another question entirely, addressed below.) (2) <u>Common Objectives</u>. Communication, conventions, compacts, and coordinating institutions come about only if there is enough mutual agreement among governments on objectives. Such agreement might be said to be a primordial condition for coordination devices to be attractive (see Cooper (1986, 1987)), and was quite influential in the postwar design of the GATT. Governments were nearly unanimous in their attraction to cooperative outcomes.⁷

⁷In the the primitive model of Table 1B.1 each government agrees that the objective is to maximize its own country's feasible gains without regard to what the other country achieves. Since +3 is infeasible without luck, foolishness, or coercion (a kind of coordination by force), each government prefers +1 to -1 and is attracted to proposals to create coordination devices.

This impetus for coordination can vanish, however, if mutuality of objective is undermined, as may be happening today. The structure of Table 18.1 provides a simple illustration. Suppose "their" government were to become determinedly hostile to "ours," even to the point of valuing our loss as much as their gain.⁸ The implied objective for them would become the difference in

⁸ The obvious characterization of this objective is "cutting off one's nose to spite one's face." It is an all-too-familiar posture for agents in hostile conflict. Trade embargoes are a good example.

their payoff and ours in Table 1B.1, 3-(-2), -1-(-1), -2-3, and 1-1, moving clockwise from the northeast quadrant. The new payoff matrix is given in Table 1B.2. Its innovation is that there is no longer any attraction for the hostile government to cooperative trade over trade war. Perceived gains are 0 in either case. Coordination may be infeasible because it takes two to make peace, but only one to break it.

The difference-in-objectives problem obviously grows worse if both governments are hostile toward each other.⁹ Then goals are inconsistent, and neither

⁹ Objectives might then seem to be common again, but they are not. "My" goal is the distance between me and you; "yours" is the distance between you and me.

government sees any attraction in coordinating. Trade wars like the 1930s are more enduring than under simple uncoordinated policy, because they cannot be shaken by any mere provision of information, institutional reform, encouragement, or exhortation. What is needed before these devices is stabilization of hostility (cease-fire), then reconciliation if possible, ideas that are reflected in the GATT principles of "standstill" and "rollback". Without genuine standstill and rollback, coordination for mutual gain is as impossible among hostile trade negotiators as it was between Hatfields and McCovs!¹⁰

¹⁰ See, for example, the Uruguay-Round invocation of these principles in GATT (1986b, p. 3)). Camps and Diebold (1983, p.55) remark that

The approach we suggest is based on reason But governments are apt to be driven by more immediate aims, by a sense of damage and a wish to rectify matters.

One general lesson of postwar coordination is that it is very tough among agents with different objectives and may be impossible among agents with inconsistent objectives. A corollary is that momentum toward coordination can be maintained by limiting the scope for cooperative initiative to like-minded trading partners, and isolating hostile ones.¹¹ Correspondingly, an organization ¹¹The sheer number of participants can matter, too, for reasons described in note 4. Having too many potential participants makes the negotiating environment more competitive, less strategic, and reduces the motivational incentives for each government to contribute toward cooperative initiative. Thus to limit the scope by limiting the number of participants enhances coordination in its own right; choosing like-minded participants enhances coordination further. It is in this light that one can understand why each of the Tokyo-Round "codes" for non-tariff measures was negotiated by an interested sub-group within the GATT, and why each maintains its own list of signatories -- with implicit discrimination against non-signers. See further discussion in Section IIB2.

of sufficiently hostile governments can easily become paralyzed, with inadequate constituency for any attempt to reclaim or enhance coordination. The view that the GATT has reached this point is evaluated below.

(3) <u>Common Structural Understanding</u>. Agreement on objectives is, in turn, possible only if there is sufficient common understanding among governments on the payoffs to alternative trade-policy initiatives, and therefore on the structure of world trade that links policy to payoffs. Such common understanding might be said to be a "pre-primordial" condition for coordination devices to be attractive.

In this regard, it is sobering to consider how ill-developed is professional consensus on empirical models of global trade patterns and the effects of trade policy -- ill-developed even by comparison to empirical models of global macroeconomics (e.g., the IMF's multilateral exchange-rate model), which are widely acknowledged to have their own distinct problems. It is arresting to learn from macroeconomic research (Frankel (1986), Frankel and Rockett (1986)) that when models differ across participants, policy coordination <u>fails</u> to improve macroeconomic performance almost as often as it succeeds. Similarly arresting is Baldwin's and Clarke's (1985) finding that <u>non</u>-cooperative solutions to conflict over alternative Tokyo-Round tariff-cutting formuli seemed

superior for all protagonists to the compromise formula that actually emerged from coordinated negotiation.¹²

¹² The issue of common understanding of payoffs and behavior is discussed further in Cooper (1986) and Holtham (1986).

C. Deeper Dimensions of Postwar Trade Policy Coordination

Trade policy coordination is of course much more subtle and complex than in the preceding account. There are at least four deeper dimensions: scope, virtue, instrument, and motive force.

(1) <u>Scope</u>. Prospects for trade-policy coordination and its outcome depend very much on its scope. Scope has three important variants. <u>Geographical</u> scope determines which governments are involved, whether coordination is multilateral, "minilateral," or bilateral, involving all trading partners, some, or only one.

Mutuality/hostility, as described above, is one criterion for determining the most promising geographical scope for coordination efforts. It also influences the choice of <u>substantive</u> and <u>sectoral</u> scope -- what issues are to be covered, and for what sectors. Postwar trade policy coordination has emphasized trade in manufactured commodities, in part because trade in agriculture, services, corporate capital (e.g. investment, rights of establishment), and labor effort (e.g., immigration, guest workers) were inflamatory by comparison. Coordination was pursued on substance and in sectors where mutuality was feasible; substance and sectors where hostility reigned were isolated. By comparison to postwar trends, mutuality seems more feasible today for trade in some services, some corporate capital, and perhaps certain agricultural sectors. But international hostility seems to have grown in standardized labor-intensive manufactures such as textiles/apparel and basic metals.

Another criterion for determining the most promising scope for coordination is the "fluidity of side payments," how easy it is to exchange concessions on one issue with one trading partner for advantages on another issue with another trading partner. Recent trade policy coordination has employed two principles

to enhance fluidity. One is across-the-board bargaining, with limited exceptions lists, which allows for concessions and advantages to be exchanged fluidly from sector to sector. An older principle is non-discrimination (as defined by MFN -- concessions must be offered to <u>all</u> trading partners, not just some), which allows for "inequities" in some bilateral tally of concessions and advantages to be offset fluidly by "windfalls" in some other.¹³ It is obvious how

¹³Baldwin (1987) gives a useful account of both principles.

important it is for fluid side payments to have common understanding among governments on payoffs and the underlying structure (model) of trade, as described above. Otherwise measures of concessions and advantages are wildly different among participants.

There is unavoidable tension between these criteria for scope. Caution to avoid hostile undermining of coordination encourages narrow scope; concern to lubricate the distribution of benefits from coordination encourages wide scope. Deep pockets capable of making lots of change sometime disintegrate from its weight.¹⁴

¹⁴ Camps and Diebold (1983, pp.29-30) illustrate this tension nicely:

The goal is ... to improve the conditions of international agricultural trade But there is also a need to protect the rest of the GATT system from the impact of fierce disputes about agriculture ... [which] can hinder progress on other subjects.

So does the Uruguay-Round declaration (GATT (1986b, p.2)), albeit with the appearance of double speak:

Balanced concessions should be sought within broad trading areas and subjects to be negotiated in order to avoid unwarranted cross-sectoral demands. (2) <u>Virtue</u>. Policy coordination by itself may have little value independent of its "virtue." The case for coordination is probably strongest where the case for policy intervention itself is strongest, and weaker elsewhere. Thus in public health (Cooper (1986)) where externalities and international spillovers are clear and even quantifiable, the case for coordination is strong. In influencing the sectoral/industrial structure, however, where the case for government policy is less universally acknowledged, the case for coordination is weaker. This perspective may help to explain why the IMF found readier approval in the United States after World War II than the ITO; there was readier approval at that time of an active role for government in macroeconomics than in microeconomics.

This lesson has been blurred in recent commentary on trade policy. There is an unwarranted tendency to believe that international policy coordination is by its very nature "good," and to neglect the possibility that uncoordinated unilateral policy may be "better." Virtue and coordination do not necessarily go hand in hand.¹⁵ Language alone provides a way to appreciate

¹⁵See Keohane (1984) for an extensive discussion.

this. Almost any outcome described as coordinated or cooperative could also be described as collusive. Almost any outcome described as uncoordinated (or chaotic!) could be described as competitive. Exactly the same formal structure supports coordination of very different timbre--coordination that signals harmonious forums full of respectful give-and-take in the mutual pursuit of noble goals; and collusion that sounds like closed, mean-spirited cartels which victims deride as vicious old-boy networks. It is all too easy to slip into the benign belief that the objective of government is the "public good," so that coordinated pursuit of that good is good in itself and to be desired.

It is all too easy to forget public-choice and other grounds for skepticism that government's objectives are prima facie good, on which coordinated pursuit of dubious objectives becomes doubly dubious.¹⁶

¹⁶One might think of this as the "bad-ideas-are-better-botched" principle.

Postwar trade policy provides many illustrations. A traditional defense of MFN treatment is that it constrains the formation of predatory and other "bad" coalitions (coordinations) of trading partners; legitimate customs unions and free trade areas are, however, excused from MFN because these coalitions are on balance "good" (liberalizing). It is arguable that international policy coordination has been just as thorough and strong in recent cartelization of global steel trade and the market sharing negotiated under successive Multi-Fiber Arrangements (MFAs) as it was in the Toyko, Kennedy, and earlier rounds of GATT-sponsored trade negotiations. Voluntary export restraints (VERs) are bilateral examples of deliberalizing coordination. Their ambiguous name has merit, though; they do involve a side payment (compensation) to the "offending" parties in order to maintain coordination -- the implicit "quota rents" (Deardorff (1986)). Although deliberalizing, they are nevertheless cooperative, and thus not as hostile as a unilateral protective counter against an import surge.

Concerns about virtue would be mere fretting if the size of the gains or losses from coordination were small.¹⁷ Some empirical research seems to suggest

that these gains and losses are indeed small. Deardorff and Stern (1984) find that the economic welfare gains from elimination of all post-Tokyo-Round tariffs

¹⁷See Oudiz and Sachs (1984) for an approach to this question for macroeconomic policy coordination.

are infinitesimal; Whalley (1985, pp. 180-184) finds that the gains from elimination of tariffs and all other deliberalizing post-Tokyo-Round trade barriers to be less than one half of one percent of world income. Kreinin (1974, Ch.3) estimates the gains to the original six members of the European Economic Community (EEC) as around one and one half percent of their 1970 national income, but MacBean and Snowden (1981, Ch. 8) find the estimate diminished as the EEC expanded to nine members, due to losses from the Common Agricultural Policy (itself arguably an example of deliberalizing coordination).

These calculations are misleadingly small estimates, however, of the gains from <u>maintaining</u> the status-quo level of coordination relative to trade war. They estimate instead the difference between the status quo and free trade. If the real status quo is far to the right along a continuum running from "trade war" to "free trade," then the measured gains to further "virtuous" coordination will be small, but the potential losses from failure of existing coordination or from extreme deliberalizing coordination might be huge. In the famous (infamous?) bicycle metaphor of trade policy coordination, there may be little additional momentum to squeeze into a bicycle cruising reasonably close to its maximum speed, but a great deal of momentum to lose if the bicycle were to fall down. Or, it's a long way down the slippery slope to the valley when you're close to the peak.

Whalley (1985) in fact estimates both kinds of gains and losses. His very rough calculations of the losses from trade war relative to status-quo coordination appear in Table 1C.1. They are surprisingly large, especially for Europe and Japan, five to ten times larger than the gains to be achieved from further "virtuous" coordination.

For reasons described in Section II, <u>preserving</u> the virtue of current coordination is the modern trade policy challenge, not <u>perfecting</u> it. Table 1C.1

PERCENT OF GNP LOST DUE TO MULTILATERAL TRADE WARS

	All trading areas adopt				
	60% tariff ²	"First step" optimal tariff ^{2,3}			
United States	0.4	2.3			
European Community	2.2	5,9			
Japan	2.2	5.9			
Rest of World	0.1	1.5			

¹Average of compensating variations (CV) and equivalent variations (EV).

²Rates assessed to all imports in presence of existing non-tariff barriers and factor taxes.

³Apparent optimal tariff against the aggregate of all other trading regions assuming no retaliation.

Source: Whalley (1985, p. 248).

suggests that this challenge does indeed have quantitative importance for the entire world.

(3) <u>Instrument</u>. Another deeper dimension of trade policy coordination is the choice of instruments relied on to encourage it. Here the most important distinction is between rules and discretion. At one extreme the compacts of coordination may attempt to legislate meticulous rules that the institutions of coordination correspondingly adjudicate. At the other extreme, the compacts may simply specify regular meetings for communication that the institutions convene and inform. Policy coordination via the Bank for International Settlements and the June summit meetings have the latter spirit; the GATT historically has the former.

Reliance on rules makes most sense when issues and policies can be reasonably defined and measured. Otherwise rules require immense resources to draft and monitor, and can easily appear arbitrary and inequitable. Discretion, discussion, diplomacy, entreaty are often more productive and cost-effective when issues and policies are hard to define and measure.¹⁸ In this light one

¹⁸Parenting offers many illustrations. So does the discussion of how "constitutions" come about and what they contain, as applied to trade policy notably by the late Jan Tumlir (Tumlir (1985), Banks and Tumlir (1986)).

can interpret the GATT's historic rules-centeredness as fitting the historic reliance of the world on objectively measurable tariffs and quotas. GATT tariff bindings are in fact an excellent example of a rule aimed at avoiding surreptitious cheating on the compacts of coordination. (Such rules are known as "credible pre-commitments" in the language of strategic policy coordination.) One can correspondingly defend the more consultative flavor of the Tokyo Round's codes for non-tariff measures as fitting the world's relative shift toward administrative policy instruments (see Table 2B.4 and the surrounding discussion).

It is instructive along these lines to wonder if the Toyko-Round code dealing with the most measurable non-tariff measure, subsidies, has been generally regarded as the least successful code precisely because it could have gone further toward definition, measurement, and rules. The problems of common objectives and structural understanding, discussed above, are admittedly severe in coordinating rules on subsidies. Yet in the absence of coordination, unilateral attempts to define, measure, and countervail them seem inevitable (Shuman and Verrill (1984)). The idea of a coordinated defining and "binding" of subsidies, much as tariffs are "bound" in the GATT, is considered below.

(4) Motive Force. Impetus is another aspect of policy coordination not captured in simple accounts. Coordination can be imposed, agreed, or implicitly chosen, with varying implications along a continuum that joins them. Coordination is imposed when weaker, smaller, or less skilled agents harmonize their policies with those of a strong, large, or skilled agent, which tailors its policy to elicit policy response among the followers that furthers its own goals. Coordination is agreed when enough consensus exists on objectives and structure among agents of comparable strength that they negotiate a compact. Coordination can be implicitly chosen even in the absence of a compact (or with an ineffective one) when agents recognize at least some gain from mutually cooperative outcomes and some penalty from cheating -- as in the concept of implicit collusion among oligopolistic producers. In this light, early GATT coordination of trade policy might illustrate the imposing force of a hegemonic United States; Kennedy-Round coordination might illustrate explicit agreement among equals; and current coordination might illustrate the kind of implicit impetus that is maintained solely by tenuous conjectures of gains

"if we all keep cooperating" and penalties "if I defect." The stability of the coordination seems greatest when imposed and weakest when implicit. Its "representativeness," however -- its reflection of the collective objectives of participants -- may be greatest when it is agreed or negotiated among equals.

Among other things, this implies a potential opportunity in the future for atypical participants to initiate fruitful ideas for enhancing coordination. The United States may today be in a better position to respond to cooperating, coordinating ideas from abroad -- e.g. from Israel, Canada, Japan, Mexico --than to initiate them itself. We turn in the next section to prospects such as this in the midst of changing environments for trade policy coordination.

II. CHANGING ENVIRONMENTS AND PROSPECTS FOR COORDINATION OF TRADE POLICY

A. Introduction

The environment for trade policy coordination today is quite different than in the early post-World War II period when many enduring conventions of coordination were established under the GATT.

In the policy environment for coordination, the most significant changes have been the levelling out of influence among national governments relative to U.S. dominance in the early post-war period, and the development of new administrative instruments of trade policy to replace the limitations that the GATT successfully coordinated for tariffs. In the economic environment for coordination, the most significant change has been the growth of large, mobile corporations that themselves practice coordination across borders. They are multinational in both operations and ownership. In the intellectual environment, these changes have been captured in the development of an analysis of trade policy coordination in strategic environments -- those with small numbers of large rival firms and/or governments -- that has challenged insights from the venerable competitive consensus.

These environmental changes interact with each other. Multinational corporations make it harder for any government to define and pursue its "own" national interest. Returns to the "capital endowment" that a country's residents own depend on revenue from far flung foreign affiliates as well as revenue from home. Discriminatory border policies that increase revenue from one source at the expense of another have ambiguous effects on "our" multinational firms and their owners. Firms that are largely "ours" (majority-owned) may nevertheless pay significant fractions of their revenues to foreign share-

holders. Strategic influence over the location and competitiveness of large, mobile multinationals is an understandably important objective of modern trade policy, and leads to concerns about market access and administrative instruments such as performance requirements, tax incentives, and unitary tax systems. The sensitivity of firms to these policies aggravates the adjustment problems faced by owners of immobile factors of production -- narrowly skilled workers, farmers, civil servants. Such groups are not internationally coordinated, but may be large and coordinated internally (e.g., labor unions). Trade policies that protect and insure them, or that help them adjust to shifting sectoral prosperity, have a very different orientation than trade policies that expand markets abroad for exporting and multinational firms, insuring their right of establishment and fair competition. A country's own internal policy coordination can be undermined by a schizophrenia in which departments of commerce and ministries of industry promote "competitiveness"-enhancing trade policies while departments of agriculture and ministries of labor promote protectionist trade policies. International policy coordination is all the more difficult when large internal trade-policy constituencies are uncoordinated or hostile.¹⁹

The following sub-sections describe these environmental changes in more detail and trace their implications for trade policy coordination.

¹⁹ Proponents of free trade and skeptics about the virtue of coordination of course argue that this schizophrenia is "good." See Price (1986) and Goldstein (1986) for descriptions of these different constituencies in their influence on U.S. trade policy. Destler (1986) contains an excellent up-todate evaluation of United States internal coordination of trade policy.

B. Shifts in the Policy Environment

Policy environments have evolved (devolved?) since the 1950s and early 1960s. Strategic interaction among governments has come to reflect shifts in relative economic size and influence. New instruments, institutions, and principles of strategic policy interaction have emerged.

(1) <u>Relative National Strengths</u>. For many reasons, dominant trade-policy leadership fell to the United States early after World War II.²⁰ Its economy was

²⁰ Baldwin (1986a) and Destler (1986, pp. 42-47) provide informative perspectives on the material in this sub-section.

least devastated by the war. Its military forces spearheaded resistance to Soviet expansion, and played important roles in European and Japanese economic reconstruction. It vetoed the multilaterally planned International Trade Organization (Diebold (1952)) in favor of a compact of its narrow commercial provisions, which became the GATT, more U.S.-patterned than the ITO would have been.

In strategic terms, this was a period of hegemonic interaction. Governments of relatively weak countries did not behave strategically. They tended to take U.S. trade policies as given, and to adopt whatever trade policies seemed best for themselves, without perceiving much scope for influencing the U.S. thereby. U.S. incentives were to act strategically, but in a unique way. The U.S. tended to choose trade initiatives mindful of collective foreign response, such as in its encouragement of European economic integration. But it could afford to be impassively obliging toward recalcitrance or provocation by single trading partners, because the impacts were relatively small. This unusual combination of multilateral strategizing and bilateral impassiveness is similar to what one might expect from a large firm in an industry with a fringe of small perfect

competitors. The large firm will be strategically calculating toward the aggregated collection of competitors, but will appear unflappable toward isolated deviance.

Two things change if small agents in hegemonic environments grow significantly relative to the hegemon. They begin to act strategically toward the hegemon, seeking to press advantage and avoid its perceived "exploitation"; and the hegemon no longer finds their provocations too minor to warrant response.

All this seems to have characterized the trade policy environment of the past 40 years. First Europe and then Japan (and even several other countries) have grown relative to the U.S. in key indicators of economic influence. Patterns for two such indicators are illustrated in Tables 2B.1 and 2B.2²¹

²¹ Again environmental changes can be seen to interact with each other. The convergence in per capita income among the countries in Table 2B.1 encourages especially the growth of intra-industry trade, based on product differentiation, variety, and scale. These characteristics often engender imperfectly competitive market structure (section C(1) below) and significant reshufflings of narrow product "niches" among firms as technological change and other shocks occur, with consequent volatility for immobile factors (section C(2) below).

Such newly influential governments have begun to shape their trade policy strategically, attentively to U.S. reponse, e.g. Tokyo-Round tariff-cutting initiatives by the European Community. And the U.S. government has become much more mindful of the domestic injury caused by "unfair" trade practices among its large trading partners, and consequently much more active in legislating trade-policy remedies. Figure 2B.1 reveals the rise in unfair trade activity (bottom panel) relative to escape clause activity (top panel), which has actually fallen. Table 2B.3 shows the recent acceleration of U.S. trade legislation, much of which is aimed at "redressing inequity."

TABLE 2B.1

RATIO: NATIONAL REAL GDP PER CAPITA¹ TO THE EQUIVALENT FOR THE AGGREGATE OF THE TEN COUNTRIES IN THE TABLE

<u>Year</u>	<u>Brazil</u>	<u>Mexico</u>	<u>Korea</u>	<u>India</u>	Japan	<u>U.S.</u>	<u>Germany</u>	France	<u>U.K.</u>	<u>Italy</u>
1953	0.416	0.691	0.309	0.220	0.619	2.963	1.464	1.473	1.751	0.961
1963	0.479	0.787	0.307	0.195	1.017	2.633	1.944	1.714	1.698	1.269
1973	0.570	0.825	0.454	0.156	1.703	2.543	2.059	1.969	1.630	1.343
197 7	0.657	0.857	0.574	0.163	1.711	2.511	1.096	2.030	1.579	1.454
1983	0.595	0.955	0.956	0.158	2.009	2.560	1.835	1.867	2.010	1.583
1984	0.535	0.855	0.989	0.155	2.074	2.744	1.756	1.706	1.840	1.560

Source: Real GDP Per Capita: 1953, 1963, 1973, 1977 from Kravis, Heston, and Summers (1982, pp. 330-336).

> 1983, 1984 from World Bank (1985, 1986) data spliced to Kravis, Heston, and Summers data in the following manner:

table entry = $y * \cdot k/p$

where y* = GNP per capita in 1983 or 1984 dollars (World Bank (1985, 1986))

- k = Ratio of Kravis, Heston, Summers figure for 1975 Real GDP per capita to World Bank figure for 1975 GNP per capita
- p = 1983 or 1984 deflator for U.S. GNP assuming 1975 = 1.00, from International Monetary Fund, <u>International Financial</u> <u>Statistics Yearbook</u>, 1986, pp. 690-691.

Sources: Population: 1953², 1963, 1973 from U.S. Bureau of the Census (1980); 1977, 1983, 1984 from World Bank (1979, 1985, 1986).

¹In 1975 dollar prices.

²Aug. 1950-1955.

TABLE 2B.2

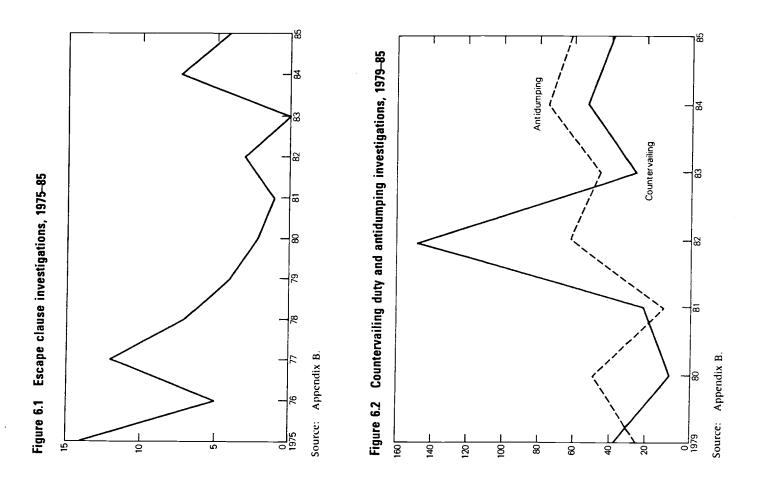
PERCENT SHARE OF EXPORTS IN AGGREGATE EXPORTS OF THE TEN COUNTRIES IN THE TABLE

Year	<u>Brazil</u>	<u>Mexico</u>	<u>Korea</u>	<u>India</u>	Japan	<u>U.S.</u>	<u>Germany</u>	<u>France</u>	<u>U.K.</u>	Italy
1953	4.1	1.6	0.1	2.9	3.4	41.8	11.7	10.6	19.9	4.0
1963	1.9	1.3	0.1	2.2	7.5	32.0	20.0	11.2	16.8	6.9
1973	2.2	0.8	1.1	1.0	13.2	25.4	24.1	13.1	11.1	7.9
1977	2.3	0.9	1.9	1.2	15.5	23.2	22.6	12.5	11.2	8.7
1983 1984	2.6 3.0	2.5 2.7	2.9 3.2	1.1 1.0	17.5 18.6	23.4 23.8	19.8 18.8	11.1 10.7	10.7 10.3	8.5 8.0

Source: International Monetary Fund, <u>International Financial Statistics</u> <u>Yearbook</u>, 1981, 1985 issues. **



TRENDS IN IMPORT RELIEF (SECTION 201) AND UNFAIR TRADE REMEDIES



Source: Destler (1986, p. 124, based on Appendix B).

TABLE 2B.3

NUMBER OF TRADE BILLS INTRODUCED IN VARIOUS CONGRESSES

(PERCENTAGE CHANGE OVER PREVIOUS CONGRESS)

Congress _(years)	Destler ₁ (1986) count	Ahearn (1986) _count ²		
96th (1979-80)	62	1089		
97th (1981-82)	56 (-10%)	1150 (- 6%)		
98th (1983-84)	57 (+ 2%)	1401 (+22%)		
99th (1985-86)	93 ³ (+60%)	1758 ⁴ (+25%)		

¹ Counts bills whose primary purpose was to restrict trade or benefit U.S. producers.

² Counts bills employing 20 trade-related terms, some to expand trade, some to protect, with various shades based on personal evaluation.

³ 1985 figure times 2.

 4 Growth rate between January-September of 1985 and January-September of 1983 applied to number of bills introduced to 98th Congress: (49/30) x 57.

Sources: Destler (1986, pp. 75-76), Ahearn (1986).

Instead of being analogous to an industry with one large firm facing a fringe of small competitors, the trade policy environment today is closer to a genuine oligopoly, with a small number of large "co-equals."

This has many implications.

(a) It suggests that trade policy coordination cannot feasibly be imposed, but must be either explicitly negotiated ("agreed" in the language of Section IC) or implicitly adhered to. The United States can no longer dictate the the timing, agenda, or formuli for multilateral trade liberalization, as illustrated by comparing the outcomes of GATT Ministerial meetings in November 1982 and September 1986 to those prior to the Kennedy Round in 1963 (Baldwin (1986a, pp. 5-12)).

(b) It suggests that <u>any</u> of the co-equal governments can initiate trade policy coordination, not just the historic "leader."²² In fact if the historic

²² Baldwin and Richardson (1987, p. 143) list several reasons why trade policy coordination among co-equal governments might be just as stable as hegemonic coordination. They also mention, however, that it suggests different "styles" or "tactics" of trade policy for all the participants.

leader is nursing a sense of injustice and grievance over lost ("stolen") influence, with sporadic withdrawal and "lashing out" as in inter-personal conflict, then it might enhance the chance of success for coordinating initiative to be reversed. The United States may, today in particular, be better able to respond cooperatively to cooperative initiative abroad than to defend taking cooperative initiative itself.²³ The posture implied for

 23 See the discussion of hostile environments in Section IB(2).

governments in Europe and Japan is more aggressively inviting than usual;

that implied for the U.S. government is more "seductively responsive" than usual.²⁴

²⁴ See Richardson (1987a, p. 289; 1985, p. 97). See also Destler (1986, pp. 48-49), who remarks that

... [S]ince the new competitors were slow to assert leadership in multilateral trade negotiations, there was a growing divergence between the loci of trade-political activism and trade-economic power.

The reasoning is quite similar that underlies the observation that the United States still has strong leadership to <u>preserve</u> present trade policy coordination, by refraining from hostile and/or uncoordinated initiatives, yet has lost leadership power to <u>advance</u> coordination. See Baldwin and Richardson (1987, pp. 123-124), for example.

(c) It suggests that if trade policy leadership is not adequately forthcoming from newly co-equal governments, there may be reason to invest "independent agents" with specified leadership functions. Such functions might include monitoring, reporting, and initiating meetings (and perhaps even complaints). Suggestions range from radical to mild. Some favor restructuring the GATT institutionally to resemble the International Monetary Fund (Camps and Diebold (1983, pp. 59-67)).²⁵

²⁵ The GATT has never technically "been" an "institution" at all -- only a "compact with signatories" -- unlike the IMF, with executive directors, standing committees, rules of order and representation of membership.

Others suggest merely the creation of an Independent Trade Policy Committee ("serviced by the GATT Secretariat") (GATT Wisemen (1985, p. 42)) or a permanent negotiating committee (Aho and Aronson (1985, p. 48)). The aim of all such suggestions is to facilitate leadership impetus and provision of accurate information, both crucial to maintaining policy coordination and avoiding devolution into disarray and possibly trade war.

(d) It suggests the advent of discriminatory trade-policy coalitions. A coalition is coordination of limited scope, among a sub-set of trading partners over (perhaps) a sub-set of issues. It is a natural occurrence in strategic interaction among co-equals, and is by its nature discriminatory (not MFN). A hegemonic environment by its nature provides no motive for coalitions, either for the large agent or for the many small ones. These insights seem little appreciated in recent discussions. Today's trade policy environment is <u>structurally</u> conducive to coalitions and hostile to MFN, whereas the postwar hegemonic environment was the opposite. The difficult question is whether conservation efforts aimed at preserving the life of this endangered animal (MFN) are still worthwhile, or whether inevitable extinction should be hastened in an effort to breed species more at home in today's jungle!

(e) It suggests that if implicit trade policy coordination is followed, (see Section 1C(4)) then periods of cooperation may be punctuated by periods of "punishment" for perceived policy violation, with, of course, counterretaliation and symptoms of trade war.²⁶ Difficult technical questions involve

how the probability and duration of such periods vary with asymmetries in the size of the agents involved or with the size of the parties or coalitions being "punished,"²⁷ and what sort of dispute-settlement mechanisms most predictably

²⁶ See, for descriptions of implicit coordination in the context of oligopoly and trade policy, Friedman (1977), Jensen and Thursby (1983), Rotemberg and Saloner (1986), and Lambson and Richardson (1987).

²⁷ On an industrial counterpart to these issues, see Lambson and Richardson (1987). One among several conclusions they draw for the case of price-setting supergames is that symmetry among firms stabilizes implicit collusion, making "punishment" shorter and less likely, compared to slightly asymmetric con-figurations of firms.

restore the peace of implicit coordination.

(2) <u>New Instruments</u>, <u>Institutions</u> and <u>Principles</u>.

(a) <u>Administered Intervention</u>. Every coordination compact is at risk because of the constant temptation for each rival to try surreptitiously to avoid the constraints on behavior -- that is, to "cheat" secretly on one's partner-rivals.

This instability can be seen in the growth of "administered intervention", aimed surreptitiously at undoing the effects of GATT-coordinated reductions in tariff bindings. Administered intervention is flexible, discretionary decisionmaking toward opaque non-tax instruments of import protection and export promotion. It includes voluntary export restraints, orderly marketing agreements, standards, licensing, and internal distribution barriers to imports, as well as performance requirements, tax forgiveness, credit guarantees, and implicit subsidies of many types for exports.

Whalley (1985) provides a striking way to illustrate the significance of administered intervention. In estimating the welfare effects of complete removal of both tariffs and non-tariff barriers to imports, he finds the latter to account for more than half of the estimated effects. His calculations are summarized in Table 2B.4.²⁸ According to them, administered intervention affects the exports and imports of Japan the most and the United States the least.

TABLE 2B.4

NON-TARIFF BARRIER SHARE OF OWN-COUNTRY WELFARE EFFECT FROM UNILATERAL ABOLITION OF ALL PROTECTION

(POST TOKYO ROUND)

Seven-

	region <u>model</u>	region model
United States	42 to 57 percent	40 to 47 percent
European Community	52 to 62 percent	56 to 62 percent
Japan	58 to 75 percent	53 to 69 percent

Four-

¹Low number in each cell assigns <u>none</u> of the "interaction effect" from removing tariffs and NTBs together to NTBs' high number assigns <u>all</u> the interaction effect to NTBs.

Source: Whalley (1985, pp. 181-182).

²⁸ They seem a more meaningful way to measure the relative importance of administered intervention than alternatives, such as tabulations of the share of trade affected in some fashion by nontariff barriers (Balassa and Balassa (1984), Nogues, Olechowski, and Winters (1986a, b)).

One implication of the greater use of administered intervention is intricacy. It becomes harder to identify foreign policies, much less measure their effects. It also becomes harder to implement one's own trade objectives. Intricacy raises the resource cost of estimating and monitoring, and slows down trade policymaking. In the United States, administrative intervention in trade, unlike tariffs, invades the turfs of regulatory agencies, congressional oversight committees, and sometimes even the judiciary.

Intricacy increases allegations of unfairness and discrimination because administrative intervention is inherently opaque. Opaqueness heightens suspicions that something discriminatory and unfair is going on below surface appearances. Information about administered intervention can become so costly for non-insiders to obtain that extraordinary mechanisms are needful to obtain it, e.g., "protection balance sheets" and "surveillance reports" (GATT Wisemen (1985, pp. 35, 42)). The value of information for maintaining coordinated cooperation is higher in environments with administered intervention than in those with more transparent trade policy instruments like tariffs, quotas, and export subsidies. Economists who applaud the benefits of price competition but are chary of nonprice competition (advertising and so on) might consider the trade policy analog. There may be much clearer benefits to "tariff competition" -- negotiating coordinated concessions in the traditional way, threatening tax-based retaliation, and so on -- than to competition and coordination among governments in administered intervention. All the features that make prices effective and efficient signals in private resource allocation make

tariffs and other trade taxes effective and efficient signals in policy coordination. Among other things, this supports the recommendation sometimes heard for "re-tariffication" (e.g., Hufbauer and Rosen (1986)).

Another implication of administered intervention is heightened "pre-emptive consciousness". Anticipations of a brave new world of coordinated (voluntary) export restraints, with market shares allotted according to the historical status quo, creates a race among large firms, and maybe entire industries, to "stake out claims" by penetrating and expanding quickly. Administered intervention may thus bring import surges upon itself. They are the rational response to expectations that a government will soon decide to vest the import "rights" of existing large suppliers in a set of "fair shares." Steel firms and automakers abroad observe that it happened in apparel and anticipate it for themselves; machine toolmakers abroad observe that it happened in steel and autos and anticipate it for themselves; and so on.²⁹ Tariffs and other transparent

²⁹ Each is playing a rational strategy for an "end game," as illustrated for example by Lawrence and Lawrence (1985). An end game is one in which a future equilibrium is known, in this case cartelized industrial structure, and agents choose optimal strategies for approaching it over time.

policy instruments have not historically created the same pre-emptive surges because both levels and changes were transparently bound into the GATT.

(b) "<u>Minilateralism</u>". Allegations of unfair and injurious behavior on the part of large trading partners who have "caught up" with the United States have made it more vigilant about unfair trade from any source -- even small trading partners come under scrutiny. All developed countries view the catch-up growth of Newly Industrializing Countries, visible most clearly for Brazil, Mexico, and Korea in Table 2B.1, with alarm and similar suspicions. (Indeed there <u>are</u> legitimate grounds for such suspicions as the economic environment includes more and more internationally coordinated multinational firms, as discussed in the next section.) Although negotiation with dynamic small competitors may not seem worthwhile, exclusion of them from multilateral trade policy initiatives is easy and quite tempting. Isolation of "offenders" is a seemingly cheaper alternative to coordinated dispute settlement.

Thus the apparent growth of unfair trade becomes one of the forces behind "minilateralism," the tendency to circle the wagons, to reduce the number of participants involved in trade policy coordination.³⁰ This has virtue

³⁰Curzon and Curzon (1985), for example, recommend that the (fair) traders within the GATT form a coalition that aims at a free trade area that would "eventually" cover "substantially all" trade, thereby attaining consistently with Article XXIV, and isolate the non (unfair) traders.

(Section IC(2) to the extent that international catch-up pressures really do depend importantly on unfair practices. But to the extent that these are just fair and normal competitive pressures from new entrants, coordinated "minilateralism" is synonymous with barriers to entry and cartelization, and has little economic merit.

A closely related force behind minilateralism is the disparity of market dependence among GATT countries. Degrees of regulation vary, as does reliance on private rather than state-owned and supported firms (see below). Multilateral negotiations of a traditional kind have become increasingly cumbersome because of differences of objective and structural understanding.

These differences lead naturally to initiatives that narrow the geographical and sectoral scope of negotiations in order to make any progress at all. The 1986 report of the United States Trade Representative (USTR (1986, pp.

61-62)) is remarkably blunt:

Nevertheless, multilateral negotiations are not an end in themselves....

America has decided to pursue <u>trade liberalization</u> opportunities <u>wherever</u> and <u>whenever</u> they exist, whether in a multilateral, plurilateral or bilateral context.

Although the United States would prefer pursuing trade liberalization through multilateral negotiations, it is deeply concerned that the process may now be <u>too cumbersome</u> to achieve meaningful and timely results. Indeed, the increasing number of GATT Contracting Parties and growing divergence of their viewpoints guarantee ever more awkward and prolonged negotiations....

If the United States cannot reach timely trade agreements on a multilateral basis, it is prepared to progress on trade issues by negotiating on a bilateral or plurilateral basis with like-minded nations....

It is time to recognize that across-the-board discussions among all GATT members may not be the best way to promote GATT goals. There is a greater need for a variety of arrangements under the GATT umbrella so trade liberalization can progress on at least some fronts without waiting for <u>all</u> issues to be settled to <u>all</u> parties' satisfaction. When a group of countries can negotiate a trade liberalizing agreement, provision should be made for its acceptance under the GATT.

Consistent with this intent, the United States has in the past few years negotiated: a quite inclusive free trade agreement with Israel and sectoral liberalization with Japan (Market-Oriented Sector Specific, or MOSS initiatives) and Caribbean trading partners. Negotiations continue with Canada toward sectoral free trade. The European Community, of course, continues to expand the boundaries of its own preferential liberalization. And 48 of the largest developing countries agreed in May, 1986 to begin trade negotiations among themselves under a Global System of Trade Preferences (GSTP). A worrisome implication of these minilateral trends is, of course, that the world may become fragmented into hostile trading blocs, Uruguay Round notwithstanding. There is a more promising perspective, however. It is that in today's policy environment only minilateral liberalizing coordination is feasible. More than that, it is an ideal crucible in which to experiment with new coordination techniques: new definitions, rules, monitoring arrangements, and dispute settlement procedures. Minilateral coordination within the European Community, for example, is almost surely going to involve important progress on coordinating trade policy in services, such as in telecommunications. Minilateral coordination between Canada and the United States is almost surely going to make progress on unfair trade rules and procedures. In the longer run, multilateral negotiations over new GATT codes and among "blocs" (a pejorative term in this context) may be usefully informed by the precedents and experiments of minilateralism.

It is undeniable that these minilateral and bilateral movements are retreats from multilateral coordination of the historic kind, resting on the MFN principle (unconditional in principle, but in the practice of nearly every country, quite conditioned). Strategic "retreats" may, however, allow trade policy coordination to regroup beneficially just as they do an army. They may furthermore be wise if increasing parity among countries in economic influence undermines MFN and enhances the idea of optimal coalition-building (see point d of Section B(1) above). In this light, it might be better not to call this a retreat from multilateralism based on MFN, but, for example, to call it a "new" multilateralism based on a "More-Favored-Nation Principle"!³¹ The

³¹"New" multilateralism is the term used by Camps and Diebold (1983). "More-Favored-Nation" treatment is a term suggested by Thomas O. Bayard.

GATT Codes of the Tokyo Round can in fact be seen as an innovative vehicle for the new multilateralism.

(c) <u>GATT Codes</u>. GATT codes are an innovative device for adopting the best aspects of coordinated minilateralism, controlling the worst aspects of administered intervention, and maintaining the many GATT mechanisms that continue to be relevant to liberalizing coordination.

Five important codes were negotiated during the Tokyo Round of GATT negotiations -- on subsidies, procurement, standards, import licensing, and customs valuation. Each was negotiated by a subset of GATT members, each on a trade policy issue of narrow scope. Each forms a supplement to the GATT, with five independent lists of signatories that do not include all GATT members. By restricting participation and focussing on narrow issues, the Codes reduced the potential for hostile undermining of coordination. Their provisions are, however, applied in principle on an MFN basis (except by the United States whose application of the first three codes was conditional).³² Each is administered by

³²See Stern, Jackson, and Hoekman (1986, p. 6). This paper is a thorough evaluation of the operational features of the codes, although not their economic effects or legal standing.

a Committee of Signatories serviced by the GATT Secretariat, and each has its own dispute settlement mechanism.

In general, the Tokyo Round Codes aimed at rules and procedures for harmonization and transparency, rather than at significant liberalization. This is one reason for not according undue weight to assessments of their "only modest" success, or to the general agreement among commentators that the subsidies code in particular has not worked well. They might be judged more optimistically as successful "standstill" agreements, strategic defenses

against de-coordination rather than catalysts of coordination.³³ They might

³³Liberalizing coordination is, however, a logical future step, involving probably "trade in concessions across Codes" -- accession by one country to one code in return for accession to another by another, forgoing insistence on some provision in one code for a rival's concession in another code, etc.

also be judged successful for creating strategically ambiguous³⁴ GATT-con-

 34 Ambiguity can sometimes be a bargaining strength. See, for example, Dixit (1987, p. 274).

sistent minilateralism. And they are commendable attempts to cope with administered border intervention in a realistic way.

The Tokyo-Round attempt to negotiate a safeguards code failed, however, and the subsidies code has room for considerable improvement, comments above notwithstanding. Acceptable codes on subsidies and safeguards are, in fact, especially needful because of important changes in the economic environment, described below.

C. Shifts in the Economic Environment

Modern trade policy issues arise in economic environments that seem increasingly strategic and that do not fit the orthodox competitive paradigm.

(1) Mobile Multinational Firms. One essential aspect of a firm is coordination within itself; as firms have grown multinationally over the past few decades, corporate international coordination has grown apace. There are many reasons for this growth. The European Community, communications innovation, capital-market integration, and ambitious development plans all have encouraged coproduction, joint ventures, mergers, and global identity. In some global markets, the same few firms compete everywhere. In some national markets, a small number of firms vie for a "prize" that is essentially control of the whole national industry. The growth of trade has been more rapid in manufactures -with potential for firm-focused economies of scale, technological gaps, product differentiation, and taste for variety -- than in agricultural and mineral products, as shown in Table 2C.1. Within manufactures, the growth of trade has been more rapid in industries with concentrated, oligopolistic market structure than in those with competitive structure; trade in aircraft, electronic machinery, chemicals, and petrochemicals grew much faster between 1973 and 1983 than trade in wood, paper, and foods, as shown in Table 2C.2. Table 2C.3 shows further that U.S. multinational firms maintained their shares of world exports over the past 30 years even as the U.S. geographical share declined, and have grown in their shares of U.S. trade.

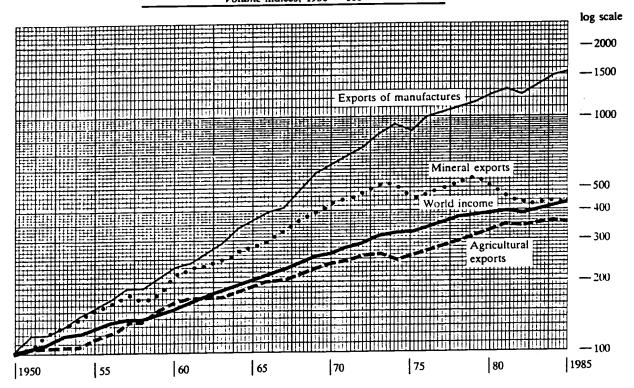
In concentrated strategic environments, firms clearly recognize the effect that their actions have on the behavior of other firms, and often of governments. Governments recognize this, too. They have turned to firm-focused performance requirements, for which firm-focused favors, such as tax incentives, are returned. Each firm or government conjectures how rivals and other

TABLE 2C.1

CHANGING COMMODITY COMPOSITION OF WORLD EXPORTS, 1950-1985

BROAD CATEGORIES

WORLD TRADE AND INCOME SINCE 1950 Volume indices, 1950 = 100



Source: GATT (1986, p. 12).

47

CHANGING COMMODITY COMPOSITION OF WORLD IMPORTS, 1973-1983

NARROW CATEGORIES

TABLE 6. - LEADING PRODUCTS IN WORLD MERCHANDISE TRADE OF MARKET ECONOMIES IN 1983^a

Rank		Product categories	Percentage shares in value of world trade		Percentage shares in value of world trade excluding fuels	
1983	1973		1983	1973	1983	1973
1	1	Crude petroleum	12.4	7.6		
2 3	7	Petroleum products	4.9	2.4		
3	4	Passenger motor cars	3.8	3.8	4.7	4.2
4	2	Iron and steel	2.8	4.6	3.5	5.1
5	3	Textile yarn, fabrics, made-up articles	2.6	4.1	3.2	4.6
6 7	9	Clothing	2.2	2.2	2.8	2.5
7	20	Office machines, data processing equipment, parts	2.2	1.4	2.8	1.5
8	8	Parts and accessories of motor vehicles	2.0	2.2	2.5	2.5
9	45	Gas, natural and manufactured	2.0	0.3		
10	15	Artificial resins, plastic materials, articles of plastic	2.0	1.9	2.4	2.1
11	18	Organic chemicals	1.9	1.6	2.4	1.8
12	6	Wood manufactures, paper	1.9	2.4	2.3	2.7
13	5	Cereals and preparations	1.8	2.7	2.2	3.0
14	10	Fruits and vegetables	1.5	2.2	1.9	2.4
15	11	Oilseeds, vegetable oils, oil cakes	1.5	2.2	1.8	2.4
16	24	Aircraft	1.2	0.9	1.5	1.0
17	17	Telecommunication equipment, parts, accessories	1.2	1.6	1.5	1.7
18	37	Transistors, etc.(electronic components)	1,2	0.7	1.5	0.8
19	27	Coffee, tea, cocoa, spices	1.1	0.9	1.4	1.0
20	26	Lorries, special vehicles	1.1	0.9	1.4	1.0
		Total of above	51.3	46.6		
		World trade (market economies)	100.0	100.0		

^aTrade data are based on import statistics

Source: Appendix Table A9.

Source: GATT (1985, p. 17).

TABLE 2C.3

U.S. MULTINATIONAL CORPORATE PRESENCE IN INTERNATIONAL TRADE

	(1) (2) Percentage Share of World Exports		(3) (4) Percentage Share of U.S. Geographical <u>Exports</u> <u>Imports</u>		
Year	from geogra- phical U.S.	from multi- national firms	that is trade U.S. multinat and their for affiliates	tional firms regign	
1957	22.7 ³	n.a.	n.a.	n.a.	
1966	17.5	17.7	17.6	11.0	
1977	13.3	17.6	26.7	21.7	
1982	14.3	17.7	n.a.	n.a.	
1983	13.9	17.7	n.a.	n.a.	

¹Including majority-owned foreign affiliates.

²Majority-owned only, it would seem.

 3 1957A figure x (1966B figure/1966A figure), where A and B are different classification systems.

Source: Lipsey and Kravis (1986, p. 29) for columns (1) and (2); Little (1986, p. 44) for columns (3) and (4).

agents will react to its own decisions. Governments, furthermore, are sometimes the owners and indirect managers of firms, and may strategically "game" among themselves.

Large multinational firms might seem at first impression to be a force against discriminatory border policy and encouraging to coordinated liberalization of world trade -- as influential constituents of many different governments simultaneously, whose flexibility and mobility would be enhanced most by free trade. This can be true, but need not be in strategic environments. The Ford Motor Company supports protectionist initiatives in the United States and Airbus Industries has depended on its sponsoring governments for support; Toyota and Nissan have not clearly suffered from auto VERs, especially not in their competition with smaller Japanese automakers. Large firms will sometimes have potential for influencing (exploiting?) groups without strategic size or power. Krishna (1983), for example, has shown how oligopolistic domestic and foreign firms may welcome voluntary export or import quotas. These quotas can facilitate implicit collusion among them, reducing competitive cheating by stabilizing market shares, at the expense of customers. Or for another example, oligopolistic national firms wanting to avoid potential entry from abroad may be able to convince governments correctly that national economic welfare would indeed be higher with import barriers that protect their market power (Dixit and Kyle (1985)). Oligopolistic national firms wishing to initiate entry into some unpenetrated market may be similarly correct to make a national-welfare case for export subsidies.³⁵

³⁵ See Brander's and Spencer's contributions to Krugman (1986) and other work referenced there. These examples are from the new analytical thinking on trade policy in strategic environments, also surveyed by Grossman and Richardson (1985) and Richardson (1987b).

Mobility of multinational firms and their professional work force also internationalizes ostensibly domestic policies,³⁶ accentuating their spillovers

³⁶ This is the twin of the observation that trade policy has become increasingly "domesticated," drawn, for example, by Ahearn and Reifman (1984).

abroad and provoking foreign pressure for international policy coordination. There is of course always <u>some</u> tendency for a country's sectoral policies to spill over abroad in mirror-image fashion. But the size of these spillovers is much larger when corporate capital resources are mobile. Most countries' industrial policies, for example, entail corporate taxes and subsidies that encourage some domestic sectors at the expense of other domestic sectors -but also at the expense of the same favored sectors abroad. Alert multinationals may decide that their expansion can be shifted to whichever of their affiliates enjoys the most favorable sectoral policy incentives. Domestic subsidies and taxes can thus easily become an instrument of strategic sectoral predation among countries.

It is no surprise that as multinational corporate size and strategic influence have increased, domestic subsidies, performance requirements, and unfair trade have become hard bones of contention in the policy environment.³⁷

 37 Camps and Diebold (1983, p.22) illustrate this when they write that

one of the basic principles that we think should guide the new multilateralism ... [is] that the international community has a legitimate concern with domestic actions when they have important external effects

The recent claim that strategically calculating policy can shape ("create", "destroy") a country's comparative advantage is correct, after all, where that same policy is capable of moving capital endowments from one place to another,

using the mediating facilities of internationally coordinated firms, and leaving labor and immobile endowments behind. One county's strategically active sectoral policy in that world can also deter another's from beggar-its-neighbor attempts to shift comparative advantage and desirable employment. Passive (more exactly impassive) policy does not have this capability for defensive deterrence. Policy coordination in such a world is an attempt to establish a peaceful equilibrium that may nonetheless be backed up by arsenals of strategic policy weapons!

It is for these reasons easy to endorse the idea that there is unique importance to Uruguay-Round negotiations on subsidies, including revision of the existing Subsidies Code.³⁸ At the very least, such negotiations will

³⁸Camps and Diebold (1983, p. 39) comment that:

It is no exaggeration to say that the damage will ultimately lead to the collapse of the system of cooperation unless better ways are found to deal with the conflicts among national industrial policies.

Policy coordination on subsidies and countervailing duties is also near the top of Canada's list of reasons for pursuing bilateral trade liberalization with the United States.

likely generate sharper definitions of spillovers and agreement on procedural rules (Hufbauer and Shelton-Erb (1984)). And it may be timely for substantive rules and full-fledged attempts to exchange request-and-offer lists for reciprocal reductions of specified subsidies that would then be "bound" like tariffs.³⁹ ³⁹Baldwin (1986b, pp. 28-34, among other places) outlines a detailed plan for such negotiations in which modalities from historic rounds of tariff liberalization are adapted to subsidies. One reason this makes sense is the inherent (admittedly complex) measurability of subsidies as compared to more administrative intervention, and hence their susceptibility to coordination by rules (see Section IC(3) above).

The more fundamental question this prospect raises is whether policy should be just as coordinated among governments as corporate planning is among national affiliates. Skeptics about the merits of markets, especially internationally integrated markets, tend to respond "yes." Skeptics about the merits of industrial regulation, especially when centralized on a global (coordinated) scale, tend to respond "no."⁴⁰

⁴⁰ See, for example, McCulloch (198, p.), who speculates that policy competition among governments exercises a healthy discipline on costly abuses of their regulatory powers. The framers of the United States Constitution ambiguously reserved to Congress the power "to regulate ... commerce among the several states" (Article I, Section 8.3), implicitly excluding state governments from coordinating inter-state trade policy, yet nevertheless reserving the authority to do so for a centralized body.

(2) <u>Adjustment</u>. Adjustment problems in the economic environment have become arguably more severe in the past fifteen years. Average unemployment rates and excess capacity are higher. Burgeoning, globally integrated financial markets have created volatile changes in exchange rates, international competitiveness, and goods trade. These changes and the strategic sensitivity of multinational firms to governments and each other have aggravated the stimuli facing workers, farmers, and other owners of immobile resources. Their adjustment problems are made even worse by the potential for substitutability between goods trade and mobile corporate capital. When goods and firms are both internationally mobile, then only slight changes in the economic or policy environment can bring about striking changes in exports, imports, and the livelihood of immobile factors that are tied closely to them (Mundell (1957)). To a large multinational firm, moving the goods and moving the plant across borders are close substitutes -they are not to its immobile workers and their unions. Displaced workers and mid-level managers who are unable to acquire or transfer skills useful to alternative sectors face long periods of unemployment and below-average earnings.

Table 2C.4 hints at the size of the adjustment problem that might face immobile workers from trade liberalization in today's economic environment. Sector-by-sector employment changes are quite large, even though their aggregate (sum) may be small. They are much larger than similar estimates for Tokyo-Round liberalization in the late 1970s by Baldwin, Mutti, and Richardson (1980, p. 419).

In brief, immobile workers seem to be saddled with sharper and more frequent unanticipated shocks from international forces than in the past (Grossman and Richardson (1984, pp. 20-23)). Some of the agents who represent them are strategically large within countries, although uncoordinated across them, such as unions, regional governments, and Departments (Ministries) of Agriculture. Strategic interaction between them and their own government can lead to indefinite protection -- a kind of strategic paralysis of unproductivity.

In this environment the challenge to all policy is formidable, both national and internationally coordinated policy. Adjustment burdens can be reduced if national policy minimizes the economic hardship to immobile segments of the population, and sensible policy may include temporary and degressive protection (Diamond (1982)). But commitment to eventual adjustment

TABLE 2C.4

ISIC #	Sector	% of Change in Total Japanese Employment with Removal of U.S. and Japanese Tariffs and NTB's by Sector	% of Change in Total U.S. Employment with Removal of Japanese Tariffs and NTB's by Sector
1	Agric, Forestry & Fisheries	- 50.2%	+96.9%
310	Food, Beverages & Tobacco	+ 9.4	-4.9
321	Textiles	+18.8	-24.1
322	Wearing Apparel	-1.3	-0.6
323	Leather Products	+0.3	-1.7
324	Footwear	+0.1	-0.1
331	Wood Product	-0.7	-1.3
332	Furniture and Fixtures	+0.2	-0.1
341	Paper and Paper Products	+2.9	-2.0
342	Printing and Publishing	+0.4	-0.7
35A	Chemicals	+ 4.7	-3.7
35B	Petroleum and Rel.Prod.	-9.5	+0.2
355	Rubber Products	+1.7	-2.2
36A	Nonmetal Min. Products	+2.3	-1.0
362	Glass and Glass Products	+ 0.4	-0.5
371	Iron and Steel	+26.0	-7.8
372	Nonferrous Metals	+ 1.3	-1.4
381	Metal Products	+ 1.9	-2.5
382	Nonelectric Machinery	+ 5.0	-2.8
383	Electric Machinery	+3.4	-2.8
384	Transport Equipment	+4.2	+1.0
38A	Miscellaneous Manuf.	+13.3	-14.9
2	Mining and Quarrying	+4.3	-2.8
4	Electric, Gas & Water	+2.7	-1.2
5	Construction	-3.2	0.0
6	Wholesale and Retail Trade	-9.3	-12.6
7	Transportation, Storage and Communication	+1.1	-3.3
8	Finance, Ins. & Real Est.	-2.6	-3.4
9	Commercial, Social and Personal Services	- 18.7	-2.2

Percentage Change in Japanese and U.S. Employment by Sector under Trade Liberalization

Source: Saxonhouse (198), p. 6.

seems a necessity, since rational strategic agents will forecast future government action when contemplating a specialized investment. Government commitment to "preservation" makes no private adjustment the strategic and equilibrium response. Government commitment to unspecified "eventual" adjustment makes waiting the strategic and equilibrium response. Only credible commitment to adjustment makes it possible for anticipations of government reaction to alter ex ante location and allocation decisions.

Yet it is hard for a national government on its own to guarantee credibly that protection is only temporary or degressive. If the conditions that justified the protection continue to exist, the incentives are nearly irresistible for the government to repeat its "temporary" dose at similar intensity -- and to repeat it again and again. If strategic agents sense how irresistible this pattern is, they will refuse to believe in the proclaimed temporariness of the trade policy, and will remain active in the protected sector rather than exiting. Their continued activity keeps conditions the same as those that warranted the trade policy in the first place, and seduces the government to repeat its temporary protection. The sequence then repeats. It should be clear that this cycle represents a strategic equilibrium, a position of rest in which temporary or degressive trade policy is impossible (that is, not sustained by the postulated strategic behavior).⁴¹

⁴¹The policy problem is known technically as time inconsistency -- this year's optimal value for next year's policy intensity will no longer look optimal when next year rolls around. The same problem can afflict all temporary policy. See Staiger and Tabellini (1986) and Feenstra (1986) for further applications of the idea to trade policy.

Strategic policy coordination among governments can help alleviate this problem. Under GATT rules trading-partner governments can already request

consultation and compensation when a temporary trade policy becomes permanent. If the consultation/compensation mechanism were working well, then the first government's pledge of transience would become more credible. Private agents would be more likely to exit. Such consultation and compensation has been largely abandoned, however, as have other safeguard procedures under Article XIX of the GATT. This heightens the urgency of safeguard revisions in Uruguay-Round negotiations, and explains the possible appeal of a standing "adjustment committee" (GATT Wisemen (1985, pp. 43-44)) that would monitor temporary, degressive protection and facilitate international pressure on a government to keep its degressivity credible to domestic constituents. A standing committee with this charge illustrates how an "independent agent" can sometimes help strategic rivals to achieve coordination by making their promises credible, discussed in Section B above.⁴²

⁴²The reasoning is the same that underlies the independence of a central bank from political forces, and that accords the IMF or a new intermediary an independent role in helping debtors' promises appear credible to creditors.

There are reasons, of course, why trade policy may not be the ideal insulator of an economy from unforeseen shocks, nor the most desirable catalyst for adjustment. A less wasteful alternative for achieving the same goal might be a loan and insurance scheme for worker experience and investment in human capital (Grossman and Richardson (1984, p. 26)), providing benefits (contingent on payment of premiums) dependent on the state of competition from abroad. Under such a program, countries would continue to enjoy the benefits of low-priced imports and incentives for factor reallocation might be preserved. Strategic policy coordination could have a role to play here as well, in that some of the beneficiaries from "our" smoother adjustment are "their" firms, workers, and unions who take over the market. These agents might therefore fairly be expected to contribute to the insurance premiums that help fund our adjustment. More exactly, since successful adjustment creates <u>favorable</u> foreign spillovers, coordinated international loan and insurance schemes may some day be worth consideration, perhaps financed most easily by a small tax on all international transactions (capital movements as well as trade), or possibly by a more targetted but larger tax or trade surpluses, and administered by the GATT's standing adjustment committee described above. Coordinated international loan and insurance programs might also be more resistant than national schemes to moral hazard problems and to "capture" by political forces (e.g., the U.S. government's use of trade adjustment assistance to assuage autoworkers in the late 1970s).

REFERENCES

- Ahearn, Raymond J. (1986), "Protectionist Legislation in 1985," processed, March.
- Ahearn, Raymond J. and Alfred Reifman (1984), "Trade Policymaking in the Congress," in Baldwin (1984a).
- Aho, C. Michael and Jonathan David Aronson (1985), <u>Trade Talks, America</u> Better Listen, New York: Council on Foreign Relations.
- Axelrod, Robert (1983), The Evolution of Cooperation, New York: Basic Books.
- Balassa, B. and C. Balassa (1984), "Industrial Protection in the Developed Countries," World Economy, 7 (June), pp. 179-196.
- Baldwin, Robert E. (1984a), <u>Recent Issues and Initiatives in U.S. Trade Policy</u>, National Bureau of Economic Research Conference Report.

______ (1984b), "The Changing Nature of U.S. Trade Policy Since World War II," in Baldwin and Krueger (1984).

- ______(1986a), "The New Protectionism: A Response to Shifts in National Economic Power," National Bureau of Economic Research Working Paper No. 1826, January.
- _____ (1986b), "Alternative Liberalization Strategies," National Bureau of Economic Research Working Paper No. 2045, October.

(1986c), "GATT Reform: Selected Issues," forthcoming in Henryk Kierzkowski, ed., <u>Protection and Competition in International Trade</u>: <u>Essays in Honor of Max Corden</u>, London: Basil Blackwell.

(1987), "The Multilateral Approach to Liberalization," processed.

- Baldwin, Robert E. and Richard N. Clarke (1985), "Game Modelling the Tokyo Round of Tariff Negotiations," National Bureau of Economic Research Working Paper No. 1588, March.
- Baldwin, Robert E. and Anne O. Krueger, eds. (1984), <u>The Structure and</u> <u>Evolution of Recent U.S. Trade Policy</u>, Chicago: University of Chicago Press.
- Baldwin, Robert E; John H. Mutti; and J. David Richardson (1980), "Welfare Effects on the United States of a Significant Multilateral Tariff Reduction," Journal of International Economics, 10 (August), pp. 405-423.
- Baldwin, Robert E. and J. David Richardson, eds. (1986), <u>Current U.S. Trade</u> <u>Policy: Analysis Agenda, and Administration</u>, National Bureau of Economic Research Conference Report.

(1987), "Recent U.S. Trade Policy and Its Global Implications," in Colin I. Bradford, Jr., and William H. Branson, eds. (1987), <u>Trade and</u> <u>Structural Change in Pacific Asia</u>, Chicago: University of Chicago Press.

- Banks, Gary and Jan Tumlir (1986), "The Political Problem of Adjustment," <u>The World Economy</u>, 9 (June), pp. 141-152.
- Brander, James A. (1986), "Rationales for Strategic Trade and Industrial Policy," in Krugman (1986).
- Camps, Miriam and William Diebold, Jr. (1983), <u>The New Multilateralism: Can</u> <u>the World Trading System Be Saved</u>? New York: Council on Foreign Relations.
- Carmichael, W. B. (1986), "National Interest and International Trade Negotiations," <u>The World Economy</u>, 9 (December), pp. 341-358.
- Coase, Ronald H. (1960), "The Problem of Social Cost," <u>Journal of Law and</u> <u>Economics</u>, 3 (October), pp. 1-44.
- Cooper, Richard N. (1986), "International Cooperation in Public Health as a Prologue to Macroeconomic Cooperation," Brookings Discussion Papers In International Economics, No. 44.

____ (1987), "Trade Policy as Foreign Policy," in Stern (1987).

- Curzon, Gerard and Victoria (1985), "Defusing Conflict Between Traders and Non-traders," <u>The World Economy</u>, 9 (March), pp. 19-35.
- Deardorff, Alan V. (1986), "Why Do Governments Prefer Nontariff Barriers?", University of Michigan Research Seminar in International Economics Seminar Discussion Paper No. 186, June 30, forthcoming in ..., Proceedings of the April 1986 Carnegie-Rochester Conference on Public Policy.
- Deardorff, Alan V. and Robert M. Stern (1984), "The Effects of the Tokyo Round on the Structure of Protection," in Baldwin and Krueger (1984).
- Destler, I. M. (1986), <u>American Trade Politics:</u> <u>System Under Stress</u>, Washington: Institute for International Economics and New York: The Twentieth Century Fund.
- Diamond, Peter A. (1982), "Protection, Trade Adjustment Assistance, and Income Distribution," in Jagdish N. Bhagwati, ed., <u>Import Competition and Response</u>, Chicago: University of Chicago Press.
- Diebold, William, Jr. (1952), <u>The End of the I.T.O.</u>, Princeton University Essays in International Finance.
- Dixit, Avinash (1987), "How Should the United States Respond to Other Countries' Trade Policies?", in Stern (1987).

- Dixit, Avinash and Albert S. Kyle (1985), "The Use of Protection and Subsidies for Entry Promotion and Deterrence," <u>American Economic Review</u>, **75 (March)**, pp. 139-152.
- Feenstra, Robert (1986), "Incentive Compatible Trade Policies," processed, March.
- Frankel, Jeffrey A. (1986), "The Sources of Disagreement Among the International Macro Models and Implications for Policy Coordination," National LBureau of Economic Research Working Paper No. 1925, May.

and Katharine Rockett (1986), "International Macroeconomic Policy Coordination When Policy-Makers Disagree on the Model," National Bureau of Economic Research Working Paper No. 2059, October.

- Friedman, J. (1977), <u>Oligopoly and the Theory of Games</u>, Amsterdam: North Holland.
- GATT (General Agreement on Tariffs and Trade) (1985), <u>International Trade</u> 1984/85, Geneva.

(1986a), <u>International Trade 85-86</u>, Geneva.

______(1986b), "Ministerial Declaration on the Uruguay Round," <u>GATT_Focus</u>, 41 (October), pp. 2-5.

- GATT "Wisemen's Report" (1985), <u>Trade Policies for a Better Future: Proposals</u> <u>for Action</u>, by Fritz Lentwiler, Bill Bradley, Sumitro Djojohadikusumo, Pehr G. Gyllenhammar, Guy Ladreit de Lacharriére, I. G. Patel, and Mario H. Simonsen, Geneva.
- Goldstein, Judith (1986), "Ideas, Institutions, and American Trade Policy," processed, January.
- Grossman, Gene M. and J. David Richardson (1985), "Strategic Trade Policy: A Survey of Issues and Early Analysis," Princeton <u>Special Papers in</u> International Economics No. 15, April.
- Holtham, Gerald (1986), "International Policy Coordination: How Much Consensus is There?," Brookings Discussion Papers in International Economics No. 50, December.
- Hufbauer, Gary Clyde and Joanna Shelton Erb (1984), <u>Subsidies in International</u> <u>Trade</u>, Washington: Institute for International Economics.
- Hufbauer, Gary Clyde and Howard F. Rosen (1986), <u>Trade Policy for Troubled</u> <u>Industries</u>, Washington, D.C.: Institute for International Economics Policy Analysis in International Economics No. 15.
- Jensen, Richard and Marie Thursby (1983), "Free Trade: Two Noncooperative Equilibrium Approaches," processed.
- Johnson, Harry G. (1954), "Optimum Tariffs and Retaliation," <u>Review of</u> <u>Economic Studies</u>, 21, 142-153.

- Keohane, Robert O. (1984), <u>After Hegemony: Cooperation and Discord in the</u> <u>World Political Economy</u>, Princeton: Princeton University Press.
- Kravis, Irving B., Alan Heston, and Robert Summers (1982), <u>World Product and</u> <u>Income: International Comparisons of Real Gross Product</u>, Baltimore: Johns Hopkins University Press.
- Kreinin, Mordechai E. (1974), <u>Trade Relations of the EEC: An Empirical</u> <u>Investigation</u>, New York: Praeger.
- Krishna, Kala (1983), "Trade Restrictions as Facilitating Practices," Princeton University, Woodrow Wilson School Discussion Paper in Economics No. 55.
- Krugman, Paul R., ed., (1986), <u>Strategic Trade Policy and the New</u> <u>International Economics</u>, Cambridge, MA: The MIT Press.
- Ladreit de Lacharrière, Guy (1985), "Case for a Tribunal to Assist in Settling Trade Disputes," <u>The World Economy</u>, 8 (December), pp. 339-352.
- Lambson, Val Eugene and J. David Richardson (1987), "Tacit Collusion and Voluntary Restraint Arrangements in the U.S. Auto Market," processed, January.
- Lawrence, Colin and Robert Z. Laurence (1985), "The Dispersion in Manufacturing Wages: An End Game Interpretation," <u>Brookings Papers on Economic Activity</u>, 1, pp.
- Lipsey, Robert E. and Irving B. Kravis (1986), "The Competitiveness and Comparative Advantage of U.S. Multinationals, 1957-1983," National Bureau of Economic Research Working Paper No. 2051, October.
- Little, Jane Sneddon (1986), "Intra-Firm Trade and U.S. Protectionism: Thoughts Based on a Small Survey," <u>New England Economic Review</u>, January/February, pp. 42-51.
- MacBean, A. I. and P. N. Snowden (1981), <u>International Institutions in Trade</u> <u>and Finance</u>, London: Allen and Unwin.
- Mundell, Robert A. (1957), "International Trade and Factor Mobility," <u>American</u> <u>Economic Review</u>, 47 (June), pp. 321-335.
- Nogues, Julio J.; Andrzej Olechowski; and L. Alan Winters (1986a), "The Extent of Nontariff Barriers to Imports of Industrial Countries," World Bank Staff Working Paper 789, Washington.
 - ______ (1986b), "The Extent of Nontariff Barriers to Industrial Countries' Imports," <u>The World Bank Economic Review</u>, 1 (September 1986), pp. 181-199.

Oudiz, Gilles and Jeffrey Sachs (1984), "Macroeconomic Policy Coordination Among the Industrial Economies," <u>Brookings Papers on Economic Activity</u>, 1, pp. 1-64.

- Price, Lee (1986), "Trade Problems and Policy from a U.S. Labor Perspective," in Baldwin and Richardson (1986).
- Ray, John E. (1986), "The OECD 'Consensus' on Export Credits," <u>The World</u> Economy, 9 (September), pp. 295-309.
- Richardson, J. David (1986), "The New Political Economy of Trade Policy," in Krugman (1986).

(1987a), "Comment" on Dixit (1987), in Stern (1987).

- ______ (1987b), "'Strategic' Trade Policy: Research and Practice in the United States," in Richard G. Lipsey and Wendy Dobson, eds., <u>Shaping</u> Comparative Advantage, Toronto: C. D. Howe Institute Policy Study No. 2.
- Rotemberg, Julio J. and Garth Saloner (1986), "Quotas and the Stability of Implicit Collusion," National Bureau of Economic Research Working Paper No. 1948, June.
- Saxonhouse, Gary R. (198), "Japan's Intractable Trade Surpluses in a New Era," University of Michigan Research Seminar in International Economics Discussion Paper No. 178, in <u>World Economy</u>,...
- Shuman, Shannon Stock and Charles O. Verrill, Jr. (1984), "Recent Developments in Countervailing Duty Law and Policy," in Baldwin (1984a).
- Staiger, Robert and Guido Tabellini (1986), "Discretionary Trade Policy and Excessive Protection," processed, May.
- Stern, Robert M., ed. (1987), <u>U.S. Trade Policies in a Changing World</u> Economy, Cambridge, MA: The MIT Press.
- Stern, Robert M.; John H. Jackson; and Bernard Hoekman (1986), "An Assessment of the Implementation and Operation of the Tokyo Round Codes," University of Michigan Research Seminar in International Economics Discussion Paper No. 174, May.
- Tumlir, Jan (1985), "International Trade Policy and Other Constitutional Issues," processed.
- U.S. Bureau of the Census (1980), <u>World Population 1979--Recent Demographic</u> <u>Estimates for the Countries and Regions of the World</u>, U.S. Department of Commerce, Washington.
- U.S. Department of Commerce (1976), <u>The National Income and Product Accounts</u> of the United States, 1929-74: <u>Statistical Tables</u>, Washington.
- USTR (United States Trade Representative) (1986), <u>Annual Report of the</u> <u>President of the United States on the Trade Agreements Program, 1984-85</u>, Washington.
- Whalley, John (1985), <u>Trade Liberalization Among Major World Trading Areas</u>, Cambridge, MA: The MIT Press.
- World Bank, World Development_Report, various issues.