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CRISES AND TURBULENCE: SOURCES, ASSESSMENTS, MANAGEMENT

by

Davis B. Bobrow, University of Maryland

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February, 1981

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This report examines: (1) the relationships between economic issues and the US crisis management agenda with special reference to North-South and West-West relations; (2) indicator systems for crisis anticipation (stock market fluctuations) and retrospective learning (US-Soviet relations); and (3) steps to improve the provision, use and responsiveness to information for crisis anticipation and management planning and to prevent third-party military crises.

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CHAPTER 1

OVERVIEW AND EXECUTIVE SUMMARY

Davis B. Bobrow

Long-lived research projects change over their course. This project began as one of three parts of a program focused on crisis management. The other two under the direction of other principal investigators have long since been completed and reported elsewhere. The third was and has remained avowedly diagnostic in style and exploratory in purpose. Its objectives have been threefold:

-- To improve our ability to understand how others recognize, avoid, approach, and manage crises;

-- To contribute to the development of useful quantitative indicators for crisis anticipation, monitoring, and retrospective learning;

-- To clarify the implications of situations, tendencies in human behavior, and crisis prevention and control courses of action rather marginal to what were, at the time, the prevailing emphases of US approaches to the sources, recognition and management of potential security crises.

Initially, these general objectives were pursued with reference to the People's Republic of China as a test case.

Our objective was to develop and apply a set of diagnostic approaches to illuminate how a relatively inaccessible regime would recognize, avoid, and manage crises. Three criteria were used throughout to orient the effort to develop what we came to call precedent-associated policy analytics (PAPAS). First, the approach should yield falsifiable predictions. Second, these should, in large measure, be found accurate against an historical record of behavior, including predictions about dilemmas for the decision system under analysis. Third, the approach should yield a characterization of the subject decision system which would apply over time and across numerous cases. As the approach had merit in these terms, it would provide a better understanding of the Chinese case and create a reasonable presumption that it merited application to other decision systems. That work was completed some time ago and has been reported on numerous occasions in brief, and at length elsewhere. Accordingly, we do not deal with it in this report. Interested readers will find the pertinent project papers and publications listed in Section D of the appendix to this report.

Beyond the findings about the usefulness of the PAPAS approach, this part of our work and international developments affecting the concerns of the US national security community led to several general conclusions on our part. The first was that developments in the international economy and in foreign economic policy would have important implications for the US crisis management agenda both directly and

indirectly. The second was that understandings of historic security relations between the US and other nations would have substantial importance for current military posture, strategy, and expectations. The third was that a comprehensive and efficient US crisis management policy should not be limited to hot incidents directly involving the US but also deal with the prevention of hot conflict between third parties, as these would pose security problems for the US. On all counts, there was an obvious need for more explicit, reliable, and valid empirical ways to gain warning and to learn from experience.

Our subsequent work followed from these conclusions and is dealt with in this report. It can usefully be grouped under the headings of international economic issues and national security, indicators for crisis anticipation and retrospection, and approaches to crisis warning and preventive control. We emphasize that, for each topic, our aims were not to provide detailed and comprehensive research in depth. Rather, we sought to provide conceptual maps, winnow out major likely sources of crisis and impediments to crisis management, and develop informative examples of analytic approaches. The general objectives were to sharpen the US crisis management agenda for policy and research. Since much of this work has yet to appear in generally available publications, it appears at length in subsequent parts of this report. A full list of pertinent project papers and publications appears in Sections A, B, and C of the appendix.

International Economic Issues and National Security

To grasp the crisis management implications of economic matters, we chose to fuse approaches from political science and economics. More specifically, we sought: 1) a conceptual framework to relate economic matters to national security policy and organization, 2) a way to illuminate the implications of North-South ostensibly economic bargaining for international tension management, 3) a better understanding of the crisis management implications of direct foreign investment, and 4) an empirical way to clarify how major economic events might alter the problems of crisis management for the US.

Conceptual Framework

The work reported in Chapter 2 draws out the national security implications of three established approaches to viewing the economics-security relationship. These approaches which we label as the schools of inventory shares, lateral pressure, and OECD interdependence, each emphasizes different questions and thus arrives at different answers about the national security implications of foreign economic policies including technology transfer, trade, and direct investment. None of them deal with decision-making processes, but instead emphasize aggregate national postures. To begin to deal with this gap, we propose a conceptualization of when the decision-making process will have some rather than other characteristics.

These characteristics, in turn, bear on the likelihood that a national government will operate coherently and effectively from a security viewpoint. The analysis leads us to question the sufficiency of the dominant prescription for US reorganization to improve security which is centralization.

North-South

In the 1970s, substantial attention among experts and the elite media in the US has gone to North-South controversy about economic issues as a potent source of international tension and crises in the future. The work reported in Chapter 3 tries to put this concern in perspective. We believe that the bargaining along North-South lines most dramatically represented by the demands of the Group of 77 for a New International Economic Order is less about economics than it is about politics. More specifically, the behavior of the parties becomes explicable and predictable through an accountability regime perspective that stresses the distribution of political authority over economic relations. We conclude, first, that the demands of the South will not be granted to a significant extent; second, that the South will not cooperate with the North to curb the power of OPEC; and, third, that, nevertheless, the North-South bargaining will not be a major source of hot crises.

Direct Foreign Investment

In the aftermath of the oil shocks, forecasts were made by prominent American experts of forthcoming "investment

wars." Should these take place, they would impact on US crisis management in one or both of two ways. First, they would bring Northern governments, including the US and its principal allies, into tense confrontations with regimes in the less-developed countries. Second, they would impair the relationships between the US and its principal advanced industrialized nation allies. Such West-West tension would, in turn, lessen the chances for cooperative Western security and crisis management actions and arrangements. The work reported in Chapter 4 seeks to clarify the likelihood that the US will find itself in such "investment wars" with their attendant security implications. The past and likely future of the US posture toward outgoing and incoming direct foreign investment are pursued through an approach that stresses a small set of policy values and policy process determinants. The values are national economic welfare, national autonomy, and national security. The process determinants are ideological consonance, impact transparency, the diffusion and concentration of perceived costs and benefits, and group political capacity. The approach works well to explain the relative stability of US policy in both areas since World War II and the changes that did take place. It leads us to predict that US involvement in "investment wars" in the 1980s is highly unlikely. Adverse crisis management implications for West-West relations are limited to the reactions to any major US effort to obstruct economic relations between our allies and the members of the Warsaw Pact.

Economic Events and Crisis Management Problems

Finally, we tried to illustrate how the sort of quantitative international politics analysis developed with ARPA support can illuminate the way major economic events can impact on crisis management problems. The events we explored were those of higher oil prices. The impacts were on arms exports and acquisitions, matters that can exacerbate the military problems of crisis intervention, regional arms races, and internal instability in the poorer nations. We grouped nations into the categories of industrialized nations which export arms and import oil, nations which export oil and import arms, and nations that are net importers of both. The application of regression analysis to post-1973 data yielded the following conclusions. Small arms suppliers, e.g., Brazil, tended to accelerate their rate of export more than the traditional major arms exporters. Significant jumps in the rate of arms imports characterized only some members of the oil exporting category, and this rate was not directly linked with the rate of change in oil exports. Expensive oil did not significantly dampen the rate of demand for imported weapons by those countries least able to afford them, i.e., Third and Fourth World oil importers. These impacts all point in the same direction--more serious crisis management problems for the US.

Indicators for Crisis Anticipation and Retrospection

To clarify the usefulness of alternative quantitative approaches to crisis warning and retrospective learning, we pursued two inquiries as examples. The first dealt with the warning contribution of stock market fluctuations. The second drew on three data sets (two developed with ARPA support) to clarify the US-Soviet relationship in the 1968-1977 period. The first, then, illustrates a strategy to clarify the value of a source of indicators; the second, of several sorts of indicators to illuminate particular national interactions.

Market Fluctuations

The work reported in Chapter 5 presents the theoretical rationale for the use of indicators of judgments by non-experts about international crises (in this case, market investors) and previous crisis management analysis using such data. We then apply a quasi-experimental design for the study of interrupted time-series data to the historical behavior of the Hong Kong and New York financial markets. Their time sensitivity makes their indicator potential of considerable interest. The "interruptions" were a variety of crisis events, some involving US or Soviet military action and others not, some involving primarily international economic shocks and others political and military events, and some that were primarily of an internal political

nature within China but with major import for Sino-Soviet relations. In order to assess the false alarm propensities of indicators based on market fluctuations, we also employed a control group of "interruptions" which did not involve crises. Market fluctuations seem to have little value as primary crisis warning indicators, although the New York Stock Exchange data may have corroborative value for some classes of crisis events. In general terms, the markets react to crises much more than they anticipate them. As warning indicators, market fluctuations would produce a great many false alarms.

US-Soviet Relations in the Period of Detente

Recommendations about current and future US defense and crisis management preparations vis-á-vis the Soviet Union draw significantly on diverse views about relations from 1968 through 1977. As is customary in international security affairs, a rich and complex record of interactions provides examples to support almost any interpretation. To illustrate the usefulness of a more comprehensive approach, the historical patterns and projective implications of three data sets are explored in Chapter 6. These deal with the political uses of force by the US and the USSR, the ability of general strategic images of the US and the USSR to postdict responses to each other's policy line, and the responsiveness and sensitivity of cooperative and conflictful actions directed by one superpower toward the other to analogous behavior

directed by the other superpower toward it. The incidence of political uses of the military by the respective superpowers is not related to the general degree of conflict and cooperation in their relationship. Images on the part of each superpower which attribute to the other expansionist objectives and to itself maintenance objectives provide superior response predictions. The superpowers quickly reciprocate changes in each other's cooperative initiatives volume, but seem to derive their conflictful activities volume from other considerations. The most general implications are that the superpowers are unlikely to be able to stabilize the mix of conflict and cooperation in their relations.

Warning and Preventive Control

The final section of this report deals with two very different subjects. These are impediments to crisis warning and management planning suggested by decision analysis findings, and the desirability and feasibility of shared warning systems for preventing third-party conflicts.

Policy Attention and Forecast Bias

Warning can be less than adequate for numerous reasons. Two of the most important explored in Chapter 7 are misestimates about more or less likely events and inattention to estimates or their rejection by the audience capable of acting on them. The implications of tendencies for bias in human judgments in general are related to

crisis warning and management planning. The ways in which these can be reinforced or partially compensated for by organizational design of the relations between policy officials, estimate providers, and information sources are discussed. Tendencies for persistent weaknesses in warning, regardless of the indicator systems in use, suggest the need for special correctives to lessen unwarranted expectations about the occurrence and treatment of security crises.

Information Steps for Preventive Control

Many of the more probable military crises that will pose substantial problems for any US administration in the rest of the century stem from cases of persistent regional tension. That is, they involve flashpoints in which two or more nations perpetually confront each other and one or more of them is an ally or associate of the US. Chapter 8 addresses a family of steps involving the US to put brakes on escalation between hostile regional powers. In the cases of special interest, the US objective is to prevent the crisis from heating up. The objectives of the local parties are to avoid being struck first, to establish that their local adversary is the aggressor, and, eventually, to move back from a hair-trigger military posture. The policy steps examined all involve the provision of warning systems and information conducive to the local parties finding a non-military way to limit and eventually escape from the security Prisoner's

Dilemma relationship in which they currently find themselves. Steps involving the US, Egypt, and Israel provide an informative example.

INTERNATIONAL ECONOMICS AND NATIONAL SECURITY

CHAPTER 2

ECONOMIC ISSUES AND NATIONAL SECURITY: ANALYTIC PROBLEMS AND ANALYTIC FRAMEWORKS

Davis B. Bobrow and Robert P. Stoker

Who would bribe if he could bully?

-- Sir Lewis Namier

Trading with the enemy, if you are cleverer than he, is a very wise thing.

-- P.J.D. Wiles

Broadly defined . . . trade is what most of international relations are about. For that reason trade policy is national security policy.

-- T. C. Schelling

If anyone thinks that I am going to send my boy to be killed in Saudi Arabia so that some slob can fill the tank of his Cadillac, you have got another guess coming.

-- letter to the Los Angeles Times

Economic policies solely the handmaid of international political maneuvering tend to domestic tyranny and international war, while foreign policies solely the handmaid of economic interests tend to an impersonal system of cosmopolitan trading oppressive to underprivileged peoples and classes and vulnerable to movements of militant nationalism and imperialism.

-- Quincy Wright

Introduction

In the US in the last decade, great emphasis has been placed on the relationships of economic issues to national

security. It has even been argued that economic interdependence is a more important security concept than deterrence, and that military matters have been relegated properly to a place of secondary importance (Malmgren, 1973). Richard Cooper, the Under Secretary of State for Economic Affairs in the Carter Administration, has argued that the prevalent distinction between high foreign policy, that is military matters and diplomacy, and low foreign policy, that is economic matters, was ill-founded and that it is past time for academics to catch up with the perspective of policy officials (Cooper, 1973). Our purpose is not to debate the wisdom of these injunctions. Like Murdock (1977), we agree that numerous economic matters now have salient national security relevance. However, accepting that description still leaves us with two demanding analytic tasks. One is to determine the security consequences of alternative economic policies. The second is to comprehend the policy process characteristics which determine the options really available to national governments to pursue economic matters as national security issues.

Our purposes here are to lay a foundation for attacking both sets of tasks. To that end, we address the problems of calculating the security consequences of economic policy decisions, review the major available analytic orientations toward the relationships between economic matters and national security situations, and suggest a framework for treating pertinent decision process characteristics. Before turning to these topics, it seems useful to share some more

fundamental judgments. In our view, many economic matters clash with the limiting or scope conditions that have characterized much Western thinking about national security policy (Bobrow, 1972). Whatever analytic power has been available to predict and prescribe the behavior of states in response to security threats has followed from the scope condition that national security is uniquely the "sole province of the central government" (Murdock, 1977: 70). By classifying an issue as within national security policy, one could make a set of analytically helpful and simplifying assumptions about: 1) the actors involved in the policy process; 2) the potential for the central government to exercise the power of authority; and 3) the ability of government to impose significant and possibly unevenly distributed costs on domestic populations. We do not mean to deny the widespread recognition that a central government operates under some constraints because of its need to maintain support mechanisms (Lindblom, 1977: 121), the habits of large organizations, or the vagaries of personal relationships (Allison, 1971). We do wish to emphasize a relative difference. In the domain of security analysis, government is generally supposed to be subject to fewer political constraints and thus central decision makers are assumed to have special opportunities to shape policy.

Most economic matters do not conform to the special status of security issues. That is, the traditional focus of national security policy choice and implementation

problems on communication with and command and control over formally subordinate bureaucratic structures becomes inappropriate. Economic matters as national security policy involve oblique and not direct authority. Oblique authority refers to the ability to enter into exchange relationships or to alter the terms of exchange through the manipulation of incentives in a diffuse system (Lindblom, 1977: 23). In essence, when national security policy deals with economics, it comes to resemble most other areas of public policy.

Accordingly, the policy capacity of a central government becomes a function of the structure of the authority relationship between the economic and political institutions of a nation and the policy tools available to central decision-makers (Krasner, 1977). The policy capacity of a government to deliberately develop national security policy on economic matters is particularly limited in nations with market economies whose governments are limited to macro-policy control instruments, e.g., the United States. We do not mean to imply that these nations are most vulnerable to economic disruption or manipulation, but rather that they have the lowest probability of readily designing and implementing authoritative national policy. The possibility of policy stagnation and incoherence seems particularly great in the face of threats that are nebulous and when coping measures entail extensive, unevenly distributed direct costs. In effect, such central governments may recognize

that economic matters are national security issues and, at the same time, be unable to treat them as such.

Assessing Security Consequences

In Klaus Knorr's (1966) helpful formulation, national security concerns arise when vital national values are threatened by foreign actors, actions, or events. National security policy then involves the development of capabilities (or national power) to maintain or achieve salient national values. An action which increases the capabilities of an adversary without disproportionately increasing one's own is unwarranted. Actions which block an increase in an adversary's capabilities have a security advantage if the adversary is unable to inflict a greater constraint on the initiator. Most of the classic instruments of economic warfare--aimed at exploiting a bottleneck effect--follow this rationale, yet, even here, there is an efficiency, risk-aversion corollary. If two courses of action will have equal impact on the power ratio, one should use that with the least expected cost.

In a world of satisficing rather than optimization, governments may use any ready-to-hand instrument which stays below a threshold of unacceptable cost. One possibility is economic withholding, as in export control to attempt to influence the behavior of a nuclear superpower in a world of strategic parity. However, such policy prescriptions may not readily be compatible with the starkest notion of

security. Although the issue may be reduced to one of relative power gain, second-order effects will vastly complicate this calculation. For example, sales to an adversary may increase its power capabilities while also increasing one's own resources available for military purposes (Hirschman, 1945). In the long run, these and other second-order effects may create elements of cost for the adversary. Only the influence consequences of no economic relations are clear should autarchy be feasible (Wiles, 1968: 466-76).

Security policy, even vis-á-vis a current or potential adversary, involves affecting not only the ratio of power stocks but also their allocation. Allocations are significantly contingent. The outside manipulator seeks to strengthen forces within the adversary government that will allocate resources to uses which are inefficient for or only weakly related to military posture. Assessments about the impact of measures to do so are inherently more difficult to make than are estimates about the contribution in principle to a power base, e.g., potential military production capability. The former involve a grasp of internal political dynamics with much local variation. Shying away from the problem for this reason only makes analytic sense if the absolute capability view imposes a relevant floor and ceiling on what the adversary can do. Often it does not, perhaps because the adversary economy is rich and advanced or because of the resource mobilization capacity of the adversary political system (Organski and Kugler, 1978).

Identifying effective policy thus requires an extensive structural analysis of the political and economic system of the target state. Such an analysis may yield complex results. For example, acts which increase military demand on the adversary economy or decrease its total resources do not necessarily create pressures to reduce military expenditures or modify international relationships. Nor do they necessarily create internal political instability.

Economic sanctions vary in their influence on allocations as do economic benefits. Some of the most important affect what an adversary will choose to do. Discussions of international military relationships often refer to perception of hostile intent and imminent threat as destabilizing. The implications of economic sanctions are analagous, as demonstrated by the US oil embargo on Japan prior to World War II (Sathre, 1978). If economic sanctions lead the target state to a security choice which imposes substantial, unwanted costs on their initiator, it is difficult to understand their security rationale. They would seem, then, to be a poor policy instrument of the strong against the strong. Further, the lack of relations they imply lowers the likelihood that hostages, albeit economic ones, will be available in the future. Like other coercive deterrent measures, economic sanctions are strongest before use.

If we add third parties to our world, but still think of power ratios, economic matters become one of a set of

determinants of the security alignments of the third parties and thus the aggregates on each side of the power ratio. One classic reason for so-called unrequited economic transfers is to bolster regimes hostile to one's enemy. This rationale was reasonably explicit in President Eisenhower's plea that foreign aid was necessary, for, unless the poorer countries "can hope for a reasonable economic advance, the danger will be acute that their governments will be subverted by Communism," (quoted in Olson, 1963). In effect, the principal alliance power pays an economic price for a security gain. Of course, this policy rationale collapses should the economic price entail more of a security drain than an asset, for example, the costs to the US of maintaining its commitments in Vietnam. Yet, the stronger an ally's economy and military posture, the more it can contribute to an adversary and subtract from one's own side of the power ratio by changing sides. Under the security rationales of a bipolar world, what begins as a conscious subsidy can become, after it has produced economic success, less an investment than a rather genteely extracted retainer fee.

Steps to bond economies together are a way to maintain and build alliances. Bonding does provide incentives for joint action by raising the costs of unilateral policy initiatives. Unlike the acceptance of economic subsidy, bonding almost inherently involves a loss of autonomy. Third parties only find it rewarding if guarantees of continued cooperation are reliable and if their share of benefits is greater than

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the initiator, the targets, and third parties. Second, the problems of security relations will vary according to the policy target which may be an ally, adversary, or non-ally of an adversary. Third, economic withholding does not necessarily increase security nor does economic support necessarily decrease it. Fourth, the structure of the economies involved and the international economy in which they are contained have great importance.

Parenthetically, these points imply that a security policy focused on item-by-item control of economic goods and its other side of item-by-item self-sufficiency is seriously inadequate. As a problem of regulatory foresight, it becomes almost impossible in the modern military era to have full coverage without shifting to a condition of autarchy with its at least indirect security disadvantages. Wiles (1968: 463) has put it well: "All 'bottleneck' products are 'strategic' even if superficially unimportant."

Aggregate Frameworks

We find it useful to group the approaches in the literature to relate economic matters to national security into three categories. We label these as the relative inventory approach, the constrained pursuit of national benefits, and interdependence among industrialized nations in the nuclear age. They share a reliance on the aggregate characteristics of nations. Although a number of classical theorists of international relations are relevant (Constant,

Fichte, Hobson, Lenin), we shall limit ourselves to the contemporary literature. For each approach, we shall discuss how it shapes thought about the nature of national security problems and thus identification of pertinent economic matters. We shall also consider implications for the impact of changes in economic matters on national security.

Relative Inventory

The inventory approach is perhaps best represented by the work of Hans Morgenthau (1950) and Frederick Hartman (1978). Under this approach, security involves the development, maintenance, and exercise of power commodities. A number of power commodities are listed, including economic ones, albeit often not weighted or examined for interaction effects. Inventories are sufficient for security when a nation can, without incurring unacceptable costs, gain what it wants and keep what it has (a state of affairs clear to others and to itself). New security problems arise from shifts in relative inventories in fact or in prospect, or from developments which lower the threshold for an increase the likelihood of unacceptable costs if the inventories are used. The importance and salience of economic matters for national security increases when:

-- the inventory of national economic capabilities declines relative to potentially hostile others;

-- the time required and difficulty of increasing

national inventory economic items increase absolutely and relative to potential adversaries;

-- the range of national economic assets, products, and production capabilities clearly related to coercive capacity expands;

-- the demand on national economic capabilities to support other elements of the power inventory increase faster than the supply currently or prospectively available, both absolutely and relative to hostile others.

It is important to recognize that these expectations which follow from the work of the inventory theorists implicitly allow for a variety of sources of change. These include: purposeful internal economic actions by others; secular trends and breakthroughs in technology; economic and non-economic developments in one's own society; economic and military behavior by third parties; differences in the distribution and magnitude of natural endowments among nations which are economically exploitable; naturally based scarcities whether because of depletion or acts of nature. The determinants of change can be affected by the standard instruments of economic warfare such as embargoes, blocking transit, worsening the terms of trade by monopolist or monopsonist action, creating unemployment through dumping and import restrictions, currency speculation, worsening another's terms of trade by dumping in foreign markets or pre-empting key purchases. However, as Quincy Wright (1955)

observed long ago, the determinants of change are at least equally sensitive to general patterns of economic development, internal economic policy or quasi-policy, and foreign economic relations.

Changes in the economics-security nexus may also be driven by changes in other components of national power especially, in an age of weapons diffusion, by increases in the costs and decreases in the feasibility of establishing a useful position of military superiority. The US has recently experienced most of the factors mentioned above with what, for an inventory theorist, is a predictable rise in the number of economic matters treated as security issues. Parenthetically, it is obvious that all other nations have not experienced similar developments in the factors listed. Accordingly, an inventory theorist would understand the lack of similar changes on their part.

Constrained Pursuit of National Benefits

One of the most interesting uses of aggregate characteristics to pursue a second approach, the constrained pursuit of national benefits, is that of Choucri and North (1975). While explicitly limited to relations between great powers with similar capabilities, the formulation is not limited to a particular historical period. To oversimplify, they stipulate that domestic economic growth leads to extension of various activities beyond national boundaries. Expansion further stimulates growth and thus domestic demands

and the need for further extension. That is, extension develops interests in the target nation and the felt need to protect and continue such external activities. Security comes to involve the continued ability to pursue these external activities to keep pace with domestic economic demand.

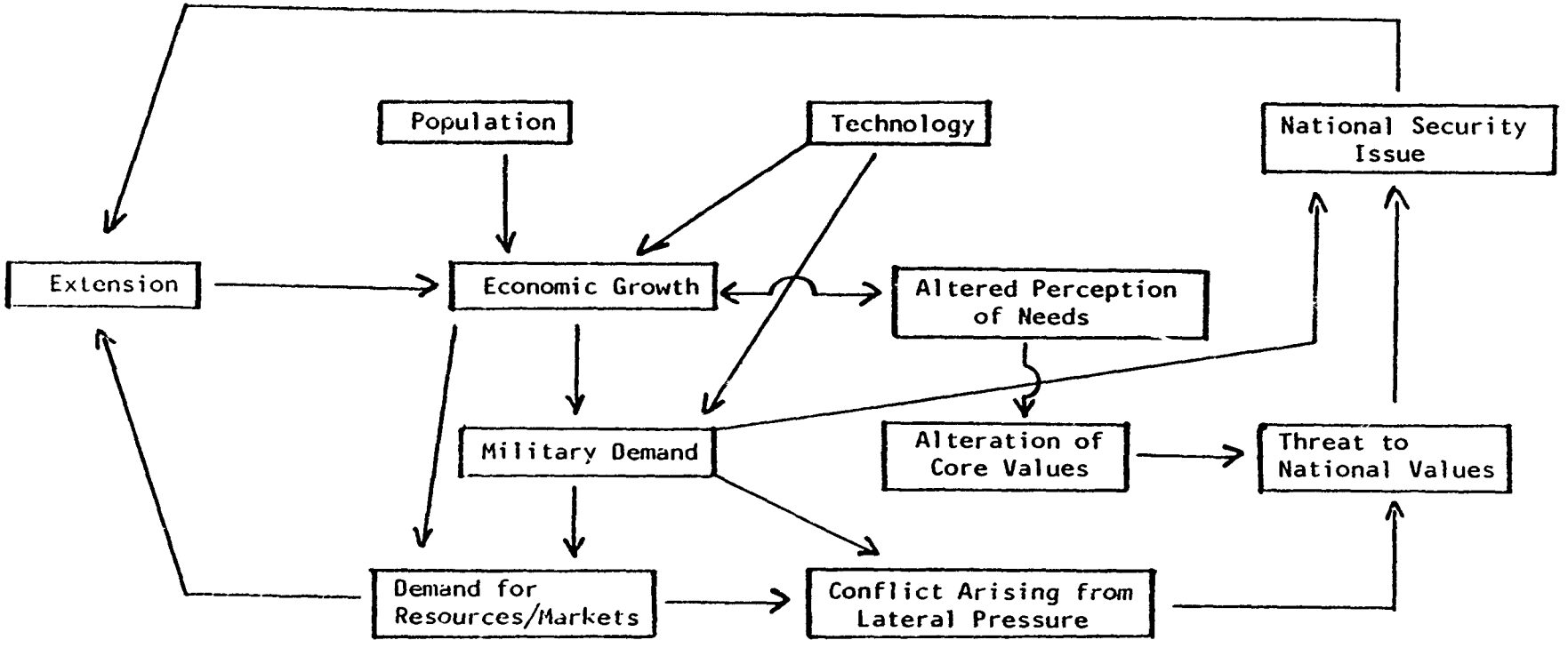
As shown in Figure 1, the pertinent acts of extension involve the pursuit of markets and resources which, in turn, lead to the pursuit of military superiority and strategic advantage. The rate and intensity of extension and of military threats to it depend on the population, technology, resources, and feasible domestic market expansion of the nations involved. If several nations are driven to extension by these factors, they will come to exert lateral pressure on one another with the consequence of conflict. These patterns do not depend upon the nature of the political economy of the pertinent nations.

Economic issues will be seen to have security implications when:

-- The joint pressures of population, technology, and expectations of abundance work for growth which, in turn, depends increasingly on foreign resources and markets; AND

-- Military demand increasingly involves foreign resources; AND

Figure 1. The economics-Security Nexus: Lateral Pressure



Note: Arrows indicate the direction of influence from an increase in one variable to an increase in another.

-- Significantly militarily capable others are attempting to extend into potential resource supply/market domains; AND
-- A pattern of benefits from previous extensions by one's own nation c others has been established and accepted as a policy premise.

The share of security issues which are economic issues will rise as the perceived threat to national values from the previous sources increases and will also do so if the moral legitimacy and pragmatic attractiveness of military responses to the threat to national values decline. A decline may follow from a number of developments including increases in the destructiveness of warfare and the importance of joint interests with those who are, in some sense, adversely affecting access to resources and markets.

Both the inventory and lateral pressure frameworks are capable and, indeed, in some sense, designed to explain decreases as well as increases in the number of economic issues treated as national security issues and the share of security attention devoted to economic matters. In contrast, the third and final aggregate approach we consider, that of interdependence, has been designed to account only for increases on both scores.

Interdependence

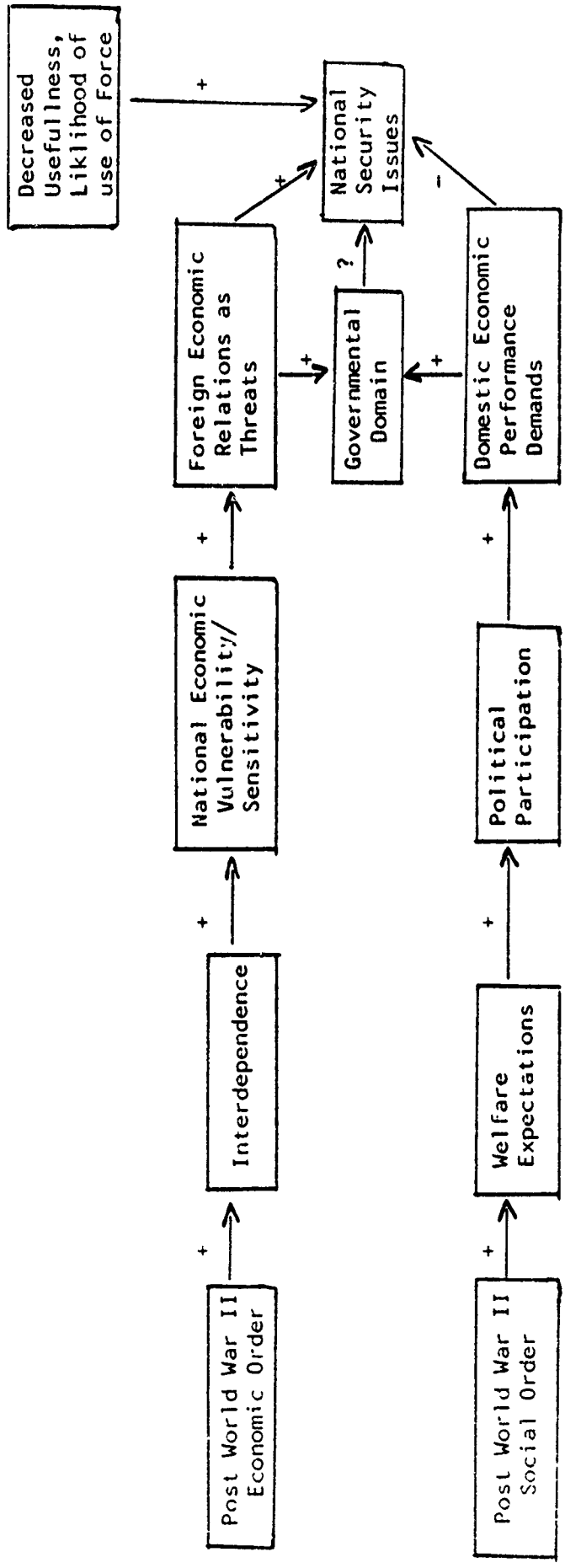
We include, as theorists of interdependence among industrialized nations in the nuclear age, both writers who

explicitly label themselves in this fashion (Bergsten and Krause, 1975; Keohane and Nye, 1977; Brown, 1974; Cooper, 1973) and Klaus Knorr (1975, and Knorr and Trager, 1977). This inevitably omits some important differences in their work, but captures their common emphasis on the interaction between homeland economies, on a set of international and domestic developments, and on a shared interest in avoiding major wars. A simplified representation of their argument appears in Figure 2.

As Figure 2 shows, two sets of developments are central. The first begins with the set of economic arrangements after World War II which created a world of increased interdependence among national economies with heightened vulnerabilities and sensitivities to one another. Foreign economic relations thus acquire the status of potential threats meriting inclusion among the responsibilities of the central government. A second chain begins with the set of social arrangements after World War II within major Western societies which created a domestic world of higher welfare expectations and broadened political participation. Domestic economic performance demands multiplied in amount and diversity thus becoming a more cardinal element of central government responsibility.

The implications of this second chain of developments for the treatment of economic matters as national security are complex. Clearly, more actors are politically mobilized and sensitive to governmental actions of omission and

Figure 2. The Post WW II OECD Pattern



commission which affect them adversely in economic terms. Should they feel that categorizing those actions as national security issues makes it more difficult to oppose them, they will resist the categorization and be in a better political position to do so. The other side of the coin is that the government will find defining economic issues as national security issues increasingly necessary to gain the latitude to take actions which run counter to the economic interests of particular domestic groups. Groups which benefit from specific shifts in central government policy will find it attractive to stress the national security implications of such a policy change. However, it does a government little good to win a definitional issue unless it can also meet the domestic economic performance demands, or shape them sufficiently, to remain in office.

The problem for governments is how to gain the latitude to deal with potential foreign threats which can undermine its ability to meet domestic economic performance demands. A policy of maximally meeting domestic demands and ignoring contingent foreign threats can lead to defeat as surely as can one of unpersuasive enlargement of the national security umbrella to impose costs on politically important domestic constituencies. How a government will, in practice, handle this set of dilemma as not resolved by the interdependence theorists, although their preference is relatively clear. Since, for them, military measures are

either unattractive or not credible, foreign threats must be handled by other policy instruments and especially by foreign economic policy.

Under this framework, it is clear that the number of economic matters relevant to national security will increase with interdependence and the vulnerabilities and sensitivities it creates (although not necessarily linearly). A more interesting question is when the number of economic issues actually treated as security issues will increase. The framework implies that this will happen for any given degree of interdependence and vulnerability/sensitivity when:

-- Foreign economic relations are perturbed or seem about to be perturbed by others;
-- Central government foreign economic responsibilities are expanded or it seeks to expand them;
-- Domestic economic performance demands are shrill and insistent so that an especially powerful rationale is needed to provide central government latitude for foreign economic policy.

Parenthetically, the last factor acquires special force if the central government also experiences a de facto loss of secrecy in the foreign economic actions it takes or permits. Again, all these factors have and continue to characterize the United States in recent years.

Four matters raised, although not always adequately dealt with by interdependence theorizing, merit at least

brief discussion. First, nations need not experience these developments at the same time or to the same degree. If they do not, one would expect discourse about foreign economic relations to find some governments treating them as security issues and others having a far different frame of reference. Second, governments need not experience the chains in Figure 2 in practice to be alert to the possibility and move preventively. Learning and anticipation, perhaps wise or perhaps not, may lead regimes to attempt to cut one or both of the chains by limiting interdependence or welfare expectations. One rationale for doing so is that of national security implications and risk-averse planning based on the need to avoid the pressures just summarized. Third, interdependence discussions make much of the distinction between symmetry and asymmetry with respect to vulnerability and sensitivity. This distinction seems to us to be more important for the choice of economic national security options than for the treatment of economic matters as national security issues. As in military matters, symmetry does not imply relaxation at high levels of vulnerability/sensitivity. Instead, it suggests the presence of a mutual damage inflicting posture, that is, of possible deterrence with its need for maintenance. Further, a sharp advantage or disadvantage in degree of vulnerability/sensitivity does not imply that a government will actually undertake offensive or defensive acts any more than it does in military matters. It does, however, affect the probable costs and benefits of options

available to a government in an implied or literal use of economic measures. Fourth, the chains in Figure 2, were they to be mirrored for several societies, as the theorists in question would argue they have been for the major members of the OECD, imply that allies will experience perturbations from other allies not for national security reasons but to cope with domestic demands. That is, the national security considerations which would lead to domestic restraint may be too weak to prevail. This familiar observation does suggest that allies will be sensitive in their own preparations for foreign economic threats to the prospect of unmet economic demands in the domestic systems of their security partners. The reason for secondary members of an alliance to worry about the economic health of a principal alliance member is not so much that a weakening economy will lessen what it can in principle do for them militarily, but that the principal member will be less likely to consider economic actions primarily on the basis of their collective security implications.

While aggregate theorizing contributes substantially to an understanding of how economic matters may be related to national security, it leaves some important questions unresolved. Our discussion of interdependence approaches stressed a set of cross-pressures operating on governments with alternative possible consequences. It did not resolve under what conditions one or another resolution will emerge. The lateral pressure and inventory theorists do not fully

identify the conditions which bring some nations to move more coherently and rapidly to deal with threats to their extensive activities than do others, or to concentrate on some aspects of their inventories more than others, or to set higher or lower inventory targets. Perhaps for our subject as with others aggregate theorizing provides important general knowledge about tendencies, but leaves much variation in behavior unexplained. In the next section, we introduce some decision-making and policy process ideas which compliment the implications of the aggregate perspectives.

The essential difference between our framework and those previously outlined is that we do not assume that issues which have the normative character of security issues will tend to be treated as such. Instead, we shall treat the distribution of political authority as a crucial variable which largely determines the ability of government to develop a strategic response to economic security threats.

Decision Making and the Policy Process

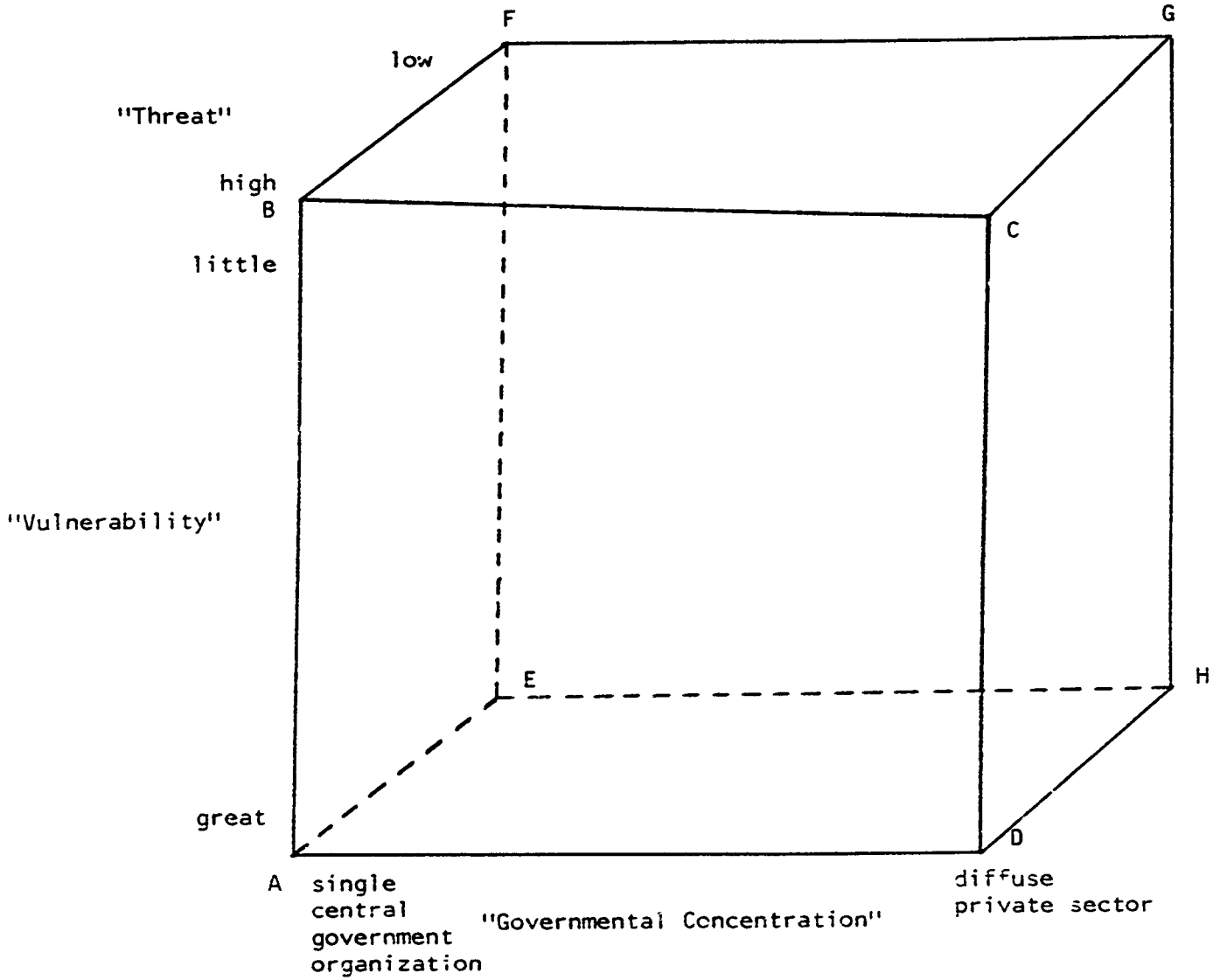
Whatever the aggregate characteristics of a nation or the international system in which it exists, situations which become occasions for decision will take a variety of forms. The analysis of situational variables thus can provide insight into the character of the process and its likely result. Charles Hermann (1969) has argued that decision making and policy processes can vary widely with

the position of a situation in a cube. The three dimensions of his cube represent: 1) awareness (from surprise to anticipation); 2) threat (high to low); and 3) decision time (short to extended). We believe an analagous framework can help us understand when economic issues will be treated as national security issues and when they will loom increasingly large in security affairs.

A Decision Situation Framework

Our economic-security nexus cube appears in Figure 3. The threat dimension ranges from high to low and shows the assets and intentions, on the part of others, to block the achievement of some important national goals. The potentially threatened nation may or may not be aware of others' assets and intentions. The vulnerability dimension ranges from great to little and shows the difficulty of replacing in the national economy the ingredients provided by particular exchanges with external economies. Vulnerability is the cost imposed by a nation's inability to engage in an international transaction it would otherwise pursue (not just an import action). The interaction between vulnerability and threat raised by particular situations and contexts determines the perception of threats. The third dimension--governmental concentration of authority and responsibility--ranges from a single central government organization to numerous private sector organizations.

Figure 3. Economics-National Security Nexus Cube



Economic matters becomes the subject of major security policy programs when they occupy corner A of the cube: high threat, great vulnerability, and concentration of authority and responsibility within the central government. At the other extreme, Corner G, there is no international policy issue of general import. With particular variations, the same holds for Corners C and H, although a variety of specialists may issue warnings. These receive little attention except as ammunition for domestic policy strategies (including ones about public-private sector relationships). When there are economic matters characterized by high threat and great vulnerability and diffuse distribution of authority and responsibility in the private sector (Corner D) there may well be advocacy of treating the economic issues as national security matters, but that will not, in fact, be done.

The concentration of authority and responsibility in a single central government organization which characterizes Corners B, F, and E will imply some national policy but not necessarily national security policy. They are all the domain of "low policy" largely ignored by high officials. The combination of low threat and little vulnerability (F) is the most extreme case. Low policy falls within security policy when the responsible organization has primarily national security responsibilities. Bureaucratic ownership is the major factor in issue area assignment. If treating the issue as a national security matter when it has little

urgency in terms of perceived external threat threatens the current bureaucratic owner, some other policy bin will be used.

With respect to change in the treatment of economic issues, we expect their classification as national security matters to decline with some diminution in threat and/or vulnerability. This will happen very slowly if a central government organization with a national security mandate has significant responsibility and authority. On the other hand, the treatment of economic issues as national security issues increases when both threat and vulnerability rise generating more intense threat perceptions and concentrating authority first in the central government and, second, in a part or parts of it with authorized national security missions. Change in either threat or vulnerability, but not in both, will be insufficient to shift economic issues into the national security domain. In contrast, an increase in the centralization of authority and responsibility in a particular part of the public sector will produce the shift if threat perception is high. The part of the national security arena devoted to economic matters will grow when the degrees of threat, vulnerability, and governmental concentration related to other kinds of security issues do not grow as fast as those for economic matters.

The implications of this framework are compatible with a number of recent developments in the United States. The national security aspects of economic matters have

received greater attention as the ability of others to block the pursuit of US goals has grown. The importance of others in international monetary affairs and their abilities to compete for foreign markets, pre-empt supply of vital resources, and worsen the terms of trade the US must accept have all been important in increasing the security salience of economic matters. All of these developments may be seen as sources of threat to the US, and threat also has been increased by the growth in host country power over US multi-national corporations and the rise of non-US multi-nationals (Bergsten, Horst and Moran, 1978). US vulnerability has also increased. This has been especially evident with respect to liquid fuel imports.

The absence of a dominant central government organization, relative to major, private firms, works to prevent treating major economic matters as national security issues. The change in the role of economic issues has been less pronounced for nations which reacted to previous high degrees of threat and vulnerability by establishing concentrated central government authority, e.g., Japan.

In practice, the placement of economic matters is a function of political, including bureaucratic, manipulation and bargaining. Oran Young (1968) has written persuasively about the importance of structuring the terms of interaction between governments in the conduct of international crises. His argument has general application to interactions within a political system as well.

Placing an economic matter at the national security pole of power (Wolfers, 1962) tends to reduce constraints on central government action from domestic economic cross-pressure, but may expose it to other constraints. The matter becomes one of high policy with attendant visibility and exposure to different perspectives on national security matters. It emphasizes danger, threat, hostility of others and therefore makes the issue fair game for competing politicians with standing on national security matters. Should there be strong support for the most primitive inventory view which stresses absolute national stocks, the pressures for viewing the economic matter as one of resource denial to a potential adversary or resource possession by oneself may well become intense. The loss of the latitude to pursue a coherent foreign economic policy (so long as diverse domestic impacts are salient) may well be replaced by the loss of latitude necessary to pursue a complex, adaptive national security policy with the selective use of economic rewards and sanctions on an adversary, ally or neutral (Weiss, 1977; Allison, 1977). Many critiques of US policy have pointed to this phenomena and its self-limiting implications as illustrated by the Jackson-Vanik Amendment linking economic relations with the USSR to its emigration policies (Holzman and Legvold, 1975; Krasner, 1977). To disaggregate further, central government bureau interests in the placement of economic issues under the national security umbrella will differ. Those with no established standing in the national security policy

process will maneuver against such a development, e.g., Commerce in the US system. Those with standing primarily on non-military matters pertaining to national security will be attracted but concerned about the loss of policy autonomy should the simple inventory denial posture be adopted, e.g., Treasury and State in the US. This will result in the development of ambivalent attitudes in these agencies regarding the treatment of economic matters as national security issues. Finally, those bureaus dedicated to the military aspects of national security will also be ambivalent, but for different reasons. On the one hand, allocating a larger share of national security attention to non-military matters lessens their claim on national priorities and resources. If the threat is so serious, broad, and even, surely it must be met with efforts of an appropriate magnitude. As suggested by Quincy Wright (1955), modern economic warfare may well distinguish between the military and civilians even less than modern military warfare and thus place at least a competitive demand on central governments.

These complexities in national leadership and bureaucratic interests are much less important if the economic matter at hand seems to have broad and even impact across the central government as well as the domestic society and little to do with altered competitive resource claims. An example of such a case involves domestic developments which 1) pose a threat to resource availability for any national

security purpose (military or non-military) and to continued occupancy of high office by incumbents, and 2) seem uncontrollable unless they can be transformed into national security issues and placed at the pole of power. Recent US events involving the dollar provide an informative illustration. The Carter Administration, in coming to the "defense of the dollar," was able to pursue a policy package which seemed related to a formidable external threat. The dollar was presented as a sort of national virility symbol destined for rapid, irreversible decline and linked to domestic economic issues (inflation and the taxpayer revolt) which posed problems for most parts of the central government. At least, in the short run, relating a domestic and an international economic matter to national security contributed to central government consensus and latitude and secured broad national support for sacrifices which might otherwise have been unobtainable.[1]

Political flexibility for the central government and the improved pursuit of national security are only some of the possible consequences of classifying an economic matter as a national security issue. Other possible consequences are a loss of political flexibility at home and more vulnerability to external bargaining pressures that may lessen

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[1]For example, an ABC News-Harris Survey poll conducted November 3-4, 1978 found massive and widespread public support for defense of the dollar measures which would reduce inflation even should they result in a short recession, slower growth and higher unemployment. Washington Post, November 27, 1978, p. A3.

national security. For example, in recent years, the US has taken steps to substantially centralize authority over energy, justified by the national security need to address the problems of dependence on imported liquid fuels. The US government has then moved to accept responsibility for energy supply and price and done so in ways which make the authority of the central government on those matters very visible. The acceptance of responsibility makes the status of energy in the US a criterion for the evaluation of the overall performance of the government and a legitimate subject for internal political demands. Apparent centralization of authority may mobilize pressures in excess of the policy control it provides. At an extreme, it can also lead to conditions that facilitate the successful use of economic coercion by others. The existence of national institutions stated to be authoritative can lessen the bargaining power of the target nation. By becoming able to bargain because of enhanced centralization, one defense against bargaining with foreign governments is lost.

Accordingly, emphasis on the limitations on centralized responsibility as the root cause of US difficulties in relating foreign economic policy to effective national security steps should be kept in perspective. Assumption of centralized responsibility may be necessary for a government to handle economic matters for national security purposes. It does not suffice in itself to improve their handling for those ends.

Implications and Future Directions

The implications of our discussion for national security analysis are substantial. First, issues should be assigned to a national security category not based on how they are treated in the policy process but rather on the basis of a threat perception generated by the interaction of threat and vulnerability. Accordingly, the definition of national security issues will be subjective at heart. The analysis of perceptions, and especially of self-perception, will be central to national security analysis.

Second, the distribution of political authority over the pertinent matter will become a critical variable and not a constant. The distribution of political authority will be treated on a spectrum from highly centralized to very diffuse. Preliminary investigation of the authority distribution will determine the appropriate policy process model to apply in subsequent attempts at description, explanation, prediction, and prescription. Should authority be highly centralized, a unitary actor model will seem relatively appropriate. Finally, diffuse distributions of authority will call for a market or systems manipulation approach to the analysis of national security policy.

Eventually, the study of national security policy may be seen as no more than a special case of the problem of provision of public goods. Security will be a special case only in that it involves especially great potential for

value deprivation if the public good is not produced, not because we can associate a particular policy process model with it. Future national security studies will focus on the question of in what circumstances one should expect the provision of the public good to be more or less suboptimal. Rather than using a predetermined policy process model, the study will focus upon how one might achieve optimality within the context of a number of general cases. Thus, changes to the field of security analysis resulting from the introduction of the economic issue set may be extensive and introduce new complications and dilemmas heretofore assumed largely to be outside the scope of national security policy analysis.

CHAPTER 3

THE US AND THE NIEO

Davis B. Bobrow, Robert T. Kudrle
and Robert P. Stoker

> In an untidy process called politics, people who want authority struggle to get it while others try to control those who hold it.
>
> -- Charles Lindblom (1977: 119)

> . . . in an anarchically organized political system like the international polity, it is particularly difficult to achieve consciously coordinated or guided changes in extensive systems of rights and rules. Efforts to achieve such results are apt to be inconclusive, time-consuming, and costly.
>
> -- Oran Young (1978: 262)

Introduction

In May 1979, more than five years after the platform of the New International Economic Order achieved prominence, delegations from rich and poor countries met in Manila for yet another United Nations Conference on Trade and Development (UNCTAD V). Once again general agreement on industrialized nation actions to improve the economic well-being of the poorer countries went unaccompanied by target dates for specific performances, and Southern institutional proposals were not accepted by Northern representatives. The Southern

delegations left with "little besides fuel bills for their limousines" to show for UNCTAD V (Washington Post, May 27, 1979: A34).

About one month earlier, twenty-three nations had signed in Geneva a complex agreement to reduce tariff and non-tariff barriers to trade, culminating negotiations (the Multilateral Trade Negotiation or MTN) begun in Tokyo some five years previously. Only one signatory to the full agreement, Argentina, was a member of the set of developing nations known as the Group of 77, and Southern spokesmen attacked the agreement as indifferent or even harmful to their economic prospects. But a high US official hastened to provide assurances that, as far as the economic welfare of the major regions of the US was concerned, there were "all winners, no loosers" (Washington Post, April 13, 1979: A9). Special arrangements already had been made to protect some sectors of the US economy concentrated in politically crucial states from import competition. For example, with respect to textiles, the US Special Representative for Trade Negotiations (the important Democratic Party figure Robert Strauss) had previously held "quintilateral negotiations" with the US textile industry, organized labor, foreign governments, the US executive branch (State, Treasury, Commerce, and Labor), and the Congress (Drew, 1979: 81). In July, the 1979 Trade Act was approved by the US Senate (ninety to four) and the House of Representatives (395 to seven).

We introduce these two opposing examples because they show how bargaining over seemingly economic matters can be differentially shaped by political goals, constraints, and opportunities. UNCTAD V, and, indeed, the North-South dialogue in general, when compared with the MTN process, differs substantially on matters of who shall hold authority, the rights and obligations of parties, and standards of conduct. These are essentially differences about politics, that is, about the feasible and desirable regime which will influence the production and distribution of economic values. If the general character of the MTN is to lessen governmental intervention in market processes, that of UNCTAD is to bolster it. If the MTN emphasizes efficient exchange, UNCTAD emphasizes regulatory institutions guided by standards and constraints other than economic efficiency. If the MTN deals primarily with national institutions and their relations with domestic institutions and firms, UNCTAD deals primarily with the role of international institutions and the relationship of governments to them and to each other.

Because UNCTAD bargaining is reasonably representative of the general strategies and patterns of interaction between the proponents of the New International Economic Order (NIEO) and the US, these points can illuminate that broader set of bargaining activities. The MTN was able to end in meaningful agreements on economic matters, first, because it primarily concerned exclusively economic matters and, second, because it involved mutual reductions in the authority of the

signatory governments, even if these are not perfectly balanced. UNCTAD V, and the North-South dialogue in general, has been unable to produce meaningful agreements because so much of it concerns political matters. The NIEO centrally involves the acceptance of new principles for authority and power and their redistribution from some governments to others through the medium of international institutions, new and existing. This character inevitably implies that the Southern proposals gathered under the NIEO umbrella entail an increase in the accountability of Western industrialized governments, such as that of the US to external parties and a decrease in their accountability to their own populations.

As Lindblom has observed (1977: 8), major political conflicts concern not so much particular items of economic value as the control of authoritative institutions, the terms of interpersonal and intergroup cooperation in systems of control, and the purposes of that cooperation. We assert that bargaining over these core political matters goes far to explain reactions to and negotiations on the NIEO. Of course, economics and politics co-exist, and the means of each can serve the ends of the other. When we emphasize the political in our perspective on US-NIEO bargaining, we do not mean to suggest that the economic is not present also. The view we do hold, and shall develop later, is that eforts to understand the bargaining only through the perspectives of economics (or moral philosophy, for that matter) will founder on numerous apparent anomalies and discrepant

behavior. On the other hand, if we approach the bargaining from the perspective of politics and accountability regime preferences, many of these anomalies and discrepancies can be reduced to a consistent and comprehensible strategic pattern. Indeed, the very choice by the participants in the bargaining to style issues as economic or political can be viewed as a political gambit.

We shall pursue our argument in the following fashion. The next section of this chapter introduces some conceptual material on accountability regimes and bargaining over them as issues about authority. We then treat the US-NIEO interaction through that perspective. Because matters of accountability and authority are not purely externally related in a world of nation-states, a subsequent section addressed internal accountability the domestic policies of the US as they relate to the NIEO. After discussing the relationships between external and internal accountability, we introduce a set of considerations that determine the implications of the latter for particular policy areas pertinent to the NIEO and suggest the nature of future US policy. The final section of the chapter summarizes our major conclusions and presents their general implications for future US-NIEO bargaining and for the simultaneous bargaining between other members of the OECD and the US and the NIEO. That is, it notes the implications of our authority perspective for what is inevitably at least

three-party, rather than dyadic, bargaining about the authority-accountability regime for international economic relations.

As this organization suggests, we are pursuing several sources of explanation, all of which can operate simultaneously in the real world. First, we consider that national governments are de facto participating in an international or external and a national or internal set of accountability relations. While national political accountability may be more regular, formal, and binding, breaches of international accountability regimes can be extremely serious. In rhetoric, but also in practice, international accountability matters (e.g., the historical US emphasis on the sanctity of commitments and the attempts by some US allies to hold the US to its governmental commitments). Second, we employ several perspectives familiar to students of decision making and the broader political system. The unitary concept of the "national interest" is identified with its advocates, while, at the same time, we stress organizational modus operandi, bureaucratic politics, and broad conflicting ideological and material interests. These varied bases for policy determination may be distinguished analytically, yet the development of a state's foreign economic policy over time cannot be understood without the melding of all of these considerations. Furthermore, a careful use of these different perspectives on policy determination dispels the artificial distinction between

the "economic" and "political" dominance of policy making. As the following discussion illustrates, much, but by no means all, of politics is about economics, and the reverse is equally true.

Authority and Accountability

Some sort of accountability regime exists whenever parties are engaged in continuing interaction. In social life, some parties participate in decisions about the correctness or legitimacy of what they and others have or have not done and may do in the future, some conventions and practices operate about the proper criteria for evaluation and about the information and decision processes used to arrive at those judgments and put them into effect. Even the advocates of a free market in the international economy call for an accountability regime to ensure respect for contracts and property rights. Most advocates of the NIEO see strong and even increasing international economic exchange; the issue is the character of the regime for steering and controlling that activity.

When officials and intellectuals criticize, defend, or propose international accountability regimes, they more specifically discuss:

-- who participates in exercising authority;

-- who is subordinate to that authority;

-- what behaviors lie within the domain of the authority relationship;

-- what information and procedures are appropriate for arriving at authoritative decisions;
-- what rules of conduct for governments determine the propriety of internal policies that affect the international system;
-- what capabilities and courses of action are legitimate for the exercise of and for resistance to authority.

As these items make clear, discussions of and bargaining about accountability regimes are inherently political and involve positions about the allocations of authority, rights and obligations, and rules of conduct for all members of the existing or potential political system that is concerned. When the different positions of parties in a bargaining situation involve explicit statements or implicit premises on one or all of these matters, accountability issues are at stake. To the extent that conflict over the previous considerations prevails, it seems reasonable to treat the bargaining as primarily political in nature and content. We shall argue that the NIEO as a whole very much concerns overall political arrangements as well as specific economic issues.

Parties who either are satisfied with the status quo on the elements of an accountability regime or fear that any change will only be for the worse will prefer a bargaining agenda defined within the prevailing regime. Advocates of

an accountability regime different from that which currently prevails or substantially modified will disagree. This does not mean that they will necessarily present a comprehensive design for an alternative accountability regime or refuse to include some non-regime change agenda items. Nor will the defenders of the status quo take a similarly pure position on the other side. Rather, the issue is one of relative emphasis and political strategy. Mixed explicit concerns and a mixed agenda are necessary for the bargaining to continue. Proponents of change will recognize the advantages of incremental steps in bargaining with defenders of the status quo, although they may need to engage in comprehensive rhetoric for other reasons. They will recognize that some types of change in accountability regimes are more likely than others to mobilize opposition and to fragment pro-change coalitions. In particular, they may well recognize that resistance will be least to altered vague rules of conduct that lack clear criteria for behavior and an implementation capability. And they may sense that selective increases in their participation in authoritative institutions will meet less resistance, perhaps because of their cooptation possibilities, than attempts to create new institutions or shift parties to a subordinate status.

In short, their initial emphases may well be on accountability regime changes that the defenders of the status quo are particularly likely to see as non-binding and as offering opportunities to split the pro-change

coalition. Nevertheless, such modest changes will still seem to be worth pursuing if they hold the promise of improving the bargaining leverage available for subsequent efforts at more comprehensive change. We should then expect attempts to replace a prevailing accountability regime to take the form of a prolonged campaign, rather than a decisive battle.

Our conception of bargaining over accountability regimes bears a substantial relationship to Lindblom's (1977) view of politics as bargaining over authority, although it does not require the presence or prospect of a government in a standard institutional sense. Like Lindblom, we have certain expectations about bargaining strategies and content. First, the whole arsenal of instruments of bargaining over authority will be used by the parties. These include efforts at persuasion through appeals to self-interest and moral legitimacy. A party will not willingly cede moral territory to others but will, instead, invoke generally acknowledged values. The parties will offer benefits to others to enter into and remain in coalitions and to defect from coalitions with major bargaining adversaries. They will issue threats to withdraw existing grants of authority and to terminate benefits then or in the future. As capabilities permit, they will engage in acts of compulsion. Second, the parties will focus on grants of permission and rules of obedience couched in the language of rights and obligations. Permissions to control will be at the heart

of many agenda topics, including the framing of permissions so that they hold different probabilities of extension and limitation. More specific to the present problem, questions of economic exchange will be approached in the context of Lindblom's "oblique authority," i.e., of the rights of national and international public sector institutions to alter the terms of exchange in the market (1977: 23).

Those governments with extensive current authority will be the firmest opponents of substantial change in authority structures. However, should the current authority also hold substantial autonomous capabilities, that government may find acceptable, although hardly optimal, some dispersion of authority which leaves use of these capabilities largely intact. That is, some sacrifice of authority over others may be acceptable if it enhances or at least protects assets to limit the authority of others.

Governments with limited authority in the prevailing accountability regime will favor regime changes if they have more confidence in the parties to whom authority will shift and the terms of its use than they do in the prevailing regime. Some governments may be attracted to changes which lessen the authority over them of the currently or historically dominant parties, as long as they need not assume authority with the obligations it may involve. Many observed this motivation in the international behavior of Germany and Japan during the twilight of American hegemony. Some may seek to secure authority on some matters as a way of bargaining with

those who, for a while at least, will continue to hold authority on other matters. This is not to contend that governments with weak authority in the present regime would prefer a radical shift. In the present situation, the preferences of the relatively weak countries of the OECD are almost completely different from those of the Group of 77, except with regard to decreasing the unilateral authority of the US. Governments currently outside of the accountability regime will prefer to stay outside of the bargaining as a whole, as, for example, the Soviets have with respect to the NIEO.

In the absence of an acceptable dispersion option, those favored, in control terms, by the status quo will prefer the narrowest possible grants of permission and acceptance of rules of obedience, for example, for single commodities and to single foreign governments. That is, they will fall back by way of concession and compromise on special bilateral agreements. Those seeking greater control will have the opposite preferences, but they may view special bilateral agreements with desirable changes in the accountability regime for those specific concerns as progress. The advocates of radical change may prefer a broad new order featuring global institutions, but they will accept increased political clout on a piecemeal basis as a step in the right direction. Faced with the dilution of authority and an increase in constraint, the parties with the most to lose will, as a statistical matter, repeatedly put forward

positions that delay those processes, make them highly contingent on reciprocal obligations, and feature a weak accountability regime. Their opponents will call for more rapid change, a new asymmetry favorable to them in terms of rights and obligations, and a strong regime to implement those asymmetries.

The emphasis on authority relations which we attribute to accountability regimes bears some resemblance to classical discussions of power politics. Nevertheless, the accountability regime frame of reference differs from much of power politics thinking in at least three important respects. First, it emphasizes rules or principles of conduct with at least some normative content. Second, it gives importance to information systems and procedures for arriving at authoritative decisions. Third, and perhaps most important, it accords a central place to institutional arrangements for parties with conflicts of interest to arrive at and carry out mutually acceptable forms of joint action.

The US and the NIEO

Are these generalities and expectations illuminating with respect to the US and the NIEO? This question can be usefully divided into two more specific queries. First, are the parties bargaining about an accountability regime in our terms? Second, does their bargaining behavior accord with our expectations?

In addressing these questions, we will have reference to behaviors of the US and the Group of 77 that have been reported by others and to strategies and underlying themes that, in large part, have been noted by the few writers on the NIEO who have recognized political perspectives (e.g., Gosovic and Ruggie, 1976; Krasner, 1979). Any special contribution by our discussion lies in three areas. First, US and NIEO statements and actions are placed in a general theoretical perspective, one whose scope is by no means limited to international economic affairs or, indeed, to international relations. Second, by describing the behaviors of the US and the Group of 77 in terms of a similar checklist, the bargaining implications become more visible. Third, we avoid forcing strategies into a framework which required that they be consistent with only two values for the parties involved--the values of national political autonomy and minimizing economic vulnerability. These two values are, of course, important to our subject. However, they are not the sole concerns of the parties, particularly for those seeking "more." Their role often shifts from one of ends to one of means.

One of the merits of our accountability-authority perspective is that it readily accommodates the struggle both for authority over others and for the capacity to constrain those who do hold authority. Autonomy is only one of the authority relations involved. An emphasis on accountability lends itself to the range of policy ends that

characterize debates among policy elites and philosophers, and not just to the avoidance of economic vulnerability. It leads us to the questions of legitimate action which appear again and again in discussions about social action--the issues of obligations to citizens and to aliens, of the propriety of pursuing economic gain, and, indeed, of the relative priority of political, economic, and social ends. Social groups and governments have complex agendas in these terms. An authority-accountability perspective focuses our attention on their pursuit of the political arrangements they believe to be advantageous to those agendas without letting us forget their instrumental character. Because our perspective does this, it prepares us for the emotional intensity that characterizes Southern appeals and demands and the potential for political mobilization facing Northern elites who would have groups in their own society pay the "bill" that compliance would seem to involve. For each society has its own accountability regime, and national leaders have varying latitude to strike international bargains. The less international regime changes threaten accepted internal rules of the game, the greater the range of short-run options available to international bargainers.

General Pertinence

The NIEO literature that has focused exclusively on bargaining over economic gains has had some difficulty resolving the question of coalition formation and cohesion.

This is because the economic preferences of the Group of 77 could diverge along several dimensions. Those endowed with significant resources, those that enjoy a lengthy coastline, the more developed nations (i.e., Brazil, Mexico, etc.), all could be expected to have economic preferences that are incompatible with those of others (especially those of the Fourth World). Thus, even the existence of the US-NIEO debate is anomolous when approached from the perspective of common economic interests. However, if one views authority and regime structure as a fundamental part of the NIEO, the anomaly disappears. All Third and Fourth World nations should favor a shift in the distribution of authority and power away from the US and towards a regime that will permit them to exercise more influence over international economic affairs.

The themes and timing of US-NIEO bargaining also suggest that much of the bargaining, indeed, concerns an accountability regime. Even the language of the Group of 77 in calling for a new "order" is indicative of that, as is the response of the US international economic policy establishment in calling for a reformed international order (Morse and Ullman, 1978: x-xi). "Order" is a reasonable synonym for "regime" as we use it. The emphasis by major US writers and recent foreign economic policy officials (e.g., Bergsten and Krause, 1975; Cooper, 1973; Keohane and Nye, 1977; Spero, 1977; Knorr, 1975) on the collapse of the post-World War II economic structure as essentially

consisting of a decline in the authority of a central power (the US), in terms of its willingness and capability to accept certain obligations and of others to grant to it special permissions, conforms to our accountability regime perspective. Even "trilateralism" can be seen as an attempt to replace a decaying regime and set of authority patterns with another.

If we look at the themes that arise again and again when one examines the US-NIEO dialogue across such diverse economic matters as international monetary policy, debt relief, trade barriers and preferences, technology transfer, aid, and commodity transactions, we find as important parts of the disputes the items we listed earlier as aspects of accountability regimes (Sauvant and Hasenpflug, 1977). Accordingly, we find that substantial attention is given to the participation of Group of 77 nations in authoritative institutions, the subordination of foreign firms to host government authority, the control over national economic policies to be exercised by international organizations, the appropriateness or inappropriateness of controlling not only price, export and import volumes, and choice of partners but also development plans, employment policies and choice of production factor mixes, and the allocation of tax revenues through mandatory aid quotas. Code of conduct proposals abound, as do discussions on what the rich owe the foreign poor (and, in response, what the foreign rich owe their own poor) and on the primacy of national versus

international law. Controversies arise over what national institutions, in the public and private sector, should be open to inspection in depth by international organizations and what rules of hearing and voting should characterize the proceedings of those organizations. And, of course, much attention goes to the legitimacy of courses of action to exert and resist authority, such as export controls, supplier and consumer cartels, nationalization, and the use of force.

Although a vast amount of purely economic bargaining is going on between Northern and Southern nations, most of what is genuinely new in the NIEO involves accountability-authority issues. It seems to us that, for the first time since World War II, the US is seriously attempting to make regime adjustments to its decline in relative economic power. Thus, it has been unprecedentedly willing to discuss seriously many avenues of approach to international accommodation that previously were dismissed as unacceptable. This is true both with respect to the Third World and in relations with the other OECD countries. In a world in which US foreign trade has nearly doubled as a proportion of GNP in recent years, and in which a major disruption anywhere may have serious ramifications for the entire system, ongoing dialogue with all important actors seems more prudent than the usual hard-line rejectionism of the past. Hence, the US is willing to engage in almost endless bargaining in such forums as UNCTAD and LOS (Law of the Sea).

The pertinence of the framework introduced earlier in US-NIEO bargaining is highlighted by the lack of operational agreements. Strongly different preferences about the elements of an accountability regime would prevent agreement except in the presence of overriding authority. As Young (1977: 47) notes, since it is unlikely that any single regime would be optimal for all parties at any given time, yet some sort of regime is favored by all, in the absence of a "dominant" regime, vigorous bargaining will result regarding the character of the regime enacted. Do we find the incompatible preferences manifest through the bargaining strategies suggested earlier? And do we see behavior compatible with efforts to ensure that no coalition with sufficient authority to dictate a full-fledged accountability regime emerges?

US Bargaining Preferences

We see a pattern of bargaining behavior by the US which corresponds to our expectations for a nation previously privileged under the historical accountability regime, in terms of authority over others and freedom from control by others, a nation that also recognizes that the previous regime can no longer be maintained and that stands to have substantial political power in the absence of a non-market set of authorities, grants of permission, and rules of obedience. The US has repeatedly preferred to define the bargaining agenda with the NIEO in economic exchange terms,

with the notable exception of the oil case, in which the US is substantially under the control of OPEC. Whatever concessions it has made have been in the realm of extremely vague rules of conduct, such as increased economic aid volumes without timetables for implementation and increased participation in existing international institutions which offer some promise of cooptation, e.g., the heightened Saudi role in the World Bank.

US spokesmen and policy intellectuals have stressed the self-interest of the South in the vigor of the US and other Northern economies, with the prospect that their growth will lead to trickle-down benefits and enhanced foreign direct investment (Fishlow, et al., 1978; Bhagwati, 1977). They have offered moral claims by characterizing most Group of 77 elites as being indifferent to the economic, political, and social rights of their own citizens, as being callous, power hungry, selfish, conspicuous consumers (Fagen in Fishlow, et al., 1978: 165-215; Johnson in Bhagwati, 1977: 246). Benefit offers to remain in a coalition with the US have been aimed at other Northern nations--indeed, the MTN as a whole serves this end--and at specific Southern coalitions, with the purpose, for example, of dividing Southern coastal states from other members of the Group of 77 in the LOS forum. Defense benefits and cooperation against radical political movements also have been emphasized. While force has not been used recently, the set of US threats has included hints to that effect, e.g., the recently announced

US Rapid Deployment Force for "Persian Gulf contingencies," as well as the more conventional threats withdrawal of economic benefits, such as aid and credit.

The US has persistently sought to limit the permissions to control granted to others, such as in commodity agreements, and the rules of obedience it accepts, for example, for direct foreign investment in other countries. When rights and obligations are accepted, they have been made as narrow as possible; thus the preference for case-by-case concessions to particular debtors and bilateral arrangements. Obligations, when acknowledged, have concerned either highly disorganized parties, such as poor populations, or clusters of governments with relatively little capability to use them as a springboard to greater control, e.g., the Fourth World rather than the Third (Hansen, et al., 1976). This, of course, also corresponds to the declared US perception of areas of greatest need; but our point here concerns actions, not motives. Even these modest obligations are usually made contingent on the acceptance by the recipients of certain rules of obedience, for example, in the case of congressional actions tying economic relations to compliance with US preferences on human rights, non-proliferation, and continued exports to the US. The creation of new international institutions with implementation and enforcement capacities has been resisted for the most part, and change initiatives have been reactive (Gosovic and Ruggie, 1976: 332-341). These proposals more often have been aimed at lessening asymmetries

in rights and obligations than at creating new asymmetries, and they often fall under the heading of removing market imperfections and distortions (Fishlow, et al., 1978). As reflected in the history of the Generalized Structure of Preferences (GSP), many of the initiatives have been qualified by so many exceptions in order to preserve the options of industrial countries for avoiding serious internal difficulties that they involve little beyond rhetorical change in rules of conduct (Ginman and Murray in Sauvant and Hasenpflug, 1977). Northern assistance to opening Northern-based multinational corporations to inspection in depth fits with our expectations, as does the preference to avoid vesting authoritative processes in "one country, one vote," broad membership international organizations. On the latter issues, the cleavage is not so much between the US and other countries as it is between those who have much to protect in the existing order and those who do not, i.e., the North versus the South.

Much of the activity just described has been defended as increasing the efficiency of the international economy, which, in turn, will eventually alleviate much worldwide suffering (Leff, 1976; Bhagwati, 1977). We find this argument insufficient by itself, because it cannot account for other US bargaining behavior which becomes understandable in an accountability-authority perspective. One set of discrepant behaviors involves export and import controls, which reflect domestic accountability constraints on the US

government--tariff and non-tariff protection through buy-American clauses, orderly marketing agreements, and unilateral interruptions of trade, such as the Nixon soybean action (Graziano, 1975). A second set involves technologies, parts, and raw materials directly related to current or potential military uses. US policy has been characterized by attention to ensuring the ability of the US to generate and operate military forces without external consent and denying such possibilities to others. An example is the formation of a cartel of nuclear technology suppliers. A third and especially salient set of behaviors that are illuminated by an authority-accountability perspective involves oil.

At least since 1973, the US has found itself in a position of weak authority with respect to oil, with little capacity to hold those in authority to account (Choucri, 1976). The positions that have been put forward are consistent with bargaining about external accountability in such a situation and, as we shall see in the next section, the pressures of internal accountability. In many of their premises, US bargaining stands since the 1973 oil events are sharply different that they were earlier (Voight and Graebner, 1975), and the changes are in line with our accountability-authority orientation. The US government regards OPEC as fundamentally illegitimate and damaging. Yet the US finds itself without the authority unilaterally to hold OPEC to account through market or other means.

The US advocates de facto participation by importing consumers, and not just by those in an ownership position, in exercising authority over extraction volumes, price, and other aspects of an accountability regime for oil (Bergsten in Bhagwati, 1977: 199-218). Authority should not flow solely from history and "accidents" of nature. Sovereign producer governments should be subordinate to that authority. Consumers should organize informally and through dedicated international institutions to lessen the authority of OPEC, as in the International Energy Agency (IEA). With respect to rules of conduct, the US asserts that it is illegitimate for exporters to link exports to the behavior of importing governments on other matters, to charge the highest possible price, and to assert property rights vigorously by radically limiting rates of extraction. Instead, the rules of conduct should give first place to the obligations of exporters and the rights of importers. They should constrain the "oil rich" and entitle the "oil poor" (Lewis, 1974: 80-81). Claims based on visible scarcity and shortage are inherently just. Indeed, US rhetoric on the oil issue bears substantial similarity to NIEO rhetoric on other matters.

Parenthetically, this does not mean that US actions necessarily match the rhetoric. The US itself employs oil-export controls and links cooperation on oil matters to other issues, economic and military. The US rejects any accountability for its own comparatively large energy consumption. And, while the US proposed and participates

in the IEA, it ensured a set of voting rules in that organization which makes it incapable of moving to exert authority over Washington's policy (Bobrow and Kudrle, 1979). These disparities between rhetoric and action are similar in kind to those among the Group of 77 which US officials and opinion leaders often cite to justify unresponsiveness to Southern rhetoric and publicize in order to weaken Southern solidarity. Yet, they are explicable for a government seeking to minimize the authority of others over it by minimizing its obligations and maximizing its rights while maximizing their obligations and minimizing their rights.

NIEO Bargaining Preferences

Turning to the proponents of the NIEO, the Group of 77, we see a pattern of bargaining behavior that corresponds to our expectations for nations seeking to modify an historical accountability regime by weakening the authority of others over them and increasing their capacity to hold others accountable while recognizing that market institutions will not suffice for those purposes. Having eliminated the accountability regime and authority structure of political empires with their colonies, and finding this insufficient to produce the hoped-for level of prosperity and autonomy, the NIEO is seeking other means.

The NIEO defines the bargaining agenda with the US largely in accountability terms and often emphasizes the elements of an accountability regime rather than the terms

of particular economic exchanges, again with the notable exception of the OPEC case. Comprehensive rhetoric is used in part to make incremental change seem like a moderate compromise. Much attention goes to vague rules of conduct which alter the criteria for accountability and lessen the authority of Northern governments, and relatively little attention is given to details of enforcement and implementation, which would highlight conflicts of interest among the Group of 77 or the likelihood that some of its members will gain authority over others. While numerous new international institutions are proposed, most of them include US participation in authoritative decisions, and more detailed attention goes to increasing the role of Group of 77 members in the governance of existing international organizations (Sauvant and Hasenpflug, 1977).

Like their US counterparts, NIEO proponents use all the tools of political bargaining. Appeals to US self-interest stress the desirability of avoiding the radicalization and destabilization of Third and Fourth World nations and the prospects of larger markets. Moral claims emphasize the alleviation of human suffering and compensation for historical exploitation (Haq, 1976). Benefit offers to remain in the Southern coalition are illustrated by OPEC foreign aid transfers and the diplomatic support provided by Arab oil exporters in their opposition to Israel. Benefit offers to specific Northers nations, among them the US, include preferrential market access and supply

reliability--offers that work to split any Northern coalition and to create interests among particular US institutions in cooperating with the Group of 77. Threats include OPEC displeasure, cooperation with the Soviets, favoritism towards other members of the OECD, hostile treatment of direct US investments, and toleration of violence against US assets and citizens.

The NIEO program calls for broad grants of permission by the US government to international organizations and Southern national governments and pledges to comply with their decisions. The legitimacy of these grants and pledges follows from the rules of conduct or criteria for accountability that appear in numerous NIEO manifestos. These consist of obligations for the US, in terms of actions it is to take and to refrain from, and entitlements or rights for the members of the Group of 77. International organizations and Southern governments are to be granted permission to set the level of aid transfers from the US and to allocate them, to market their manufactures at will in the US, to exclude US manufactures from their own economies, to have access to technologies of the kinds and on the terms they stipulate, to regulate commodity transactions with respect to production volumes and price, to exercise great selectivity in accepting foreign direct investment, to ensure investor compliance with numerous criteria, from ownership to the mix of production factors, and to set the amounts and

criteria for loans and the terms of repayment, if any (UN Res/3281/1975, Chap. II).

The program outlined above would obligate the US government in all these areas. It would be expected to share the information and expertise that would enable international organizations and Southern governments to exercise their rights and "call" the US government on its obligations. Furthermore, both the US government and American firms would have to refrain from acts of collusion or parallel action with other OECD governments and firms that would vitiate the sought permissions and pledges. These rules of conduct for foreign economic policy, and, indeed, domestic economic policy, clearly are not compatible with a universal value of political autonomy and have unclear implications for social justice and the alleviation of individual suffering among the world's poor. The South's preferred rules of conduct are consistent with respect to "oblique authority," that is, they have in common legitimation for continuous and substantial activity by national governments and international organizations in economic exchanges and in setting the terms of those exchanges.

The Group of 77 has emphasized that the rights and obligations of the US should relate to organized parties--Southern national governments and international organizations with substantial Southern membership in their decision-making bodies (UN Res/3281/1975, Chap. II, Art. 10). Given the weak capacity of most Southern governments actually to

hold the US to account, the emphasis on international organizations is sensible in authority terms (Meltzer, 1978). It works to aggregate the power of the South in bargaining processes (Wriggins and Adler-Karlsson, 1978: 27). At the same time, it avoids delegation of authority to any particular Southern nation to represent the others. In that sense, the emphasis on international organizations fits well with the primary goal of lessening the authority of those currently in control and provides a common denominator among the Group of 77. At the same time, a strategy of regime building postpones issues of authority within the South to control particular exchanges, issues that have a significant divisive potential. Since the NIEO also rejects the notion of a linkage between its demands for accountability and a new pattern of authority and the performance of Southern countries on almost any economic, military, or political matter, solidarity is enhanced and other potentially divisive issues are excluded from the bargaining agenda. The grants of permission and rules of obedience the South proposes are intended to be absolute, rather than contingent, and to apply to all, rather than some, Southern countries.

The emphasis on non-contingent accountability by the US, and the North generally, to organized parties responsive to Southern authority preferences is pursued in a variety of ways. If one were to attempt a crude typology of the policy proposals put forth under the heading of the NIEO, one would find that the general tendencies in the form and content of

most of the proposals are consistent with our expectations about bargaining over political authority. The policy proposals may be grouped into three major categories: 1) proposals to alter the behavior of existing national institutions; 2) proposals to alter the behavior of existing international institutions; and 3) proposals to extend the authority of international institutions into a domain presently lacking a significant, centralized institutional structure (Gosovic and Ruggie, 1976: 328-41; Sauvant and Hasenpflug, 1977).

Proposals to alter policy outputs of existing national institutions tend to concentrate on the introduction of new criteria and resultant behavioral prescriptions, rather than addressing directly the distribution of power and authority. They serve to lay a normative basis for specific obligations which the South hopes eventually to impose upon the developed states. Article 18 of the Charter of Economic Rights and Duties of States illustrates the nature of these proposals.

> Developed countries should extend, improve and enlarge the system of generalized non-reciprocal and non-discriminatory tariff preferences to the developing countries. . . . Developed countries should also give serious consideration to the adoption of other differential measures . . . which will provide special and more favorable treatment, in order to meet the trade and development needs of the developing countries. In the conduct of international economic relations the developed countries should endeavour to avoid measures having a negative effect on the development of the national economies of the developing countries, as promoted by generalized tariff preferences and other generally agreed differential measures in their favour. [UN Res/3281/1975, Chap. II, Art. 18]

The strategy is quite consistent with our perspective. The sovereignty of the state prevents the proposals from emphasizing a direct shift in authority away from national institutions. An attempt is made to influence the more manipulable aspects of these national regimes through the development of new norms and decision rules. In this way, the advocate of change has a higher probability of success, as any attempt to limit directly the authority of an existing national institution would be highly controversial.

International institutions also are targets for redistribution of power and authority. Rather than limiting attempts at influence to redefining organizational missions and developing new criteria for policy decisions, Southern proposals for the revision of international institutions also deal with issues of representation and procedure. Proposals abound to increase Third and Fourth World representation in bodies that have important capabilities to impact upon international economics, as do proposals attempting to reform the voting or bureaucratic procedures of these international institutions. The examples below, taken from the Programme of Action on the Establishment of a New International Economic Order, deal with the international monetary system and illustrate the prominence of developing nation participation in NIEO proposals.

> Full and effective participation of developing countries in all phases of decision-making for the formulation of an equitable and durable monetary system and adequate participation of developing countries in all bodies

> entrusted with this reform and, particularly, in the Board of Governors of the International Monetary Fund. [UN Res/3202/1974, Sec. II, Subsec. 1, item D]
>
> More effective participation by developing countries, whether recipients or contributors, in the decision-making process in the competent organs of the International Bank for Reconstruction and Development and the International Development Association, through the establishment of a more equitable pattern of voting rights. [UN Res/3202/1974, Sec. II, Subsec. 2, item C]

Thus, the case of international institutional reform involves conflict and bargaining on at least two fronts: the distribution of authority and the terms under which it is used.

The third type of proposal involves a fundamental shift in the regime that dominates a given domain. This sort of proposal is distinct from the others in that it involves the establishment of new institutions of authority. This creates a situation of conflict in which the South-North differences are most readily indicated by the negotiations over the character of the institution. The bargaining over an international Seabed Authority (ISA) is illustrative.

With the extension of the exclusive economic zone to the 200-mile limit, much of the debate on the ISA came to center on the exploitation of deep-sea nodules. Initially, the negotiations were cast as a conflict over the distribution of economic benefits expected to follow from nodule extraction. The bargaining positions of prominent US policy makers and NIEO advocates were consistent with this perspective. The US favored a relatively weak regime whose primary purpose would be to facilitate orderly operations of private enterprises. The regime would issue licenses for the mining

of specified tracts and legitimize the property rights of the licensed firms. Southern spokesmen envisaged a stronger authority whose mandate would extend even to exclusive, direct extraction activities.

Compromise and agreement on the question of the distribution of economic benefits is not sufficient for agreement on the International Seabed Authority. Both parties moved significantly towards compromise on the distribution of economic gains. The US position evolved to recognize the obligation of the exploiting firms to "pay an agreed portion of their revenues to the international organization, to be used for the benefit of developing countries." Beyond this, the US was prepared to "explore ways of sharing deep seabed technology with other nations" and to establish a commission of consumers, seabed producers and land-based producers to monitor the adverse effects of deep-sea development on nations whose exports would face serious competition from the nodules (Walsh, 1977: 193). The Group of 77 also compromised on its initial bargaining stance. It no longer insisted on exclusive mining rights for the Authority; instead, the Authority would develop an autonomous extraction capability as well as issuing licenses to firms (Sauvant and Hasenpflug, 1977: 182).

Convergence on licensing and the distribution of economic gains overshadowed the central conflict over political authority. On this score, neither side was willing to compromise. Issues of distribution of authority and

procedure were still contested. Kissinger stated that:

> The management of the organization and its voting procedures must reflect and balance the interests of the participating states. The organization should not have the power to control prices or production rates. (Walsh, 1977: 193)

Although the US was prepared to share the economic gains from nodule development, it balked at the transfer of authority to an international organization which could be controlled by the Group of 77.

The Group of 77 was equally persistent in its demands for a transfer of authority. Despite compromise on the question of exclusive mining authority for the ISA, the developing states still wished to ensure "direct and effective control" over any firm engaged in nodule extraction. This included the necessary conditions of price and production-rate control, in addition to a mechanism for compensation of land-based producers (Sauvant and Hasenpflug, 1977: 183).

The parties to the negotiations could not agree on the question of political authority. Compromise was reached on virtually all the economic issues, although in the US questions of domestic political feasibility remained. The central issue was not the existence of some sort of institution but, rather, what the character and composition of the new authority regime would be.

Thus, in the US-NIEO negotiations, Southern spokesmen attempt to advance towards greater authority over international economic policy on three fronts. By attempting to

alter the mission and decision rules of existing institutions and by strengthening their opportunities for participation in international organizations, NIEO advocates are moving beyond a demand for policy reform to demand a voice in policy making. This broad strategy is advanced, not retarded, by incremental steps through bilateral arrangements that grant legitimacy in specific cases to the rules of conduct and locus of authority positions in the NIEO platform. These provide the benefits of precedent and increase Southern bargaining counters and Southern skills for effective participation in the broader regimes still strived for (Goodman). Group of 77 understanding of this point may explain why the increasing prevalence of particular case arrangements that are compatible with the NIEO platform has not sufficed to weaken the Southern coalition.

When we approach Group of 77 bargaining through an accountability-authority perspective, we cease to be puzzled on a number of counts. First, the continued adherence to proposals that, in terms of theory and historical experience, have serious negative implications for many Southern national economies falls into place. Bargaining over possibly perverse economic outcomes and decisions can well be deferred until after accountability and authority changes have been achieved. Second, the apparent lack of acceptance by Southern officials and policy analysts of economic rationality arguments becomes explicable as well. Most of them do not need tutorials on the workings of the international economy. Economic

rationality arguments are largely irrelevant to the political campaign for changes in the accountability regime, which, if achieved, would leave great areas of latitude for specific economic choices. Third, the continued support for OPEC and its policies, which have adverse economic effects on most of the Group of 77 members, becomes much more understandable in the light of the Southern emphasis on organized institutions for control of the US and the North. The continuing solidarity with OPEC does not rest on ignorance of the implications for Southern energy importers of the economic consequences of high prices and limits on supply. Instead, it reflects the political judgment that, in view of the paucity of other organizations with a capacity to secure and enforce permissions and obedience, it is important to maintain the single organization with a Southern composition that does have such a capability (Wriggins and Adler-Karlsson, 1978: 44-53).

In sum, we find both the US and the Group of 77 behaving in large measure in ways that are consistent with the expectations from our accountability-authority bargaining perspective, with the consequence of little agreement except to keep on bargaining. Both have preferences about desirable external accountability regimes, and they pursue these within the constraints of their leverage and internal accountability situations. For the US, continuing to bargain is the least bad of the available alternatives. There is, after all, little possibility that the US will manage to regain its

previous predominant authority position. Most dispersal options imply a further loss of authority and an even weaker ability to hold OPEC accountable and to maintain other important regime relationships with the members of the OECD. American attempts to arrive at a dominant coalition with the other industrialized nations of the West have been severely hampered by internal accountability constraints (which we discuss in the next section), Southern moves to divide the North (Gruhn, 1976), and the desire of the other industrialized powers to improve their authority position relative to that of the US.

Meanwhile, the US takes steps that lessen the likelihood of Southern consensus on the desirability of quickly establishing a new centralized accountability regime with enforcement powers. These steps include concessions on some vague rules--which some might call lip-service--encouragement of US-based multinational corporations to accept new accountability arrangements with particular Southern governments, or at least an unwillingness to support their resistance to such changes (Bergsten, Horst and Moran, 1978), persuasive efforts to highlight differences of interest within the Group of 77 (e.g., between the so-called Newly Industrialized Countries and the most impoverished), and policy support to Southern regional organizations capable of serving as an alternative to the whole Group of 77 as a bargaining partner. While bargaining about the NIEO, the US acts to weaken coordination and policy centralization.

In striking special bargains with Japan, France, or the EEC, the South is particularly attuned to opportunities presented by internal accountability patterns within the US system. As long as Northern coordination can be prevented from increasing, continued bargaining surely does not worsen the Southern authority situation. Indeed, it can be plausibly argued that it may even improve, if a few conditions can be met. First, the ability of the South to hold the North to account will grow if oil dependence increases and if the very fact of North-South bargaining and the acceptance of international organizations, even with weak mandates, can be used to emphasize the legitimacy of the direction of regime change favored by the Group of 77. Second, the ability of the North and thus of the US to exercise authority over the South and to impose obligations on it may shrink because internal accountability pressures may increasingly strain the capacity of the OECD member governments to arrive at and implement a mutually acceptable external accountability regime among themselves. Third, continued bargaining also will help the South should economic conflicts of interest within the Group of 77 be likely to lessen or at least become less susceptible to Northern exploitation and exacerbation. Judgments on this last score involve not just perceptions of the Southern economies but also of the constraints that will shape US and other Northern government actions now and in the next few years. It may well be that continued bargaining with

piecemeal concessions from the US and other OECD members provides the second-best solution, which is often the result of politics.

Internal Accountability and US Government Conduct

Our discussion thus far has addressed external accountability, i.e., bargaining over the rights and obligations of national governments with respect to each other. The NIEO limits itself to that issue; but all national responses will, in practice, be significantly shaped by the accountability regimes that prevail within nations. Any prognosis of US bargaining with the Group of 77 must come to terms with the internal accountability regime operating to shape US government conduct. Barring a change in that regime, US responses to the NIEO will be limited to those permitted by the regime that now exists. Thus, we shall address the general characteristics of the prevailing internal accountability regime in the US, emphasizing the stressful context of the emergence of NIEO demands. Finally, we turn to implications of US conduct for the major issue baskets of NIEO proposals.

A General Characterization

US foreign economic policy since World War II has rested upon extraordinarily fragmented authority and responsibility combined with an increasingly strained consensus on accountability criteria and hence on general

lines of policy. The fragmentation of authority and responsibility observed by leading analysts of American foreign economic policy (e.g., Krasner, 1977; Cohen, 1977) manifests itself in the structure of both the Executive and Legislative branches of the central government. No single Executive department has foreign economic policy as its primary responsibility, but many are affected, as it involves their primary mission. Indeed, with the possible exception of Treasury Department predominance in international monetary policy, responsibility for the issue bundles of the NIEO is widely scattered among Executive units with diverse goals and domestic constituencies. Any action tends to require extensive and extended inter- and intra-agency bargaining and coordination within the Executive branch. Responsibility in the committee structure of Congress is perhaps even more diffuse. And, again with the notable exception of international monetary policy, Congress has taken pains to keep the Executive on an exceedingly short leash and has made numerous case-by-case permissions necessary.

Moreover, any response to NIEO proposals requires extensive and extended bargaining within and between the two branches. It is most unlikely that an American policy elite can formulate and implement coherent foreign economic policies of the scope suggested by the NIEO unless there is broad consensus on policies with visible benefits and invisible or relatively minor costs and risks.

The relationship between governmental and non-governmental organizations in formulating and implementing foreign economic policies provides still a third sort of fragmentation. The authority of government on economic matters, compared to that of business and labor, is relatively weak in the American system. This weakness is reinforced by the structural fragmentation within the public sector. Even when the influential private sector parties are highly concentrated ("big" business and "big" labor unions), usually no single group can speak with authority for the point of view it claims to represent. We can conclude that, even if the branches of the US government could agree on a coherent comprehensive foreign economic policy, they would still face substantial problems of adoption and implementation when bargaining with an important but fragmented set of non-governmental organizations.

This set of diffuse authority patterns suggests that the US government simply could not make meaningful adjustments to NIEO proposals even if it wanted to. It does not have the authority to transfer. What it can do is bargain in an MTN style, by which we mean work out, over many years, a complex series of specific bargains that are tailored to the interests of numerous pertinent domestic parties and in which general principles are bent to particular instances. Authority and influence can be aggregated to support a package of specific bargains rather than a general principle.

The authority arrangements just summarized are, of course, not new. How, then, can we account for the apparent coherence of US foreign economic policy in the period extending roughly from Bretton Woods until the Nixon New Economic Policy? Our explanation lies in the existence of a consensus on the criteria of accountability to be applied to foreign economic policy and on a set of general lines of policy compatible with those criteria, policy directions that, for the most part, did not require a centralization of authority greater than that we have described.

The principal accountability criteria were domestic prosperity, national autonomy, and national security. The free-trade policies pursued by American policy makers throughout the postwar period, until at least the mid-sixties, were seen as serving all three of these ends simultaneously. Indeed, most of the policies pursued, even though they may have had, as their basic purpose, the service of one fundamental goal or another, seemed during that period to have positive spillovers into the other areas as well. In fact, chosen policies became, over time, quasi-criteria of their own. In addition to ever freer trade, there was the bonding of allies and clients in an anti-Soviet political-military coalition, the creation of a framework for orderly international dealing, and the isolation of and denial of economic benefits to hostile governments. The instruments chosen in the service of these policies are well known:

the encouragement of US direct foreign investment, aid transfers and the granting of less than fully reciprocated access to US markets, acceptance of a central currency responsibility, restraint in interfering with or regulating US-based multinational corporations and support for US firms against regulatory attempts by foreign governments, specific product and general prohibitions against "trading with the enemy," and sanctions through foreign aid reductions and loan obstruction. The key to consensus was twofold: neither the criteria nor the quasi-criteria appeared to present tradeoffs for the nation as a whole, and those whose proximate interests were negatively affected by the policies pursued were not politically important enough to be able to resist effectively.

By the time the NIEO program gained prominence, in the early 1970s, the consensus was disintegrating. The disintegration took place at three levels, but as political phenomena the three are sometimes difficult to distinguish. First, there was a growing perception by many important groups that their own self-interest was not being served by free trade, whatever the interest of the country as a whole. This was particularly true among increasing parts of organized labor; and the perception was strengthened by a nearly stagnant economy. Second, it was increasingly unclear to many that the national interest was being served by the chosen policies. Why should the US government not actively pursue trade advantages for its firms when many foreign governments were aiding theirs? Why should the US forego sales to the

Soviet Union and Eastern Europe when such a denial apparently only allowed others to sell there? Finally, there was some restiveness about the relationship among the three principal criteria. For example, was the pursuit of prosperity through trade with the Soviet Union done at some expense to national security, or was security enhanced by such contact?

Despite doubts about the quasi-criteria and the relationship among the criteria, there was not substantial doubt about the three fundamental criteria themselves. The nation-state remained the measure of all things, and only a miniscule constituency within the US favored an alteration of criteria in the direction advocated by the NIEO: recognizing the material prosperity of non-citizens as a significant obligation of Americans and allowing others a voice in determining US economic activity.

None of the changes was complete or uniform. Nevertheless, the total effect was increasingly to bring the elements of foreign economic policy into the sphere of domestic political conflict within and between the Executive and Congress, within the private sector, and between it and the government. As the consensus on criteria and policy instruments dissipated, the structural properties of the US internal accountability regime blocked the emergence of an authority capable of formulating, making, and implementing the decisions needed for new policy initiatives, coherent or otherwise. All these developments were well under way before the OPEC actions of 1973. However, those actions lent

momentum to the disintegration of consensus within the US on foreign economic policy. It is ironic that the very OPEC policies that were so heartening to the advocates of the NIEO accentuated the stresses among the various quasi-criteria and cast doubt on the historical emphases of US policy. They made it less likely that the US government would concentrate attention on the program of the Group of 77 beyond the context of a threat to US domestic prosperity and the key elements of the US military alliance network. That is, the OPEC actions and the perceptions in the US of their consequences served to keep the broader emphases of the NIEO low on the policy elite agenda and to cast proposals for reform in a context of threat to the major responsibilities of any US administration.

To arrive at a prognosis on US-NIEO bargaining, we need to understand what US policies will emerge in the context of dispersed authority and interest and of perceived conflict among accountability criteria, quasi-criteria, and courses of policy action to pursue them. We expect US policy responses to the Group of 77 to follow from four sets of considerations. First, the chance of positive response increases with perceived fit between the policy proposal and the criteria and quasi-criteria just noted. Proposals seen to clash with policy directions that historically have been linked with accountability criteria or with other American values will have difficulty gaining political

support. We can label our first set of considerations ideological consonance. A second characteristic of a proposal which determines the nature of the politics it will generate is impact transparency. Where the impact of the adoption of a certain policy is uncertain, the policy reaction among various groups may be either muted or inconsistent, depending on the groups and the circumstances. Regarding the NIEO proposals, we will predict the emergence of both reactions. Third is the well-known issue of the diffusion and concentration of perceived costs and benefits. Wilson (1973), drawing heavily from Olson (1965), has predicted that those with the most to gain or lose on a per capita basis will be far more prominent in the determination of political outcomes than any construction of the "public interest" would suggest. It should also be noted that there is a certain minimum threshold of importance for an issue to engage the serious attention of political groups. The costs and benefits of issues have to be weighed inclusive of the costs of political activity. This raises our last important consideration. The nature of the domestic policy process will be shaped by the extent to which the concerned political actors are already organized for effective political action. It is one thing to shift existing capabilities to a new policy proposal and another to start assembling those

resources from scratch. This set of considerations concerns the existing political capability.[1]

Before applying these considerations to future US policy towards the NIEO, we should review briefly the US response thus far. No single voice has spoken with authority, and all response has been fragmentary. The State Department, assuming its usual role of emphasizing bargaining and some appearance of compromise with foreign perceptions and interests, has favored a much more open stance than has the Treasury. Yet, even the State Department has had enormous difficulty dealing comprehensively and clearly with the assumed "rights" put forth by the Group of 77. Secretary Kissinger did manage, in his 1975 General Assembly speech, to mix principles of apparently intentional murkiness with

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[1]This formulation of policy determination departs markedly from that of Lowi (1964, 1967). We find Lowi's approach unhelpful for a number of reasons. First, it ignores the pervasive role of redistributional consequences in foreign economic policy in the simple sense of shifting burdens to others and garnering benefits to oneself. In large part, this is because he fails to distinguish between intended and real impacts and to recognize the very different faces of an issue that different political participants will perceive and respond to. Second, he tends to treat governmental participants in the policy process as doing little more than reflecting the perceptions of important outside groups. In our view, governmental actors, like outsiders, also engage in initiatives and blocking behavior to pursue their particular interests and those they attribute to the nation as a whole. Third, it is no easy matter to assign policies to a particular one of Lowi's "arenas of power," except after the fact. This is illustrated in his own work by the use of tariff policy for more than one category and by the failure to explain the reasons for arena shifts. While the framework may be useful post facto, this difficulty of assignment makes it of little anticipatory value.

a set of possible bargaining areas for the future. Yet, no points of principle related to a change in accountability were granted, and steps were taken short of breaking off bargaining to link the US response to Third and Fourth World behavior on oil. No important domestic constituency demanded that the matters raised by the NIEO be treated in a way that would explicitly acknowledge the asserted rights of the Group of 77 and the obligations of the US. And, as we would expect, the unwillingness of the US government to take a firm, clear, and comprehensive position on the NIEO has persisted in the Carter Administration. Most of the substantive issues involved have not been tackled in any detailed way by the US. But, using our policy considerations, we can make some predictions.

Looking Ahead

We shall organize our discussion of future political support in the US for responsible bargaining postures towards the NIEO in terms of the issue baskets the latter has stressed: aid and development finance; trade; technology transfer and the multinational corporation; and institutional reform.

Aid and Development Finance. It may be true, as Fishlow in Fishlow, et al. (1978: 14) observes, that the Group of 77 "accepts the mutuality of benefits from trade and foreign investment and rejects the Marxist contentions of inevitable exploitation." But most US

political participants or even just voters who have any awareness of the NIEO see it as involving substantial or even massive resource transfers from the US to others. And the NIEO program calls for making those transfers automatic, as a matter of right. This position clashes with the criteria and quasi-criteria of US policy discussed earlier. Accordingly, those in the US who favor increased direct resource transfers with the lack of strings sought by the Group of 77 have tried to avoid any notion of obligation to Southern governments or of automatic exaction mechanisms. It is, of course, true that, for other reasons, some important governmental players in the policy process--especially in the State Department and the foreign aid bureaucracy--want to see transfers of resources to the Third and Fourth Worlds enhanced and more firmly committed. However, even in its usual face of charity, unrequited aid transfers fit with none of the historically central criteria of internal accountability. More important, a substantial increase in untied, general purpose transfers (i.e., money for use at the discretion of the recipient) does not have a positive perceived cost-benefit ratio for any important political group in the US outside of the bureaucracy. As a policy, it is regarded as a transparent failure and has become a favorite political "whipping boy." The real value of US aid has been declining since the early sixties (Frank and Baird, 1975). The drop has been particularly great in

recent years, and there is no politically compelling reason to expect the trend to be reversed.

Multilateral agencies, especially the World Bank, provide a form of aid more politically acceptable because of its small subsidy component and visible and attractive results. The perceived "business-like" quality of Bank operations, according to ostensible efficiency criteria, will be conducive to the continuation of relatively strong US support such as that provided by the Carter Administration (Bergsten, 1979). Whether the actual funding involved will do much more than keep up with the consequences of higher energy prices, the declining value of the dollar and sluggishness in the Northern economies is moot. It seems unlikely that the trend of US government contributions will increase much further in real terms. Nevertheless, the World Bank also offers a partial solution to the debt relief objective of the NIEO. The general problem of shaky excessive private debt can be ameliorated by a swap in which US private lenders exchange their obligations from the LDCs for obligations from the World Bank, and Southern nations deal with the Bank. Such a policy appeals to the self-interest of politically important private financial institutions in the US and seems capable of improving--and certainly not hurting--the domestic American economy. It is also reasonable to expect some continuing US government support for writing off and rescheduling debts of regimes the US wishes to bolster for other foreign policy reasons. However, that form of

relief will continue to be negotiated on a case-by-case basis. A general "forgiveness" policy would appear to constitute a substantial, arbitrary and unrequited gift and hence to violate the first accountability criterion of domestic prosperity.

A third branch of policy for augmented development financing involves future international taxes on revenues from hitherto unexploited assets. The most common example involves minerals extracted from the deep ocean seabed (Cooper in Bhagwati, 1977). Krasner (1977) suggests a reason for the relative political feasibility of this line of policy: the willingness of people to "fight harder to avoid giving up what they have than . . . to get new benefits in the future." For the citizenry at large, the opportunities foregone would be largely speculative, contributing to the opaqueness of the policy, and it would be a matter of firm and important conviction for rather few established groups. Although, for the mining companies, the stakes are enormously high, policy elites interested in increasing the flow of resources might still see it as the path of least resistance. However, the time of acceptance with minimal political cost may already have passed. Private firms are barraging the US Congress with prospects for deep-sea exploitation, while the LOS negotiations proceed at a glacial rate. And general economic anxiety, the perceived failure to meet the first internal accountability

criterion either now or in the future, creates political incentives in the US to resist such tax arrangements.

Trade. The trade program of the NIEO has two major components. The first demands that commodity prices be stabilized and "made remunerative" for producers. The second calls for maximum access for Southern manufactures to the internal markets of the industrialized nations.

Stabilization divorced from the issue of guaranteed remunerative prices seems attractive in principle (Fishlow, et al., 1978). The stabilization for export earnings (STABEX) scheme of the EEC and a large group of developing countries provides a precedent. The underlying principle does not involve past guilt or asymmetrical obligation: stable prices (in contrast to fluctuations around the same trend) benefit both importing consumers and exporting producers. The problem is to find a specific set of implementation measures which would serve stabilization without working to raise prices. There are a number of workable alternatives, all of which should involve only modest expense. Since the US is a major commodity exporter, the US government should find its problems of domestic economic management eased by stabilization, and private firms would, in general, benefit from a predictable business climate. As such a policy does not violate the persisting preferences for minimal governmental interference in commercial operations, one can expect the US Executive branch to have considerable latitude in designing and bargaining internationally for

stabilization-only schemes, the implications of which are modest and foreseeable. US proposals will be limited to such stabilization schemes, and the domestic political coalition hostile to attempts to raise prices for particular commodities will be far more powerful than the small groups seeking such treatment.

In contrast, the prospects for US initiatives to increase access for Southern manufactures are far more pessimistic. The comparative advantage of Southern economies often lies in manufactures in which the US currently has severe problems of low wages and weak employment. General economic softness exacerbates those problems and makes concessions appear to be at variance with the criterion of domestic economic prosperity. Free trade has always been plagued by both a lack of clear implications and, very often, an unequal struggle between concentrated interests and the public interest (Amacher, Tollison and Willett, n.d.). The usual political forces, threatened plants and workers, have been given a considerable boost in recent years from the increasing number of highly unionized industries that have come into direct competition with imports. But the quasi-criterion of free trade--which would still be held by most economists to be valid--as well as the desire to help the economies of the Third and Fourth Worlds lead most elements in the Executive branch to support liberalism. Furthermore, free trade is not without its concentrated interests. All exporters, by

now, well understand not only the necessity for an open international economy but the benefits that a low exchange rate--one threatened by the protectionists--brings them. And world business, in general, is geared to multi-country trade. Most of business thus continues to give its support to free-trade policies. With respect to the NIEO, the problem will be the temptation those parties will experience to use protectionism against Southern nations as a sop to secure free trade with other industrialized economies. Those, after all, are the key allies crucial to the still predominant political-military quasi-criteria mentioned earlier. The history of the MTN internal negotiations is instructive in this regard.

Clearly, the major political counter to protectionist demands is adjustment assistance to shift workers into stable or growing sectors. The general fragmentation of authority, interest, and responsibility referred to previously has prevented the formation of a strong coalition for effective adjustment assistance, and the general lack of economic vigor weakens receptiveness to special claims.

The prospects are not completely bleak, however. There are new allies for free trade. The consumer movement, albeit ill-organized as yet, has a considerable stake in open access to US markets, as do the international bankers who have extended substantial credit to some Southern nations. Nevertheless, we conclude that internal accountability pressures and diffuse authority will combine to

make it unlikely that a US government will, in the next few years, substantially decrease the barriers to Southern manufactures, with the possible exceptions of cases of military allies and regional stability linchpin regimes in the Group of 77. The nonreciprocal nature of the NIEO program on this score further weakens the prospect of American responsiveness.

Technology Transfer and the Multinational Corporation. Free trade has at least some historical appeal in principle to major groups in America. Technology transfer has a history of restraint and has rapidly become an incendiary issue with organized labor. In the case of free trade, the lower-priced goods are already available; the issue is whether or not to allow Americans to buy them. In contrast, technology transfer seems to be not only an unrequited transfer (like aid or debt relief) but an active step to create a threat to oneself. Opponents can purvey the vision of Americans losing jobs to foreigners through future import competition and of a decline in markets and direct Southern-based business competition abroad. While the arguments can be subtle and complex, there is enough truth to the restraint position to make it difficult to marshal support for policies that would generally stimulate technological diffusion. Labor will be adamantly opposed. Free-trade groups will be much more divided than with respect to physical trade barriers. Thus NIEO technology transfer proposals encounter formidable barriers with respect to the US policy process.

The proposal is ideologically dissonant, many of the consequences are clear enough to those directly threatened, and those threatened are large, powerful, and already organized and committed, while the proponents are uncertain and weak. Accordingly, we expect the US official position to be limited to the diffusion of "appropriate" (i.e., efficient but usually "low") technology which will pose minimal competition for exports or the US home market.

The NIEO program for multinational corporations emphasizes placing them completely under the power of host Southern governments, with great disclosure of information about them as an aid to host government bargaining and Southern coordination. Two possible sources of support within the American political process are pertinent. One is the internal accountability criterion of national autonomy, a principle underlying many more specific ways of judging the foreign economic policy performance of any US administration. A second source is the view of the large MNC as a pernicious influence inimical to the set of concerns that should motivate American foreign economic policy. The increased prominence of many non-American transnational enterprises in the US economy encourages this perception. Fuller disclosure per se has long had support in important elements of the US government (the Department of Justice and the Federal Trade Commission) and among some members of Congress. Suspicion of the oil companies has led to demands for disclosure and responses that could provide important

precedents. Also, the protectionist political forces referred to earlier may be encouraged to support such measures because their impacts are not transparent and because they can be expected to provide tools for control of the international business activities of major American firms. Fuller disclosure may reveal what kind of foreign inducements are being offered to MNCs, how many jobs are being transferred, and what interests govern MNC decisions. If recognition of host country sovereignty and the non-applicability of international law deters foreign direct investment, so much the better. Nevertheless, it seems unlikely that a US Executive responding to such political influence at home will begin by acting in the complex forums of international economic bargaining. Changes will probably come first as domestic measures and only later as support for international codes.

The lack of transparency of the policy will not prevent complete mobilization of business against such measures and much of labor for them. The outcome cannot be predicted; much may turn upon how persuasively business can present the case that its international competitive position will be damaged. This, in turn, will depend on the pace of similar activity in other industrial countries, which, in general, have lagged far behind the US in disclosure requirements.

Institutional Reform. In our discussion of external accountability, we argued that institutional measures were attractive to the South. Here we shall argue that

institutional reform of particular kinds is attractive to a US government working in the internal authority-accountability context as we see it. When we introduced the notion of an accountability regime, in section 2, we noted six elements: 1) participation in the exercise of authority; 2) subordination to that authority; 3) domain of authority coverage; 4) procedures and information for reaching decisions; 5) criteria or rules of conduct to guide the exercise of authority; and 6) resources and instruments to exercise and resist authority. We noted that parties desiring to alter the prevailing accountability regime might find it tactically advantageous to focus on the first and fifth of these initially, and parties faced with the need to accept some change but wanting to minimize it also would try to concentrate attention on these two elements. In our discussion of US-NIEO bargaining, in section 3, we noted the efforts by NIEO proponents to achieve changes in the roles of national governments and in the nature of existing international institutions and to create new international institutions. As expected, we found that the US had been relatively accepting of changes in participation in authoritative decisions (element 1) and in establishing vague criteria and objectives (element 5) for existing international organizations; it had been relatively open to the creation of new institutions so long as they were weak or ill-defined in the matters of subordination, domain, information and binding procedures, and resources for enforcement (elements 2, 3, 4, and 6).

Many aspects of the issue bundles just discussed in terms of internal accountability involve the role of the US national government vis-à-vis others and tangible, relatively binding actions. Institutional reform, to which we now turn, from an internal accountability perspective involves the second and third elements of the NIEO institutional strategy--existing and new international organizations--and need not involve tangible, relatively binding actions. The US has accepted increased Group of 77 participation in the World Bank and the International Monetary Fund. Kissinger and the Carter State Department have proposed a variety of new institutions beginning with the United Nations Special Session in 1975, e.g., an International Investment Trust, an International Center for the Exchange of Technological Information, and an International Industrialization Institute. We expect such receptivity and initiatives to continue but in the overwhelming majority of instances to be rigorously confined to the participation and criteria elements of an accountability regime.

None of the criteria of internal accountability for foreign economic policy need be obviously violated, and no important interest need be obviously threatened. Indeed, an emphasis on participation and aspirations for human welfare may lessen the tension from one horn of the American dilemma about relations with other nations and peoples. Policy impacts other than the increased frequency of international meetings and the compositions of the group

attending are extraordinarily opaque and contingent, to the point where non-specialists will have difficulty grasping them. This murkiness and indefiniteness of consequences make it highly unlikely that many participants in the political process will see that much is involved in terms of costs and benefits and thus will attach importance to the proposals. Accordingly, the cost of oppositional politics will seem unattractive. Because Congress need not be involved, it will be relatively difficult to mount an effective opposition. Similarly, for many years and many negotiating sessions, these characteristics will make opposition seem politically unrewarding to Congress. The bodies likely to be involved, Executive branch departments, have little to lose so long as no single part of the Executive branch can turn the international institution to its own ends. There is little at risk so long as greater participation still reflects the distribution of economic power (as it continues to do in the World Bank and the IMF), voting rules embody an American veto, or the institution is incapable of implementing actions of any consequence. The Third World has a strong interest in inflation to diminish the real value of its debt, and its role in the International Monetary Fund--and especially in channelling increased liquidity to the Third and Fourth Worlds--would have to be watched very carefully. Yet, no group in the US should be more concerned about or better equipped to evaluate the danger than is the Executive.

Of course, this conducive internal accountability situation changes once the stakes come to seem important to organized political groups, as the LOS experience demonstrates. Until then, even those who abhor "foreign entanglements" may well be persuaded that Kissinger-style institutional initiatives provide a pretense of responsiveness to the NIEO that costs little and has the useful possibility of diffusing the demands and weakening the cohesion of the Group of 77. Others can be induced to go along with arguments about the need to avoid leaving open a position of special advantage to OECD competitors and to minimize hostile perceptions of the US by leaders of Third and Fourth World governments. Agreements on participation and proposals for new international institutions with few teeth require relatively little centralized authority. They are largely within the territory of the State Department so long as no commitments are made on regime elements other than participation and general criteria.

In sum, institutional reform of certain kinds requires of the US government neither substantial centralized authority nor formidable domestic political skill. Since little authority will be delegated, it is not needed in the first place. Since little opposition will arise, one does not need to muster substantial support around a new internal accountability consensus. Alone among the NIEO issue baskets, the institutional reform proposals when limited to participation and vague normative criteria are, from the point of view of

internal accountability, the epitome of issues that are at what Arnold Wolfers (1962: 3-35) long ago called the "pole of indifference."

Conclusions and Implications

The application of an authority-accountability perspective has had the general benefits we anticipated. It emphasizes the relatively new elements in relations between the North and the South embodied in the NIEO debate. Doing so elucidates the political elements of the conflict, elements that lend coherence to otherwise puzzling sets of demands, responses, and non-responses. An approach that focused solely on economic considerations, for example, would not do as well. And, as we have suggested, our authority-accountability perspective has important implications for the differences and similarities in the response of the US and other major members of the OECD to the Group of 77 in the past and the future.

For the US, we have seen that external accountability interests and internal accountability constraints work towards the same pattern of policy activity and inactivity. External accountability stakes and initial positions lead the US to oppose general transfers of authority to institutional structures that it cannot dominate. Instead, US policy preferences lead to three forms of action. The first consists of limited, specific, and contingent case-by-case concessions on rights and obligations. The second

supports new international institutions that would function to shift authority to the US in particular international economic matters where it lacks market or other sources of power now and in the foreseeable future. Oil is the best present illustration. That is, if the benefits from a new regime are to increase the authority of the US and decrease the extent to which others can hold it to account, the US favors such changes. Otherwise it does not. The third and most visible active strategy consists of proposals for enhanced participation by the Group of 77 in existing international institutions and the creation of new institutions sanctioned by little agreement on ultimate objectives--what we have called accountability criteria. However, these initiatives are taken and pursued in ways that involve the most minimal transfer of authority and acceptance of binding obligations.

The internal accountability constraints of diffuse authority and little consensus work in the same direction. Specific, case-by-case concessions can be seen as a result of prolonged internal bargaining and interest aggregation, as the MTN illustrates. Proposals for new authority arrangements in areas where the US is in a weak position and which seem to threaten all the core criteria of internal accountability are less constrained than those regarding other matters, as the oil case again suggests. Finally, proposals for enhanced participation by the South and non-authoritative international institutions do not require

difficult-to-muster concentrations of authority or substantial consensus. Instead, they follow from the interests and mandate of the key element of the Executive branch, the Department of State.

The implications of this convergence of external and internal accountability considerations for US-NIEO relations also depend on the authority-accountability considerations working on the Group of 77. The underlying element of its program is massive transfers of authority to institutions capable of holding the Northern governments to account. It seeks to have the US and the other members of the OECD grant it rights and accept major additional obligations, except in those cases where some Group members already have massive power, i.e., the oil area. Nevertheless, it too supports the steps for increased participation in existing international institutions, agreements on vague new standards, and the establishment of non-authoritative new international institutions, but for reasons different from those that motivate the US. For the proponents of the NIEO, such steps lay the groundwork for pursuing later meaningful transfers of authority away from the US. They provide necessary conditions for such a transfer, create at least modest perceptions of favorable momentum, allow Group leaders to focus the cause of their economic problems on external sources, and, of the utmost importance, place virtually no focus on the political tenuousness of the Group of 77.

Accordingly, we can expect some continuing increases in Southern participation in existing international economic institutions and the continued proliferation of non-authoritative institutions dealing with aspects of economic relations across national lines. Second, in those areas where US internal accountability constraints permit and external accountability preferences are at least neutral, we can expect some movement by the US towards NIEO positions. We believe that limited debt relief, commodity price stabilization, and increased surveillance of multinational corporations are areas of possible agreement, although US internal constraints remain. However, these specific kinds of accommodation will take place in the context of continued and massive US resistance to NIEO proposals with respect to unrequited transfers, vastly increased access for Southern manufactures to Northern markets, and technology transfer. Most fundamental, there will be no agreement by the US to the massive shifts in authority and accountability that the Group of 77 seeks.

The US response will not be fully matched by the other members of the OECD. Compared with the US, most other major Western countries have institutions that are capable of speaking more univocally and authoritatively for the entire society (Katzenstein, 1977; Krasner, 1977). On external accountability grounds, they too favor a diminution of US authority and an increase in their ability to hold the US to account. But this is not to argue that they will be

systematically more supportive of the NIEO than the US is. Within the subset of major European countries, for example, there are cross-cutting considerations. On the one hand, there are powerful colonial ties and ambitions for influence which, especially in the case of France, make the appearance of responsiveness critical. Furthermore, in a world in which material scarcity is perceived more acutely than ever before, the entire EEC will be seeking special and advantageous relationships within the Third World. These factors are reflected in the Yaounde and Lome Conventions. Some have seen them as precursors of a tightly formulated EEC-wide common policy towards the Third World (Twitchett, 1978).

But once again our dual accountability perspective is useful. Nearly all the European countries face bleaker prospects in world trade than does the US (and Japan) and therefore view the prospect of increased Third World manufactured imports with far more trepidation. Furthermore, while the stabilization of primary product prices might be acceptable, a raising of primary prices is a more unambiguous loss for Europe than for the US. Finally, foreign investment from Europe is much less geared to a global strategy than is US or Japanese investment; therefore, an important countervailing force to incipient protectionism is largely absent. Furthermore, EEC policy may reflect the past in deferring to the needs of those members who have the greatest

perceived problems with a positive response (Vaitsos, 1978). Added to this set of considerations will be intra-EEC rivalries and tensions.

What are the implications of these proclivities? First, they are likely to lend additional momentum to US adaptations in those areas already noted as good prospects for accommodation. Second, while some OECD members may appear to go beyond the position of the US in the direction of accommodation, such responsiveness is likely to be more apparent than real. Third, other key states in the OECD will not cooperate vigorously with the US in establishing strong international institutions for matters in which US authority is weak unless they are convinced that those institutions will not reinforce subordination to the US. Oil developments since 1973 are symptomatic on this score (Bobrow and Kudrle, 1979). The implications for OECD and thus Western alliance cohesion are clear and negative. However, that does not equate with enhanced chances for the realization of the new authority-accountability regime sought by the NIEO advocates. Indeed, if the consequences of conflict within the OECD strengthen the internal accountability constraints operating on the US, negative reaction to the NIEO may be intensified.

CHAPTER 4

THE US AND DIRECT FOREIGN INVESTMENT

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Introduction

Some years ago an influential article argued that "Trade Policy is Foreign Policy" (Cooper, 1972). Many found it odd then that such a case would have to be made. Trade policy is indeed a critical part of any nation's foreign policy, and the post-war US policy has shown both continuity and change (Baldwin, 1976; Krasner, 1977). Foreign direct investment policy accordingly gains importance because over half of all world trade now takes place within firms operating in different countries. But direct foreign investment (DFI) can have foreign policy significance independent of its role in world trade. The essence of DFI is, after all, control by aliens. It constitutes a foreign-controlled economic presence within a sovereign state with all of the suspicions and conflicts that implies (Model, 1967). Perceptions of these threats gain credibility from the sheer size of many multinational corporations whose volume of final sales dwarfs that of many nations. For example, in 1978, 40% of the 100 biggest economic units in the world were corporations. General Motors surpassed the gross national product of

Yugoslavia and in 1979 Exxon exceeded those of East Germany and of Iran (Across the Board, 1980).

Unfortunately, "control" like "power" is easier to recognize in specific instances than to define generally. The share of ownership necessary to exercise decisive influence in an enterprise is typically much less than 51%, but the share will vary from firm to firm, largely because of the overall distribution of ownership. We think, however, that the Department of Commerce definition is acceptable: foreign direct investment consists of the ownership of 10% or more of the equity of an enterprise. Using this standard, the United States was not only the largest "home" country for DFI in 1978 with $168 billion, it was also the second largest "host" country (after Canada) with $41 billion invested. Obviously, a large number of political and economic factors determine to what extent foreign "control" confers usable power within and outside of pertinent enterprises.

Our purpose in this chapter is to develop an approach to thinking about the general emphasis of US outgoing foreign direct investment (ODFI) and incoming direct foreign investment (IDFI) policy that will explain past and present policy well enough to allow for a confident prediction of their future central elements. We emphasize that our concern does not lie with narrow policy decisions but rather with broad national postures and the policy process that maintains or changes them.

For ODFI, we address policies toward outflow of investment, retaliation against host countries judged to have dealt inappropriately with US foreign investment, and control of the activities of the overseas subsidiaries of US firms. For IDFI, we consider policies toward inflow of investment, control of the activities of foreign subsidiaries and the US, and leverage on home country governments through the "hostage" capital of their IDFI in the US. The understanding we seek involves not just positive policy but also its absence. An empty policy space demands explanation as much as positive policy. Finally, we seek some understanding of process, in particular of the relative roles of public politics versus intra-governmental or intra-bureaucratic decision making.

Our exploration proceeds as follows. First, we summarize the content of US policy towards DFI. Second, we discuss alternative explanatory approaches from the literature. Third, we introduce an approach that seems more satisfactory to us on a priori grounds. Fourth, we apply the approach to explore past and contemporary policy in some detail. Finally, we use it to forecast US ODFI and IDFI policies for the coming decade.

A Policy Summary

The post-World War II ODFI and IDFI policies we seek to understand are relatively simple. Furthermore, relative to trade policy, there has been rather little policy

innovation over the post-war period. Thus, we will be dealing with sources of continuity more than sources of change.

Although the "multinational corporation" was not an uncommon phenomenon before World War II, about one-half of US overseas investment at that time was non-controlling. The sharp change in relative magnitudes as well as the growth of both is dramatic. In 1940, US direct investment abroad was $7.4 billion while non-controlling investment was $6.2 billion; in 1977, the figures were $148.8 billion and $49.3 billion. The reasons for the growth of DFI include the increased ease of transport and communication brought by the post-war world and changing market structures (Vernon, 1971).

Post-War ODFI Policy

Outflow. The principal public policies to facilitate outflow are in taxation. Both the tax credit--which allows corporate taxes paid to foreign governments to be counted against US corporate tax liabilities--and the tax deferral--which allows whatever tax liability remains to be postponed until the foreign subsidiary remits its earnings to the parent--clearly provide incentives for the outflow of DFI. While both have roots as legal practices going back more than sixty years, the tax credit is truly fundamental. If corporate income were to be taxed twice, the amount of overseas activity found attractive would diminish dramatically.

With rather similar corporate tax rates around the world, however, the tax credit scheme--also employed by virtually all other major "host" countries--tends towards neutrality in the international allocation of capital. By contrast, the tax deferral is essentially an interest-free loan from the US government to the overseas investor. While, in fact, it has served to compensate for some government incentives to purely domestic investment (Bergsten, Horst, and Moran, 1978: Chapter 6), taken by itself, it encourages overseas investment beyond those differences that might exist in underlying capital productivity.

The Carter Administration came to power pledged to remove deferral, and the Senate supported this position in 1977. The only major group questioning the tax credit has been the AFL-CIO. The Burke-Hartke Bill, which embodied the demise of both the deferral and the credit, got very little support when discussed in the early seventies.

While the tax credit and tax deferral go back to a period when the official US government position was not actively to encourage ODFI and developed thereafter as international conventions, there were several post-war policies avowedly to encourage DFI by American firms. ODFI insurance against expropriation, war, and currency inconvertability was part of the Marshall Plan. By the late fifties, however, official encouragement of this kind was extended only to ODFI in poorer countries. Quite comprehensive insurance was granted to foreign investors by

AID after 1961 and, after 1969, by the Overseas Private Investment Corporation (Wilkins, 1974: 331-332).

There has been no general effort to limit ODFI, but some policies pursued in the interest of the balance of payments in the late sixties and early seventies had that implication. President Johnson introduced voluntary guidelines in 1965 to encourage firms to finance their foreign subsidiaries' growth out of overseas borrowings rather than US funds. In 1968, a mandatory program of outflow controls was introduced--the only such effort in US history (Wilkins, 1974: 335). The effort was never very successful and was abandoned in the 1970s after the introduction of flexible exchange rates.

If there has been no history of a systematic attempt to control the outflow of investment per se, still less has there been any attempt to control the outflow of non-strategic technology--except to Communist-governed countries. The only governmental rules controlling this general area are those of patent law.

Retaliation. Following the events in Cuba in the early 1960s, Congress insisted that the Executive branch take action against countries that seized the property of US firms without regard for due process or without appropriate compensation. The Hickenlooper ammendment to the Foreign Assistance Act of 1962 forbade US bilateral assistance in such circumstances. It was complemented by an analogous directive from President Nixon in 1972, and, in 1973, by the Gonzales

ammendment that extended the conditions to the US stance in multilateral financial institutions. Yet, then and since, the Executive was given considerable discretion about invoking the sanctions. Most Executive branch retaliatory responses have used off-the-public-record means rather than public sanctions (Olson, 1979A, 1979B; Pinelo, 1973; Einhorn, 1974).

The United States has had no firm or consistent policy on the issue of access for US firms to investment opportunities in other countries. In discussion surrounding the formation of the Common Market and the Treaty of Rome, the US did insist that its firms be given the same status as European (but not national) firms (Gilpin, 1975: 124). However, when France interfered with US incoming investment in the mid-sixties, there is no record of any official US protest (Christopher Layton, quoted in Wilkins, 1974: 334). The most blatant challenge to US preferences has been Japan. Its economy was virtually closed to foreign investment until the seventies (Yoshino, 1970), and even today Japan is scarcely an hospitable host. Yet the US, while maintaining some pressure on the issue, has generally been content with concessions from Japan in other areas.

Control. The US government has also attempted to control the activities of US subsidiaries abroad through the extraterritorial application of its laws and policies. Part of the balance of payments controls of the sixties and seventies were US government rules about how foreign

subsidiaries should finance their activities. US antitrust law also has powerful extraterritorial claims. The Sherman Act quite explicitly includes overseas activities that affect the US market and has been so applied. In recent years, as a result of the movement of EEC antitrust policy toward that of the US, there has been some international harmonization (Bergsten, Horst and Moran, 1978: Chapter 7). Finally, through various pieces of legislation and executive discretion, the US has attempted to control the trade of its foreign affiliates with Communist and other hostile countries. This was particularly resented and resisted by General DeGaulle.

Policy Towards IDFI

US policy towards IDFI is even easier to summarize than that regarding ODFI. Until the early 1970s, IDFI policy was "something other countries had" (Pastor, 1977: 321). Over most of the first six decades of the twentieth century, there was both little sense of national policy toward and little consciousness of IDFI. While such investment had played an important part in the development of the American continent in the 19th century (Morrison, 1975: M-8 - M-19), most European investment that lingered on into the new century was liquidated during and immediately after World War II.

Inflow. The US has attempted to influence the inflow of direct foreign investment in two ways. First, in common

with most other major nations, it has some restrictions on foreign participation in certain sectors of the economy. Ownership is either barred or restricted to non-"controlling" positions in merchant shipping, banking, certain natural resources, radio and television, nuclear energy, hydroelectric power, mining of Federal lands, domestic air transport, and defense industries. Although the strictures on aviation and communications go back only to the twenties, some of the other restrictions extend back to the nineteenth century. Only the controls on atomic energy and some resources are of post-war origin.

Second, Executive branch policy has more generally been neutral toward IDFI, with occasional ventures into encouragement of a very modest kind. President Kennedy saw encouraging IDFI as a way to improve the US balance of payments, but attempts to give foreign investors advantages not enjoyed by US investors met with strong Congressional opposition then and since (Pastor, 1977: 326; Committee on Government Operations, 1980). More recently, the Economic Development Administration and the Department of Housing and Urban Development have sought to promote IDFI in economically distressed parts of the US, although the Treasury Department has discouraged competition among the states on the grounds that such a competition benefits only the foreigner.

Until the mid-1970s, no one apparently knew how much FDI there was in the United States or in what areas. There

was no locus of responsibility for policy on IDFI or for simply monitoring IDFI. Then Congress became increasingly active in the wake of an enormous upsurge in IDFI after the devaluation of the dollar and the sequence of jumps in oil prices with the attendant flow of dollars to several OPEC countries with limited absorptive capacity. The Congress insisted on several massive studies of IDFI; the Executive was given power to subpoena foreign corporate records in the US; new disclosure and reporting requirements were implemented by the SEC; the Department of Defense developed a tighter set of regulations to prevent foreign control of firms engaged in classified work; the Department of Agriculture was charged to monitor foreign investment in farmland; the Department of Energy was tasked to monitor activities of foreign-owned energy firms. Several descriptive conclusions about this spate of Federal activity in the second half of the 1970s stand out. First, most of it involved monitoring and information collection rather than inflow encouragement or discouragement. In some cases, particularly the International Banking Act of 1978, US law probably became more neutral in the competition between US and foreign banks. Second, the monitoring responsibility was fragmented within and among numerous Executive branch agencies, although much of it was in the Department of Commerce, and often discharged reluctantly and lethargically. Third, policy responsibility was first placed in an interagency committee under the Secretary of Treasury which

rarely even met and then, in late 1979, assigned to the US Trade Representative. While 1980 saw Congressional proposals for a screening agency legislation to that effect has yet to emerge (Pastor, 1977; Committee on Government Operations, 1980).

A pervasive complication is that in the US state jurisdiction controls most business activity. Most law nominally pertaining to IDFI is state law. This includes nearly all of the law pertaining to the ownership or transfer of land and most of the laws concerning the incorporation and operation of commercial enterprise. Law is one thing; effective control is another. One recent study has concluded that not only is most state legislation on foreign investment very old, but little of it could seriously hinder foreigners who wanted to conduct business (Phillips, 1975). Furthermore, many states in the 1970s were actively recruiting foreign firms.

Investment in real estate is another matter. Fears going back to massive British real estate investment in several states after the Civil War and to the accumulation of real property by Japanese nationals a generation or two later generated severe restrictions in some states. Some strictures have been reduced by the courts, but in the early seventies, six states had general prohibitions on the ownership of land by aliens (although five had exemptions for resident aliens or those intending to become citizens). Several other states forbade aliens from owning agricultural

land or restricted the size of foreign-owned real estate holdings. While, in many states, such discrimination could be overcome through corporate investment, many states also have prohibitions on the corporate ownership of land (Morrison, 1975: M-17, 18).

Control. There is very little evidence of US attempts to control the behavior of foreign subsidiaries differently from attempts to control domestic firms, e.g., the Export Administration Act of 1969. The sole exception involves the International Emergency Economic Powers Act of 1977, under which the president, after declaring a national emergency, can prevent or undo IDFI and generally take control of every aspect of the use of certain alien property. The Iranian episode is a prominent example (Piper, 1980). This is hardly a flexible policy tool.

Leverage. The use of foreign assets in the United States as a lever to control or influence the behavior of foreign governments has been limited to the primarily reactive seizure and control of foreign property just noted: a response to a hostile international political or military situation.

Alternative Approaches to Policy Explanation

Foreign economic policy in general and various aspects of direct investment policy in particular have been subject to a number of searching accounts over the past decade. We

examine this work for its usefulness in understanding present and past US ODFI and IDFI policy well enough to make confident forecasts for the future. We group the research by theoretical perspective, and in so doing, we may not do justice to many who have written in a similar tradition but whose work we do not explore, or whose aims differ from ours.

Mindsets

In his recent study of the two devaluations of the dollar in the early seventies, John Odell (1979) places heavy emphasis on the different fundamental beliefs of various policy makers in determining the changing outcomes of the policy process. While we think Odell's work is quite persuasive for the cases he investigates, we find its usefulness for our purposes to be very limited. For the most part, we are seeking an explanation of relative stability, not change. Furthermore, for purposes of explaining such policy--or non-policy--over an extended period of time, one must necessarily concentrate on the process that selects individuals for key decision-making positions.

Bureaucratic Politics

The bureaucratic politics approach can expand the usefulness of the mindsets perspective by stressing individual characteristics other than intellectual predilection, and it focuses on ways in which conflicting personal interests are reconciled. Nonetheless, like mindsets, it is

clearly of greatest power when a small number of persons has autonomy in making a quite specific decision (Einlorn, 1974). That is not our problem; there are no single decisions of any consequence that we seek to explain.

Statism

The realist or statist approach appears to offer a focus on intertemporal policy stability. Its fundamental tenet is that the logic of all governments produces an elite that pursues its conception of the "national interest" with considerable autonomy from other groups in society. This pursuit of the national interest is implicit in the unitary rational actor models of national security policy. In recent years, however, it has become an important model for analysts of foreign economic policy as well. It can be particularly useful in comparative analysis to stress the differing international economic circumstances of various states (Katzenstein, 1977).

In his recent book on US policy towards raw materials investments, Krasner (1978) finds the statist position compelling. Of course, he does not address important areas of our policy concern: other kinds of US ODFI and any IDFI to the US. Within his subject, Krasner discerns a consistently ordered pursuit of objectives by those in the State Department and the Executive Office of the President who were in charge of this policy area. He claims that these ordered preferences are autonomous in the sense that they don't represent

a balancing of the interests of active groups. The most active groups in the cases he investigated were the proximate business interests that were often opposed by parts of the government just mentioned. However, the fact that the will of active groups has been successfully resisted does not establish that "the desires of the state cannot be reduced to some summation of private desires" (Krasner, 1978: 1, 2) because private desires may not all be represented in active groups. Also, the source of the statist preferences is never clearly identified, nor is their prevalence in the Department of State and the Executive Office of the President sufficiently justified. Bureaucratic isolation and politically paramount status can be sources of vulnerability and narrow self-interest as much as their opposites. Finally, it is not Krasner's purpose to explain what sorting device allows certain policies to get decided within the insulated world of statism and which do not. This is important for our purposes because, although many aspects of IDFI policy have allowed for much Executive discretion, Congress and other groups have been able to alter the range of that discretion.

One very careful and influential study of US ODFI has been written from a statist perspective. Robert Gilpin's US Power and the Multinational Corporation (1975) provides a critical account and prescription for US ODFI policy. Gilpin sees a policy that was originally designed to serve the US interest as ultimately damaging to both the US

economy and its international political posture. Gilpin's book, however, devotes a great deal of attention to the costs and benefits of alternative US ODFI policies but very little to the configuration of political and economic forces that hold the present policies in place or to what political forces might ultimately disturb them. We question some of Gilpin's positive economic arguments, but more importantly, we need political explanations he does not attempt.

Intra-governmental Relations

It is clear that we need a broader perspective for a fairly complete understanding of DFI policy. An approach that allows consideration of the relationships among government institutions is clearly necessary. There are many approaches that seek regularities in the behavior of various groups within the government, either within the federal executive, or between the Executive and the Congress. Some of these approaches are identified and explained by Pastor (1977: Chapter 1).

A careful look at the entire set of government actors may reveal surprises about the policy process. Pastor, for example, finds the ideological commitment to free trade within the Congress in the 1970s to be generally of the same order as that in the Executive (Pastor, 1977: 297), despite a sometimes more acute concern to ameliorate the difficulties that such a policy might bring. More surprisingly, Pastor finds that interest groups have played

a minimal role in the determination of both trade policy and foreign investment policy since 1960.

An approach that stresses intragovernmental relations thus has a good deal of appeal. The larger society appears to have been relatively quiescent on DFI policy. Yet that silence has not been total. Since 1970, the AFL-CIO and some other groups have been officially on record as opposing the outflow of US investment, and many believe that public pressure on the issue is growing (Krasner, 1978: 349). The Congressional investigation of IDFI was also in direct response to the concerns of certain constituents. Yet this approach does not contain or generate the policy standards that permeated Congressional concern, simply treating them as givens.

Marxism

Part of the appeal of Marxism lies in its emphasis on what it regards to be the ultimate building block of the society: the social class. Marxism certainly cannot be accused of regarding the government as separate from the society; indeed, the government's purpose is to pursue the interests of the dominant class. In many recent discussions (for example, Krasner, 1978: 20-26), two strands within Marxist thought are identified. One, the instrumental Marxist position, suggests that the state will act in the immediate interests of the capitalist class. Particularly in the older literature, capitalists control the government

directly and are extremely short-sighted in the pursuit of the interests of their class. We find much in both the US ODFI and IDFI record that is inconsistent with this view. Antitrust policy is always a problem for this school of analysis. The actual operations of the Justice Department often appear to put US firms at a disadvantage relative to the firms of other countries. Another anomaly is the relatively weak US government response to the blockage of foreign investment by Japan. Finally, it is not at all clear why the US capitalist class would be so quiescent--in some quarters enthusiastic--about the massive growth of IDFI in the 1970s.

For explanations of these and other anomalies, one must look to the usually more recent and more sophisticated writings of the structural Marxists. Instead of the government functioning as the "executive committee of the bourgeosie," it works to maintain the coherence of the society. This conception comes very close to the systems maintenance function that characterizes all governments. It becomes extremely difficult to distinguish between a state that is pursuing its view of the national interest and a dissembling ruling class trying to maintain that appearance, while, in fact, working only for its own interest. Any policies that appear to go against the immediate interests of the capitalists can be explained away as either deception or some other kind of long-range strategy. The problem is particularly acute given the

frequent consonance between the interests of the capitalist class and the interests of the larger society--at least from the perspective of standard Western analyses of economic welfare and national security. This raises what for us is a most telling criticism of the Marxist approach. Whether or not it provides a satisfactory superficial explanation of government policy--and only in its structural variant is this accomplished--it invariably fails to provide a unique explanation (as will be clear from our subsequent account of US policy). More fundamentally, it is based on what we regard as implausible positive economics and value theory.

Interest Group Pluralism

Another approach offering the apparent scope that we seek is interest group pluralism. Unfortunately, what this approach offers in scope it sacrifices in detail and predictive ability. As many critics from economics have pointed out, the group is a concept to ill-defined for an understanding of either its genesis or its cohesion and external effectiveness (Olson, 1965: 16-22; Posner, 1974: 341-342).

The most influential interest group account of foreign economic policy determination is Lowi's classic review of Bauer, Pool, and Dexter (Lowi, 1964). Lowi claims that types of issues can be linked to the "arena of power" in which they are developed and resolved. Yet there is much ambiguity about what the identification of issues and arenas means. Lowi claims that he "defines policies in

terms of their impact or expected impact on the society." But key actors bring differing expectations about the impact of many policies to the political arena. There is now a vast literature about the way in which interested groups sell policies--particularly under the guise of "regulation" --for ends that are mainly redistributive, i.e., shift burdens away from and bring benefits to the group in question. Indeed, even casual perusal of the tariff policies Lowi gives as examples (1964, 1967) shows that they are almost all heavily--if not entirely--redistributive in this sense. The tariff, when applied to a specific commodity, protects the factors of production specific to that commodity ("regulatory"); when the same question is addressed at the sector level, both total costs and benefits are higher ("distributive"); while if the question is put in terms of general protection, there may be a general impact on the relative earnings of capital and labor ("redistributive").[1] The essential difference among the three is the relative size and stakes of the contending groups, and there is no explanation in Lowi for how tariff issues have moved from

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[1]The relevance of the tariff to the third Lowi arena must only be inferred. Lowi comes close to acknowledging the relevance of general tariff levels to his third arena when he suggests (Lowi, 1967: 325) that "it is interesting to note the absence of a foreign policy variant of redistribution. This might be due to my incomplete coverage rather than to a datum about the system. Devaluation might be an example of a redistributive use of resources in foreign policy." It is well-known, however, that a devaluation is equivalent on trade account to a uniform tariff on imports and a uniform subsidy on exports.

one arena to another over time. Lowi's arenas, in fact, confuse the intentions of the various actors and the real impact of policy--which will probably be discerned sooner or later. His terminology is consistent with neither. Regulation appears to focus on government intent while re-distribution, in the sense in which Lowi uses it, appears often secondary to government intent (e.g., Social Security) while assuming primary importance for other groups.

For our purposes, it is difficult to know how to classify various DFI policies into one or another of Lowi's arenas or to anticipate what conditions would maintain or change their status.

Economic Approaches

Economists discussing the determinants of public policy begin from a very different standpoint from that of interest group pluralism. The individual is the unit of analysis, and economists sometimes appear to believe that if the average citizen benefits from a public policy, that policy will ultimately prevail. From this perspective, the absence of a substantially non-neutral policy towards DFI by the United States is regarded as both salutory and un-surprising. Because DFI is seen as a powerful force facilitating international efficiency, citizens of all countries are held likely to resist interference with this attractive new source of betterment simply because it threatens the well-being of certain--especially political--elites. Although such a simple view of the matter is

sometimes attributed to a view called "Sovereignty at Bay," it cannot be identified with any major writer--certainly not Raymond Vernon (1971, 1977). It does, however, present one common inadequacy of some economists' way of dealing with policy matters: showing what is right and assuming politics will finally come around.

Those economists who have not ignored politics provide a far more useful perspective for us, but have not directly addressed DFI. The contributions of Olson (1965), Buchanan and Tullock (1962), and others have led to the development of the "public choice" approach to public policy. As could be expected from a theory that is really nothing more than microeconomics applied to non-market decision making, public choice theory starts with the individual and assumes well-being maximization. (Well-being is often dominated by wealth, but this is not necessary for the theory.) Far from identifying the output of the political process with the will of the informed median voter, however, public choice analysis stresses the way in which externalities, the "free rider" problem, and information imperfections distort political outcomes. In its normative version, the public choice approach thus presents a powerful set of criteria against which to measure the functioning of actual political institutions.

A Suggested Approach

Our dissatisfaction with major approaches to explaining US policy toward ODFI and IDFI leads us to seek a small set of key concepts about policy concerns and policy process characteristics that would be robust in two senses. First, it should provide the conceptual means to relate a changing international environment and US domestic context to manifest ODFI and IDFI policy outcomes. Second, it should be sufficiently well-rooted in the basic beliefs and structure of US society to apply to numerous specific cases over long periods of time.

Our own views about the fundamental validity of a public choice perspective (Willett, 1980) lead us to assume that a satisfactory approach must encompass both economic and non-economic values, and the political process through which these values operate on perceived situations to determine policy. The balance of prevailing policy at any particular time and the timing and content of changes in gross policy postures can only be grasped through an approach that contains both policy values and process determinants. The importance of political processes commits us to concepts which imply disaggregating the US into groups and institutions, including bureaucratic and Congressional actors. The approach we suggest is not limited to direct foreign investment alone but applies to foreign economic policy more generally (Bobrow, Kudrle, and Stoker, 1980). This

seems to us to be a source of strength. Direct foreign investment policy is properly analyzed in the broader context of a nation's entire foreign economic policy.

Conceptualization and Expectations

We shall discuss the main sets of elements in our approach--policy values and process determinants--in turn, and then comment on their relations to each other.

Policy values embody most fundamentally three general criteria. These are: 1) domestic prosperity emphasizing employment and growth; 2) national autonomy emphasizing independence from foreign pressure and manipulation; and 3) national security emphasizing the capacity to generate internally and maintain a military margin of power sufficient to constrain any foreign enemy. The most attractive policy sacrifices none, but rather advances all in mutually reinforcing ways (Keohane, 1978; Viner, 1948).

A consensus among US elites and informed publics developed after World War II that a set of policy aims of a more concrete kind were uniquely well-suited to achieving this trinity of values. Over time, as they apparently were successful in those terms, these policy aims came to take on independent ideological significance, that is, they achieved the status of quasi-criteria for policy. They became the relatively more operational indicators of progress towards or retrogression away from the more fundamental values of prosperity, autonomy, and security. Thus, they

came to stand as the presumptive bases for policy, bases held to be wise and sound until clearly proven to be otherwise. The quasi-criteria featured an open international economy, the maintenance of a framework to promote orderly dealing and to avoid international economic conflict, the bonding of allies and clients in a formal or informal anti-Soviet coalition, and the isolation of and denial of economic benefits to hostile governments.[2]

What evidence would confirm the importance we attribute to the criteria and quasi-criteria? First, in the absence of perceived conflicts among these desiderata, there would be little in the way of vigorous policy debate. Second, whatever the degree of perceived incompatibility, policy debate would be conducted with reference to them and obeisance to the legitimacy of all of them. Advocates would portray their options as most conducive to them and the alternatives as violating them. Proponents of options inimical to one or several of the criteria or quasi-criteria would rationalize their position in terms of necessary adjustments to a difficult world, not in terms of their unconstrained preference. Third, advocates of changes in policy would try, if at all

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[2]It is important to stress that we are, here, mainly characterizing informed opinion and not opinion reflected in public opinion polls, which has usually been much less internationalist and, on economic matters, more protectionist. Nevertheless, even by the late seventies, after much sensational discussion of the negative effects of both incoming and outgoing foreign investment, a majority of Americans either favored or had no feelings about both phenomena (Piper, 1980: 2, 3).

possible, to stress how their policy recommendation represented simply more vigorous and vigilant pursuit of the established values rather than challenges to them. Fourth, if that was not credible, the advocates of policy change would claim only to be departing from some of the quasi-criteria and not the fundamental trinity. The last two points impute judgments about the declining chances for change: greatest for tactics, less for strategy, and least for goals.

An array of our individual criteria and quasi-criteria in a particular order of decisive importance seems to us to be inappropriate and possibly misleading. One reason is that their relative decisiveness fluctuates as one or another has, or appears to be in danger of, decline below a satisfactory level. Another is that each of the quasi-criteria may be linked to more than one of the criteria in an ostensibly causal fashion. While these observations caution against a constant hierarchy of importance among policy values, they do yield some expectations. As a particular value comes to seem especially endangered, advocates of existing policy will increasingly defend it in terms of the endangered value and opponents will attack it as inadequate in that perspective. The content of policy debate will change in emphasis. If, previously, no values were seen as endangered, the intensity of policy debate will increase. And, of course, policy changes are most likely with changes in the "worry list." As for situations in which none of our trinity of fundamental values seems endangered but tradeoffs

seem unavoidable, the policy chosen will be that which seemingly advances any two of the core values. If none does, we do not expect coherent policy to emerge. For example, we expect external events or trends to be more likely to trigger policy changes as they make some policy previously in conflict with only one core value come to seem in conflict with at least two.

The second or policy process block of concepts in our approach contains four process determinants. These are: 1) ideological consonance, 2) impact transparency, 3) the diffusion and concentration of perceived costs and benefits, and 4) group political capacity.

Ideological consonance has to do with the perceived compatibility between a particular policy option and the criteria and quasi-criteria introduced previously. The more a policy option seems to support all of them well, the more likely it will be to prevail. If that option is a current policy of omission or commission, we expect little debate and few overt opponents. Also, high ideological consonance implies the perceptions of large and widespread benefits from the policy. Opponents of high consonance policies who call attention to their aims often defeat themselves by mobilizing those who perceive benefits from the policy.

Impact transparency involves the extent to which policy consequences are clear or murky. When they are clear, the other three process determinants all affect

the outcome in important ways. When they are murky, the reaction of groups and institutions may well be muted, perfunctory, or inconsistent. Obviously, consequences are most frequently murky for groups for whom information search is particularly costly and most frequently clear for groups whose cost of information is insignificant. The former sorts of groups and institutions, ones with low political capacity in terms pertinent to the policy involved, usually have to fall back on their perceptions of ideological consonance. Given the unclear nature of policy impact, those perceptions usually rest on the credibility of institutions and groups that support and implement the policy. The image of the commitment of the "source" to our posited policy values becomes crucial.

The third determinant, the amount and diffusion or concentration of perceived costs and benefits, is well-known. Wilson (1973), drawing from Olson (1965), has predicted that those with the most to gain or lose on a per capita basis will be far more prominent in the determination of political outcomes than any construction of the "public interest" would suggest. There is, of course, a certain minimum threshold of costs or benefits for an issue to engage the serious attention of actors in the policy process, including those in the executive and legislative branches. The costs and benefits of issue involvement have to be weighted inclusive of the costs of political activity. Accordingly, when costs and benefits

are diffuse and modest, we expect a rather bland policy process, perhaps marked by little active policy at all. When both costs and benefits are diffuse but large, we expect an intense and prolonged policy debate with many participants attempting to influence the outcome. When they are concentrated and substantial, we expect a rather small number of participants to become heavily involved. When they are large but concentration is all on the cost or the benefit side, the outcome is essentially known and policy options are either non-starters or obvious winners. If a (typically non-transparent) issue can be packaged with other issues in a way that tilts towards one or another of these categories, that framing will itself be a matter of political influence and attempted manipulation.

The political capacity of different groups and institutions affects the incremental costs of issue involvement and even of issue information. Some concerned political actors are better organized and positioned for influence attempts than others, something that obviously changes over time. It is one thing to shift existing capabilities to a new policy area and another to start assembling those political resources from scratch. When seriously affected groups are organized to influence some public institutions more than others (the Executive or the Congress, Treasury or State), they will attempt to channel the policy process accordingly.

As our emphasis on ideological consonance suggests, the policy values and process determinants operate simultaneously and interactively. Vivid images of consonance and dissonance between prevailing policy and policy values tend to shape at least two other process determinants--impact transparency and the nature of costs and benefits. It is equally the case that stocks of political capacity, perceived costs and benefits, and impact transparency, in part, determine ideological consonance judgments in the policy process and by its constituents. Newly salient threats work on both sets of elements. However, major changes in policy content are unlikely unless some alternative fits better with the state of the process determinants. Dissatisfaction and anxiety about the policy values under current lines of policy suffice to produce changes only in policy management and not in policy content. In the present case, the hallmarks of dissatisfaction with a better alternative are demands for better information about DFI, greater accountability by those parts of officialdom responsible for it, and more explicit and coherent policy marked by heightened vigilance toward potential threats to the policy values.

Examining the Past

Our fundamental criteria, quasi-criteria and policy process considerations provide us with some general expectations. It remains to see to what extent they are supported by the history in the last several decades of US ODFI and

IDFI policy and the lack thereof. We shall discuss IDFI policy first before turning to the more complex and active ODFI area.

The IDFI Experience

The discussion of IDFI policy in section 2 referred to the areas of capital inflow, governmental control of existing DFI in the US, and the use of existing investment for leverage on other governments. The most striking features of US IDFI policy are its absence, and the relative lack of political process action at the Federal level. This is what we would expect for a policy area historically regarded as, for the most part, irrelevant to, or with little importance for, the criteria and quasi-criteria noted earlier and one with murky, diffuse, and modest costs and benefits. We are left to test our approach against the fragments of policy and temporary upsurges in policy activity pertinent to IDFI.

Inflow. Federal restrictions on the inflow of DFI are of relatively long standing and focused on sectors with strong national security or national autonomy implications. Aviation, ship-building, and nuclear matters illustrate the first. Banking and communications illustrate the second. The absence of more general restrictions fits with recognition of their potentially counter-productive effects on the criterion of national prosperity, and the quasi-criteria of movement toward a more open international economy, bonding

of anti-Soviet allies, and general aversion towards exacerbating economic conflicts among nations. The national policy process took modest steps without major controversy during the Kennedy and Johnson Administrations to encourage DFI in the service of domestic prosperity (Pastor, 1977: 326-27).

Federal Policy Action, 1973-1980. If we look beneath the surface details of bills introduced in Congress in the early 1970s, as Pastor (1977) has done, our expectations are supported. The Congress, stimulated by a general climate of unease about US domestic prosperity and national autonomy in the face of OPEC actions, dollar devaluation, and noisy foreign corporate takeover attempts, became concerned about possible ideological dissonance between de facto US policy and these criteria. Hearings did establish a lack of Executive attention to IDFI in those terms including a weak information base. But no Executive agency viewed the problem as important for its agenda. When Congressional pressure, the Foreign Investment Study Act of 1974, fostered data from Commerce in 1976 that allayed concerns about the threat to the criteria, Congress contented itself with an improved watchdog regime. When the regime was allowed to languish, Congress returned to the attack (Committee on Government Operations, 1980).

The IDFI policy process then waxed and waned mainly with the degree of possible ideological dissonance. As we would expect in an area with murky impact, Congressional

pressure was greatest when it distrusted the commitment of the source of current policy to vigilant pursuit of the criteria. Thus, Congress first strengthened the role of the Departments of Commerce and Treasury. As these came to seem reluctant guardians of our policy values, Congress bargained with the White House to give the Trade Representative a leading role. There is an interesting resemblance in the content of Congressional critiques and their preferred assignment of Executive Branch responsibility between the recent DFI history and that earlier with trade.

Two highly organized groups did express views on the issue, but neither was very influential. The major MNCs represented by the Chamber of Commerce faced the costs that restriction and central government regulation might generate in terms of foreign action against the US. Organized labor represented by the AFL-CIO went on record in 1975 as opposed to "the unregulated takeover of U.S. firms by foreign interests" (Pastor, 1977: 355), but its position was guarded. The large unions wanted the government to gain greater control over business operations, particularly over their international mobility, yet incoming investment appeared to offer more jobs. The problem was that most foreign firms tended to locate in states with right-to-work laws and hence hastened the decline of unionized output. Thus, one would expect, from organized labor, the somewhat vague and tentative position that was actually observed. One outcome was clearly desirable: given the Republican administration and

weak union political power in many of the most successful host states, the AFL-CIO particularly desired Congressional entry in the IDFI field.

The states showed little interest in substantially changing their policies over the period under review. The special efforts by industrially less developed states is entirely understandable given the concentration of benefits there and the visitation of any costs to groups outside their jurisdiction. Control of foreign land-holding remained much as it had been earlier: concentrated in those states with powerful agricultural interests.

How do our categories illuminate the course of US history towards the inflow of foreign investment? Leaving the historic populist thrusts directed against the British and the Japanese aside, the idea of encouraging direct investment into the US is certainly consonant not only with the generally open US policy since the founding of the Republic but especially with the zealous promotion of DFI in the post-war world as an aid to peace and prosperity. Second, while all of the impacts of direct investment in industry are not apparent, those that are seem highly favorable to national prosperity: new plants, more jobs, sometimes the promise of greater exports, and an increase in the tax base. Negative influences, such as the possible strengthening of foreign firms for greater worldwide competition through their experience in the US market or the increased facility that such firms might gain to imitate

US processes and methods (Sametz, 1976) are much more problematic and remote. These concerns, to the extent that they mattered at all, would be confined to the national level because each state would ignore the consequence of its own action.

The picture in land and agriculture is more complex. Actual and potential foreign buyers are the economic rivals of domestic would-be buyers, and the latter are a dependable part of the constituency of the exclusionary forces in many states. Less easily reconciled with economic theory is the apparent opposition of many landowners to foreign investment. While one might invoke Kindleberger's idea that there is a little peasant in everyone (Kindleberger, 1969: 113)--even those who stand to gain financially from an unfettered market--the real answer is probably more simple. Even in those states with the strongest restrictionist sentiment, the amount of land owned by foreigners is now very small--not more than a few percent of the total. Thus, the price of populist sentiment, even for landowners, is, in most instances, uncalculated but very small.

The situation in agriculture is somewhat unusual in that the costs of exclusion (reduced land values) are faced by many of the same people who benefit from exclusion (through satisfaction of xenophobic impulses); the satisfaction caused by domestic ownership will, of course, differ across individuals; so does the implicit price because of the unevenness of landholdings.

In the industrial sector, the principal opponents of IDFI are most likely to be the competitors of the incoming firms. In some instances, they may prevail but, unless their case can be clothed in national security, it is hard to see how it can be made cogently. The gainers will have the presumption of law on their side and no apparent need for political organization. We assume that non-agricultural real estate--the kind of investment now heavily engaged in by OPEC beneficiaries--is, on its face, the most innocuous of all. It is usually compact in size and has no fixed use (so only domestic buyers in general face increased prices) and is an asset the ownership of which is generally unknown to the public at all events. It lacks national autonomy or security implications.

In the case of the other two main issues of IDFI policy, control and leverage, lack of transparency and the diffusion of costs and benefits have given the Executive an almost entirely free hand in devising national policy.

Control. As the name of the International Emergency Powers Act implies, control of IDFI has historically been tied to our national security criterion and the quasi-criterion of isolating and denying benefits to hostile governments. Even the most recent vigorous Congressional call for a supervisory agency argues repeatedly that it will advance rather than obstruct the policy values we have emphasized. It supposedly will not disrupt the anti-Soviet alighment, close the international economy, impede orderly

dealing, or reduce a desirable volume of IDFI because it will merely reciprocate control measures in general use by other governments. It will advance national security and autonomy by preventing an unwitting buy out of "national interest sectors" by untrustworthy foreigners, i.e., by visible and masked OPEC investors. Control and screening must be improved not because IDFI is often bad but because it is not always good (Committee on Government Operations, 1980).

IDFI as a Lever. The historic policy on potential leverage provided by the stock of IDFI in the US has been one confined to denial of economic benefits to hostile governments. In times of national emergency, the president has the authority to freeze assets and become a custodian of foreign property. The existence and record of use of this instrument fits nicely with the national security and national autonomy criteria. As we would expect, interest in the broader use of IDFI for leverage arises occasionally in terms of better pursuing the criteria and quasi-criteria put forward. It declines even more quickly in the face of evidence that it might well make matters worse in terms of the quasi-criteria of an open international economy, cooperation against the Soviet Union, and avoidance of economic conflict with non-hostile governments.

The ODFI Experience

While ODFI policy has been marked by greater complexity and political activity, it also conforms well with our

expectations. We shall again follow the organization of section 2 which treated ODFI policy and politics in terms of outflow, retaliation, and control. It also seems important to distinguish between policy toward industrialized non-Communist, developing, and hostile governments. With the exception of the last type of host, the general pattern of policy evolution is clear--toward increased US Government neutrality with respect to ODFI and increased indifference to the fate of existing ODFI in host countries. The movement has been from positive encouragement and protection to an arms-length posture. With respect to the policy process, there has been a trend to remove policy responsibility from the Department of State to other parts of the Executive branch and to increase the role of the Congress, mainly at the behest of Congress itself. We need to see how these patterns of change and their limits, as well as particular periods of political activity, fit with our approach.

Outflow. There is a fundamental sense in which US ODFI policy is more instrumental in its very conception than is the parallel policy of free trade. Economists have long understood that free trade benefits a country under most circumstances quite independently of whether the country's trading partners follow such a policy. In the case of the outflow of corporate capital, however, the tax credit convention suggests that a diminution of national income might result (Musgrave, 1975). Among other things, this argument does not consider the foreign "rents" that

might be earned on domestic inventions or other special products which, in turn, might be most effectively sold through ODFI. Nonetheless, we conclude, as do Bergsten, Horst and Moran (1978: 23-24), that a country that is overwhelmingly a parent to ODFI would support the present regime more because of the quasi-criteria of an open international economy and orderly dealing than because of a direct contribution to domestic prosperity. Alliance bonding has also been important, and hence the regime has been seen to serve the criterion of national security as well. In some cases, the goals of autonomy and security have led to positive incentives for capital outflow; the most notable case was the long-standing practice, since reduced, of allowing tax credits for what are essentially excise (not profits) taxes paid by the oil companies to the oil producing countries (Bergsten, Horst and Moran, 1978: 67-68) with the expectation of increased foreign production, thus conserving domestic resources.

From the beginning of the Cold War until the early 1960s, ODFI seemed to pose little danger to overwhelming domestic prosperity and an advantageous international economic position. National autonomy was not a problem. National security seemed to require reinvigoration of the industrialized economies of Western Europe and Japan and progress to avoid the spread of Communism in the developing countries. ODFI in minerals continued to seem conducive to reliable supplies of imports at prices close to real

production costs, notably in oil. Thus mineral ODFI seemed to support national autonomy and domestic prosperity. Positive incentives to ODFI in the industrialized countries, through tax credits and deferral, seemed to support most of our criteria and quasi-criteria and thus to be ideologically consonant. No major groups were subject to concentrated costs in a visible way. ODFI in Communist nations was largely a moot issue as they were not open to it. As these perceptions and realities underwent change, we would expect policy and politics to change somewhat, and they did.

By the later 1960s, domestic prosperity issues were emerging, and the industrialized hosts of US ODFI were becoming increasingly competitive with the US. In addition, their bonding to US policy toward Communist governed states seemed to be lessening. A balance-of-payments problem worsened, and the Executive--with little Congressional opposition--proceeded in the Johnson Administration first to call for voluntary restraint on ODFI to industrialized states and then, in 1968, to impose mandatory controls. The criteria and quasi-criteria were, at that time, still not at issue. That did come for the quasi-criteria with the Burke-Hartke Bill in the early seventies and has recurred since then, e.g., in some of the debates over the Tax Reform Act of 1976. The criteria were still not at question. Instead, the issue was the compatibility with

them, especially with domestic prosperity, of the quasi-criterion of an open international economy.

Why then did Burke-Hartke fail to pass, and tax policy change only towards increased neutrality? First, ideological consonance, while strained, was not convincingly broken. The net impact on general domestic prosperity of severe outflow constraints was somewhat murky, and their consequences for anti-Soviet bonding, orderly dealing, and an open international economy seemed adverse. The real economic impact of ODFI is harder to understand than that of free trade for both theoretical and empirical reasons, but such evidence as was considered during the debates of the seventies was not very negative on the most politically salient prosperity issues. On the issue of "jobs," the evidence was somewhat mixed, but the case that their raw number had been reduced by activity was very weak. Furthermore, on the issue of the functional distribution of income between profits and wages, the period of maximum outflow of US investment was accompanied by a slight increase in before-tax equality--the opposite of the finding predicted by the simple model used by the protectionists. Hence, while the direct impact of ODFI is far from transparent, it is very difficult for any large group to believe with a solid empirical basis that it has been seriously damaged by foreign investment per se. Import competition is dramatic, but it can plausibly be argued that the imports would be coming in to virtually the same extent without DFI. The

AFL-CIO provides an existing political capability for the protectionist forces, but it is the only one, and it has been quite ineffective to the present.

These considerations created a political balance at the point of neutrality but not restraint. Measures were put into law and signals delivered to the Executive that to avoid restraint steps must be taken to lessen concentrate costs, and thus re-establish greater ideological consonance in the employment dimension of prosperity. As we would expect, political activity did occur, policy modifications did happen, but the quasi-criteria went largely untouched.

Outflow to the developing countries raised other issues. Our criteria and quasi-criteria do not include development per se because the US has not accepted the prosperity of others as a major responsibility except under special circumstances such as in post-war Europe (Bobrow, Kudrle and Stoker, 1980). Incentives for ODFI to the LDCs would wax and wane with judgments that it contributed to the emergence of a political order in the LDCs supportive of our criteria and quasi-criteria. Support for a major private sector role in development, salient at least as early as the late fifties, and most significantly with the establishment of OPIC in 1969 to insure against non-commercial risks and expropriation, followed from convictions that it would contribute to the emergence of desirable political systems. When that became controversial in the mid seventies, Congress moved to phase out

OPIC. The themes in the attack were what our approach leads us to expect. That is, OPIC incentives to ODFI in the LDCs do not help and may make it less likely that political systems will emerge that act in ways supportive of the criteria. By providing hostages and points of leverage, US investments lessen US autonomy. By providing an irritant and focus of antagonism, they play into the hands of pro-Communist groups. By encouraging cheap goods to compete with domestic production, they were (falsely) claimed to hurt US domestic prosperity. And when made in raw materials, because of the nature of the "obsolescing bargain" and the growing skills of LDC elites, they do not contribute to raw material supply on favorable terms and thus to national autonomy and domestic prosperity (Moran, 1978). The interests with concentrated benefits in OPIC had not withered away when the phase-out legislation was passed in 1974. But ideological dissonance temporarily dominated. In 1977-78, Congress modified its position in ways we would expect, given the continued existence of strongly supportive interests with concentrated benefits at stake. That is, it re-established insurance authority together with strictures that contributed to ideological consonance and the reduction of concentrated costs. Recognizing that, without capital inflow, favorable political systems were unlikely to emerge, the '978 legislation focused on the poorest countries and called for monitoring of development impacts. Clashes

with domestic economic interests were damped by strictures on support for export-competing ventures and ones with significant job loss implications in the US. National security considerations were authorized to override human rights concerns, as we would expect (Congressional Quarterly Almanac, 1974, 1977, 1978).

ODFI to hostile nations, especially Communist-governed nations, only became an issue in the late 1960s and 1970s. Until then, both the policies of the potential host governments and our major criteria and quasi-criteria all precluded it. The crucial issue since then has been whether or not ODFI could shape the evolution of those societies or at least their international behavior in ways sufficiently conducive to US national security to outweigh the historic quasi-criterion of isolation and denial of economic benefits to hostile states.[3] A secondary issue was the pursuit of domestic prosperity when the availability to the Communist states of alternative sources of DFI rendered security costs

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[3]The evolutionary impact of ODFI in nations pursuing repugnant policies on other grounds, e.g., the Republic of South Africa on racial grounds, raises similar questions but in a much murkier form. While continuation of racist policies may undermine long-run US security and autonomy interests in Southern Africa, it does not pose as immediate a perceived threat to our criteria and quasi-criteria as do the Soviet Union and the Warsaw Pact. These less direct and immediate security costs are not as competitive with our domestic prosperity criterion, and open economy and Soviet containment quasi-criteria, for such a "pariah state." As we would expect, US policy on outflow has not involved equally stringent controls for South Africa as for the Soviet Union, nor do we expect it to in the foreseeable future.

and gains moot. Here the balance to be struck was between domestic prosperity consequences and national security consequences. Given the non-transparent impact of ODFI for the evolution of Communist societies, judgments about national security consequences came to focus on their current policies. When these seemed to fit with prevailing conceptions of US national security, e.g., opposition to Soviet preferences or in the case of the Soviets, the absence of overt interventions, ODFI incentives received general support. The persistent opponents were those convinced of the inevitable hostility of the host governments in question. When host policies seemed to run counter to US national security emphases, policy and politics moved toward restrictions. When domestic prosperity was a source of unease, and the national security issue was voided by alternative sources of DFI, policy was modified to enable greater ODFI.

Of all the outflow questions, that to potentially hostile states raises the most difficult issues in terms of a possible clash among our criteria and quasi-criteria, and raises the most intense feelings about the ideological consonance of policy alternatives. We would expect policy in this area then to be much more volatile and intermittently to swing toward more active discouragement of ODFI than in others. Those expectations have been supported in the last decade.

Retaliation. Policy with respect to retaliation for foreign treatment of US ODFI can usefully be discussed in terms of the response to non-compensated seizure and that to barriers to investment access.

We expect a policy of sanctions in response to non-compensated seizure to rise and fall as: 1) such events are seen to threaten our criteria and quasi-criteria; 2) the impact on organized political groups of the seizures is concentrated and costly; and 3) organized groups expect sanctions to be beneficial for them or at least cost free. Since World War II, there have been three major actions which seemed to stress sanctions--the Hickenlooper Amendment of 1962, the Nixon policy statement of 1972, and the Gonzalez Amendment of 1973. The common feature of all three instances is the presence of "escape hatch" language enabling the Executive branch to avoid imposing sanctions. That is, all are better understood as bargaining cards than as binding policy. All came at times when the prospect of a wave of noncompensated seizures seemed great and when Congress distrusted the commitment of the Executive branch, and the Department of State in particular, to the criteria we have stressed. None was implemented except in token ways. Quasi-covert, selective manipulation of the offending political economy was more prevalent (Olson, 1979A and 1979B; Pinelo, 1973; Einhorn, 1974).

This pattern becomes explicable in terms of 1) inducing the offending national government to revert to a

pattern of behavior compatible with our criteria and quasi-criteria, and 2) deterring others from actions in violation of them. Thus, the open policy actions mentioned in the last paragraph were ideologically consonant because they seemed to enhance deterrence, sanction quiet manipulations of the offenders and yet did not absolutely have to be invoked in a public way. The form of retaliation, if any, was left to Executive branch specialist judgment about what strategies and tactics would best advance our criteria and quasi-criteria. In practice, that came to mean a set of judgments about the general internal and external policies of the host government and the forms of pressure and sanction that would be particularly conducive to a change in the policy or composition of the offending regime. Public sanctions might well arouse nationalist emotions which would stabilize rather than destabilize the offending political leaders. Blatant, overt pressure through formal sanction could well motivate and enable them to pursue policies counter to our criteria and quasi-criteria, e.g., economic involvement with the Soviet Union or Cuba.

In addition, as our discussion of policy process factors would lead us to expect, interest group attempts to secure sanctions declined over time as host governments developed sophisticated strategies to split US investors and more mobile manufacturing and service industries grew in relation to raw material ventures. That is, while the costs of noncompensation were concentrated, other US

investors could anticipate concentrated potential costs should sanctions be invoked (Pinelo, 1973; Einhorn, 1974). At the same time, investing firms increasingly resorted to risk-spreading strategies that involved a set of interested parties other than the US Government whose sanctioning responses would not necessarily be measured against the same criteria (Moran, 1973; Seidman, 1975: Introduction).

There has been no policy of retaliation for barriers to access of ODFI. Instead, the US policy has been to trade off access issues for other behavior by current or potential host governments thought to advance criteria and quasi-criteria. If the other policies were felt to be inimical--for example, to domestic economic prosperity as in the case of the EEC trade barriers--then the US actively sought investment access on a non-discriminatory basis. But when US investment was harassed, as in France during the sixties, other considerations such as avoiding international economic conflict and maintaining anti-Soviet relationships took precedence. Japan's blockage of US investment did not provoke specific retaliation because other policies were felt to be increasingly positive. For example, Japan reduced barriers to US exports and restrained its exports to the US. This is what we would expect as the price of retaliation seemed either murky or counter-productive.

Control. Policy attempts at control of existing US ODFI involved three issues--anti-trust, financing, and

trading with hostile governments. All three were directly related to our criteria, and their history developed in line with their relationships to the criteria. All were related to the criterion of national autonomy for the US as it involved the extraterritorial claims of US law. However, the way in which the three were pursued was very sensitive to other considerations. Anti-trust action against behavior which lessened competition in the US market reflected domestic prosperity concerns. The steady and careful emphasis on bringing other nations to harmonize their anti-trust approach with that of the US reflects adherence to the quasi-criterion of avoiding international economic conflict. Foreign subsidiary financing became an issue in the context of the balance of payments difficulties of the late 1960s and early 1970s with their implications for domestic economic prosperity. When flexible exchange rates eliminated the connection, the policy issue evaporated. Subsidiary trading with hostile nations remains subject to the same tendencies to oscillate and for largely the same reasons as policy on the outflow of ODFI to the same countries. However, its application has been somewhat moderated, as we would expect, by a desire to avoid intense friction with major economic partners and allies.

Looking Ahead

We are encouraged by the ability of our approach to deal with the patterns of US ODFI and IDFI policy in the

past several decades. The question becomes, then, whether circumstances have or will change sufficiently to alter the relationships between ODFI and IDFI and our criteria and quasi-criteria or the policy process factors we have stressed. One current view is that the liberal era of free capital movements is coming to a close. In particular, encouragement or even neutrality towards ODFI is held to be simply an inertial policy remnant from a world that is gone forever. Others raise the specter of a United States reacting to massive foreign buyouts of major economic institutions and assets and thus curtailing IDFI sharply. Our views are sharply different from these. We are wary of what Pastor has called the "cry and sigh" cycle (Pastor, 1977: Chapter 7) that begins with cries of a fearsome wave of national economic chauvinism and ends with a sigh of relief at escaping from it. The most probable forecast with respect to external and internal factors affecting the policy application of our criteria and quasi-criteria calls for no major changes in US posture towards ODFI or IDFI, but somewhat harder political bargaining with other nations to reciprocate US neutrality.

External and Systemic Factors

As for external factors, we believe the neo-Spenglerian forecasts of US decline and abandonment falsely extrapolate changes from the 1950s into the future. In our view, the major changes in the relationships between the US and the

rest of the world have already occurred, and their most dramatic effects have become visible. Changes in the coming decade are likely to be, at most, incremental, and, if anything, the pendulum will swing toward fundamentally enhanced interests in cooperative relations with the US. Frictions and strains will, of course, not disappear and may be exacerbated in important respects. But we fail to see how, in terms of our criteria and quasi-criteria, they will impel the US towards fundamentally different policies than now prevail.

For many governments, the importance of a military deterrent to Soviet and Soviet proxy intervention and coercive bargaining will regain some of its former importance. At the same time, the economic bill for such a deterrent will increase further in real terms. The US will be seen as the fundamental provider of that deterrent. Accordingly, the costs associated with offending the US through political and economic actions will seem to rise rather than decline further. Ceteris paribus, many governments will want to invoke the possibility of a US response as a counter to potential Soviet pressure to the extent tnat it is domestically politically feasible for them to do so.

The relative economic decline of the US has or is about to lose its momentum and may well be reversed by the mid-eighties. The massive shifts in shares of world trade and capital as an inevitable consequences of post-World War II reconstruction may have largely run their course.

US volumes are still overwhelming in these areas. The devaluation of the dollar, combined with the maturing of German and Japanese industry and the size of the US internal market, work together to provide incentives for foreign investment in the US leading to strength in the US national production share in leading sectors. The relatively greater growth in the 1980s of the US work force than those of the other major economic powers in the OECD will have a similar affect. Two of the sources of Japanese and German economic momentum may be changing--the "newness" of their industrial plant and the social bargain and work ethic conducive to productivity growth. The dependence of the NICs on markets for export manufactures gives them a vested interest in access to and in the economic vigor of the biggest of affluent markets--the US. The increase of developing host country bargaining power has already had its most dramatic effects. US and other multinational corporations have already largely shifted to a variety of risk-spreading strategies. All these factors should contribute to reinforcing the ideological consonance between present policies and our criteria and quasi-criteria.

Energy developments may well magnify all these tendencies. US energy endowments, technology base, and currently luxurious energy consumption all give it an advantage over other major OECD nations and NICs in adapting to a period of expensive liquid fuel imports. Even before the impact of recent US energy legislation has been felt, the energy

consumption and import growth curve has been bent downward more for the US than for other major industrialized importers. Expensive energy makes the energy dependent NICs especially needful of export markets at the same time that it hampers growth of potential markets in the energy importing less developed countries. And in the last resort, US military power looms as the ultimate deterrent to Soviet influence over the oil-exporting countries or severe supply restrictions.

These factors will push others to avoid actions which would lessen US commitments to the quasi-criterion of an open international economy and exacerbate international economic conflict. Other developments, however, hold the potential for greater friction. Among the industrialized countries, the combination of low growth rates, pressures for investment at home, and loss of jobs in weak and surplus capacity industries will make themselves felt on regimes (Strange, 1979). Major OECD governments will face increased conflict between capital and labor and between progressive export-oriented and established import-competing industries. In these circumstances, existing formal and informal coordinating arrangements in Western Europe and Japan will face greater strains than in the recent past. Political leaders will be tempted to patch together supporting coalitions at home through a variety of measures--protection against imports, safeguarding optimal domestic opportunities for indigeneous capital, and

safeguarding domestic capital for indigeneous users. Policy toward foreign investment elsewhere and the receipt of foreign investment may easily come to seem a domestically politically attractive arena for securing coalition support and deflecting internal criticism. Pressures will be greater than they have been in recent decades to avoid any appearance of placing the welfare of foreigners ahead of that of nationals. The most likely context for this issue is that of trade and investment with the Soviet Union and its allies. US policy enforced on foreign subsidiaries different from that of the host governments looms as a large potential source of friction.

More generally, the incentives on all sides of the OECD to maintain positive relations for security and economic reasons are likely to prevail albeit after hard bargaining, political posturing, and in the form of complex and mixed bargains (Krasner, 1979). The prospect of "investment wars" (Bergsten, 1974) with these countries triggered by US demands for IDFI, e.g., by the UAW for Japanese auto plants in the US, needs to be kept in perspective. The auto industry represents a special case because of its size. In addition, there are economic incentives for Japanese automobile IDFI as their manufacturing costs rapidly climb to US levels.

As for the Newly Industrialized Countries, their growth objectives call for continuing to host US ODFI. It is probably true that they will increasingly press

local branches of MNCs to export. Yet the problems that would pose to the US also need to be kept in perspective. Exports to third-party markets only hurt US prosperity if the US would otherwise be successful in those markets. Exports to the US of products priced lower than those made in the US would only hurt domestic prosperity if they led to later exploitation of market power and higher prices than would otherwise occur in the US.

As for the poorest countries, their likely pattern of behavior will be such as to maintain the current US policy of providing some capital inflow in the interests of staving off political turbulence but little active defense of those investments. Indigenous leaders vulnerable because of poor domestic economic performance, will vigorously search for "foreign devils," and highly visible foreign investments are attractive devils. We expect cycles of attempts to attract investment and then politically motivated steps to control and seize it.

There is every reason to expect Communist-governed states to seek foreign direct investment to the point where it clashes with their national autonomy or national security. China will clearly be particularly receptive, seeing DFI as a device to bond the US for advantageous economic benefits and deterrence of the Soviet Union. The smaller Warsaw Pact nations will see it as a major means to achieve the domestic economic performance required to maintain political tranquility and thus some partial national autonomy from the

USSR. The Soviets will be both attracted and repelled--attracted by the economic and technology transfer benefits and repelled by the possibilities of foreign investment being used to exert pressure on core domestic and foreign policy matters.

With the exception of economic relations with the Soviet Union and East Europe, we see little likelihood of external changes that would make current US ODFI and IDFI policy dissonant with the standards we expect to prevail. Changes would then have to follow from our other three policy process considerations--clarity of impacts, concentration of costs and benefits, and organized political capacity--to which we now turn.

Internal Factors and IDFI

We see little prospect for massive new restrictions on IDFI. The visible consequences of industrial IDFI will continue to be attractive. At a time of capital shortage, IDFI appears particularly welcome, and possible negative consequences of enhancing the strength of foreign firms will remain problematic and remote. The principal opponents of IDFI are likely to remain the competitors of the incoming firms. Of course, this could change with massive IDFI on the order of 25% or more in major visible sectors of the economy. The perceived clash with national autonomy and security would mobilize additional groups hostile to IDFI and stimulate ideological anxiety and opposition. We see

little prospect of that, if for no other reason than that foreign governments are unlikely to allow such a massive capital loss from their home market. In any event, there would be sufficiently timely warning to deter a massive influx, perhaps through some sort of Federal screening authority.

Non-agricultural real estate, a currently active area of OPEC IDFI in the US, will remain innocuous because of its diffusion and anonymity. From a national autonomy and national security perspective, it seems largely irrelevant.

Agricultural land poses a somewhat more complex problem. Foreign buyers clearly impose a cost on would-be domestic buyers. Yet landowners who would gain from higher prices now often oppose foreign investment. But while the price of populist sentiment has been modest, as time goes on and foreign demand increases, the split between those who find the foreign presence a negative externality and those who are expected to subsidize that taste may become more apparent. It is politically questionable whether those most sensitive to the land issue would be stronger than the groups with substantial interests in foreign industrial investment were the issue joined. In any event, it is legally questionable whether the states ultimately have authority to regulate foreign investment in land or other areas (Vagts, 1961; Morrison, 1975). Test cases are almost certain over the coming years.

In sum, we expect continued Congressional pressure for demonstrated Executive branch stewardship of the policy values in our approach, pressure that will include threats to impose a more restrictive regime if the Executive does not start treating IDFI in a more systematic and alert manner.

Internal Factors and ODFI

The distribution of the costs and benefits of ODFI will remain much as it has been in the past. Those most negatively affected are workers in industries where the US is losing its comparative advantage and where the loss of employment is virtually inevitable regardless of ODFI, absent major barriers to imports The impact on unionized workers will continue and perhaps even increase. But the power of the AFL-CIO, the major politically organized anti-ODFI group, will, if anything, decline. The share of representativeness of the labor force belonging to it are in decline, its influence in the Democratic Party is no longer automatic, and its influence in the Republican Party is practically nil. We can expect a Congress committed to the criteria and quasi-criteria we use to take steps across party lines to provide displacement support and thus blunt a clash with the domestic prosperity criterion.

How can the use of 20% of new capital formation abroad be justified when US investment is so low? A politically sufficient answer may be twofold. First,

the overseas facilities provide a necessary marketing arm for US business while increasing the availability of low-cost imports. Second, an attempt to cut off the outflow could generate retaliation of unknown severity. Furthermore, as the defenders of ODFI never fail to point out, capital outflow is highly industry specific and the industries investing abroad generally are not those that are experiencing a low growth of productivity at home. In other words, if the capital didn't flow out, the costs are palpable while the benefits are speculative. Contrary arguments are familiar and, at least by 1980, had little support in Congress or the Executive branch. The growing quantitative comparability of ODFI and IDFI will probably make the balance of advantage from liberal capital movements seem more even. The benefits from IDFI and greater reliance on export earnings increase incentives against harsh steps that could lead to retaliation. Consumer and widespread retailer interest in inexpensive imports from US foreign subsidiaries is unlikely to lessen or is their organized political capacity. These factors all work against ODFI seeming substantially more ideologically dissonant or becoming more politically controversial. Taking steps to stop the flow of ODFI in one key sector, however, may gain considerable support. Many have argued that equity investment in raw material exploitation has resulted in both exorbitant prices and the ultimate risk of the capital stock (Bergsten, Horst and Moran, 1978: 466). The phasing out of the tax credit

for this kind of investment might well be justified on the basis of all three of our criteria--if packaged with policies that promised to extend raw materials exploration by other means (i.e., various debt schemes).

The remaining and relatively new issue has to do with the extent to which the nation should act more consciously as a monopolist in the overseas sale of its inventions and innovations. There is now a great dispute over the extent to which the US patent system and anti-trust laws allow for maximum national advantage (see the discussion in Business Week, June 30, 1980). It is being proposed that firms be allowed to cooperate more fully in R & D without fear of prosecution and that small firms be allowed greater collaboration in overseas sales. Perhaps most significantly, there are proposals to delay--perhaps for several years--the commercialization of some patents outside the US. The latter argument would receive a powerful boost if there is disagreement with our allies about policies towards trade and investment with the East. The patent restriction may be a particularly attractive policy innovation because, while it may not actually serve the national interest, it does have the advantage of being a measure apparently uniquely suited to American technical superiority and against which appropriate retaliation might be difficult to devise. Of course, it would have little consequence except to stimulate reactions inimical to broader US

concerns should the strictures be too comprehensive. The policy would clearly have to be highly selective and might well prove to be unworkable.

In sum, our forecast for the future is relatively undramatic. We expect the criteria and quasi-criteria that underlie previous US ODFI and IDFI policy to retain their centrality. And we do not see prospects for massive external changes or substantial revision in the configuration of internal political forces that would fit different policy to prevailing standards of judgment.

INDICATORS FOR FORESIGHT AND RETROSPECTION

CHAPTER 5

MARKET FLUCTUATIONS FOR CRISIS WARNING AND MONITORING

Steve Chan and David B. Bobrow

Introduction

Scholars of international relations and foreign policy have become increasingly concerned about the relevance of their basic research for applied crisis forecasting.[1] We share this interest, and report the results of a preliminary test on the usefulness of financial market indicators to anticipate crises. A quasi-experimental design for studying interrupted time series is applied to the historical behavior of the Hong Kong market prior to the occurrence of a number of incidents that had important implications at least for the general region in which it is located. Using the same method, we also examine the data from the New York market for any corroborative evidence of warning signals.

The general logic of our inquiry, like works that employ "soft" data requiring expert interpretation (e.g., event and content analyses), relies on the collective

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[1] Recent efforts in this area include Singer and Wallace (1979), Choucri and Robinson (1978), and the special March 1977 issue of the International Studies Quarterly.

judgment of members of some relevant population to code the meaning and implications of political events and situations (e.g., von der Mehden and Hill, 1980; Lentner, 1972; Fitzgibbon, 1967). In our case, the judges are financial investors rather than members of the more familiar expert communities (e.g., scholars, officials, journalists). "Judging" takes the form of betting on or preparing for an uncertain future, as represented by decisions to buy or sell securities. The prices of these securities reflect the collective judgment of an investment community about the future, and changes in these prices indicate adjustments in its expectations of developments that may threaten or enhance financial returns. We do not assume or expect that any strong leading indicators we may find in the market data can distinguish between the extent to which actors are attempting to prepare for an international crisis or are attempting to profit from it. We do assume that investors try to maximize their profit and, perhaps more importantly, to avoid any loss. Their perspicacity is an empirical question we hope to illuminate for crisis developments.

Several considerations about plausibility and feasibility easily come to mind. Positively, the attractiveness of financial market indicators for our purpose was succinctly summarized by two leading researchers more than ten years ago: they offer "readily accessible data of unquestioned authenticity reported on a daily basis, measured on an equal-interval scale, and shown to be sensitive to even minor

instabilities in the international system" (Holsti and North, 1966: 190). Since the time of this statement, financial capital has become even more truly international in its character and orientation, given the greater economic interdependence and sensitivity of nations today. It is increasingly mobile, flowing between the national boundaries of Western countries with greater ease and rapidity as policy and communication barriers are weakened. Political and economic developments in one locale can thus have almost instantaneous repercussions elsewhere, as the different national investment communities seek a new market equilibrium. Information on their transactions is usually available on a real-time basis for the major exchanges, an important advantage for crisis forecasting since the available data from other public sources often lack time sensitivity.

Negatively, several possible objections to our approach also come readily to mind. First, our posture contains the perhaps outrageous implication that people normally assumed to be naive about foreign affairs may do a better job at predicting the onset of international crises than those whose metier is analyzing the managing these matters. What evidence do we have to justify the view that nonspecialists can possibly have a better "batting average" than specialists? Second, the market is constantly fluctuating and its movements are subject to a variety of influences, many of which are unrelated to international relations. How can we be

sure that a nonrandom change in the market's behavior has taken place, and that this change is in response to the particular impending international crisis being examined, rather than some other events or processes? Third, it is one thing to use market indicators to monitor the progress of a crisis and to measure its intensity, but quite a different matter to talk about using them to forecast crises. What theoretical basis and empirical evidence support the proposition that the market can adjust itself in anticipation of possible impending events rather than merely reacting to events after they have occurred? Fourth, how confident can one feel about the research results, even if they show major changes in market prices prior to the initiation of crises? For instance, will our quasi-experimental approach exaggerate successful anticipation, if we examine only those events known retrospectively to have involved a substantial escalatory potential? To obtain a balanced view of the market's record of hits and misses, we also need to recognize that it can issue false alarms for situations where no crisis came to pass.

We shall try to overcome these reservations. In the first section of the analysis that follows, we present evidence inside and outside the foreign policy arena to show that the asserted unique advantage of specialists in making accurate empirical predictions may not be realistic. The second section offers the theoretical justification and empirical evidence for the expectation that the market can

predict at least some classes of events. This section reviews the research pertaining to the efficient-market hypothesis, which contends that the market will adjust itself in an unbiased and almost instantaneous way to all available information about alternative futures. In the third section, we examine the issue of the market's sensitivity, as opposed to its predictive capability, to political developments. This discussion notes several previous studies on the relationship between market behavior and foreign policy events. In the fourth section, we discuss the problems of determining the occurrence of nonrandom changes in the market's behavior and of avoiding spurious explanations of these changes. We address these problems in the context of out quasi-experimental design, and outline the analytical procedures for capturing any signs of the market-leading events. The fifth section presents our rationale for assessing event predictability and sensitivity, the rules for interpreting the results of the quasi-experimental tests, and the data and events used for these tests and the basis for their selection. It also addresses some limitations of our approach in terms of the types of countries and crises for which it will not be effective. The results themselves are presented and discussed in the sixth section.

To avoid unwarranted inferences, we adopt several safeguards. Concerns with convergent and discriminant validation (Campbell and Fiske, 1959) lead us to stress the presence or absence of corroboration between the

signals emitted by different markets (Hong Kong and New York) and indicators (stock, gold, and currency values).[2] We also compare the quasi-experimental results for periods during which crises occurred with those for randomly selected periods during which no crisis took place.

Are the Odds Against the Experts?

Do experts make better predictions than laymen? The available evidence suggests that expertise does not necessarily confer an advantage in domains characterized by weak theory and poor data. For instance, geologists have not been able to achieve consistent accuracy in earthquake prediction (Kerr, 1978), while "naive" laymen who rely on unorthodox observation and inference patterns (e.g., animal behavior) are known to have scored several major successes as well as failures (Kerr, 1980). Similarly, the results from a series of experiments, designed to solicit predictions of the actual behavior of persons in filmed stress interviews, do not greatly encourage our confidence in expert opinions (Cline, 1964). Although psychologists, as a group, were better predictors than engineers, "an intuitive housewife made the best predictions of all experts" (Milburn, 1978: 87).

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[2]However, for reasons to be discussed later, we have not been able to apply fully cross-indicator validation.

Similar assessments of the experts' performance seem to apply to the world of horse racing and mutual fund management.[3] The work done on parimutuel betting indicates that the public is consistently biased in the direction of underplaying the favorites and overplaying the long-shots (e.g., Ali, 1977; Griffith, 1949; Harville, 1973; McGlothlin, 1956). More surprisingly, it also shows that this bias is more severe for three groups of experts: the official track handicappers, the odds-givers of the Daily Racing Forum, and the reporters for the racing columns of city newspapers (Snyder, 1978). Thus, "the odds on the tote board at post time more truly reflect the probabilities of different horses winning than do odds in the morning line" (Seligman, 1978: 34). However, the experts may be handicapped in this case because the need to submit their recommendations before press deadlines could conceivably deny them the latest information available to the general public.[4]

This apparent disadvantage does not apply to the professional managers of mutual funds. If anything, they are more likely to benefit from "inside information" than the general public. Michael Jensen (1969) studied the

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[3] To conserve space, we refrain from citing numerous examples. For a more detailed documentation of studies in these and other areas pertaining to expert judgments under uncertainty, see Chan (1980).

[4] Snyder also mentioned certain unwritten conventions about the range of acceptable odds as a distorting factor in the experts' assessments; the professionals hesitate to give very long or very short odds.

performance of these funds during 1955-64, using the unmanaged Standard and Poor Index to establish a market norm. The results, again, do not inspire our confidence in the experts' judgments. Even when loading charges are disregarded in computing returns, seventy-two of the 115 funds examined fell below the market line, with an average deviation of -8.9%. Indeed, regardless of the method used to compute returns, the number of funds outperforming the market is less than the number that can be expected by chance. Thus, a naive investor who bought stocks randomly and held on to them during this period would have a better chance of making a profit than if he had invested his money in a mutual fund. We stress that Jensen's results are typical, being supported by earlier as well as more recent studies on the performance of mutual funds (e.g., Friend, et al., 1970, 1960; Sharpe, 1965; Williamson, 1972).

With respect to foreign policy forecasts, Thomas Milburn (1978) reported the results of an exercise conducted in 1964, in which he asked thirty social scientists and twenty physical scientists a series of twenty-nine questions about the future of international relations. Twenty-five of Milburn's twenty-nine items dealt with political or military assessment, and thus presumably belonged to the domain of expertise of the social scientists. The other four items involved technological assessment, for which the physical scientists would presumably have an edge. There was agreement between the two groups of scientists on twenty-four of

the twenty-nine items. For the subset of nontechnological items, the two groups offered similar predictions in twenty-two of the twenty-five cases, thus suggesting that differences in the special knowledge status of the respondents did not have a major influence on their predictions. Moreover, in one of the three cases of disagreement, the result contradicted our presumption of expertise; that is, the physical scientists were able to make a better prediction than the social scientists in the latters' area of specialization. Finally, we note that the social scientists were able to make successful predictions in seventeen of the twenty-five cases in their domain of expertise, when chance alone would have produced 12.5 successful predictions.[5] In sum, the social scientists' performance as experts was hardly impressive in its predictive accuracy.

In a study that shares Milburn's design and purpose, Lloyd Jensen (1972) conducted a survey of 171 foreign policy professionals in the spring of 1965. His sample of interviewees included eighty-nine policy makers in the State and Defense Departments, forty-three correspondents, and thirty-nine academicians. These respondents were asked twenty-five questions about the future of international relations. As in the Milburn study, their answers were subsequently scored

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[5]The physical scientists were more successful, making accurate predictions on all four items relating to technology. However, the N is too small in this case to warrant any confidence in inferences regarding their predictive capability.

for accuracy and inaccuracy as history unfolded. They were able to achieve an average accuracy of 64%, not a very high rate when we consider that random guesses would have produced a 50% accuracy rate as their answers were dichotomized. Among Jensen's four groups, State Department officials did best, with 43% of them scoring an accuracy rate of 70% or above. Twenty-seven percent of the journalists were able to achieve this level of accuracy, whereas only 18% of the Defense Department officials and of the scholars attained this achievement. The performance of the academicians was especially low, with 41% of them achieving an accuracy rate below 60% (Jensen, 1972: 31). Incidentally, they included only political scientists.

The most interesting aspect of Jensen's work from our perspective is his attempt to explain a person's predictive accuracy by his educational accomplishments and specialization. He found that variables such as the highest degree obtained by the respondent, the discipline in which he specialized, and his current geographical area of specialization were not significantly related to predictive accuracy. If anything, people with the lowest academic degrees (B.A. or less) and the least relevant specializations (the non-social scientists) were better predictors. These results were not affected even when singling out specific predictions. Thus, for example, "even when isolating the Soviet expert in terms of his predictions about Soviet behavior,

his accuracy was shown to be no greater than that of persons with other specialties" (Jensen, 1972: 34).

We conclude that it is unwarranted to assume that experts are necessarily superior at making accurate predictions. Accordingly, our decision to explore financial investors' judgments for forecasting international crises may appear less bizarre.

The Efficient-Market Hypothesis

Even if the reader is persuaded by the above evidence, the credibility of our approach remains in doubt unless we can satisfactorily respond to several other questions.

1. Can the market really predict events that affect investment returns?
2. Is the market sensitive to political-military events?
3. How do predictability and sensitivity relate to stock, gold, and currency prices for the events and markets we examine? And,
4. How can we differentiate empirically, if only in retrospect, the relative predictability of our test events and the relative sensitivity of the Hong Kong and New York markets to these events?

We confront the first issue in this section, while postponing the others for later discussion.

The horse race and mutual fund examples we have cited come from a considerable body of literature concerned with

the verification of the efficient-market hypothesis. Basically, "an efficient market is one in which prices move rapidly to reflect all that is known, anticipated, hoped, and feared about particular investment situations" (Seligman, 1978: 34). The efficient-market hypothesis claims that the state of the market at any given moment captures fully all currently available information, and that the market responds quickly and in an unbiased way to newly available information. It argues, in effect, that some sort of collective intelligence is at work in the market, even though individual intelligence--as in the case of horse races--may be clearly in short supply. This proposition obviously offends Wall Street pundits, "because it implies that prices move before their own pronouncements, which implies, in turn, that the pronouncements aren't worth much" (Seligman, 1978: 34).

More technically, the efficient-market hypothesis has been stated and tested in three forms (Fama, 1970; Lorie and Hamilton, 1973). Its weak form asserts that successive changes in stock prices are statistically independent. These changes have been described as a random walk and, in the terminology of physicists, a Brownian motion. The unpredictability of market movements was notices by Bachelier (1964) as early as 1900, and has since received overwhelming empirical support (e.g., Alexander, 1961; Fama, 1965a, 1965b; Godfrey, et al., 1964; Granger and Morgenstern, 1963; Kendall, 1953; Moore, 1964). The results of these studies indicate that despite the widespread practice of

chart-reading on Wall Street, an investor cannot achieve superior returns by knowing the sequence of stock price histories. Moreover, they show that stock prices are not "sticky" (e.g., Mandelbrot, 1963). There is no reason to expect that they should change gradually by small fixed increments, since the processes for generating and acquiring new market-relevant information hardly have this characteristic. Indeed, if investors are smart--and the evidence shows that they are--stock prices should occasionally experience abrupt "big leaps" or "free falls," in order to reflect fully and quickly major changes in their knowledge status.

We stress the last point for three reasons. First, it buttresses the importance of time-sensitive data. Second, the tendency for market prices to show occasional discontinuities means that the interrupted time-series method is a proper way to investigate them. Third, measures such as the double-mood and Walker-Lev statistics, which refer to differences in trends or population parameters, are less appropriate and relevant for our purposes. To anticipate the later discussion on the quasi-experimental design, the single-mood tests we employ are more suitable for studying discontinuities in price levels at specific points in time.

The semi-strong form of the efficient-market hypothesis contends that the current prices of securities reflect fully public knowledge about the earnings prospects of the firms they represent. Since this knowledge is widely

distributed, it is futile to acquire and scrutinize information about individual companies in the hope of achieving above normal returns. Thus, just as the weak form dismisses the advice of the so-called technical analysts, the semi-strong form argues that the "fundamentalists" also cannot consistently do better than the market average. If there are any sophisticated traders who perceive a gap between the current prices and intrinsic values of securities, their actions will quickly eliminate this discrepancy. As a result, current prices are, in fact, the best estimates of intrinsic values. There is also no method that can be devised to accurately predict future prices or to detect underpriced securities, since every piece of relevant information has already been accounted for in their current prices.

Samuelson (1965) gave the initial theoretical proof for this argument, which was subsequently supported by several empirical studies (e.g., Ball and Brown, 1968; Brenner, 1979; Fama, et al., 1969; Scholes, 1972; Saud, 1970). These authors examined the effects of different kinds of public announcements (e.g., dividend increases, stock splits, secondary offerings, earnings reports, changes in the discount rate by the Federal Reserve Bank) on security prices. They found that the market usually anticipates (i.e., leads) these announcements--sometimes by months--so that by the time they are actually made and publicized, the prices

of the securities in question have already discounted their effects.

We stress three points suggested by the semi-strong form of the efficient-market hypothesis. First, knowledge about specific factors that are likely to affect a firm's prospective earnings, and ipso facto its future stock prices, is unnecessary for making investment decisions, since the market is efficient in incorporating all hopes and fears in the current prices. This point can be generalized to support our later contention that the value of market indicators for predicting crises does not require an exact understanding of the causal mechanisms that affect security prices. Second, and again to anticipate our later discussion, the difference in security prices at two time points indicates the amount of change in the investors' expectations about their potential financial returns, expectations that can only be altered by new information introduced during the intervening period. Since we shall use aggregate stock indices, their changes are more likely to reflect expectations about the economy as a whole than the prospects for individual firms, and we hope to relate these general economic expectations to foreign policy events by the quasi-experimental method. Third, and most importantly, the empirical evidence cited above demonstrates convincingly that the market is capable of predicting, in the sense of making anticipatory adjustments, at least some economic or financial events. Our purpose in this paper is, of course,

to determine whether its anticipatory capability extends to political-military events, and can thus be used to assist the prediction of international crises.[6]

The strong form of the efficient-market hypothesis asserts that even those with superior access to privileged information cannot consistently outperform the market. The studies on mutual fund performance mentioned earlier sought to test this assertion, and offer consistently strong support for it. With the possible exceptions of corporate insiders and floor specialists, the strong form is supported. It reinforces our earlier point that experts do not necessarily make better predictions in areas characterized by weak theory and poor data.

Market Sensitivity to Foreign Policy Events

The studies referred to so far do not indicate that security prices are sensitive to political or military, in contrast to financial or economic, developments. We therefore review briefly the literature germane to this concern, even though it typically does not address the anticipatory nature of market data (i.e., the issue of event predictability) and is only concerned with price adjustments after

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[6]Some may wish to argue that the relative accessibility of business "inside information," as opposed to that for foreign policy, makes it more difficult for the market to anticipate international crises. We are less certain about the validity of this view as it implies that businessmen value their trade secrets less and treat them more casually than foreign policy officials.

important foreign policy events have occurred (i.e., ex post sensitivity).

Victor Niederhoffer (1971: 193) found that "large [market] changes are substantially more likely following world events than on randomly selected days." In their work on the Cuban missle crisis, Holsti, et al. (1969) employed three indicators: the Dow Jones Stock Index, the Chicago market for wheat futures, and the exchange rate between US dollar and Swiss franc. They found generally strong correlations between the first two indicators (although the first went down and second rose) and other derived measures of the crisis perceptions and behavior of the US, and moderate correlation for the last indicator. In another study on the First World War, Holsti, et al. (1968) tracked the inflow and outflow of gold for the London market, and monitored the price fluctuations of the most important stocks and bonds for the future belligerents. The outflow of gold corresponded with heightened crisis perceptions, and the gold holdings of the various national banks increased sharply as tension mounted in the days preceding the outbreak of war. On the other hand, stock and bond prices moved in the opposite direction of the perceived hostility measure for the conflict participants, while remaining stable throughout the summer of 1914 for the two European neutrals (Sweden and Switzerland). In an earlier study of the same conflict, two of these authors also examined other market

indicators (wheat futures, currency exchange rates, and bank interest rates), and found their movements to be in close agreement with the escalation of the crisis as revealed by their content analysis measures (Holsti and North, 1966). Finally, Russett and Hanson (1975) studied the effects of developments related to the Korean and Vietnam wars on the US stock market. The evidence that emerged from their analysis is more ambiguous; it indicated that stock prices tended to rise when prospects for peaceful settlement were raised during the post-1967 period of the Vietnam war, although such relationship was absent during the pre-1967 period and for the Korean war.

Unlike these other studies, Chase Econometric Associates, Incorporated (1979) undertook a feasibility study with crisis anticipation as an explicit aim. The authors examined the domestic economic data of ten countries and the dyadic data (e.g., trade) for eight country pairs. A discriminant function was estimated for each of the six country pairs with more than one crisis occurrence, and the F statistics of these functions were significant in four cases. The results were more encouraging for Arab-Israeli relations than those involving the Greece-Turkey-Cyprus triangle. On the basis of the discriminant analysis results, the authors concluded that the Type 1 error rate (the proportion of crisis cases not classified as crisis cases) was 27%, whereas the Type 2 error rate (the proportion of noncrisis cases classified as crisis cases) was 16%. They

also conducted logit analysis for three dyads (India-Pakistan, Israel-Syria, and Israel-UAR), and ex post simulations using the fitted functions were successful in calling crises in 75% of the cases.

While these are impressive results, the Chase study suffers from three major limitations. First, the authors' reliance on quarterly observations (and their use of lags extending up to a year) precludes the time sensitivity so important for crisis anticipation. Second, as the authors have pointed out, their analysis is too dependent on coincident as opposed to leading indicators of crises (which were lumped together in the estimation procedures). And third, the small sample of countries and the infrequency of crises make the structures of their equations rather fragile in view of possibly major future changes in the data configurations.

To summarize, the works mentioned tend to support the efficient-market hypothesis, even though with the exception of the Chase study they did not show the market adjusting itself to international developments in an anticipatory manner. They did demonstrate that the market was sensitive to these developments, and that it was at least able to react to them in a relatively speedy and "appropriate" manner. We shall elaborate what "appropriateness" means in the later discussion of rules of inference.

The Quasi-Experimental Method

We use the quasi-experimental design for studying discontinuities in time-series data (e.g., Caporaso and Pelowski, 1971; Campbell and Ross, 1968) to check whether and to what extent the market anticipated international crises. We try to find any nonrandom change in the market's behavior in the period surrounding the occurrence of events known retrospectively to have a crisis potential. A nonrandom change means a statistically significant departure of the market from its expected price level, which is an estimate based on the linear extrapolation of the market's current trend.[7] The discontinuity in the market's behavior is attributed to the influence of the quasi-experimental treatments, which, in our case, are the crisis events being tested.

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[7]While the efficient-market hypothesis implies that no method can be found to predict accurately the market's price levels, some studies (e.g., Ying, 1966) do show nonzero serial covariance in these levels. More specifically, the use of trend data to predict (or, more accurately, postdict) price levels in our case does not contradict the efficient-market hypothesis which, strictly speaking, only contends that the deviation of the return for t + 1 from its conditional expectation at t cannot be confidently predicted at t, but does not deny that "the conditional expectation itself can depend on the return observed for t" (Fama, 1970: 392). It is also important to point out two other differences between our analysis and those that have often been cited as supporting the efficient-market hypothesis. The latter studies refer to a lack of serial covariance for changes in prices (i.e., their first differences) rather than their absolute levels, and they are more concerned with the difficulty of developing a trading strategy that promises better-than-average returns (i.e., prices plus dividends) after opportunity, transaction, information, and tax costs have been controlled for. We are, of course, not interested in "beating" the market, and are only concerned with predicting what its price level would have been if there were no disturbances to upset it.

The measure used for making this causal inference is the single-mood t statistic, which is calculated on the basis of the difference between the actual state of the market and its predicted state for the interval immediately following the introduction of the test event.[8] A positive sign means that there has been an appreciation in the market's value above the level expected if nothing has happened to agitate it, and a negative sign indicates a depreciation from this expected value.

Since the market can lag as well as lead events, we generate a t statistic for each of the eleven days surrounding the occurrence of the test event, with five days preceding it and five days following it.[9] Thus we have a

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[8]The determination of the timing of some of the test events is problematic, especially for incidents such as the Bangladesh war and the collapse of Saigon which represent the culmination of a series of crisis-inducing developments. Also, some events relating to developments inside China (e.g., the two alleged coup attempts) are only known to the general public retrospectively when the regime chose to publicize them. For the Chinese domestic events, we have relied on the chronology provided by Hinton (1978). In conducting the analysis, we have tried to control for the time zone difference between Hong Kong and New York and, when the determination of the exact timing of the test events is feasible (e.g., government announcements of new monetary policies), we treat those event happenings after the close of the market as if they took place on the following business day (thus, events happening over the weekend would be assigned to the following Monday). One problem created by this unavoidable compromise is the noncomparability of the amount of time available to the market to respond to events. Clearly, the opportunity for market response would be very different for an event that happened one hour before the close of the exchange on Friday as opposed to an event that happened one hour after it. Incidentally, as implied by this statement, we use daily closing prices for our analysis.

[9]We chose to restrict our search for evidence of market anticipation and reaction to a relatively short

pre-test period of five daily observations, and a post-test period of six daily observations. The day of event occurrence is included in the post-test period, and we use the term post-test to refer to the occurrence of the event and not to its duration as it can continue to unfold during this period. The statistics for day 7 through day 11, accordingly, reflect continuous market adjustments to new information regarding the event as it becomes subsequently available, and are not necessarily a response to the initial information about the event occurrence itself.

We adopt a "sliding time frame" approach in calculating the t statistics. As we move from one day to another to compute this statistic, we also shift the data base for this computation by one daily interval. The data base represents the market's values for the preceding twenty-six business days,[10] and is analyzed by means of the ordinary least-squares linear regression to provide a predicted market value for each of the eleven observations.

As is customary in this sort of analysis, we address several sources of distortion that can affect the valid interpretation of its results. These include: 1) history,

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period because of the problem of history to be discussed below. However, this choice rules out the possibility of detecting any evidence of market anticipation that may have taken place several weeks or even months before the actual event.

[10]Since we are dealing with business days as our units of observation, the actual calendar time involved is more than one month.

2) maturation, 3) instability, 4) instrumentation, 5) testing, 6) regression toward the mean, and 7) idiosyncrasy and irrelevance.

The problem posed by history refers to the possibility that events other than the test treatment are responsible for the observed change in market behavior. Except in three instances,[11] we do not feel that this is a major concern because we have purposefully excluded situations involving multiple event happenings (e.g., the Sino-Indian border war in 1962, which coincided with the Cuban missile crisis). We also limit the data bases for regression to twenty-six days, a relatively short period, in order to minimize the chances of developments other than the test intervention influencing the market.

We also believe that the maturation problem--which means that the observed change in market behavior may merely reflect some regular running process--is not severe. While there are many fancy techniques that can be used to detrend the data, we feel that these niceties are unwarranted since the relatively short spans of time (thirty-seven business days) we work with reduce the chances that the results are the artifact of long-run processes such as business cycles. More importantly, the studies cited earlier in connection

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[11]The following three pairs of incidents happened within one month of each other: 1) the suspension of dollar convertibility and the death of Lin Piao, 2) the Yom Kippur war and the Arab oil embargo, and 3) the death of Mao Tse-tung and the arrest of the Gang of Four.

with the weak form of the efficient-market hypothesis show that there is little evidence of commonly assumed cycles or streaks in market behavior, except that over several decades most stock averages tend to rise as a result of the long-run increase in earnings and dividends. Incidentally, differences in the general trend or state of the economy at the time of the occurrence of the test events should not be a handicap in making cross-event comparisons, because the single-mood tests are based on the relative size of the market shifts within the period covered by each event.

Instability refers to the problem created by an inherently volatile data series, so that the observed change could simply be a random occurrence. Rumors and speculation can have this effect. However, this is not a problem for us as we found substantial autocorrelation in our data series. As a matter of fact, two of our indicators, gold and currency values (especially for the New York market for the earlier test events), are too stable for the interrupted time series method, which, after all, stresses the detection of discontinuities in the market's behavior.

Similarly, instrumentation, testing, and regression do not present problems for us. We have no reason to believe that any change in the data measurement and reporting system took place within any of the test periods. It is inconceivable that our retrospective analysis could have a testing effect, that is, the stimulus provided by the administration of the test itself can induce the subjects to respond in

certain ways. And, since we have not selected our test events on the basis of any extreme market values associated with them, we need not be concerned with the problem of regression toward the mean.

Idiosyncrasy and irrelevance refer, respectively, to the possibility that similar test events can produce different observed changes in the data patterns, and that different test events can produce similar changes. We try to deal with idiosyncrasy by studying the results obtained for several comparable test events that are likely to affect the market. To answer the possible charge of irrelevance, we shall compare the results for periods experiencing international crises (the experimental group) with those for periods without them (the control group).

The Logic of Inference and Interpretation

Even if one accepts our previous reasoning, the relevance of crises to changes in market behavior hinges on the presumption that the crises of interest have implications for the economic expectations of the participants in the markets of interest. We shall discuss later how these considerations entered into our choice of the events, markets, and indicators (stock, gold, and currency prices) for the analysis. Before doing so, it is appropriate to state several more general expectations about market behavior.

What causes market prices to fluctuate? Three general considerations underlie our position. First, any news that increases uncertainty about earnings prospects is destabilizing. Since investors are risk averse, uncertainty works to depreciate stock prices and to raise the prices of hedging alternatives such as gold and relatively less-exposed currencies. All the market research previously cited shares the view that investors avoid extra uncertainty absent the lure of greater potential financial gains. To the extent that our test events increase the unpredictability of the general business environment pertinent to the markets under examination, they exert downward pressure on stock prices and upward pressure on gold prices.

Second, it is a paradox and yet a truism that generalizations about market behavior, whose status as description, explanation, prediction, and prescription is often easily interchangeable, are notoriously vulnerable to self-fulfilling and self-denying prophecies. If they are believed by many investors, authoritative statements indicating, for instance, that stock prices are cheap (a description), or that an economic recession has reduced substantially corporate profits and thus makes the holding of stocks unattractive (an explanation that can easily be converted into a prediction on future occasions), or that interest rates will rise in the next six months and thus contribute to a fall in bond prices (a prediction), will result in a stampede to adjust portfolios, which will, in turn, either nullify the stated

condition (in the first instance) or bring it about (in the latter two instances). Moreover, if any trading rules based on such generalizations can consistently detect and thus take advantage of opportunities presented by discrepancies between the actual prices and "intrinsic values" of securities, attempts to profit from these opportunities will invalidate them because, as already noted, the market is ruthlessly efficient in eliminating these biases. Parenthetically, security prices are a "fair game" variable, meaning that for every transaction the buyer believes the price will rise and the seller believes it will fall. Thus, at any given price, the traders must have opposite expectations about the potential return of the security in question. Otherwise, the price cannot be established or maintained.

Third, because of the danger of self-fulfilling and self-denying prophecies and because the same generic events often have different real or perceived impact on the economy, we feel that sweeping generalizations about how political-military developments will affect security prices are unwarranted. Accordingly, in this analysis, we stress, instead, the "appropriateness" interpretation of investors' response to events.

Specifically, we argue that the interpretation of market indicators hinges on some particular understanding of the economic implications of the crises under examination. Rather than a plea for ad hocery, this point of view cautions that the complexity of market behavior cannot be conveniently

explained away by simplistic generalizations. It clashes with the broad interpretations suggested by both the Marxist and "inverse Marxist" perspectives. The former expects markets to be bullish with delight at the enhanced prospect of war and defense expenditure profits. The latter expects markets to turn bearish. Crises and wars are held to dampen investor enthusiasm as they are expected to induce or exacerbate inflation, budget deficits, tax surcharges, government economic regulation, and balance of payment problems.

Our interpretation of the analysis results presented later and by the other researchers cited earlier indicates that the "appropriateness" posture is more reasonable for understanding market behavior. Certainly the literature on the efficient-market hypothesis and on the impact of foreign crises on security prices supports this perspective of people as "economic man" or "rational investor." For instance, as already mentioned, Russett and Hanson (1975) discovered that the New York Stock Exchange reacted quite differently to the development of the Vietnam war before and after 1967. Stock prices were more sensitive to war-related news during the post-1967 period than the pre-1967 period. During the later period, they responded positively to prospects of conflict settlement, but this relationship was absent during the earlier period and for the Korean war. Incidentally, as an additional caution against sweeping generalizations such as the Marxist perspective, the authors found that the

shares of individual corporations heavily involved in defense contracts did not behave bullishly as a result of increased international tension.

As a further example supporting the "appropriateness" point of view, Fama et al. (1969) investigated the phenomenon of stock prices being stimulated by the prospects of share splits. Since these splits only divide a company's assets into more shares and, therefore, in themselves, do not increase the value of these securities, the authors hypothesized that the price rises are due to the investors' reasonable interpretation that they indicate an impending management decision to increase dividends as a result of the company's improved earnings. In fact, this market anticipation is usually correct; most splits are followed by substantial dividend increases. For those stocks that a dividend increase is not forthcoming after the split, their prices experience a downward adjustment as the "appropriateness" rationale would suggest. Furthermore, as implied by this perspective, the authors proved convincingly that "when the information effects of dividend changes are taken into account, the apparent price effects of the split will vanish" (Fama et al., 1969: 3).

Does our imperfect understanding about how investors are likely to perceive the effects of different political events on their future financial returns render this analysis somehow suspect in terms of its predictive relevance? We think not. The efficient-market hypothesis offers a

powerful argument for expecting market prices to reflect quickly and, at least in some cases, to anticipate relevant developments, even though, according to it, we cannot accurately predict the direction and magnitude of the market's next move (this unpredictability being related to our uncertainty about both what events will take place and how investors will interpret them). More importantly, this hypothesis contends that even though individual investors may not actually make judgmental forecasts about the impact of the types of events we test, the market behaves as if there were some collective intelligence at work in incorporating the possible effects of these events in current prices.

Certainly, "black box" approaches have a long tradition in many disciplines, including the so-called hard sciences. The work on earthquake prediction cited earlier is a case in point. Although we cannot yet explain satisfactorily why animals behave strangely before the occurrence of quakes, this knowledge deficiency should not deny the possibility of deriving benefits from the use of their observed behavior as a warning indicator. The proper test of the usefulness of "black box" approaches is the predictive accuracy of their results (e.g., Friedman, 1953; Nagel, 1963), after making sure that this accuracy is not due to fortuitous reasons. To guard against the latter possibility, we shall compare market behavior during crisis and noncrisis periods, as already mentioned.

To sum up our argument to this point, we believe it "appropriate" to expect markets to be sensitive to and to attempt to predict crises with serious implications for economic performances, even if that implication is limited to uncertainty about economic performance. If both sensitivity (i.e., deviations from expected values after the crisis begins) and prediction (i.e., deviations from expected values before the crisis begins) are absent, we can justifiably conclude that the markets provide poor warning indicators, as we can if only sensitivity is present. If markets show equal magnitudes of fluctuations in noncrisis periods, we, once again, are justified in recommending against relying on their performance for crisis warning.

No matter how sound our reasoning, markets cannot provide warning indicators unless they meet certain conditions. First, they must provide timely and systematic data on transactions. There are, however, few organized markets outside the OECD countries for which a centralized reporting system has been in existence for a relatively long time. Second, markets need to be exposed to foreign investment concerns. Only a small number of formal exchanges have the necessary foreign linkages to be considered as international or regional markets; most are national markets devoted to the transaction of domestic business interests. Third, for obvious reasons, we are also constrained by the limited number of non-OECD countries whose governments adopt a relatively liberal commercial policy, permitting free trade

in security instruments and allowing their prices to fluctuate according to market demand and supply. These considerations generally restrict the use of market indicators for forecasting crises to Western industrialized countries. The approach cannot be applied to countries with command economies, countries whose exchanges have only the status of national financial centers,[12] and countries without formal exchanges providing regular market reports.

We choose Hong Kong in part because it is one place outside the OECD countries that meets the above requirements (Jao, 1979). The laissez faire policy of its government makes Hong Kong especially attractive for our analytical concerns; it permits us to study market responses to events unencumbered by possibly distorting governmental regulations. New York obviously also meets these conditions. For each market, we have appropriately reported overtime measures.

For Hong Kong, the principal data base for the analysis is the Hang Seng Bank Index of the Hong Kong Stock Exchange. This index gives a composite score for the daily performance of that market, and is similar to the Dow Jones Index of the New York Stock Exchange in its design and function.[13]

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[12]This consideration does not apply when the countries in question are directly engaged in foreign or domestic crises. It only affects the utility of using indicators from these relatively parochial markets for the purpose of predicting and monitoring second-order crises, that is, crises that do not directly involve the countries in which the markets are located.

[13]This index is based on the closing market prices of the thirty-three most active stocks, adjusted for their

For the early 1960s, our source--the Far Eastern Economic Review--also gave local gold prices and exchange rates between the Hong Kong and US dollars.[14] Unfortunately, except for the earliest five events in our sample, the need for time-sensitive data precludes the use of the gold and currency measures; the Review changed its reporting from daily to weekly quotations.[15] We have also been denied

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respective number of outstanding shares. July 31, 1964 was chosen as the base date, and the index for that date was given a score of 100 in order to provide a standard for comparing the daily changes in the aggregate market value in the subsequent period. Being an aggregate measure that averages the fluctuations of the more volatile and sensitive stocks with those that are less so, this index may underestimate the degree of market anticipation or response. However, unlike the United States, Hong Kong does not have a defense industry whose stocks may be expected to be more sensitive to international tension. Moreover, this expectation does not actually receive empirical support in the investigation by Russett and Hanson (1975), who found that the stocks of US companies with strong defense or Third-World business interests generally did not behave differently from other stocks during the Vietnam war.

[14]The Far Eastern Economic Review started to report the Hang Seng Bank Index on August 25, 1970. The daily index quotations between November 24, 1969 and that date were obtained directly from the research department of the Hang Seng Bank. The Hang Seng Bank Index was not developed until 1969, and we use the Far Eastern Economic Review Index, its predecessor, as our stock indicator prior to that year. The relatively minor differences between these two indices should not prevent us from drawing cross-event comparisons, especially since the relevant t statistics are based on the relative market shifts for each of the individual test periods and we did not switch the use of these indices during any test period. Incidentally, the component stocks of the Dow Jones Industrial Index have also undergone change over time.

[15]We have tried to use these weekly figures, but have concluded that their lack of time sensitivity negates any possibility of deriving early warning signals from them.

other possible indicators (e.g., the prices for bonds and commodities such as rice and sugar) because of the lack of a consistent and extended data series providing daily readings of the market's activities. As a result, we have not been able to resort fully to multiindicator validation to guard against false alarms from individual indicators. We have, however, included the Dow Jones Industrial Index and the Standard and Poor 500 Index of the New York Stock Exchange for making between-market comparisons. Although we have also collected and analyzed the gold and currency exchange data for the US, they are less appropriate for the early events. Until August 1971, Washington supported the convertibility between dollars and gold.[16]

For markets which meet our conditions, our reference to "black box" approaches does not mean that we have undifferentiated expectations about their predictions of and sensitivity to events. In part, these differences lie in the nature of the crisis events themselves. In part, they follow from the varying sources of turbulence in the economic performances central to particular markets.

Generally, we expect predictability to be inversely related to sensitivity. Almost by definition, markets are especially likely to react to big surprises, that is, to unanticipated events shrouded in secrecy. Accordingly, we

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[16]Before 1971, we used the London gold quotations.

hypothesize that they will be more sensitive to, but less able to predict abrupt and major changes in the international political or military climate such as the sudden outbreak of armed conflicts. Clearly, some events are more predictable than others. For example, the recent Chinese invasion of Vietnam, heralded by a series of rather explicit threats from Peking, is more likely to be expected than the 1969 Sino-Soviet border clashes (the Chenpao Island incidents) which seem to have fewer public warning precursors. Other events may belong to the AGUS (Anticipated Generally but Unanticipated Specifically) variety discussed by Paige (1972: 53). Thus the market could have long expected and discounted developments such as the death of Mao Tse-tung, the normalization of Sino-American relations, and major currency devaluations. The general processes that culminated in these events are public knowledge, even though their exact timing might not be known in advance with precision. Accordingly, their evertual occurrence is less likely to arouse the market. There are, of course, some events (e.g., assassinations, coups d'etat, surprise attacks) that are inherently difficult to predict, even though the market may react vigorously after their occurrence. Consequently, just as it is not applicable to all countries, our approach should not be expected to be equally successful in anticipating all types of situations that may be classified as crises in hindsight.

We also reason that the Hong Kong and New York markets should exhibit differential event sensitivity and predictive capabilities due to their different preoccupations and perhaps special advantages resulting from these differences in terms of the information monitoring and assessment emphases of their participants. Indeed, this view underlies our choice of Hong Kong. Until recently, China offered very restricted information access to foreign observers, and even now our knowledge about its foreign and domestic policies is rather fragile and limited. Residents of "outposts" such as Hong Kong and pre-tumult Beirut, with close geographical, cultural, and other communication contacts (e.g., trade, refugees) with political systems that are, to us, relatively closed but important for policy reasons, may have a unique advantage--and incentive--for accurately predicting the foreign policy initiatives and reactions of their powerful neighbors. The economic and political viability of these "havens" depend substantially on the collective ability of their citizens to plan for and adjust to opportunities and threats created by nearby states. Thus, both their proximity and vulnerability to countries we want to understand better give importance to these places as "observation posts."

While we do not suggest that the Hong Kong market responds only to Chinese developments in view of the major export shares going to the United States, West Germany, and Japan (The Hong Kong General Chamber of Commerce, 1979), we

do contend that it will be more sensitive to and perhaps in a better position to predict events in China than other markets. After all, the city's current status quo is "virtually underwritten by China" (Jao, 1979: 687). Peking's acquiescence is essential for its political and economic stability. In addition to crucial dependence on imports of food from China, there are numerous investments by PRC institutions in Hong Kong. Firms that can be quickly affected by Chinese actions undermining the Crown Colony's stability (e.g., public utilities, real estate, construction) constitute about half of the component stocks of the Hang Seng Index. The stock market crash of 1967 is a prime example. It was caused by local riots and strikes inspired by the Cultural Revolution in China, and by the ensuing investor panic about a possible Chinese military takeover. At the height of the disturbance, stock values fell by 25% in two months. In addition, Hong Kong is second only to Japan as a direct recipient of Chinese exports, and thus has clear reasons to attend to general matters of political stability and economic productivity in China. Finally, its market is particularly exposed to regional developments. Hong Kong has long been a recipient of Asian flight capital, and has become a major regional center of international finance and trade.

We expect the New York market to be more attuned to events directly involving the US, its major allies, and its

sources of crucial raw materials (e.g., the Middle East). It should more appropriately respond to events with broad international implications and be less attentive to internal events in China or ones with purely Asian implications. These distinctions should not, of course, be pushed too far, since neither market totally insulates itself from events anywhere in the world.

The test events shown in Table 4 enable us to pursue our differential expectations. They include international military and political crises, international economic crises, East Asian regional crises, and Chinese domestic political crises. The next section of the paper reports our analyses following from our "appropriateness" perspective.

We shall assess event predictability by examining the timing of price adjustments, and sensitivity by the magnitude of these adjustments. If significant price changes take place before the occurrence of a test event, we interpret them as indicating that the event is predictable by the market and that the market is sensitive to it. If prices change only after the occurrence of an event, ex post sensitivity but not predictability is supported. And, if there are no substantial price changes before or after an event's occurrence, sensitivity is unsupported. This, in turn, means that, for such cases, our approach cannot be used for crisis prediction; whether or not they are anticipated, these events do not influence investors' behavior. As an

Table 4

Test Events

	Events	Dates*
1.	US retaliation against North Vietnam as a result of the Gulf of Tonkin incident	August 5, 1964
2.	US bombing of North Vietnam as a result of the Pleiku incident	February 7, 1965
3.	The outbreak of the Kashmir war	September 1, 1965
4.	The May 16 circular, signalling the official start of the Cultural Revolution in China	May 16, 1966
5.	The communique of the 11th Plenum of the Cultural Revolution	August 12, 1966
6.	The outbreak of the Six-Day War**	June 5, 1967
7.	The devaluation of the British pound by 14.3%	November 18, 1967
8.	The Communist Tet offensive in South Vietnam	January 30, 1968
9.	Soviet invasion of Czechoslovakia	August 20, 1968
10.	The Sino-Soviet border clash on the Chenpao Island	March 15, 1969***
11.	US invasion of Cambodia	April 30, 1970
12.	The suspension of the convertibility of US dollar into gold and the imposition of a 10% import tariff surcharge	August 15, 1971
13.	The alleged coup attempt by Lin Piao and his death; all civil flights in China grounded	September 13, 1971
14.	The outbreak of the Bangladesh war involving India and Pakistan	November 22, 1971
15.	US mining of the Haiphong harbor	May 8, 1972
16.	The floating of Western currencies	June 23, 1972
17.	The devaluation of US dollar by 10%	February 12, 1973
18.	The outbreak of the Yom Kippur war	October 6, 1973
19.	The decision by Arab oil producers to initiate a 5% cutback in production and a 17% price hike	October 17, 1973
20.	Chinese invasion of the Paracel Islands	January 14, 1974
21.	The reemergence of T'eng Hsiao-p'ing from political disgrace; his election as the Vice Chairman of the Chinese Communist Central Committee	January 10, 1975
22.	The collapse of the Saigon regime	April 30, 1975

Table 4 (Continued)

	Events	Dates*
23.	The death of Chou En-lai	January 8, 1976
24.	The riot at Tien An Men Square in Peking, leading to the removal of T'eng Hsiao-p'ing from power	April 5, 1976
25.	The death of Mao Tse-tung	September 10, 1976
26.	The alleged coup attempt by the Gang of Four, leading to their arrest and T'eng's second political reemergence	October 6, 1976
27.	The Shah's exile from Iran	January 16, 1979
28.	Chinese invasion of Vietnam	February 17, 1979
29.	Soviet invasion of Afghanistan	December 25, 1979

*These are the actual dates on which the events took place. For some events, the dates used in the subsequent data analysis may be one or two days later than those indicated here, because they happened after the close of the market on a business day or during a weekend.

**The Hong Kong market data are unavailable for this event, because financial transactions in the Colony were stopped during May 13-28 and June 5-20 due to local political disturbances.

***There are two reported clashes, with the first one taking place on March 2.

additional check on the possibility of market insensitivity to test events--that is, the possibility that the changes observed are part of normal market behavior and not induced by our quasi-experimental stimuli--we shall compare the results obtained from crisis and noncrisis periods.

To summarize our research concerns, we identify the following questions and rules of inference. What are the signs of the t statistics? For the Hong Kong market, a decline in investor confidence is indicated by a fall in stock prices (a negative t sign) or a rise in the prices of gold and US dollar relative to the Hong Kong dollar (positive t signs). What are the sizes of the t statistics? We provide significance tests at the .01 and .05 levels to assess whether a nonrandom change in the market's behavior has taken place. What is the timing of significant market shifts? By providing the t statistics for periods immediately before and after the occurrence of the test events, we hope to determine whether the market can anticipate these incidents or is more prone to respond to them retrospectively. Do the indicators used converge or diverge in issuing warning? To the extent that they coincide, we gain more confidence in the results. In connection with the idiosyncrasy issue raised earlier, do the results for similar kinds of test events converge or diverge? We are inclined to be more optimistic about our approach if the market indicators behave consistently with respect to similar event stimuli. Do the Hong Kong and New York markets converge or diverge?

Although, as mentioned already, we do not expect these markets to be equally sensitive to or capable of predicting events, cross-market confirmation will be useful, even if it applies only to the direction and not the exact timing or magnitude of investors' adjustments to events. It helps us to avoid false alarms due to the idiosyncrasies of particular markets. And finally, are the quasi-experimental results unusual in the sense of being different from the magnitude and frequency of market shifts during normal times? We shall compare these results with those for periods where no crisis was present, in order to gain a better perspective on their validity as indicators of event predictability and sensitivity.

Analysis Results

We shall now report our results as they bear on the usefulness of market behavior as a source of crisis indicators. The daily t statistics for stock prices are provided in Appendices A (for the Hang Seng Index) and B (for the Dow Jones and Standard and Poor Indices).[17] We have five readings for each event preceding the crisis and six (including the day of the crisis) readings after its occurrence.

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[17] Because of the close correspondence between the movements of the Dow Jones Industrial Index and the Standard and Poor 500 Index, as a visual inspection of the New York data in Appendix B indicates, subsequent analysis deals only with the former measure.

We are less interested in the results for specific events than the patterns that characterize different types. For Hong Kong, we categorize the test events according to: 1) domestic Chinese crises, 2) international economic crises, 3) international political-military crises, and 4) East Asian military crises. We use, for the New York market, the additional categories of: 5) US economic initiatives, 6) US military initiatives, 7) US military setbacks, 8) involvement of a US ally in political-military crises absent direct US military involvement, 9) Soviet military initiatives, and 10) involvement of a Soviet ally in military crises absent direct Soviet involvement. As a set, these categories are not mutually exclusive, and follow from judgments about investor concerns and information propensities rather than any theoretical basis. The assignment of our twenty-nine test events to these types appears in Table 5.

We shall consider the general properties of market behavior as well as those for each of our categories. At both levels of analysis, we shall address: 1) the timing, magnitude, and direction of price shifts, that is, the extent to which the markets were predictive or reactive or neither; 2) the convergence of different measures in terms of the above concerns; and 3) the extent to which the shifts are greater than the normal fluctuation propensities provided by our control group of observations (for the Hong Kong market only).

Table 5

Types of Events

Event	Types*									
	1	2	3	4	5	6	7	8	9	10
1. Gulf of Tonkin				x		x				
2. Pleiku Retaliation				x		x				
3. Kashmir War			x					x		
4. May 16 Circular	x									
5. 11th Plenam Communique	x									
6. Six-Day War			x					x		x
7. Pound Devaluation		x								
8. Tet Offensive				x			x			
9. Invasion of Czechoslovakia			x						x	
10. Chenpao Clash				x					x	
11. Invasion of Cambodia				x		x				
12. Dollar Convertibility		x			x					
13. Lin's Death	x									
14. Bangladesh War			x					x		
15. Mining of Haiphong				x		x				
16. Western Currencies Crisis		x			x					
17. Dollar Devaluation		x			x					

Table 5 (Continued)

Event	Types*									
	1	2	3	4	5	6	7	8	9	10
18. Yom Kippur War			x					x		x
19. Arab Oil Embargo		x								
20. Invasion of Paracels				x				x		
21. T'eng's Emergence	x									
22. Collapse of Saigon				x			x			
23. Chou's Death	x									
24. Peking Riot	x									
25. Mao's Death	x									
26. Arrest of Gang of Four	x									
27. Shah's Exile			x					x		
28. Invasion of Vietnam				x						x
29. Invasion of Afghanistan			x						x	

*The event types are described in the text.

Timing, Magnitude, and Direction

Summary data on anticipation of and reaction to events for the two stock indices (Hang Seng and Dow Jones) appear in Table 6. Shifts significant at the .01 level are cumulated into the totals for those significant at the .05 level. The results are generally disappointing with respect to the value of these indices for crisis anticipation and reaction. While they imply a tendency for the Hong Kong market to become bearish in the aftermath of crises, no such relationship is apparent for the New York market. Moreover, for both markets, price shifts occurred less than one-third of the time. Nor do they suggest that the markets are generally more anticipatory than reactive. Of course, these patterns may obscure striking indicator performance for particular types of events.

In Table 7, we break down our results according to the types of events introduced in Table 5. It reports the number of observations statistically significant at the .05 level before and after a test event. For each group of events, it presents the number and percentage of these strong readings as well as the percentage of events that were missed completely. In contrast to the other data in the table, high scores for the last measure indicate weak anticipation or reaction.

The data generally support our conclusion from Table 6 about the poor anticipatory performance of the stock indices. When we take the last two rows of the pre-event

Table 6

Stock Anticipation vs. Reaction to Events*

	Hong Kong (Hang Seng Bank Index) N of Observations = 308				New York (Dow Jones Industrial Index) N of Observations = 319			
	Pre-Test N=140		Post-Test N=168		Pre-Test N=145		Post-Test N=174	
	.01	≤.05	.01	≤.05	.01	≤.05	.01	≤.05
Stock Increases	16 (11%)	30 (21%)	3 (2%)	14 ([illegible]	7 (5%)	15 (10%)	15 (9%)	30 (17%)
Stock Decreases	4 (3%)	10 (7%)	14 (8%)	36 (21%)	9 (6%)	24 (17%)	12 (7%)	26 (15%)
Total Changes	20 (14%)	40 (29%)	17 (10%)	50 (30%)	16 (11%)	39 (27%)	27 (16%)	56 (32%)

*Because data for the Six-Day War are unavailable for Hong Kong, we have only 28 test events for that market compared with 29 for New York. The pre- and post-test periods are of unequal lengths with the former containing five daily observations and the latter containing six. The percentage figures have been rounded off.

Table 7

Market Sensitivity to Different Types of Events*

	Hang Seng		Dow Jones	
	Pre	Post	Pre	Post
Group 1--Domestic Chinese				
May 16 Circular	3	3	1	2
11th Plenum Communique	0	1	0	0
Lin's Death	1	1	0	1
T'eng Political Emergence	0	0	3	1
Chou's Death	1	1	3	4
Peking Riot	0	5	0	4
Mao's Death	5	0	1	0
Arrest of Gang of Four	0	2	5	3
N of Major Changes	10	13	13	15
N of Observations	40	48	40	48
Major Changes as % of Observations	25	27	33	31
% of Events with No Major Change	50	25	38	25
Group 2--International Economic				
Pound Devaluation	0	4	4	6
Dollar Convertibility	3	0	2	3
Western Currencies Crisis	1	0	0	0
Dollar Devaluation	5	1	1	2
Arab Oil Embargo	0	2	2	4
N of Major Changes	9	7	9	15
N of Observations	25	30	25	30
Major Changes as % of Observations	36	23	36	50
% of Events with No Major Change	40	40	20	20
Group 3--International Political-Military				
Kashmir War	0	1	0	4
Six-Day War	Not Available		1	4
Invasion of Czechoslovakia	3	3	0	4
Bangladesh War	0	1	0	0
Yom Kippur War	1	0	0	1
Shah's Exile	4	1	1	0
Invasion of Afghanistan	0	3	0	2
N of Major Changes	8	9	2	15
N of Observations	30	36	35	42
Major Changes as % of Observations	27	25	6	36
% of Events with No Major Change	50	17	71	29

Table 7 (Continued)

	Hang Seng		Dow Jones	
	Pre	Post	Pre	Post
Group 4--East Asian Military				
Gulf of Tonkin	1	4	3	2
Pleiku Retaliation	4	0	2	6
Tet Offensive	0	2	2	0
Chenpao Clash	0	3	0	0
Invasion of Cambodia	0	4	4	2
Mining of Haiphong	1	3	3	1
Invasion of Paracels	3	2	1	0
Collapse of Saigon	1	2	0	0
Invasion of Vietnam	3	1	0	0
N of Major Changes	13	21	15	11
N of Observations	45	54	45	54
Major Changes as % of Observations	29	39	33	20
% of Events with No Major Change	33	11	33	56
Group 5--US Economic Initiatives				
Dollar Convertibility	3	0	2	3
Western Currencies Crisis	1	0	0	0
Dollar Devaluation	5	1	1	2
N of Major Changes	9	1	3	5
N of Observations	15	18	15	18
Major Changes as % of Observations	60	6	20	28
% of Events with No Major Change	0	67	33	33
Group 6--US Military Initiatives				
Gulf of Tonkin	1	4	3	2
Pleiku Retaliation	4	0	2	6
Invasion of Cambodia	0	4	4	2
Mining of Haiphong	1	3	3	1
N of Major Changes	6	11	12	11
N of Observations	20	24	20	24
Major Changes as % of Observations	30	46	60	46
% of Events with No Major Change	25	25	0	0

Table 7 (Continued)

	Hang Seng		Dow Jones	
	Pre	Post	Pre	Post
Group 7--US Military Setbacks				
Tet Offensive	0	2	2	0
Collapse of Saigon	1	2	0	0
N of Major Changes	1	4	2	0
N of Observations	10	12	10	12
Major Changes as % of Observations	10	33	20	0
% of Events with No Major Change	50	0	50	100
Group 8--US Ally Involvement				
Kashmir War	0	1	0	4
Six-Day War	Not Available		1	4
Bangladesh War	0	1	0	0
Yom Kippur War	1	0	0	1
Invasion of Paracels	3	2	1	0
Shah's Exile	4	1	1	0
N of Major Changes	8	5	3	9
N of Observations	25	30	30	36
Major Changes as % of Observations	32	17	10	25
% of Events with No Major Change	40	20	50	50
Group 9--Soviet Military Initiatives				
Invasion of Czechoslovakia	3	3	0	4
Chenpao Clash	0	3	0	2
Invasion of Afghanistan	0	3	0	0
N of Major Changes	3	9	0	6
N of Observations	15	18	15	18
Major Changes as % of Observations	20	50	0	33
% of Events with No Major Change	67	0	100	33

Table 7 (Continued)

	Hang Seng		Dow Jones	
	Pre	Post	Pre	Post
Group 10--Soviet Ally Involvement				
Six-Day War	Not Available		1	4
Yom Kippur War	1	0	0	1
Invasion of Vietnam	3	1	0	0
N of Major Changes	4	1	1	5
N of Observations	10	12	15	18
Major Changes as % of Observations	40	8	7	28
% of Events with No Major Change	0	50	67	33

*The results reported in this table are significant at the .05 level. The percentage figures have been rounded off.

results for each group as indicative of anticipatory performance (percent of total possible significant observations and percent of events missed), we find comparatively strong performance for both exchanges in cases of US economic and military initiatives (Groups 5 and 6), and international economic events (Group 2). The marginally better performance of the Hong Kong Index for US economic initiatives probably follows from prior discounting in the New York exchange. Both markets were particularly poor at anticipating international political-military events, US military setbacks, events involving US allies but not the US or the USSR directly, and Soviet military initiatives. While the Hang Seng Index did much better than the Dow Jones at anticipating cases involving Soviet allies but not the superpowers directly (Group 10), the number of events is so small as to warrant reservations. Contrary to our expectations, the Hong Kong readings were not better at anticipating East Asian military and domestic Chinese events (Groups 3 and 1). If anything, they did worse than the New York readings for events inside the People's Republic. Both exchanges missed six of our twenty-nine events (the spread of the Cultural Revolution, Peking riots, Kashmir war, Bangladesh war, the Soviet invasion of Afghanistan, and the Chenpao clash). In addition, each failed to warn about several events of interest. If one had relied on the Hang Seng Index, no warning would have been given of T'eng's political rehabilitation, the climax of the bid for power by the Gang

of Four, the devaluation of the British pound, the oil price rises, the Tet offensive, and the US invasion of Cambodia. If one had relied on the Dow Jones Index, no warning would have been forthcoming for the alleged coup by Lin Piao, the floating of Western currencies, the Soviet invasion of Czechoslovakia, the Yom Kippur war, the collapse of Saigon, or the Chinese invasion of Vietnam. Although it is likely that prior market discounting has dampened anticipatory signs for some of these events, these differences in market performance do not reveal any readily interpretable pattern.

Although an absence of significant price changes prior to event occurrence precludes warning from our stock indices, the presence of such changes does not necessarily constitute warning. The direction of price changes must be appropriate. If investors are risk averse, stock prices should fall due to increased uncertainty about the prospects of a stable (i.e., predictable) economic and political environment for firms. The information in Table 6 about the percentage of significant pre-event changes for the Hang Seng Index immediately gives us pause. Price increases are more frequent than decreases, a pattern that is reversed for the post-event observations. The Dow Jones Index behaves somewhat more in line with our general expectation. We recognize, however, that some events may be expected to stabilize the business environment (e.g., the changes in Western monetary policy), and thus anticipation would involve price rises. To get at the appropriateness of

responses to different events, we need to disaggregate them according to types. Before doing so, it seems important to note that we have no particular expectations about the post-event directions of change. Even in the context of a de-stabilizing event, prices may remain stable or even rebound because of prior discounting or excessive anticipatory compensation for forthcoming developments (Russett and Hanson, 1975: 157).

In Table 8, we report the direction of significant pre- and post-event changes. We continue to use the categories introduced previously. When changes occurred in the direction of price movements, we use both a plus and a minus sign. Such a mixed pattern of changes for the pre-test period is essentially uninterpretable for warning purposes. The anticipations of the Hang Seng Index seem comparatively more appropriate for economic events (Groups 2 and 5). With regard to East Asian military and domestic Chinese crises (Groups 4 and 1), one might argue that a positive sign would be appropriate because some of these events may be economically beneficial to Hong Kong. For example, an intensification of the Vietnam war might be expected to bring additional spending by the US government and its personnel in the Crown Colony, as would the advent of a Peking regime more oriented to involvement in the international economy. While one can rationalize market behavior on particular occasions in these terms, the general data pattern is not encouraging from the

Table 8

Direction of Market Anticipation and Reaction*

	Hang Seng		Dow Jones	
	Pre	Post	Pre	Post
Group 1--Domestic Chinese				
May 16 Circular	+,-	+,-	-	+,-
11th Plenum Communique	0	-	0	0
Lin's Death	+	+	0	-
T'eng Political Emergence	0	0	+	+
Chou's Death	+	+	+	+
Peking Riot	0	-	0	-
Mao's Death	+	0	+	0
Arrest of Gang of Four	0	-	-	-
Group 2--International Economic				
Pound Devaluation	0	+,-	+	+
Dollar Convertibility	+	0	+	+
Western Currencies Crisis	-	0	0	0
Dollar Devaluation	+	+	+	+
Arab Oil Embargo	0	+	-	-
Group 3--International Political-Military				
Kashmir War	0	-	0	+
Six-Day War	Not Available		-	+
Invasion of Czechoslovakia	-	-	0	+
Bangladesh War	0	-	0	0
Yom Kippur War	+	0	0	-
Shah's Exile	+	+	+	0
Invasion of Afghanistan	0	+,-	0	-
Group 4--East Asian Military				
Gulf of Tonkin	+	-	-	-
Pleiku Retaliation	+	0	-	-
Tet Offensive	0	-	-	0
Chenpao Clash	0	-	0	0
Invasion of Cambodia	0	-	-	-
Mining of Haiphong	-	-	-	+
Invasion of Paracels	+	+	-	0
Collapse of Saigon	+	-	0	0
Invasion of Vietnam	-	-	0	0

Table 8 (Continued)

	Hang Seng		Dow Jones	
	Pre	Post	Pre	Post
Group 5--US Economic Initiatives				
Dollar Convertibility	+	0	+	+
Western Currencies Crisis	-	0	0	0
Dollar Devaluation	+	+	+	+
Group 6--US Military Initiatives				
Gulf of Tonkin	+	-	-	-
Pleiku Retaliation	+	0	-	-
Invasion of Cambodia	0	-	-	-
Mining of Haiphong	-	-	-	-
Group 7--US Military Setbacks				
Tet Offensive	0	-	-	0
Collapse of Saigon	+	-	0	0
Group 8--US Ally Invclvement				
Kashmir War	0	-	0	+
Six-Day War	Not Available		-	+
Bangladesh War	0	-	0	0
Yom Kippur War	+	0	0	-
Invasion of Paracels	+	+	-	0
Shah's Exile	+	+	+	0
Group 9--Soviet Military Initiatives				
Invasion of Czechoslovakia	-	-	0	+
Chenpao Clash	0	-	0	0
Invasion of Afghanistan	0	+,-	0	-
Group 10--Soviet Ally Involvement				
Six-Day War	Not Available		-	+
Yom Kippur War	+	0	0	-
Invasion of Vietnam	-	-	0	0

*The results reported in this table are significant at the .05 level. A plus sign means an increase in stock value, and a minus sign means a decrease in stock value. When both signs are indicated, there was no consistent direction in the stock movements.

perspective of systematic warning. Note the bearish reactions to many of the East Asian military events and instances of US military initiatives (Groups 4 and 6), reflecting perhaps the equally plausible interpretation of investor fears of the increased danger of PRC military intervention in these cases. Similarly, although some of the reactions to domestic Chinese events are explicable in terms of anticipated economic policy (e.g., the death of Mao), others are not (e.g., the death of Chou). Moreover, a comparison of events that are likely to engender similar kinds of investor hopes or fears (e.g., the defeat of the "radical" elements led by Lin Piao and the Gang of Four, the Chinese invasions of the Paracels and Vietnam) indicates frequent discrepancies in the market's responses, and thus heightens our concern with the possibly idiosyncratic nature of these responses.

The Dow Jones results show strongly appropriate performance for the economic events. They also are generally appropriate for East Asian military crises and US military initiatives, if we have expectations in line with the "inverse Marxist" and "modified Marxist/inverse Marxist" perspectives discussed by Russett and Hanson (1975). According to the former viewpoint, war has a bearish implication. According to the latter, a little war that stays within bounds initially triggers bearish sentiments but soon produced bullish reactions when fears of conflict escalation are dissipated (e.g., the mining of Haiphong, the Six-Day war). In most of the cases where the two

markets differed in their pre-crisis behavior, the Dow Jones Index seems more appropriate from a warning perspective (e.g., the Arab oil embargo, the Pleiku retaliation, the Tet offensive). Nevertheless, our enthusiasm for it for crisis warning purposes is dampened, because it missed a number of key events. While many of these misses may be explained by prior discounting, such behavior diminishes its usefulness for short-term warning.

Indicator Convergence

Our confidence in market changes as warning signals will be greater if the different measures (stock, gold, and currency prices) move in ways that converge in terms of a warning implication. For Hong Kong, we expect stock prices to move in one direction, and gold and currency exchange observations in the other. For New York, stock and gold values should move in opposite directions. The price of US dollar should fall for those events that increase uncertainty about its future economic performance. It can, however, be bolstered by some second-order crises, since the American currency is often the beneficiary of flight capital. Table 9 reports the pertinent data, which, for Hong Kong, are limited to the first five events in our sample and, for New York, to events that happened one month after Washington's withdrawal of support for dollar convertibility in August 1971. It contains the number of pre- and post-test observations that are significant at the .05 level, and the direction of these changes.

Table 9

Indicator Convergence: Stock, Currency, and Gold*

A. Hong Kong Market	Hang Seng Index		HK-US Dollar Exchange Rate		Gold Price	
	Pre	Post	Pre	Post	Pre	Post
Gulf of Tonkin	1 (+)	4 (-)	0	0	0	3 (+)
Pleiku Retaliation	4 (+)	0	1 (-)	2 (+,-)	0	2 (+)
Kashmir War	0	1 (-)	0	0	0	0
May 16 Circular	3(+,-)	3(+,-)	0	1 (+)	0	2 (+)
11th Plenum	0	1 (-)	2 (-)	0	0	0
Totals	8(+,-)	9(+,-)	3 (-)	3(+,-)	0	7 (+)

B. New York Market	Dow Jones Index		US-HK Dollar Exchange Rate		Handy & Harmon Gold Price	
	Pre	Post	Pre	Post	Pre	Post
Bangladesh War	0	0	4 (+)	6 (+)	5 (+)	3 (+)
Mining of Haiphong	3 (-)	1 (+)	0	3 (+)	3 (+)	3 (+)
Western Currencies	0	0	5 (-)	5(+,-)	1 (-)	0
Dollar Devaluation	1 (+)	2 (+)	2 (+)	5 (+)	3 (+)	5 (+)
Yom Kippur War	0	1 (-)	0	4 (+)	1 (-)	2 (+)

Table 9 (Continued)

B. New York Market	Dow Jones Index		US-HK Dollar Exchange Rate		Handy & Harmon Gold Price	
	Pre	Post	Pre	Post	Pre	Post
Arab Oil Embargo	2 (-)	4 (-)	5 (+)	0	2 (+)	0
Invasion of Paracels	1 (-)	0	4 (+)	0	1 (+)	1 (+)
T'eng's Emergence	3 (+)	1 (+)	0	0	3 (-)	0
Collapse of Saigon	0	0	4 (+)	0	0	0
Chou's Death	3 (+)	4 (+)	1 (-)	4 (+)	0	4 (-)
Peking Riot	0	4 (-)	1 (+)	1 (-)	3 (-)	1 (-)
Mao's Death	1 (+)	0	0	3(+,-)	4 (+)	3 (+)
Arrest of Gang of Four	5 (-)	3 (-)	0	0	5 (-)	1 (-)
Shah's Exile	1 (+)	0	2 (+)	0	4 (-)	0
Invasion of Vietnam	0	0	1 (-)	1 (-)	0	1 (-)
Invasion of Afghanistan	0	2 (-)	2 (+)	2 (-)	3 (+)	5 (+)
Totals	20(+,-)	22(+,-)	31(+,-)	34(+,-)	38(+,-)	29(+,-)

*The results reported in this table are significant at the .05 level. The signs in the parentheses indicate the direction of price change.

For Hong Kong, the degree of convergence with respect to warning anticipations or even reactions is not strong. Similarly, even if we disregard the domestic Chinese events to which the New York market was not expected to be particularly attentive, the evidence is still discouraging. The three measures generally fail to move in conjunction in a manner that our "appropriateness" logics lead us to expect. The post-test results are not notably better than the pre-test results in terms of revealing a consistent pattern of market adjustments. In contrast to the earlier events used for the Hong Kong market, the prices of gold and currency seem more volatile than stocks for the New York market in the more recent past.

Experimental vs. Control Observations

As a final assessment step, we have analyzed the stock data for Hong Kong for twenty-eight randomly selected periods that did not experience crisis developments. Duplicating the analytical procedures for the experimental group of crisis periods, we have eleven daily readings of t statistics for each of the randomly selected periods. Thus we have the same number of daily readings (N = 308) for the control and experimental groups. If the fluctuations in the experimental periods are to warrant the status of meaningful indications, they have to be more frequent at a significance level than those for the control periods. In Table 10, we compare the

Table 10

Crisis vs. Noncrisis Periods: Hang Seng Index*

	Pre-Test Periods			Post-Test Periods		
	Crisis	Noncrisis	Comparative Difference	Crisis	Noncrisis	Comparative Difference
Domestic Chinese	25%	30%	- 5%	27%	29%	- 2%
International Economic	36%	30%	6%	23%	29%	- 6%
International Political Military	27%	30%	- 3%	25%	29%	- 4%
East Asian Military	29%	30%	- 1%	39%	29%	10%
US Economic Initiatives	60%	30%	30%	6%	29%	-23%
US Military Initiatives	30%	30%	0%	46%	29%	17%
US Military Setbacks	10%	30%	-20%	33%	29%	4%
US Ally Involvement	32%	30%	2%	17%	29%	-12%
Soviet Military Initiatives	20%	30%	-10%	50%	29%	21%
Soviet Ally Involvement	40%	30%	10%	8%	29%	-21%
All Test Events	28%	30%	- 2%	30%	29%	1%
N of Major Price Changes	40	42	- 2	50	49	1

*The total number of pre-test observations is 140 for each group, and the total number of post-test observations is 168 for each group. The results reported in this table are at the .05 level. The percentage figures have been rounded off.

percentage of observations for the crisis events indicating statistically significant changes at the .05 level with the average percentage of such occurrences in the control group. We also report the differences in these percentages between the two groups.

We note that the total number of statistically significant fluctuations for the experimental and control groups is about the same (forty compared to forty-two for the pre-test periods, and fifty compared to forty-nine for the post-test periods). The Hang Seng Index "outanticipates" the control group in only four of the ten event types. These are the ones singled out earlier, referring primarily to economic events and the involvement of Soviet allies in military crises (absent direct superpower involvement). For the other six event types, there is no apparent basis for treating the market fluctuations as warning signals rather than irrelevant noise. The results for the post-event periods imply the possible effects of prior discounting. For those event types with an apparently better anticipatory record, there were less post-event changes for the experimental group than the control group. If we disregard these types, the experimental observations show substantially more significant reactions, especially for US and Soviet military initiatives. The last finding, however, does not reinforce the use of stock values for warning purposes, but only indicates its potential for monitoring ongoing

crises. In sum, we find no special anticipatory capability attributable to the Hong Kong market.

Conclusion

Our results clash with our initial research expectation. They indicate that market indicators cannot be reliably used for forecasting (as opposed perhaps to monitoring) crisis developments. While negative findings are always disappointing, they can usefully redirect attention and resources to potentially more productive inquiry.

Of course, several features of our research design may have contributed to the generally negative results. Markets may have substantially longer leads for at least some events than we have provided for in this analysis. Unfortunately, assessing prior market discounting requires extending the temporal coverage of the analysis and thus exacerbating the problems of history and perhaps maturation. Our results also seem to imply that the Hong Kong market is more sensitive to events relating to the US than China. Thus, contrary to our initial expectation, it does not seem to provide a particularly useful or helpful platform for China-watching. Given Hong Kong's heavy dependence on external trade, its market may be more sensitive to economic events in the West than political-military events regarding China. Its sensitivity to the events examined may be further dulled by the fact that Hong Kong was not a direct party to any of the crises tested. None of them posed a direct

threat to its political or economic status. The indicator value of the Hong Kong market, or any other, for anticipating domestic crises in national political systems may have been unreasonably lowered because of the extreme secrecy during the period of our analysis which characterized internal Chinese politics. Market indicators might work better for more open political systems. These considerations temper our basic skepticism about the use of market indicators as a crisis-prediction tool in isolation. And the results from the New York market suggest that such indicators may have a modest value in support of warnings from other sources when the nation in which the market is located becomes directly engaged in a crisis, in particular as its government takes economic or military initiatives.

Appendix A

Table 11

Test Results: Hong Kong Stocks

Day	Tonkin	Pleiku	Kashmir	May 16	11th Plenum	Pound	Tet	Czech
1	2.12*	0.68	1.48	4.96**	0.42	-0.17	-0.61	-0.85
2	1.21	11.96**	1.28	-1.14	-0.10	-0.35	-0.52	-1.17
3	0.93	4.83**	1.20	-1.32	0.28	0.25	-0.94	-2.69**
4	0.33	2.57**	0.88	-2.12*	-1.05	0.03	-0.74	-2.80**
5	-0.19	1.97*	1.36	-1.74*	-1.35	0.64	0.29	-3.53**
6	-1.05	-1.11	0.90	-2.26*	-1.58	5.05**	0.98	-2.14*
7	-2.73**	-0.29	0.16	2.32*	-1.72*	2.38*	1.47	-2.17*
8	-2.61**	0.68	-0.74	-2.21*	-1.64	-0.42	0.96	-1.98*
9	-2.64**	-1.29	-0.96	-0.94	-1.42	-1.49	-.02	-1.23
10	-1.90*	-1.35	-1.71	-0.38	-1.28	-1.94*	-2.18*	-0.94
11	-1.32	-1.39	-1.92*	-0.37	-1.49	-2.31*	-2.54**	-0.94

Day	Chenpao	Cambodia	Convertibility	Lin	Bangladesh	Haiphong	Currencies	Devalue
1	0.20	0.64	1.43	4.82**	0.28	-0.84	-2.17*	3.85**
2	-0.88	0.22	1.57	1.65	-0.09	-0.46	-1.12	3.69**
3	-0.73	-0.82	1.75*	0.67	-0.07	-2.23*	-1.20	4.81**
4	-1.24	-0.49	2.32*	1.57	-0.19	-0.34	-1.32	5.51**
5	-1.14	-1.15	2.12*	0.17	-1.32	-0.09	-1.40	3.67**
6	-2.34*	-1.75*	1.71	-0.61	-3.43**	-1.14	-1.19	1.81*
7	-2.66**	-2.48*	1.08	0.21	-0.76	-2.61**	-0.22	1.20
8	-2.09*	-2.52**	0.37	0.57	1.31	-4.63**	-1.03	0.69
9	-0.88	-3.91**	0.08	0.76	0.93	-2.28*	-1.17	0.72
10	-0.77	-1.58	0.08	0.69	0.74	-0.92	-0.74	0.82
11	-0.83	-0.30	1.26	2.42*	-0.08	-1.06	-0.15	0.84

Table 11 (Continued)

Day	Yom Kippur	Oil	Paracels	T'eng	Saigon	Chou	Riot	Mao
1	1.74*	0.20	2.50**	0.86	2.04*	1.03	-0.21	2.33*
2	0.82	-0.41	2.22*	0.52	1.12	1.50	-0.58	2.94**
3	0.73	-0.83	1.78*	-0.15	1.48	2.36*	0.01	3.12**
4	0.99	-0.26	1.20	-0.54	1.70	1.23	-0.78	2.23*
5	1.33	-0.78	1.38	-0.77	0.77	1.25	-1.02	2.40*
6	1.04	-0.69	1.35	-0.33	0.05	2.45*	-1.99*	-0.21
7	0.63	-0.66	1.22	0.60	-0.66	-0.37	-1.60	-0.48
8	0.20	0.70	1.86*	-0.09	-1.16	1.14	-2.93**	-1.14
9	-0.41	2.30*	1.28	-0.08	-2.08*	0.53	-1.86*	-1.26
10	-0.83	1.37	1.53	0.36	-2.69**	-0.12	-2.43*	-0.41
11	-0.26	2.25*	2.26*	0.34	-1.66	-0.94	-2.33*	-0.17

Day	Gang of Four	Shah	Vietnam	Afghan
1	-1.55	1.92*	-3.20**	1.15
2	-1.38	3.36**	-2.39*	-1.02
3	-0.65	3.09**	-1.95*	0.58
4	-0.79	1.62	-0.97	0.51
5	-0.44	3.02**	-1.42	0.76
6	-0.95	1.80*	-2.87**	-0.08
7	-1.07	1.35	-1.35	0.70
8	-1.27	0.59	-1.55	3.09**
9	-2.29*	-0.14	-1.11	2.81**
10	-2.98**	0.04	-1.55	-0.73
11	-0.65	-0.35	-0.78	-2.24*

*Significant at the .05 level
**Significant at the .01 level

Appendix B

Table 12

Test Results: New York Stocks

	Gulf of Tonkin		Pleiku Retaliation		Kashmir War		May 16 Circular	
Day	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.
1	-2.33*	-2.46*	-0.60	-0.60	-1.04	-1.83*	-3.04**	-3.29**
2	-1.81*	-1.48	-1.12	-0.90	0.02	-1.23	-1.58	-1.82
3	-1.24	-1.42	-0.72	-1.10	-0.30	-0.78	-1.13	-1.22
4	-1.16	-1.29	-1.72*	-1.00	-0.51	-1.25	-1.48	-1.64
5	-2.34*	-3.34**	-2.51**	-2.21*	-1.17	-1.20	-1.71	-1.76*
6	-1.78*	-2.05*	-3.72**	-2.49**	-1.04	-1.13	-1.79*	-2.07*
7	-3.25**	-2.95**	-2.10*	-1.82*	0.77	0.00	-1.44	-2.03*
8	-1.42	-1.72*	-4.64**	-3.29**	2.91**	1.46	0.17	-0.15
9	-1.00	-1.37	-5.96**	-4.69**	2.64**	2.20*	0.17	0.22
10	-0.87	-0.76	-2.41*	-1.89*	2.65**	2.75**	1.06	5.28**
11	0.89	0.39	-2.41*	-1.68	2.59**	2.16*	2.03*	2.25*

	11th Plenum		Six-Day War		Pound Devaluation		Tet Offensive	
Day	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.
1	0.65	0.62	-0.58	-1.09	2.04*	0.79	-2.71**	-3.66**
2	0.63	0.66	-0.84	-1.26	1.02	-0.22	-2.24*	-3.25**
3	0.59	0.79	-1.90*	-2.56**	1.93*	-0.36	-1.55	-2.13*
4	0.29	0.71	0.12	-0.46	2.81**	2.94**	-1.08	-1.36
5	0.69	1.00	0.24	-0.61	2.90**	2.81**	-0.86	-1.23
6	1.29	1.37	-1.51	-2.23*	3.72**	2.71**	-0.89	-1.40
7	0.73	0.86	1.23	1.38	3.21**	2.89**	-0.90	-1.74*
8	-0.39	-0.49	2.40*	2.72**	2.90**	2.54**	0.18	-0.80
9	-0.58	-0.78	2.95**	3.31**	2.70**	2.33*	0.99	-0.80
10	-1.22	-1.73*	2.89**	3.03**	2.37*	2.16*	1.14	-0.75
11	-1.40	-1.81*	2.89**	3.07**	1.78*	1.74*	1.69	-0.49

Table 12 (Continued)

	Invasion of Czech.		Chenpao Clash		Invasion of Cambodia		Dollar Convertibility	
Day	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.
1	0.41	0.74	1.16	1.06	-3.08**	-2.32*	-1.19	-1.16
2	0.86	1.27	1.62	1.41	-2.54**	-1.88*	-1.02	-0.58
3	0.61	1.02	1.28	1.28	-2.84**	-2.36*	0.39	1.24
4	1.36	1.67	0.39	0.90	-2.87**	-2.53**	2.69**	3.35**
5	1.69	2.04*	0.25	0.73	-1.20	-0.70	2.22**	2.60**
6	1.92*	1.98*	0.37	1.09	-0.89	-0.52	6.13**	5.31**
7	1.85*	1.60	0.73	1.29	-0.68	0.21	4.47**	4.23**
8	2.02*	1.41	1.13	1.73*	-2.03*	-1.77*	2.16*	2.16*
9	2.01*	1.41	1.68	1.17	-1.75*	-1.65	1.47	1.55
10	1.49	1.10	1.42	1.79*	-0.28	0.15	1.25	1.39
11	1.31	0.87	0.95	1.38	0.80	1.36	1.67	1.64

	Lin's Death		Bangladesh War		Mining of Haiphong		Western Currencies	
Day	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.
1	0.03	-0.14	-0.25	0.01	-2.19*	-1.90*	-0.47	-0.40
2	-0.02	-0.10	0.23	1.03	-2.43*	-1.85*	-0.55	-0.42
3	-0.01	-0.27	0.43	1.35	-2.05*	-1.66	0.23	0.09
4	-0.90	-1.05	0.16	0.40	-1.30	-1.08	0.69	0.39
5	-1.55	-1.45	0.01	-0.21	-0.67	-0.45	0.72	0.42
6	-1.67	-1.65	-0.23	-1.06	-0.72	0.60	0.30	0.24
7	-2.23*	-2.04*	-0.33	-1.46	-1.69	-1.65	-0.40	-0.33
8	-1.70	-1.46	-0.18	-0.90	-0.63	-0.27	-0.22	-0.17
9	-1.65	-1.38	0.67	1.48	0.25	0.68	-0.58	-0.36
10	-1.08	-0.99	1.22	3.21**	1.66	2.20*	-0.92	-0.37
11	-1.25	-1.11	1.17	2.95**	1.90*	3.18**	-0.20	0.21

Table 12 (Continued)

	Dollar Devaluation		Yom Kippur War		Arab Oil Embargo		Invasion of Paracels	
Day	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.
1	-0.72	-0.84	0.50	0.05	1.35	-1.11	1.32	0.83
2	-1.27	-1.24	0.78	0.35	-0.40	0.44	0.20	-0.36
3	-0.87	-1.34	1.00	0.11	-0.65	0.34	-1.56	-1.80*
4	1.39	1.45	-0.07	-0.45	-2.25*	-1.78*	-2.27*	-2.23*
5	3.49**	3.84**	0.80	0.68	-2.37*	-1.89*	-1.05	-1.30
6	4.14**	4.14**	0.83	0.62	-2.68**	-2.13*	-1.06	-1.27
7	1.45	1.45	0.10	0.13	-2.54**	-1.94*	-0.64	-0.70
8	0.84	0.82	-1.35	-1.11	-1.90*	-1.58	-0.03	0.04
9	1.58	1.40	-0.40	0.44	-1.93*	-2.55**	0.75	0.86
10	1.94*	1.73*	-0.65	0.34	-1.30	-1.61	-0.38	-0.13
11	0.90	0.91	-2.25*	-1.78*	-0.80	-0.94	-0.63	-0.39

	T'eng's Rise		Collapse of Saigon		Chou's Death		Peking Riot	
Day	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.
1	2.50**	2.68**	-0.20	0.28	0.67	0.99	0.33	0.68
2	2.07*	2.26*	-0.40	-0.07	0.53	1.17	-0.37	0.06
3	1.85*	1.69	-0.20	0.00	2.43*	2.80**	0.32	0.60
4	0.97	0.61	-0.57	-0.44	2.77**	2.74**	-0.49	-0.34
5	1.46	1.20	-1.20	-1.16	2.56**	2.29*	-1.01	-0.73
6	2.24*	2.06*	-0.16	-0.04	2.51**	2.14*	0.46	0.81
7	1.10	1.19	0.31	0.35	2.90*	1.90*	0.06	0.29
8	0.00	0.15	1.18	0.87	2.40*	2.48*	-1.79*	-1.53
9	0.09	0.25	1.17	1.03	0.93	1.15	-2.59**	-2.87**
10	-0.01	-0.07	-0.66	-0.45	1.76*	1.94*	-2.90**	-3.41**
11	-1.55	-1.27	-0.79	-0.36	0.66	0.76	-1.92*	-2.72**

Table 12 (Continued)

	Mao's Death		Gang of Four		Shah's Exile		Invasion of Vietnam	
Day	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.	D.J.	S.P.
1	1.09	1.50	-2.36*	-3.01**	1.36	1.36	-0.78	-0.81
2	1.43	1.78*	-2.19*	-2.67**	0.66	0.77	-0.12	0.12
3	1.99*	2.31*	-2.87**	-3.28**	0.83	0.88	-0.04	0.17
4	1.61	1.83*	-2.43*	-2.65**	1.33	0.81	0.02	-0.03
5	0.86	1.12	-2.86**	-2.75**	2.07*	1.54	0.04	0.25
6	0.88	4.85**	-2.72**	-2.35*	0.48	0.22	0.99	1.12
7	0.27	0.63	-1.68	-1.45	0.07	-0.06	1.04	0.75
8	-0.18	0.21	-2.18*	-1.86*	0.27	-0.15	0.35	-0.07
9	-0.09	0.38	-2.94**	-2.65**	-0.18	-0.41	-0.07	-0.43
10	0.72	1.22	-1.20	-1.13	-0.41	-0.65	-0.08	-0.11
11	1.21	1.68	-1.57	-1.64	0.18	-0.27	-1.40	-1.51

	Invasion of Afghanistan	
Day	D.J.	S.P.
1	0.57	-0.06
2	-0.60	-1.49
3	-0.58	-1.69
4	0.16	-1.58
5	-1.09	-2.51**
6	-1.31	-1.92*
7	-0.98	-1.52
8	-1.37	-1.54
9	-3.94**	-3.76**
10	-3.45**	-3.25**
11	-1.48	-1.34

*Significant at the .05 level
**Significant at the .01 level

CHAPTER 6

THE US-SOVIET RELATIONSHIP

Davis B. Bobrow

Introduction

Standard dictionaries define detente as a relaxation of tensions. Standard American political rhetoric refers to a brief historical period, not exceeding 1972-74, when relaxation took place or was thought in the United States to be taking place.[1] When we address the future of detente, we are then speculating about a psychological mood among decision makers, and about the reappearance of the patterns of action that marked the early 1970s so far as the US and the USSR were concerned.

I do not view questions about the definition of detente as of particular importance in themselves. They matter insofar as the answers have implications for the future international standing of the US and the USSR, and for breakouts from the current reality in which the superpowers are poised for war with each other. As for the relative international standing of the two superpowers, I

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[1] A number of the major documents can be found in Pranger, 1976. One view of the calculations and moves leading to the high point of detente appears in Kissinger, 1979. For Soviet views, see Shaknazarov, 1979; Arbatov, 1979; and Inozemtsev, 1979.

do not believe that the degree of tension in their relationship has any clear, overriding implication either as cause or effect. The breakout question, however, is more difficult.

Breakouts may be towards war or towards peace. The means for breakout consist of cooperative and conflictual actions. The impact of steps by one superpower on the actions of the other are critically important in assessing and planning for the future. To understand the consequences of interaction for war, tension, and peace, we have to come to terms with the factors that shape response patterns as well as action initiatives. Responses surely are not simply mechanically produced by what the other superpower has just done or is doing. They are influenced also by internal politics and interests, the behavior of third parties, superpower actions directed in the first instance at third parties and the images held of the other superpower which provide interpretations of its actions.[2] My own view is that, in total, the set of determining factors operates to keep the superpowers from breaking out to war or to peace with each other. Instead, they seem, at best, condemned to wander back and forth along a path from lesser to greater degrees of tension. This bounded instability in the level of tension reflects the pressures of a set of factors that

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[2]On the role of expectations and precedents, see Bobrow, et. al., 1979.

prevent both superpowers from persistently avoiding hostile or cooperative initiatives towards each other.

No single essay can comprehensively and evidentially deal with all the pertinent considerations, and this chapter is no exception. What it will try to do is to bring a political perspective to the future of the relationship through two kinds of arguments. The first, in the next section, presents some assertions about political dynamics. The second draws on three bodies of systematic evidence about periods in the past and projects their implications into the future. This sort of "as if the future will resemble the past" thinking has very serious limitations. Still, it provides one set of conjectures that merit consideration. Each of the three bodies of evidence is comprehensive within its ground rules, rather than providing only supportive examples for some preconception. Lenin long ago pointed out the value of comprehensive bodies of evidence over examples, and on that point I agree with him.[3] None of these data sets deals with military capabilities or

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[3]Lenin's enjoinder was that

> . . . it is necessary to take into consideration not individual facts but the whole of facts relevant to the problem under study without any exception, otherwise a suspicion and at that a totally justified suspicion may arise that the fact has been selected or fitted arbitrarily, that instead of objective relevance and interdependence of historical phenomena as a whole, the reader is fed a subjectively prepared mish-mash . . . .

This observation is from his "Statistics and Sociology," as quoted in Pastusiak, 1976.

economic stocks or flows. Those factors are obviously of great importance, and there is no intent to deny that. But political activity and interpretation patterns also matter, and the following pages address them as one important ingredient in looking ahead on the basis of history. By now, the many caveats on what follows should be clear, and repeating them should be unnecessary.

Some Political Perspectives

The most likely future has the US and the Soviets avoiding war or peace with each other, with fluctuating degrees of tension in their relationship. This section briefly puts forward some views that lead to that forecast. It also rejects the ostensibly attractive linkage between a US policy of confrontation with the Soviets and an improved US international standing.

Neither superpower will be able to develop a stable political consensus in favor of granting full legitimacy to the other or of waging a general nuclear war. Groups with political veto power in the US and the USSR will believe that the other superpower will make either extreme strategy unrewarding. Accordingly, both superpowers will pursue mixes of policy, some cooperation and some conflict, some accommodation and some hostile assertion. The composition of the mix will vary, but over time, it will be drawn back to some historically centrist position from a preceding deviation.

Because the historically legitimate position among the political elites of both the US and the USSR is one of high war readiness, it will be more difficult to sustain low degrees of tension than high degrees of tension. Skeptics about accommodation can always argue, in Yair Evron's phrase (1973: 172), that the pursuit of a "compartmentalized policy" demonstrates that the adversary had, indeed, an "integrated and coordinated aggressive policy." High expectations for accommodation can be discredited fairly easily.

Yet there are also constraints on assertion. Opponents of accommodation are often advocates of deterrence through strength but seldom advocates of general war. Indeed, they often argue that they seek to lower its probability. So long as both superpowers pursue mixed courses of action, the opponents of unrestricted confrontation will also have persuasive arguments. And there is no compelling reason to expect high hopes for confrontation to be met fully. No particular mix of superpower actions in the intermediate zone between war and peace will seem to work very well in the coming years. By "work well," I mean work to lessen significantly the dangers the US and the USSR pose to each other, the support they provide to each other's enemies and obsessions, and the burden of military expenditure. As a result, there will be continued pressures to alter the prevailing mix of cooperative and conflictual actions.

Making the mix stable requires a high order of political leadership and skill in the conduct of domestic politics and international affairs. Although their internal politics are vastly different, the task exceeds the capabilities of US and Soviet regimes based on tenuous coalitions. These regimes are especially likely to succumb to the demands of domestic critics and find it difficult to fulfill understandings into which they or their predecessors entered with the other superpower. Perhaps, as a result, they tend to resent actions by the other superpower --striking initiatives of conflict or cooperation--that worsen their already difficult internal political situation. They are particularly attracted to opportunities for aggrandizement as a way of preempting domestic criticism, and in some ways are surprised at and resentful of hostile responses that present politically stressful choices between backing down or engaging in unwanted commitments and investments.

When the current mix of actions towards the traditional adversary represents a departure from historical practice or ideological norms, weak regimes are extraordinarily dependent on quick positive feedback. They are very vulnerable to developments that look like losses for, or attempts to inflict losses on, their nation. Obviously, so long as both superpowers pursue mixed strategies, evidence of such attempts will present itself. The need for

strong and quick positive feedback becomes even greater. When both regimes are weak, the pressures to revert to previsouly legitimized courses of conduct not only seem strong but do not seem politically worth resisting. Even if only one superpower regime is politically weak at home, leaders of the other are tempted to conclude that it makes no sense to invest in cooperative policies involving political penalties at home and little prospect for rewarding responses from abroad. Leaders are at least equally tempted to seize opportunities for national enhancement abroad when restraint would involve almost certain political costs at home and assertive action holds little prospect of a decisively costly response by the other superpower.

Since tense relations with the other superpower have political legitimacy, even regimes that prefer to alter the mix in the direction of less conflict and more cooperation pursue a set of insurance actions. These stress military preparations to insure their nation against a loss of position and to provide the government with some ammunition to deal with internal critics and competitors. These actions nourish pressures to moderate the pursuit of reduced tensions. If even the proponents of detente admit the need to insure against its demise, then surely more prudent views are justified. Insurance or hedging actions make regimes pursuing detente hostage to their domestic skeptics, and this bondage can be relaxed--if at all--only by the behavior of the other superpower. Yet, most insurance actions

are hard to distinguish from preparations for aggrandizement, that is, from the use of detente to prepare to submerge the traditional adversary.[4] The prudent and political adversary response is also to insure or hedge, and also in ways that may indicate aggrandizing intentions. The US and Soviet regimes will be unable to provide quick positive feedback to each other about the rewards of accommodation that is more politically potent than the chilling implications of insurance/aggrandizement activity.

However, given the political legitimacy of avoiding general war, even regimes whose preferred mix has more confrontation and less accommodation pursue insurance actions. They refrain from hostile acts and take cooperative initiatives. In this instance, it is hard to tell whether the actions indicate a desire to reduce tension or simply to control escalation. Here, too, analogous dynamics work to blunt possibly persuasive positive feedback from the prevailing policy of confrontation.

The factors that make for regression to the mean in superpower policy may be supported also by third-party governments, if the latter believe their own interests to be threatened by extremes of US-Soviet cooperation and conflict.

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[4]On the content of submergence and the differences between it and other futures that might be pursued, see Hamburg, 1975. On attaching a threat interpretation even to events expected before entry into detente, see Freedman, 1977.

Placed in this sort of field of forces, political leaders can react in one of three basic ways. First, they can swing pendulum-like from one extreme degree of tension to another. Second, they can seek management control internally and externally by a coordinated mixing of their policy instruments so as to stay near an historically established central tendency on the tension spectrum. Third, they can try to satisfy all their internal political factions simultaneously by decoupling tension-reducing and tension-increasing lines of policy.

It would be unduly tedious to go through the implications of every possible combination of US and Soviet leadership behavior across these three modes. However, a few do merit mention. If both engage in pendulum-like activity and swing in the same direction at the same time, perceptions of an impending breakout to war or peace will be especially high. If both regimes are in this mode but out of synchronization, expectations for a striking success through coercive diplomacy will be especially high. If both are in a management mode, breakouts are and will seem quite unlikely. The policy of each will seem coherent and predictable to the other, and relationships may well be stable and be felt to be so. If both sets of leaders decouple their confrontation and accommodation lines of policy (not two tracks but two railroads), the result will be mutual confusion and irritation, continuous intragovernmental conflict in each

nation, and a chronic resort by the highest political officials to patching up relations and policy inconsistencies. Unfortunately, for the sake of simplicity, there is no particular reason to expect that the US and the Soviet leadership will be in the same mode at any particular point in time.

The significant possibility of the system being out of synchronization politically reflects differences in their institutional and group structures, in the time span and sensitivities of their policy processes (discussed later) and in the timing of their respective military development and procurement programs.

Some of the more important disparate cases, as we shall see, do need to concern us. If one side manages and the other oscillates, we can expect the manager to achieve some exploitative gains but to exercise enough foresight to avoid breakout. If one side oscillates and the other decouples policy, chaos and loss of control by both governments over the tide of events become especially probable. No one has his eye on maintaining the system of US-Soviet relations. Finally, if one of the superpower regimes seeks to manage and the other to decouple confrontation and accommodation, acrimony is a likely result. The managerial government becomes increasingly irritated with the problems posed by the other, even though it can often gain some marginal benefits because it knows more clearly what it wants. The managerial mode is more conducive to making initially low commitment probes and, should the lack of

response warrant, following up with what are likely to be decisive actions. The style is similar to opportunism coupled with cutting one's losses should the opportunities come to seem inordinately costly.

Of course, this pattern, in and of itself, affects the behavior of the uncoordinated government. First, it engenders anger at the unresponsiveness of the manager to particular initiatives and at chronically opportunistic moves. Second, it generates increased domestic criticism of the uncoordinated government for failure to deter successful opportunism and "face up to" the inherently aggrandizing nature of the adversary. Third, in an effort to divert such criticism, the uncoordinated government may let some of its arms behave in a similar fashion but less decisively and with less capacity to pull them back should probes and partial commitments turn out to be very costly and unproductive. After all, if you want to go everywhere, no road will get you there.

These political possibilities are affected by the prevalence of beliefs in either the US or the Soviet elite of two kinds. The first concerns the extent to which one's own system is on the brink of irreversible decline or, instead, has a bright long-run prospect. Long-run optimism is conducive to patience and the management mode referred to earlier. In contrast, pessimism leads to a rapid swing towards confrontation, as in the currently fashionable "neo-Spenglerian" view of the US (see, e.g., Podhoretz,

1980). Some of the more obvious lines of action that follow from this sort of fear are probably self-defeating for the international position of the US. As Americans certify their decline, third countries have greater reason to hedge their bets on the US. As Americans begin noisily to initiate long lead-time actions to remedy the situation, a truly Machiavellian adversary has high incentives to extract gains in the interim. As Americans reject such pessimism and US leaders, instead, claim to have gained disproportionately in recent years, the Soviet leadership will find it increasingly difficult to refrain from confrontation or to pursue accommodation. Should Soviet leaders also trumpet their more successful statecraft, those Americans who doubt the neo-Spenglerian vision will be less credible.

The second belief involves the extent to which all setbacks and challenges in the world are attributed to the other superpower versus acknowledgment of other forces at work. Because I believe in the powerful operation of other forces, the attribution of all US setbacks to the Soviets or vice-versa seems not only wrong but actively self-defeating as well. For the coming years, emphasis by US elites on the Soviet "hand" will operate to persuade third parties that the Soviets are, indeed, inordinately powerful and clever, and that the US simply cannot relate to third-party problems and ambitions. Should the Soviet elite propagate an analogous conception, it should expect equally unattractive results. Such views require of the other superpower politically

impossible and often extraordinary acts of self-restraint and self-abnegation. And they nourish the view among the war-fearing allies of the US and the USSR that their superpower will involve itself in and drag them into unrewarding and unnecessary conflicts with the other superpower. In a period of change in much of the world, this two-person Monopoly game view of international politics on the one hand makes global detente seem the only kind of detente worth having, and, on the other hand, makes it impossible. Neither superpower can manage third-party actions that well.

Drawing on the Past

This section summarizes and extrapolates from three bodies of information. They deal with patterns in the Soviet and US use of military instruments, the usefulness of different images of fundamental US and Soviet political strategy, and relationships within and between US and Soviet pro- and anti-detente actions in the years 1968-75. I do not advise anyone to accept the extrapolations that follow as correct or precise, but rather to view them as one set of crude expectations that should be considered along with other possibilities. As a general caution, the data and measures are replete with problems. The references report, in great detail, the nature of these problems and the many analytic decisions on which the numerical findings rest.

For our purposes, the absence of trends and relationships, as well as their presence, has importance.

Discrete Uses of Military Instruments

This section examines patterns in the uses by each of the two superpowers of their military instruments in discrete political-military operations, i.e., in the sorts of situations often thought of as international crises or at least unusually tense regional situations with an abnormally high potential for generally affecting relations and evolving into prolonged violence. We draw on the comparable studies by Blechman and Kaplan (1978) of US actions, and by Kaplan (1979) of Soviet actions since World War II. Their data cover, for each superpower since the end of World War II, the universe of instances "when physical actions are taken by one or more components of the uniformed military services as part of a deliberate attempt by the national authorities to influence, or to be prepared to influence, specific behavior of individuals in another nation without engaging in a continuing contest of violence" (Blechman and Kaplan, 1978: 12). Actions fall within their definition if:) force dispositions were physically changed; 2) a specific political impact was a significant national government objective; 3) political influence was sought rather than the physical imposition of will; 4) initiation of war was not intended, even if it did result; and 5) some specific behavior was sought from the targets of the action. We

shall summarize some key elements of their findings for each of the superpowers, and then hazard some projective implications.

For the Soviets, the only clear trends in the location and political-military context of such actions are the decline in the percentage taking place in Europe (from 83% in 1953-65 to 11% in 1977-79) and those centered on security relations in the West. In terms of the frequency of coercive uses of their military, the Soviets have fluctuated, and there is no particular trend (see Table 13). There was fluctuating use during the approach to detente, high incidence during the peak years of detente (1973-74), subsequent reductions and resurgence in frequency only in 1978. The right-hand column in Table 13A shows the percentage of instances of Soviet use where the US also used its military instrument. It seems to be declining, but not in response to Soviet abstinence. Indeed, reductions or increases in Soviet use are not accompanied by a fully matching change in the frequency of associated US military activity. It appears as if the Soviets periodically discover the limited value of frequent and of infrequent use, but this discovery does not seem to be simply and strongly related to US military activity or quiescence.

Major US and Soviet characteristics during the same year throw little light on the frequency of Soviet use. The correlational relationships are described in Table 14. Familiar factors are used to understand Soviet behavior.

Table 13

Soviet Coercive Uses of the Military

Time Period	Number	Annual Average	Cases Where US Also Used Military (Pct)
A. General Patterns			
Oct. 1956--Dec. 1962	29	4.6	66
Jan. 1963--April 1967	7	1.6	75
May 1967--Nov. 1974	46	6.0	33
Dec. 1974--Oct. 1977	5	1.7	40
Nov. 1977--June 1979	9	5.4	20

B. The Recent Past

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Number	6	8	5	8	5	2	8	5	2	3	1	7

Source: Kaplan, 1979, Chap. 2, pp. 4, 5, 51, 52.

Table 14

Correlational Power of Fundamental Factors for Soviet Behavior

	Do Incidents Increase?	Is There a Statistically Significant Relationship?*
When Soviet strategic force ratio is better	Yes	No
When Soviet GNP or defense spending grows	GNP No Defense Yes	No No
When US economy stagnates	No	No
When US president is unpopular	Yes	Yes
When US defense spending is flat	No	No
When general US-Soviet tension increases	No	No
When Soviets perceive numerous crises	No	No
When Soviet leadership has just changed	No	Yes

*At the .05 level.

Yet many of them simply are not particularly helpful: changes favoring the Soviets in their strategic force ratio with the US; increases in the Soviet gross national product or defense spending; stagnation of the US economy; lack of growth in US defense spending; general increases in US-Soviet tension; or Soviet leadership perceptions of many rather than few crises. The strongest relationship is between the recent advent of a new Soviet leadership and a decline in Soviet coercive uses of the military instrument, a decline that is reversed as the leadership continues in office. The relationship with US presidential popularity is intriguing but may reflect the unpopularity of the American president after, rather than at the time of, Soviet military activities.

For the US, the last full year of the data base is 1974. Using the three available time periods similar to those given for the Soviets in Table 13A, we see some evidence of a declining trend in the percentage of actions taking place in the Western Hemisphere and in Sub-Saharan Africa and South Asia. Although there is no trend with respect to Europe, that arena sees many fewer cases than do Latin and Central America, the Middle East and North Africa, and East and Southeast Asia. Although data on Soviet military involvement in the pertinent cases are incomplete, the percentage of cases of Soviet involvement seems to have been relatively constant since 1956, at about 15-20%. As shown in Table 15, the US resembles the Soviets in the

Table 15

US Coercive Uses of the Military

Time Period	Number	Annual Average
A. General Patterns		
Oct. 1956--Dec. 1962	61	9.7
Jan. 1963--April 1967	53	12.1
May 1967--Dec. 1974	32	4.1

B. The Recent Past

	1967	1968	1969	1970	1971	1972	1973	1974
Number	4	4	3	6	4	3	6	2

Source: Blechman and Kaplan, 1978, pp. 549-53.

absence of any particular trend in the frequency of such actions and in the fluctuation of their incidence. Given the loose coupling in superpower activity noted previously, it is not surprising that in the relatively recent past (Table 15B) US, as well as Soviet, frequencies changed in the same direction from year to year and were relatively high during the peak period of detente.

An overlapping but not identical set of general factors were explored for possible explanations of change in the incidence of pertinent US actions. The correlational relationships are described in Table 16. Familiar factors used to understand US behavior do seem to have explanatory power, at least in a co-occurrence sense. The US seems more prone to engage in discrete coercive uses of the military when it has more nuclear superiority relative to the USSR, its economy is vigorous, its president is popular at home, the international environment is turbulent, its forces are not heavily engaged in a massive conventional war, and the memory of such wars has faded somewhat. Fortunately, Blechman and Kaplan provide us also with a regression analysis which sorts out problems of simultaneity. They conclude that a powerful explanation lies in the simultaneous operation of temporal distance from major conventional war involvement, economic vigor, and presidential popularity. The first dominates in importance (Blechman and Kaplan, 1978: 27-31).

Table 16

Correlational Power of Fundamental Factors for US Behavior

	Do Incidents Increase?	Is There a Statistically Significant Relationship?*
When US strategic force ratio is better	Yes	Yes
When US president is popular	Yes	Yes
When US economy is healthy	Yes	Yes
When US perceives numerous crises	Yes	Yes
When US is not engaged in Korean and Vietnam Wars	Yes	Yes
When US has not been engaged in those wars in past three years	Yes	Yes

*At the .05 level.

Simple, linear views of trends in Soviet engagement in discrete military operations, or of its relationships with general features of the US and Soviet systems, will not be very informative if the future resembles the past. As for the US, the most important general factors are, in the last instance, internal. I refer to the fading of conventional war memories, economic vigor, and presidential popularity. Some more specific extrapolations follow.

-- Problems posed to either superpower by the discrete military actions of the other will mostly occur outside of the established NATO-Warsaw Pact theater.

-- Superpower engagement in discrete military operations will not be tightly linked to the state of cooperation in their direct relations. We should not expect the frequencies of such actions to decline with a resurrection of detente or to soar should detente wane once again.

-- Changes in strategic military or economic capacity and vigor will not have any particular short-term effect on Soviet coercive uses of the military.

-- With a new Soviet regime, the incidence of discrete military operations will be low, only to rise after several years and then level off.

-- As Vietnam war memories fade and the US economy recovers, and if the incumbent president is popular,

the US will increase its use of discrete military operations.

-- Increases or decreases in the frequency of such actions by one superpower will be accompanied by similar shifts by the other, although most incidents will not involve direct, avowed confrontation by their official uniformed forces. The climate either one creates seems to legitimate matching behavior by the other. Third parties will be the predominant direct targets.

To conclude this part of our discussion, it is important to keep in mind that the data reported do not deal with covert action, overt action by proxies, deliberate initiation of wars, or long-standing situations of massive military preparedness and confrontation short of war. Keeping these exceptions firmly in mind, Europe stands out as a stable area where both superpowers are particularly likely to show restraint in terms of the behavior discussed in this section. This fits with perceptions of West European leaders since 1963 that tension is relatively low.[5] The likelihood of a surge of discrete military operations by both superpowers at the same time will be most dangerous should we face a confluence of the following circumstances:

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[5]There is substantial evidence that detente in Europe began not later than 1963, and has persisted since then. See Goldmann, 1973, 1974, and 1977, pp. 46-47; Mahoney, 1977.

the Soviet leadership, after being in office for several years, faces a US administration that is "forgetful" of the last major conventional war involvement, is riding an economic recovery, and is popular at home. This, of course, is not an unlikely situation for the mid-1980s.

Expectations from Strategic Images

This section draws on an unusually systematic study of the predictive value of different images of US and Soviet political strategy by William Gamson and Andre Modigliani (1971). The period covered took place long ago (January 1946-November 1963), but current US debates keep referring to it, and the alternative strategic images of the US and the USSR in the current US debate are not much different from those considered by Gamson and Modigliani. What they do is reason from 1) alternative images a side (West and Soviet) holds of itself and the adversary, to 2) how each will interpret different forms of behavior by the other, and thus arrive at 3) expectations about responses to each other's pattern of behavior when one or another strategic image operates. They then compare the expectations with about sixty Soviet and sixty US actions. As for capabilities, they simply assume them to be equal. And they assume that the West and the Soviets make decisions with an eye to the reactions of the other.

Table 17 summarizes the elements of each strategic image and the alternative codes for each element, the

Table 17

Assessing Strategic Images

	Alternative Codes			
Image Elements				
Own goal	Consolidate Sphere	Expand Sphere	Destroy	Other
Adversary perception own goal	Consolidate Sphere	Expand Sphere	Destroy	Other
Own perception adversary goal	Consolidate Sphere	Expand Sphere	Destroy	Other
Behavior Patterns				
Belligerent (extremely, quite, fairly)				
Balanced (firm, 50-50, flexible)				
Accommodative (fairly, quite, extremely)				
Inconsistent				
Responses				
Refractory				
Conciliatory				
Neutral				

Table 17 (Continued)

Interpreting Accommodative and Belligerent Behavior

If a coalition's strategic goal is:	And if its own recent behavior has been:	Then it will view the adversary's accommodative behavior as:
Destruction	Anything	Lax
Expansion	Belligerent	Lax
	Non-belligerent	Lax or receptive
Consolidation	Anything	Receptive

If a coalition's reflected image and perception of the adversary's goal are, respectively:	And if its own recent behavior has been:	Then it will view the adversary's belligerent behavior as:
Expansion & consolidation	Anything	Resistant
Expansion & consolidation	Belligerent	Resistant or aggressive
	Non-belligerent	Aggressive
Consolidation & expansion	Anything	Aggressive

Source: Gamson and Modigliani, 1971, p. 63.

alternative behavior patterns and the response codes (expected and actual), and traces some of the interpretations.

Only two images of the Soviets correctly predicted Soviet responses much more than half the time, or did appreciably better than a coinflipper. The most successful (73%) had the Soviets trying to consolidate their own sphere of influence, believing that the West perceives that as their goal, and perceiving the West as seeking to expand its sphere of influence. The image in which the Soviets attribute expansion goals to themselves and the West and hold that the West thinks that the Soviets seek only consolidation does almost as well (69%). Images of the Soviets pursuing the destruction of the West or conceiving of both sides as expansionist with an aware West did poorly. The relative performance of the images is about the same if we look separately at predicting Soviet refractory and conciliatory responses.

How well do the various Western images of Soviet strategic thinking predict Soviet responses to the three broad lines of Western action (belligerent, balanced, accommodative)? The two images just mentioned were the most helpful for all three courses of Western action, as we have indicated. However, their success rate for Soviet responses to belligerent patterns was just over 50%, not much better than that of numerous other images. If none of the images is good at predicting responses to belligerence, many are quite successful at predicting responses to balanced or accommodative Western behavior.

Appraisals of Soviet strategic views and responses clearly depend very much on the range of Western policy stimuli that we look at. A defensible case can be made for numerous views. However, if we had to pick one image, the most helpful would be that of a consolidationist Soviet Union convinced that the West understands it correctly but, nevertheless, continues to try to expand its sphere of influence. The pertinent findings appear in Table 18.

What about the West? The aggregate findings for alternative images of Western strategy and the expectations to which they give rise are strikingly similar. The most successful image sees the West as pursuing consolidation, perceiving the Soviets as aware of that and viewing Moscow as committed to expansion (82% success rate). The image in which both sides seek expansion, with the Soviets mistakenly perceiving the West as intent on consolidation, does almost as well (78%). The other images do poorly for the total set of cases, and the two mentioned are strikingly successful for both refractory and conciliatory responses. Many other images do quite well at predicting only refractory Western responses. When we look separately at predicting Western responses to Soviet belligerence, balance, and accommodation, the findings are less like those for images of Soviet strategy. The scores appear in Table 19.

In contrast to the images of Soviet strategy, those of the West do better at predicting response to belligerent than to accommodative behavior. Similarities include the

Table 18

Success Rates for Western Images of Soviet Strategy
by Type of Western Behavior Patterns

	Belligerent Patterns			Balanced Patterns			Accommodative Patterns		
Belief System*	Number of Predictions	No. of Correct Predictions	Success Rate (Pct)	Number of Predictions	No. of Correct Predictions	Success Rate (Pct)	Number of Predictions	No. of Correct Predictions	Success Rate (Pct)
CCE	13	7	54	24	19	79	8	7	88
ECE	13	7	54	24	19	79	8	5	62
DEC	13	6	46	22	15	68	8	1	12
DEE	11	4	36	22	15	68	8	1	12
CEE	11	4	36	24	7	29	8	7	88
EEE	11	4	36	24	7	29	8	5	62
EEC	13	6	46	37	10	27	8	5	62

*Belief System Key: C = Consolidation; E = Expansion; D = Destruction. The first letter refers to the Soviet goal; the second to the Western perception of the Soviet goal; the third to the Western goal.

Source: Gamson and Modigliani, 1971, p. 83.

Table 19

Success Rates for Possible Soviet Images of Western Strategy by Type of Soviet Patterns

	Belligerent Patterns			Balanced Patterns			Accommodative Patterns		
Belief System*	Number of Predictions	No. of Correct Predictions	Success Rate (Pct)	Number of Predictions	No. of Correct Predictions	Success Rate (Pct)	Number of Predictions	No. of Correct Predictions	Success Rate (Pct)
CCE	16	13	81	28	25	89	13	9	69
ECE	16	13	81	28	25	89	11	5	45
DEE	15	7	47	26	20	77	13	4	31
DEC	16	3	19	26	20	77	13	4	31
CEE	15	7	47	28	6	21	13	9	69
EEE	15	7	47	28	6	21	11	5	45
EEC	16	3	19	32	6	19	11	5	45

*Belief System Key: C = Consolidation; E = Expansion; D = Destruction. The first letter refers to the Western goal; the second to the Soviet perception of the Western goal; the third to the Soviet goal.

Source: Gamson and Modigliani, 1971, p. 89.

presence of numerous images that predict well the Western response to balanced Soviet behavior and one particular image which others never surpass in performance.

We now turn to some extrapolations:

-- The West will be surprised more frequently by Soviet responses to a "hard-line" policy than by responses to balanced or accommodative policies.

-- The Soviets will be surprised more frequently by Western responses to a "soft-line" policy than by responses to balanced or belligerent policies.

-- If political leaders tend to become disenchanted with policies that have unexpected responses, Western leaders will tend to back away from belligerent lines of action and Soviet leaders from accommodative ones.

-- Debates in either camp about the other's fundamental strategy which fail to examine responses to belligerent and balanced and accommodative courses of action will be inconclusive and possibly misleading.

-- The most generally informative image of each side's fundamental strategy has the West and the USSR each conceiving of itself as pursuing consolidation, the other side accurately perceiving that, and the other side being intent on expansion.

-- Decision-making processes in each side will tend to dismiss the possibility that its own goals are threatening to the other and that its own actions are perceived as signs of aggressive intentions. They will stress that the other will expand unless contained or constrained in some fashion.

US-Soviet Event Interaction: 1968-75

Our third body of data consists of actions initiated by the US towards the USSR and by the USSR towards the US during the years 1968-75. We place these actions into pro- and anti-detente categories (accommodation and conflict) and thus allow the governments to have four options: 1) to take accommodative action; 2) to refrain from accommodative action; 3) to take conflictual action; and 4) to refrain from conflictual action. The kinds of acts classified as pro- and as anti-detente are listed in the Appendix. The events are not assigned differential importance, come from the public record (The New York Times), and are combined by month.[6]

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[6]The data are aggregated from the World Event Interaction Survey, developed by Charles McClelland, who has generously shared them. With respect to limitations, they deal only with non-routine public activity as reported in one source (The New York Times). Long-term flows, secret actions, and the reportage of sources with different national sensitivities are not reflected. Neither are domestic developments in the US or the USSR. I chose to exclude initiatives by the two superpowers towards each other played out through third parties. With use of the month as our time unit, fine-grain analysis of temporal reactions is

We begin with three sorts of average monthly scores for each year. The number of events reports the frequency of each kind of activity by each country. National account percentages summarize the emphasis in each superpower's activity. For example, the larger the percentage of US actions that were in the pro-detente account, the smaller the percentage in the US anti-detente account. Finally, national contribution percentages measure the superpowers' proportional contributions to the total amount of activity between them. For example, the higher the percentage of total pro-detente actions initiated by the US, the smaller the share provided by the Soviets. These last measures trace the symmetry in the extent to which each puts forward conflictual or cooperative actions. The basic data appear in Table 20.

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precluded. Events are not weighted for importance. (On general limits and technical exploitation of this sort of data, see Hayes, 1973; Job, 1977; and Bobrow, et al., 1979.) On the other hand, these limitations may not be so dysfunctional compared to readily available alternatives as they seem at first glance. The logic of detente called for non-routine, public cooperative activity. Surely, if detente existed at all, it should have existed in the direct relations between the superpowers. As for weighting events in terms of importance, we have no reason for great confidence in any particular set of values we may attribute to the Soviets or any particular justification for mechanically applying a set of weights for Americans to Russians. Use of a monthly unit of time is realistic given our limited ability to date precisely the occurrence, let alone superpower government leaders' awareness of events from the public record. We know that many public events are previously communicated to other regimes through official channels, and we know that many are "noticed" by governments through their intelligence activities prior to "public occurrence" and reporting.

Table 20

US and Soviet Pro- and Anti-Detente Event Activity

	1968	1969	1970	1971	1972	1973	1974	1975	1968-1975
Number of Events									
US pro-detente	2.9	5.0	6.8	6.3	7.3	12.0	10.8	3.8	6.7
US anti-detente	3.9	2.6	3.9	4.4	3.1	4.3	1.5	.6	3.1
USSR pro-detente	2.4	4.8	5.8	3.8	6.8	12.3	9.8	3.6	6.2
USSR anti-detente	6.0	4.3	8.4	7.8	5.5	5.8	4.4	2.4	5.6
National Accounts									
US initiations pro-detente	43	66	64	59	70	74	88	86	62
USSR initiations pro detente	29	53	41	33	55	68	69	60	53
National Contributions									
US initiation of total pro-detente actions	55	51	54	62	52	49	52	51	52
US initiation of total anti-detente actions	40	38	32	36	36	43	25	20	36

As usual, one can choose indicators to reflect different policy perspectives and support different historical judgments. Does a relaxation of tensions primarily involve increases in cooperative action and relatively equal amounts of such actions by the parties involved? If so, detente did come and go. Absolute levels of pro-detente activity by the US and the USSR were quite similar throughout. Each provided about half of the total number of cooperative initiatives. There was a clear rise in volume, peaking in 1973-74, with a sharp decline in 1975. On the other hand, does a relaxation of tensions primarily involve decreases in conflictual actions with both parties giving such actions an equally small part in their policy? The Soviets consistently produced more conflictual actions than the US and allotted a larger share of their total number of activities to tension-arousing or tension-maintaining acts. Accordingly, they provided a disproportionate share of all the anti-detente actions. At first, the latter view brings the data to suggest a pattern of Soviet exploitation of US softness. On second glance, there is fragmentary evidence, the especially low number of Soviet anti-detente actions in 1975, that detente was beginning at the very end of the period covered by the data. The record in Table 20 provides ammunition to both opponents and proponents of detente in the US.

Most of us believe that both pro- and anti-detente activity matter. Yet, in terms of simultaneous correlations,

the two streams of action are not strongly related. Correlations between a superpower's pro- and anti-detente activity levels are weak as are those with other sorts of activity by the other superpower. The frequency of pro-detente actions by each is strongly related to that of the other (86% of the variance). The analogous relationship for anti-detente frequencies is much weaker (29% of the variance). Pro-detente activities seem, then, to be externally coupled. By comparison, the superpowers' anti-detente frequencies seem to be more closely related to their general policy emphasis (45% of the variance for the US; 27% for the USSR).

The apparent decoupling between pro- and anti-detente actions deserves exploration. Are both sides in the "two-railroad" rather than the managerial or oscillation modes we introduced earlier? We turn to multiple regression analysis to explore the relative importance of different factors in producing the absolute volumes of superpower pro- and anti-detente activity and changes (first differences) in those volumes. We use both concurrent factors and those for the previous time period (the preceding month). The numerical results and the explanatory factors appear in Table 21. For example, we regress the volume of pro-detente events by the US against the concurrent volume of US anti-detente activity, concurrent pro- and anti-detente activities by the Soviets, previous period volumes of both sorts of actions for each superpower, and previous

Table 21

Impacts on Pro- and Anti-detente Activity*

	Bs**									
	1	2	3	4	5	6	7	8	9	R^2
Raw Frequencies										
US pro	.11	.88	.05	-.05	-.11	.16	-.00	-.00	-.01	.94
US anti	.18	.22	.03	.52	-.09	.04	-.13	-.00	-.02	.72
SU pro	-.04	.93	.02	-.17	-.01	.15	.04	.01	.01	.93
SU anti	-.14	.49	.19	.04	-.40	.14	.44	.05	-.01	.63
Frequency First Differences										
US pro	-.06	.79	-.17	-.12	-.12	.17	.03	-.11	-.05	.72
US anti	-.07	.23	.36	.10	-.06	.04	.00	-.28	.04	.47
SU pro	.17	.56	.24	-.18	-.01	-.03	.11	-.21	.34	.79
SU anti	.29	.33	-.26	-.21	.17	-.17	.05	.15	.41	.46

*Number of observations: 94 .

**Columm Key (Bs)

1. Own concurrent activity on the other account.
2. Other's concurrent activity on the same account.
3. Other's concurrent activity on the other account.
4. Own previous period activity on the same account.
5. Own previous period activity on the other account.
6. Other's previous period activity on the same account.
7. Other's previous period activity on the other account.
8. Own previous period percentage allocated to the same account.
9. Other's previous period percentage allocated to the same account.

period US and USSR emphasis on pro-detente activities. The right-hand column (R^2) in Table 21 reports the total explanatory power of all these variables. Columns 1-9 report the magnitude and direction of impact of a unit of change in an explanatory variable on the dependent variable, e.g., the volume of US pro-detente events. Since the data and measures are ill-suited to regression analysis, no confidence should be placed in specific numerical values. At most, only cautious "ordinal"--i.e., relatively more or relatively less--interpretations are warranted.

We do better at explaining absolute activity levels than changes in them, and at explaining pro-detente behavior than anti-detente behavior. Weak explanations (low figures in the R^2 column) tell us that factors outside our equations are particularly important for understanding changes in anti-detente activity by the US and the USSR.

When we turn to US pro-detente behavior, we find that absolute activity levels and changes strongly and simply match concurrent Soviet pro-detente activity and changes in it. The absolute level of Soviet pro-detente activity is similarly related to that of the US. However, changes in Soviet pro-detente activity frequencies show more complex sensitivities. Current changes in US pro-detente activity do have the most impact. There seems to be a tendency to respond imitatively to US changes in pro-detente emphasis in the recent past. Some "course correction" tendencies also are at work. Changes in Soviet pro-detente activity

"balance" somewhat changes in Soviet anti-detente activity, US anti-detente activity, and prior shifts in Soviet emphasis. Increases in anti-detente activity by either side induce a lesser degree of Soviet increase in pro-detente activity; decreases in anti-detente activity. Soviet pro-detente activity moves in a direction opposite to prior change in Soviet emphasis. At least with respect to pro-detente activity frequency changes, the Soviets seem to be acting much more in the managerial mode introduced earlier than is the US. US behavior with respect to pro-detente courses of action seems to be decoupled from the past and from the world of US and Soviet anti-detente practices.

Do these patterns repeat themselves for anti-detente activity? US absolute activity levels are most sensitive to US practice in the recent past and, secondly, to current Soviet anti-detente activity. Changes in US anti-detente activity levels show different sensitivities. Although current changes in Soviet anti-detente activity are partially reciprocated, other tendencies work to avoid war and peace. Changes, albeit in an attenuated fashion, work to balance changes in Soviet pro-detente activity and correct for previous changes in US emphasis. Upward changes in concurrent Soviet pro-detente activity seem to induce upward changes in US anti-detente activity; downward changes in Soviet pro-detente activity induce downward changes in US anti-detente activity. Previous changes to emphasize pro-detente actions by the US induce subsequently changes to increase

anti-detente activities. Previous changes to emphasize anti-detente activities induce subsequent changes to lessen them.

The anti-detente activity level of the Soviets differs from that of the US in being more sensitive to current US conflictual actions, prior US pro-detente activity, and prior Soviet pro-detente activity. The last two are particularly interesting and seem to rival in importance tendencies to match US conflict initiations. High levels of prior US pro-detente activity seem to induce Soviet anti-detente activity; low levels seem to work in the opposite direction. This may or may not be exploitation and probing. It certainly is not positive feedback from a US point of view. Unlike the US, the Soviets seem to operate in a way that relates their prior investment in pro-detente activities to current anti-detente activity levels. Although, in an attenuated manner, high volumes of prior pro-detente investment operate to reduce anti-detente activities in the current period, low levels of prior pro-detente investment operate to increase them. Compared to those of the US, Soviet decisions about anti-detente activity levels seem to follow from consideration of a broader range of policy opportunities and investments.

Changes in Soviet anti-detente activity show signs of the balancing and course correction tendencies noted for changes in Soviet pro-detente activity. Current changes in US anti-detente activity produce an attenuated matching

response. The Soviets seem to change their anti-detente activities in ways that go some distance to blunt rapid shifts in their emphasis on pro- and anti-detente activities and brake momentum towards extremely high or low levels of conflictual initiatives. Unlike the US, they respond to current increases in the pro-detente activity of the other superpower with a tendency to reduce their anti-detente activity.

This collection of impact relationships suggests several relatively simple conclusions. The mode of extreme oscillation, let alone out-of-phase oscillation, particularly conducive to breakouts towards war or peace was not operating. The Soviets had more ability to affect changes quickly in US pro-detente actions than the US had to affect those of the Soviets. Compared to the US, Soviet pro-detente activity changes worked to blunt the impact of their anti-detente changes and their past shifts towards or away from tension-reducing behavior. The US moved to respond to increases in Soviet activity, of whatever kind, with more conflictual steps. The Soviets differed from the US in tending to change pro- and anti-detente behavior in the same direction and relating those changes to fluctuations in both kinds of US behavior. The impacts on Soviet behavior suggest efforts to avoid runaway, extreme Soviet policy towards accommodation or conflict and the build-up of momentum towards the peace or war poles of the US-Soviet relationship. At least

in relative terms, the US operated in a decoupled, two-railroad policy mode and the Soviets in a managerial mode.

If we extrapolate these patterns to the future, we will expect that:

-- The US and the USSR will continue to operate in ways that work to prevent breakouts to war or peace.

-- Neither side will provide the other with clear positive feedback that pro-detente actions produce tension-reducing momentum. Neither will be dramatically generous.

-- Soviet policy will show more coordination between pro- and anti-detente activity adjustments than will that of the US.

-- Soviet policy will seem more affected by previous experiences than will that of the US, which seems to operate more exclusively in the present.

-- Both sides will conclude that their short-term policy instruments have rather limited ability to affect the anti-detente activity of the other and will be skeptical about justifications for changes in anti-detente activity that emphasize the importance of conflictual initiatives by the other.

-- Course correction tendencies will be insufficient to stabilize the degree of tension in the US-Soviet relationship.

-- The Soviets will find US decoupled behavior irritating and indicative of confusion, political immaturity, and a residual tendency to react negatively to any Soviet initiatives.
-- The US will find Soviet managerial behavior frustratingly complicated and indicative of some unclear combination of organized conspiracy and flexible retention of accommodative and conflictual options.
-- US analysts will be unable to distinguish, conclusively, from overt Soviet actions towards the US, whether the Soviets have a unified leadership with complex concerns or a divided leadership with opposed policy preferences.[7]

Conclusion

The speculations about the political dynamics of the relationship and the extrapolations from historical evidence converge on the most likely future US-Soviet relationship. It is an ambiguous future, without definitive resolution and with fluctuation in the degree of tension. The general characteristics asserted in the previous pages suggest that detente had little prospect for permanence, like the Geneva spirit of 1955, the Camp David spirit of 1959, and the

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[7] On a national leadership that responds to numerous considerations, see Spielmann, 1978. On factions with different views of detente, see Spechler, 1978.

"Kennedy experiment" of 1963-64.[8] Without more fundamental changes, there is no very persuasive reason to expect a replay of these attempts to be any more successful. Our preceding arguments suggest also that shifts, of the order of previously experienced magnitudes, in gross characteristics of the US and Soviet systems will not provide us with powerful expectations about Soviet uses of military coercion. In that respect, those shifts should not inspire great fears or great hopes. Detente in Europe stands out, appropriately and feasibly to Soviet and European observers, as an island of stability amidst the variation in US-Soviet tension.

Yet, we are left with anxiety about the relationship between the US and the Soviet Union, even if each wishes to avoid extreme tension. The preceding analysis shows that short-term bilateral policy choices only weakly affect changes in their own and each other's anti-detente levels. If the anxiety leads to continued attention to and flexibility in the relationship, it may turn out to be beneficial. However, sloppy, emotional, simplistic US or Soviet leadership, bent on dramatic resolution of the relationship through a few bold strokes, may tear the bonds that keep conflict in bounds. No one should ever feel comfortable when only the wisdom of governments stands between him and muclear war.

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[8]For one relevant part of previous history, see Etzioni, 1967.

APPENDIX

AGGREGATION OF WEIS EVENT CODE CATEGORIES

Pro-detente

Comment

Comment on a situation--optimistic
Explain a policy or future position

Consult

Meet with, at a neutral site, or send a note
Visit, go to
Receive a visit, host

Approve

Praise, hail, applaud, express condolences
Endorse another policy or position; give verbal support

Promise

Promise one's own policy support
Promise material support
Promise other future support
Assure; reassure

Grant

Express regret; apologize
Give a state invitation
Grant privilege, diplomatic recognition, de facto relations, etc.
Suspend negative sanctions; accept a truce
Release and/or return persons or property

Reward

Extend economic aid
Extend military assistance
Give other assistance

Agree

Make a substantive agreement
Agree to a future action or procedure; agree to meet, to negotiate

Reques'.

Ask for information
Ask for policy assistance
Request action; call for
Entreat, plead, appeal to

Anti-Detente

Reject

Turn down a proposal; reject, protest, demand, threat, etc.
Refuse; oppose, refuse to allow

Accuse

Charge, criticize, blame, disapprove
Denounce, denigrate, abuse

Protest

Make a complaint (not formal)
Make a formal complaint or protest

Deny

Deny an accusation
Deny an attributed policy, action, role, or position

Demand

Issue an order to command, insist; demand compliance, etc.

Warn

Give warning

Threaten

Threaten without specific negative sanctions
Threaten with specific negative sanctions
Threaten with force specified
Present an ultimatum; threaten with a time limit and negative sanctions specified

Demonstrate

Demonstrate non-militarily; walk out on
Mobilize, exercise and/or display armed force

Reduce Relationship

Cancel or postpone an event
Reduce routine international activity; recall officials, etc.
Halt negotiations
Break diplomatic relations

Expel

Order personnel out of the country
Expel an organization or group

Seize

Seize a position or possessions
Detain or arrest person(s)

Force

Carry out a non-injurious destructive act
Inflict non-military injury/destruction
Engage militarily

WARNING AND PREVENTIVE CONTROL

CHAPTER 7

POLICY ATTENTION AND FORECAST BIAS

Davis B. Bobrow

Introduction

We all recognize that forecasts in international relations and, for that matter, in social life in general are often inaccurate and that judging their quality may be difficult because of actions to fulfill or deny them (Zarnowitz, 1967; Bobrow, 1978; Jensen, 1972; Knorr, 1964; Wohlstetter, 1965; DeWeerd, 1962; Wasserman, 1960; Merton, 1967). Few gasps of surprise will result when we note that: 1) forecasts result from processes which are rarely neutral either normatively or with regard to methods, evidence, and reporting; 2) high-level officials, be they in governments or movements or firms, allocate resources to forecasts about some rather than other aspects of the future in a nonrandom fashion and the stock of forecasts available to them is not a random sample of potentially available organized information and judgment about the future; and 3) policy attention and the allocation of resources other than attention are shaped by the forecasts and anticipations to which high-level officials have been exposed.

Policy attention is affected by previous forecasting attention, and forecasting attention is affected by policy attention. Forecasting products are significantly shaped by existing properties of the forecasting process and of those human and artificial elements involved in it.

Few of us are satisfied with the joint effects of these relationships. Two major sorts of explanations tend to characterize discussions of these problems and each suggests certain sorts of ameliorative actions given that policy does require anticipation. The first stresses the need to improve the technical resources available to forecasters (e.g., data bases, computational procedures, predictive theories) and to increase the technical sophistication of those who request, produce, and consume forecasts (Choucri and Robinson, 1978; Dawes, 1973). The second sees the problems as resulting less from technical state of the art limitations and misunderstandings and more from a variety of pathologies such as self-serving defensiveness, elitist arrogance, ideological and class bias, and "simple" stupidity and shortsightedness. Prescriptions seek improvements through changes in institutional accountability, personnel selection, and intra-organizational incentives (Wilensky, 1967; Webb, 1969; Smith, 1970; Irving, 1964). Our purposes are not to question the appropriateness of these explanations and suggestions but to explore some more fundamental sources of the problems to which they are addressed.

Accordingly, in the following pages, we will clarify what we have in mind by forecast bias and policy attention, draw on some striking findings from other fields and reason through their implications for bias in policy attention and forecasting in international relations, and suggest some steps to improve policy anticipation.

Our Problem

Implicit in our emphasis on policy attention is a notion of forecast bias which goes well beyond some in common use. These tend to stress disparities between predicted and realized states. We do not mean to exclude such types of forecast bias and will discuss them shortly. It seems important to extend our focus to include other forms of distortion in policy anticipation. We are concerned with possible disparities in the forecast attention given to some dimensions of the future relative to others, e.g., military as compared with environmental, to some paths into the future relative to others, to some policy instruments versus others, and to some causal chains of policy impact rather than others.

In terms of prediction-realization bias with regard to particular states of a variable, we include the notion of mean error between predictions and realizations for a comparable set of forecasts, e.g., of gross national product or petroleum production. We would add systematic misestimation of magnitudes of fluctuation and of turning

points. Forecasts which seriously distort the magnitudes of cyclical movements might still do well under the mean error criterion. Yet, policy does need to cope with the magnitude of cyclical movements as well as with their trend. With regard to bias in forecasting turning points, we include a systematic tendency to miss turning points and one to predict turns (and events) which do not occur. For both sorts of bias with regard to turning points, we want to discriminate performance with respect to wanted turns and unwanted developments. (Parenthetically, given our perspective on the anticipatory system, we would scrutinize carefully the decisions about the set of forecasts, the population or aggregate used to assess bias with respect to mean errors in forecasting of a fluctuating series, magnitude of fluctuations, and turning points.)

Even if forecasts show no persistent bias in terms of prediction-realization disparities, we may still regard the set of forecasts as massively and systematically distorted. The rationale for forecasting activity is not solely to predict what will happen. Forecasts are sought in order that the policy system will operate to increase the chances of more rather than less attractive outcomes. To the extent that forecasts, as a set, illuminate the pursuit of some rather than other dimensions of value as a systematic matter, they are biased in our view. We would use a similar perspective to judge them with regard to bias in favor of one generation rather than another should they systematically slight

distant or proximate time periods (Solow, 1974). These are types of forecast bias with regard to the delineation of a policy agenda. If we are talking about a set of forecasts intended to clarify the value of action strategies, two additional forms of bias merit our attention. Should the forecasts attempt to predict the causal path to a particular future state, they are biased if they systematically ignore or downplay large sets of causal variables prior to analytic screening. This form of bias operates, ceteris paribus, to tilt policy assessments against instruments which would bear on the omitted variables and to unduly focus attention on those which bear on the variables included. Should the forecasts seek to clarify the consequences of alternative policy instruments, they are biased if they systematically ignore or downplay large sets of policy instruments prior to screening for potential consequences and feasibility. This form of bias operates to tilt policy actions toward the unrepresentative set of instruments and options considered and away from others.

In sum, forecasts may seem relatively unbiased in terms of prediction-realization disparities, and still be massively biased with regard to characterizations of future environments, to the forces at work to produce them, and to the nature and impact of available courses of action. And the interaction between forecast biases of these kinds and policy attention can have consequences at least as serious as those involving more customary usages of forecast bias. Our expanded notion

is particularly important when we deal with classes of forecasts where decisions cannot be informed in a timely fashion by definitive realization data. International policy is replete with situations of that sort. Inattention to the extended forms of forecast bias we have suggested often will not be compensated for by clear, explicit evidence, at least not in a timely fashion. If we are to improve the anticipatory system to check for our additional forms of bias, we need to find some methods which do not depend solely on subsequent clear knowledge of what really happened. And we will need to tune the anticipatory system through use of those methods and maxims.

Some Sources of Distortion

Given our extended notion of forecast bias, it seems useful to single out possible major sources of distortion in policy anticipation. It seems particularly appropriate to concentrate on some which are not limited to particular forecasting methods or institutions. We will draw on some distortions recently discovered in another field and some which seem to be associated with heuristics people use to make judgments under uncertainty.

Paleobiology may seem an unlikely place to look for generalized sources of distortion in forecast bias and policy attention pertinent to international relations. The field deals with the patterns of occurrence of life forms over long periods of time--that is, on the basis of the fossil record

it attempts to explain the occurrence of new life forms at certain times, the extinction of life forms, and the pattern of diversification within classes of life forms over time. Why did dinosaurs evolve gradually into species and then suddenly disappear? Why did tribolites diversify rapidly and then die out gradually? Why was there a change in the gross size of many classes of life forms during the time of the dinosaurs? Why do mammals evolve more rapidly than clams? Paleobiologists are not forecasters. However, they do make some decisions based on information and information structures which are similar to those made by forecasters (Science, 1975). And forecasters and policy group members resemble paleobiologists in that they work heavily with impressions they bring to a particular task or issue, impressions about patterns which have import, underlying trends, and differences in rates of change.

Recent computer-based work by paleobiologists has produced some striking findings about the results of random processes. They set up programs to replicate evolutionary changes through time with transitions from one time to the next being determined by computer-generated random numbers. The patterns thus produced are very similar to the ones paleobiologists have labored very hard to understand, events that seem intuitively to be very strongly patterned and the sorts of sequences we tend to think of as non-random. "Catastrophes," such as the sudden extinction of 20 percent of the species groups, happened both by computer and in the

historical fossil record, and so did patterns that looked like unidirectional changes or trends. The patterns that can be computer generated through randomness look just like the patterns any reasonable scientist or analyst would expect to be called upon to explain.

What does this have to do with international relations? Surely the recognition and extrapolation of unidirectional trends and the search for underlying causes of events which look to be patterned does go on. Configurations of events are rarely treated as a result of a random process. Instead, they are treated as reflecting some orderly causal process which will provide a firm basis on which to construct forecasts and to focus policy attention. By analogy, the paleobiology computer findings tell us that there may well be a significant class of events of the kind forecasters and policy makers attend to which are indistinguishable from randomly produced events or patterns. De facto exclusion of this possibility leads to poor investments and a distorted view of historical phenomena. Subsequent forecasts and policy behavior based on notions that randomly generated simultaneous events result, instead, from a coherent strategy on the part of oneself or others and that trends are irreversible or need reversing will be, at best, inefficient and, at worst, trigger other unwanted events.

It seems reasonable to suggest that, left to their own devices, policy anticipation systems are systematically biased against a "randomness explanation." Clearly, it does

little to give policy makers the feelings of efficacy and control demanded by their positions. It provides little in the way of a guide to action or a basis for justifying resource allocations. Forecasters are unlikely to feel very professionally effective if they admit that the historical bases from which they work are full of events which are indistinguishable from what could occur from randomly generated incidents. And they are likely to receive few rewards for forecasting that some matters of great consequence could occur for the reasons that they were generated by our paleobiologists' computer programs. In sum, there are strong incentives to impose unwarranted explanations on events, to restrict unduly the set of future possibilities, and to overrate the feasibility of effective planning and action.

Another finding from the recent paleobiological work merits our attention. There has been consensus that some species evolve more quickly than others. This was found to rest on an artifact--the number of characteristics of a species or group of species that are included in the list of descriptors of the species accepted by the community who study it. It seems as if evolutionary changes occur faster among mammals than among clams because analysts have decided that there are more things to notice about mammals than about clams. The bias in observation pattern completely accounts for the variation observed in behavior. Note that this finding deals with directional change, not simply with fluctuation.

The analogy to international relations forecast bias and policy attention is apparent. If the set of descriptors accepted for some countries is far larger than that accepted for others, those with the more extensive list will be seen as evolving at a faster rate. As the initially short list grows to a more equal length, the rate attributed to the "slow" countries will increase and become more similar to that attributed to the countries originally described more elaborately. Similar reasoning applies to aspects of international relations and of national systems, e.g., their politics in comparison with their force structure. Until the lists of descriptors have the same number of dimensions, the prudent analyst and forecast consumer will control for the discrepancy in arriving at differences in rates of evolution. One can easily imagine an anticipatory system in which such control is not exercised and in which the descriptor lists are not equalized. Attention goes to matters which are expected to change and reports on change are predominantly provided on subjects previously held to change rapidly. The allocation of resources to subjects which already have abundant descriptors tends to feed further elaboration of their traits and a widening rather than narrowing gap in the complexity of descriptor structures for different subjects. If absolute forecast production resources are not growing, and massive commitments have been made to acquire capabilities which can assess only a particular subset of subjects,

these tendencies are bolstered. Only dramatic and unforeseen events seem likely to inject a different dynamic.

We shall return to these sources of distortion later in relation to those we now wish to introduce from decision analysis findings. These have been found when people try to judge: 1) the probability that an object or event is associated with some class of objects or processes; 2) the frequency of occurrences of a certain class and the probability of some event; and 3) the probability that an event or distribution of events has or will have a particular numerical value. To make such judgments, people draw on the heuristics of representativeness, availability, and adjustment from an anchor (Tversky and Kahneman, 1975). Each is vulnerable to recurrent distortions which have implications for international relations forecasting and policy attention.

The representativeness heuristic leads people to bias the probability they attach to a connection between two items, A and B, in line with the degree of similarity or dissimilarity they perceive between them. It comes into play when people assess membership (does object A belong to class B), estimate cause after the fact (did event A originate from process B), and predict consequences (will process B generate event A). People who hold A and B to be similar assign a high probability to such connections; people who hold A and B to be dissimilar assign a low probability. How does this heuristic work? Let us suppose one begins with the following information about a military enemy: non-white, short,

wear black pajamas, low technology society. The judgmental task is to provide an estimate of the probability that this enemy belongs to one or another of the two classes "tough enemies" and "easy enemies." Suppose further that one has an image of tough enemies which attributes to them these features: white, tall, snappy military uniforms, high technology society. Under the representativeness heuristic, people will tend to assign our illustrative enemy an unwarrantedly low probability of belonging to the class of tough enemies.

The distortions arise because similarity as a basis for judgment does not reflect other matters which affect probability. It is insensitive to the prior probability or base frequency of the outcomes. Suppose one is trying to assign a statement issued by a foreign head of government charging that the US engages in imperialist oppression of the Third and Fourth World to one of two classes--actions intended to influence the US, and actions intended to influence Third and Fourth World governments. Under the representativeness heuristic, the similarity of the statement in question to a stereotype of actions intended to influence the US would dominate the probability assignment regardless of information that the source of the statement directs 90 percent of its foreign policy actions to influencing Third and Fourth World governments.

To make the problem a bit worse, experimental evidence indicates that information about base frequencies loses its

impact on probability estimates when the item A to be characterized comes with what is, in reality, an irrelevant description as compared with situations in which it comes with no description at all. Let us suppose one knows that approximately 80 percent of the political-military leaders of a developing country have relatives engaged in economic activities which benefit from government favors. The problem is to estimate the probability that General A will move to lessen such corruption. Experimental evidence suggests that people who only have the information just given are more likely to assign probabilities which reflect the skewed distribution of interests than are people who have also been told that General A is middle-aged, has three children, speaks fluent French, and is widely respected by his colleagues.

The representativeness heuristic also can lead to distortion due to insensitivity to sample size. People fail to recognize the extent to which the probable match between a sample statistic and a population parameter fluctuates with sample size. This insensitivity also characterizes questions of judging the probability that a sample has been drawn from one population rather than another (posterior odds). Under the representativeness heuristic, sample proportion dominates estimates with no control for the role of sample size. Tversky and Kahneman neatly summarize the consequences, "this bias leads to the selection of samples

of inadequate size and to overinterpretation of findings" (Tversky and Kahneman, 1975: 70).

With regard to the anticipatory system of concern to us, it leads to the following sort of distortions. First, none of the groups pay adequate attention to sample size. Second, when particular value is given to information which is especially rare and thus inherently involves a small sample size, they persistently place undue confidence in the proportion of behaviors represented in that sample. For example, let us suppose that critiques of military exercises by high-level foreign staff are an important basis for forecasts of strategic intentions, and that those available are, indeed, a very small sample of the population of such critiques. Estimates of the proportional attention to one rather than another aspect of conflict escalation in the sample receive more credence in forecasting than they should have.

To continue, the representativeness heuristic opens the door for insensitivity to the relative predictability of some rather than other outcomes. Let us suppose that the task is to predict the future popularity of several political parties or movements. Using representativeness, if the party or movement is currently described favorably in terms of popularity, popularity is likely to appear most representative of that description. If it is unpopular, unpopularity appears most representative. In predicting absolute or relative future popularity, little attention

is given to the quality of the evidence underlying the current description of the two groups or to the extent to which the contents of the description are sufficient to answer the predictive question posed.

How can insensitivity to predictability affect international relations forecasting? First, current evidence may be more sufficient to predict some classes of phenomena than others. To the extent that these differences go unrecognized in a forecasting process, we unwarrantedly place equal confidence in predictions about the different phenomena, e.g., about the current political popularity of parties and movements in nations which have been independent for some time and in nations which have just left colonial status. Second, even if descriptions, for example, of the popularity of two political movements, are equally germane to the predictive questions, the current descriptions may well be biased in several senses. They may rest on much higher quality information about one movement than about the other, in which case one should not have equal confidence in the predictions about each. For example, let us imagine a case in which one movement has numerous relations with foreigners and is active in urban areas where foreigners reside and the other eschews such contacts and operates in hinterlands. They may rest on an information flow which deliberately overestimates the current popularity of one group and underestimates that of another. This can readily happen when a foreign power depends on a movement with

which it is allied against another indigenous faction to provide it with information about the popularity of the other.

Representativeness is prone to the illusion of validity, to estimates advanced with unwarranted confidence because initially available information seems to fit well with a particular conceivable outcome. Overconfidence appears even when the professionals making predictions have received substantial evidence of their fallibility. Overconfidence bias flourishes when the initial information seems internally consistent. Unfortunately, that consistency may simply reflect the redundancy and correlation among the variables and judgmental criteria which provide the initial information. Yet, we know that predictions and estimates based on independent inputs are likely to be more accurate than ones based on redundant, correlated inputs.

Unfortunately, redundant, correlated inputs can easily thrive in policy anticipation systems. Some of the prudential motives which lead to the development of redundant inputs, e.g., of military mobilization, are forgotten as information moves from one to ancther point in the anticipatory system. Checks for correlation go unmade or unforwarded. The search for high confidence predictions leads to greater attention for information inputs which tend to provide a consistent pattern than to those which reduce confidence in any given prediction or forecast. Specialization may divide the variables attended to in ways which

unwittingly provide any particular group of specialists with rather redundant and correlated variables. Information systems may tend to collect, store, and forward highly redundant variables. Examples abound in international relations forecasting. Highly correlated aggregate economic development indicators can produce unwarranted confidence in prediction of future development levels. Actions by ex-colonies to diversify their international relations (military, economic, diplomatic, and cultural) which may well be redundant and correlated can lead to overdrawn predictions that the countries will completely leave the sphere of positive relations with the "West" and enter into the sphere of the Soviet Union.

Finally, the representativeness heuristic runs counter to the phenomenon of regression toward the mean and ignores its implications. Regression tells us to expect that the value of the outcome variable will be less extreme than the value of the input variable. Representativeness tells us, instead, that it will be as similar as possible to the extremeness of the value of the input variable. This distortion can be particularly damaging when an actor not only has a continuing interest in the performances of another actor, but also intersperses responses and signals (be they punishments or rewards) intended to influence the other's subsequent performance. Occurrences are attributed to the response of the second actor to an undue extent and little, if any, consideration is given to the regression effect.

Interpretations of detente illustrate the need to attend to regression. Let us suppose that the US government is monitoring Soviet performance in terms of hostile and friendly actions where the pure cases of each provide the ends of a continuum. In one case, let us suppose that an extremely friendly Soviet performance is followed by a positive (rewarding) US response and that an extremely hostile Soviet performance is followed by a negative (punishing) US response. If the subsequent Soviet performance lies closer to the mean than the performance prior to the US response, representativeness leads to the conclusion that rewards induce an increase in the hostility of Soviet behavior and punishments induce an increase in the friendliness of Soviet behavior. In another case, let us suppose that the Soviet behaviors are the same as those just stated but the US responses are reversed, i.e., opposite in sign to the extreme Soviet performance rather than identical in sign. Representativeness leads to the conclusion that punishments induce an increase in the hostility of Soviet behavior and rewards induce an increase in the friendliness of Soviet behavior. If we have not taken the regression effect into account, we should be wary of either set of inferences.

We can now turn to a second common heuristic and the distortions to which it is particularly vulnerable. Availability, the ease with which instances of phenomena are brought to mind, influences the frequency attached to some class and the probability estimated for some event. We will

discuss the problems posed by biases of retrieval, effectiveness of search sets, imaginability, and illusory correlation.

Estimates of class frequency and event probability are effected by retrievability bias when instances of some class or event are particularly famous, graphic and dramatic, and recent.

Applications to international relations forecasting and policy attention come readily to mind. Graphic instances of individual human suffering are more likely to trigger policy attention to problems of poverty and human rights abroad than are massive tables of distributional statistics. Forecasts of the consequences of limited US military intervention in developing country wars are likely to attach a higher probability to futility and escalation when Vietnam is more retrievable than the interventions into the Dominican Republic and Lebanon. Estimated percentage of foreign interventions initiated by the US and the Soviet Union, respectively, based on a list of interventions in which the initiator is clearly identified will overstate the representation of Soviet initiations if they are more well-known, and of US initiations if they are the better known.

Retrievability bias operates systematically under the availability heuristic to depress estimates of events which have not occurred, e.g., nuclear war, and even more so for unexperienced events whose immediate consequences in graphic and human terms will impact only on distant generations. It operates to raise estimates of events which have happened

recently to people like oneself, relative to estimates of events which have happened to others with whom one does not identify. If decision makers differ in the sorts of instances which are more readily retrievable, they will tend to arrive at different estimates. If their anticipatory systems make some sorts of instances more retrievable than others through specialized data bases, they operate to bias estimates.

The availability heuristic is also vulnerable to biases due to differences in the effectiveness of search strategies. Suppose that people have been asked to estimate the frequency of items which fall into several classes. This bias occurs if they can search some contexts more effectively than others and the frequency in those contexts does not represent the frequency in all relevant contexts.

For example, let us suppose that the task is to estimate the frequency of acts of physical violence and of bribery across nation-state lines. Search strategy bias enters when, first, one finds it easier to think of contexts in which violence occurs, e.g., between governments, between revolutionary movements and governments, than of contexts in which bribery occurs, e.g., between firms and governments, between firms and firms, and second, violence occurs more in the former pair of contexts than in the latter and bribery occurs more frequently in the latter pair than in the former. Bias introduced by systematic differences in search sets obviously works to feed the bias introduced by systematic

differences in retrievability. Less obviously, allocations of search resources in a biased way are likely to reflect previous biases in retrievability. The more highly one estimates the probability of some unwanted event because instances of it come to mind, the more important it seems to evolve search strategies to forecast occurrences of that event.

Obviously, imagination constrains availability. Situations which are easier to construct when instances are not remembered will be more available than ones which are more difficult to construct. Imaginability often varies with the skill of the people involved in using some sorts of rules, theories, or variables. For example, one would expect persons familiar with nuclear physics and weapons to find it easier to imagine new, complex combinations of their elements than laymen. Similar biases would characterize professional military planners, ecologists, or political scientists with regard to the instances which their imagination will produce. Yet, different sorts of imaginative skills are differentially represented in most anticipatory systems, both within each group participating and between groups. If only persons with rich imaginations about Russia and Western Europe are represented in offices charged with forecasting the future nature of international nuclear weapons capabilities, they will inject an availability bias different than would be the case if persons with rich imaginations about India, Brazil, Japan, etc., were equally represented.

Finally, availability underlies common lore correlation bias. Let us suppose that common lore establishes a strong associative bond between two events or traits of an actor. Individuals exposed to bodies of information about each of the events or traits overestimate the extent to which they co-occur. That is, the association from lore modifies inferences which would be drawn solely from the content of the information set. An example tested empirically involves estimates of the co-occurrence of a physical trait or observable act and an inferred psychological characteristic. Availability makes instances of co-occurrence come to mind more easily than instances of separate occurrence and does not control for the lore effect.

International relations abounds in correlational lore even though it may vary from group to group and historical period to historical period. The lore effect suggests that such associations are sturdily resistant to data. For example, if there is lore which bonds nationalization of private foreign investments to hostile intentions toward the US, the frequencies of co-occurrence will be overestimated. If there is lore which bonds domestic political freedom to anti-Soviet policy preferences, their co-occurrence will be overestimated. And, by analogy, if lore disassociates military cooperation with the US from domestic political suppression and from gross economic inequality, their co-occurrence will be underestimated.

The third major heuristic we wish to consider is that of adjustment to an anchor. It operates when people start from some initial value and then adjust it to arrive at a final estimate. The starting points tend to anchor the estimate in that different starting points tend to produce different final judgments. This heuristic hosts the biases of insufficient adjustment, and of optimism toward conjunctive and pessimism toward disjunctive events. The anchor in a particular estimating situation may stem from partial analysis already performed or from the way in which the problem is cast, or both.

Bias through insufficient adjustment skews estimates toward the initial value established by or provided to the estimator. For example, individual's estimates of enemy troop strength or weapons inventories will be lower than intervening information warrants if they begin with a low value, and higher than intervening information warrants if they begin with a high value. Note that taking a mid-value between the eventual estimates will not eliminate the distortion unless the two anchors are equally distant from the true value.

Since initial, partial computation also can insert anchors into the estimating process, it seems that order of presentation can distort estimates when people actually do the first steps in the calculation and then mentally adjust for the final estimate. Let us suppose that the estimating problem involves aggregating observations about

a number of phenomena, e.g., petroleum reserves of a number of countries or strategic weapons of different types. Experimental evidence suggests that the anchoring effect will boost estimates of the total which begin with the largest national reserves or weapons type holdings and depress those which begin with the smallest when time or attention are short. We know that both time and attention are in short supply for high-level officials.

Anchoring underlies bias in estimates of the probability of conjunctive and disjunctive events. Most policy-related estimates are about conjunctive and disjunctive rather than simple events. The probability of most plans succeeding rests on a series of events coming to pass. Plans, then, have a conjunctive character. The assessment of risks of failure of a complex system involves the breakdown of any one needed part or occurrence of a single significant negative event. If plans have a chain-like structure of conjunctions, risk assessments have a funnel-like structure of disjunctions. Anchoring operates in both cases to distort the estimate about total system performance in the direction of probability attached to the first simple event considered. In the case of plans, each event treated as simple may be quite probable but the overall probability with a large number of events can be rather low. The anchoring effect leads to bias in favor of optimism about the probability of success. In risk assessments, each event treated as simple may be highly improbable, but the overall probability of

breakdown with a large number of events can be rather high. The anchoring effect leads to a bias which depresses the probability estimate of failure.

Policy anticipation systems will tend to provide unduly rosy forecasts about the probable success of foreign policy plans and instrumentalities and unduly sanguine forecasts about the risk of complex systems (human and technological) malfunctioning. These effects increase if groups in the anticipatory process receive rewards for suggesting efficacious courses of action (the "can do spirit"), and sanctions for defeatist thinking including bureaucratic versions of excommunication.

Consequences and Quality Control Steps

We have introduced a number of sources of distortion which can bias forecasts and policy attention. These are listed in Table 22 for convenient reference. We have no reason to think that they are more characteristic of regimes we like than of regimes we find repulsive, of rich people than of poor people, of political conservatives than of political radicals, of civilians than of soldiers, of young people than of old people, of the Central Intelligence Agency than of Common Cause. They pervade human judgment and perception. And as we have seen, one can easily illustrate their implications for judgments about international relations with examples which will strike few observers of

Table 22

Sources of Distortion

1.	Inattention to "Randomness Explanations"	
2.	Inattention to Descriptor Elaboration	
3.	Inattention to Prior Probability, Base Frequency	Representativeness Bias
4.	Inattention to Sample Size	
5.	Inattention to Current Description Reliability	
6.	Inattention to Predictability	
7.	Inattention to Information Redundancy, Correlation	
8.	Inattention to Regression Effect	
9.	Inattention to Retrievability	Availability Bias
10.	Inattention to Search Strategy Effectiveness	
11.	Inattention to Imaginability	
12.	Inattention to Lore-Based Correlations	
13.	Inattention to Insufficient Adjustment	Anchor Bias
14.	Inattention to Conjunctive Optimism	
15.	Inattention to Disjunctive Pessimism	

the US anticipatory process as far-fetched and may even strike some as disconcertingly familiar.

Of course, one need not worry about the impact of sources of distortion in Table 22 if they operate within an individual or group to cancel each other out. Casual inspection suggests that they, if anything, operate to compound rather than to cancel out distortions. This is particularly true if we think of their operations over time. For example, the number of descriptors applied to a phenomenon affects the availability of instances of it, and availability, in turn, affects the nature of the templates used to make representativeness judgments. As another illustration, illusory correlations provided by common sense operate as anchors which will not be adjusted sufficiently in a forecasting process. Even when a particular distortion does not operate to compound others, its presence suggests that the others will go unrecognized. Compensatory steps which are feasible in principle will not be taken in practice. For example, sensitivity to differences in sample size could partially deal with distortions due to differences in retrievability and in the effectiveness of search strategies. Yet, one common tendency is to ignore the import of differences in sample size.

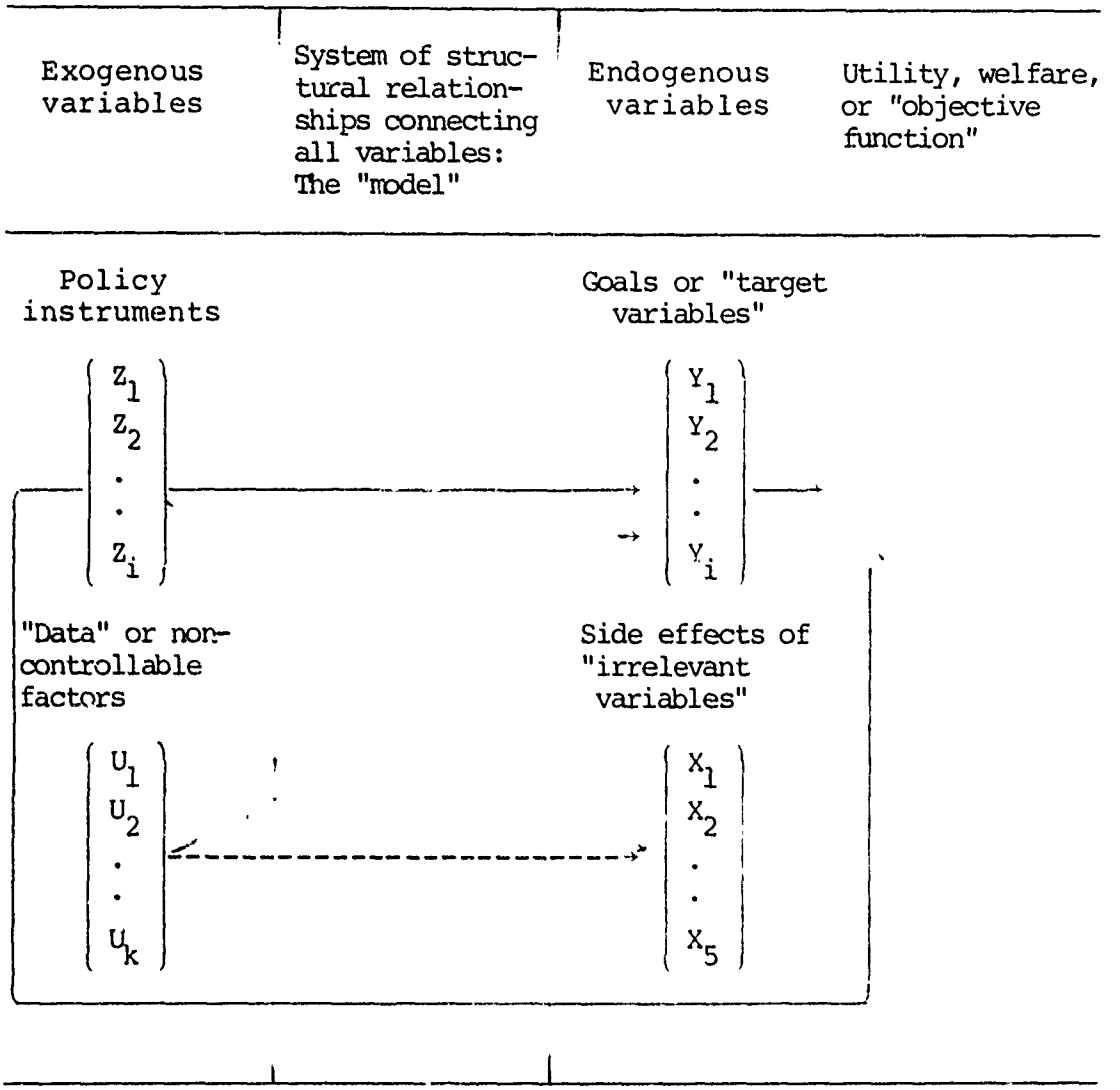
A precise estimate of the consequences of these distortions and a specification of steps to lessen their adverse effects on the quality of policy anticipation will depend, in important ways, on how we choose to think about the policy

anticipation process. Accordingly, it seems necessary to briefly introduce some conceptions of what can be meant by a policy anticipation process and talk about quality control steps in the context these conceptions provide.

Perhaps the purest model of enlightened policy relationships to the future is that of Tinbergen, which has been modified and adapted by Fox (Tinbergen, 1952; Fox, 1974). John Koehler has helpfully presented this conception with reference to economic policy making and it is reproduced below in Figure 23 (Koehler, 1975: 397). Obviously, it need not be limited to economic policy making but can apply to policy clarification and evaluation in general.

In application, legitimate authority posits some welfare function. Objective analysts then go to work to array, through collection and invention, the set of potentially relevant policy instruments and noncontrollable factors and to construct the necessary structural models. With these tasks performed, they can then forecast the consequences of the sets of possible combinations of the exogenous variables as processed through the structural relationships for a variety of outcome state characteristics. The results can then be ordered in terms of probability and desirability with respect to the given welfare function. The results produced by the approach in Figure 23 are forecasts of contingent consequences which, in themselves, are based on a very large set of decisions about the present (estimates)

Figure 23. The Structure of Economic Policymaking



and anticipation about the future (expectations). These include stipulating a set of policy instruments and noncontrollable factors and their characteristics at different points in time. They centrally involve decisions about the structural relationships which will prevail during policy implementation. They reflect decisions about the set of variables which will be targets and germane aspects of side effects and about their values in the present and prior to policy impact. And, of course, the selection of endogenous variables requires some expectation about the welfare function which will ultimately be used.

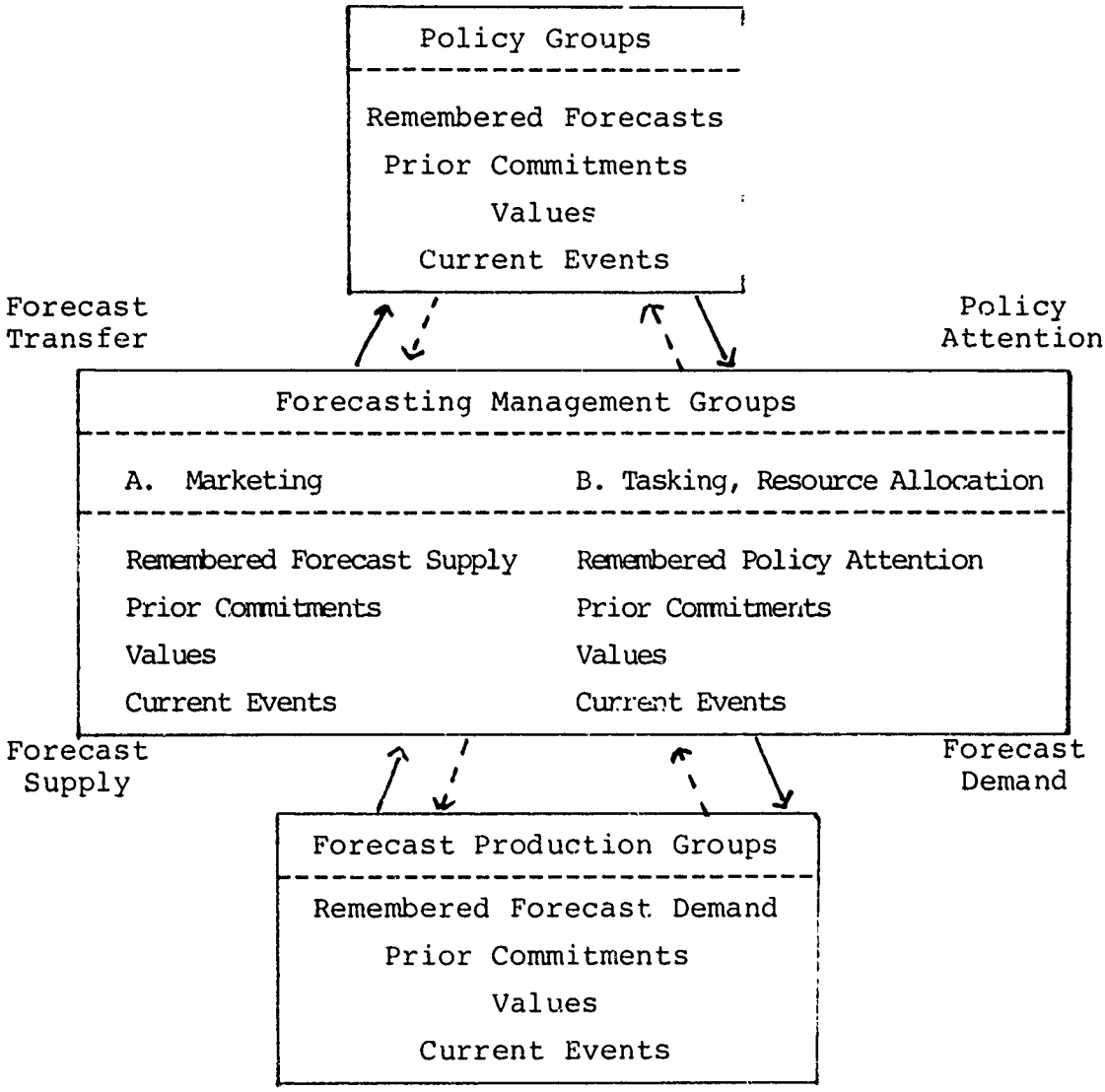
As we have seen, these are judgments which are prone to the biases listed in Table 22. If policy anticipation systems had the rather self-contained technical character suggested in Figure 23, one might feel that it would suffice to deal with the distortions we have discussed through a set of efforts to "raise statistical consciousness" and insure that the statistical information which our biases slight became salient in the policy anticipation process. One can imagine education efforts and routine procedures which will help compensate for the distort ons through some combination of explicit calculation, recognition of the direction of bias in assigning probabilities to one or another possibility, and clear statement of the differing degree of confidence and ignorance underlying the estimates and choices embodied in the enlightenment notion of policy anticipation.

These steps are surely praiseworthy, but they do little to deal with the fact that forecasting and policy attention are embedded in an ongoing institutional process of a complex kind. That is, they take place in a more or less distorted fashion within a context with a history. Figure 24 presents one simplified conception of the policy anticipation context particularly germane to forecast bias and policy attention (Dunn, 1974; Hilsman, 1956; Jensen, 1966; Millikan, 1959; Allison, 1975).

The schematic consists of several analytically distinct groups which may or may not consist of distinct individuals and groups in practice. These are connected by solid arrows which signify the flow of guidance of a more or less binding nature and dotted arrows which signify feedback in response to such guidance. In each instance, the content of a guidance flow is a function of extant properties of the groups from which it originates, feedback from previous guidance issued, and the immediately preceeding guidance received.

Policy groups generate policy attention guidance as a function of their memories about previous forecasts (e.g., missed turning points), prior commitments (e.g., to deliver certain future collective environments), values, the stimuli of current events, forecasts recently received, and the response of forecast management groups to recent policy attention guidance (e.g., cost, feasibility of helpful forecasts).

Figure 24. An Anticipation Schematic



Forecast management groups in their roles as taskers and resource allocators generate forecast demand guidance as a function not solely of policy attention but also in relation to their memories of policy attention (e.g., they ask for things they never read), prior commitments (e.g., to particular collection systems), their values, the stimuli of current events, and the response of forecast production groups to recent forecast demand guidance (e.g., risks, diversion of resources to support particular forecasts).

Forecast production groups supply forecasts not only in response to forecast demand but also as a function of their memories of forecast demand, their prior commitments, their values, the stimuli of current events, and the response of forecast marketing groups to recent forecast supply (e.g., don't make waves) (Adams, 1975).

Finally, forecasting management groups in their role as marketers, transfer forecasts as a function of the forecasts supplied to them and their memories of previous forecast supply (e.g., accuracy), their prior commitments, values, the stimuli of current events, and the feedback from policy groups to forecasts transferred recently (e.g., unresponsive, irrelevant).

Obviously, the schematic in Figure 24 is crude and oversimplified and could be elaborated and specified in numerous ways, for example, by proliferating groups in each analytic category, explicating their internal structure, stipulating time lags and processing intervals, and positing

learning functions. However, even in its current primitive form, it suggests a number of important points.

Figure 24 should make us skeptical of diagnoses which suggest that forecast bias is responsible in and of itself for defects in policy attention and that improvements solely in the quality of forecasts are feasible and sufficient to improve policy attention. Efforts to improve the anticipatory system are best undertaken in the perspective of treating it as a system (ARPA, 1973). Fragmentary changes in and of themselves in one of our analytic groups or on one of the determinants of group behavior will not necessarily yield desirable consequences. If we are to engage in such systems analysis, we will look not only at predictive shortcomings but also at the retained history drawn on by the participants in the different anticipatory roles, their prior commitments in terms of investments made and bills which may come due, their values in personal, organizational, and public welfare terms, and their images of the present. We will look at the feedback they provide and receive as well as the guidance they generate. All of these may be manipulable in terms of their content and weight in the anticipatory process. Individually and in interaction, they may well dominate the effects on forecast bias and policy attention of alternative techniques used within the narrower limits of the schematic in Figure 23.

The context provided by Figure 24 has strong relevance to whose statistical consciousness should be raised and what

formal procedures for forwarding statistical controls on distortion are needed. Of at least equal importance, it informs us about possibilities with regard to a second set of quality control steps which we can group treat as representational actions.

Within a given group in the anticipatory scheme, we can imagine deliberate efforts to lessen the biases favoring expectations of one rather than another future possibility by achieving or at least moving toward symmetry in the numbers of descriptors, retrievable instances, search strategies, redundant and independent inputs, and the alternative correlations provided by different bodies of lore. The determinants of the behavior of each of the groups shown in Figure 2 suggest the properties of each in which symmetry, or at least diversity, must be sought. The benefits for international relations policy anticipation are obviously greatest when each group is insensitive to a particular distortion and duplicate the unrepresentativeness of the others. Such cross-the-board efforts should not be concentrated on to the extent of ignoring the possibility of rapid improvement by installing compensating bias factors in the different groups. Sharpened statistical consciousness on the part of a particular group can, itself, serve as one way to compensate for unrepresentational properties of the memories, commitments, and values of other groups. This system-balancing strategy obviously calls for substantial knowledge about the participants in the policy anticipation

system. Sound recommendations about the mix of statistical awareness and representational strategies also requires such information.

Accordingly, concern with the quality of forecasts and policy pertinent to international matters calls for empirical surveys to establish the nature of current insensitivity and unrepresentativeness in pertinent institutions. These will provide the basis to stipulate practical statistical procedures, information investments, and procedural and personnel steps to improve the situation.

Such improvements will not eliminate the distortions we have discussed, only lessen them. And the gain will be temporary unless we periodically pursue the surveys and resulting innovations. There is no adequate substitute for austere modesty on the part of those who participate in anticipating international policy and who offer suggestions to assist them.

CHAPTER 8

INFORMATION SYSTEMS TO CONSTRAIN CONFLICT

Davis B. Bobrow

> . . . in diplomacy there is always the other side to be considered. And that is the same in military affairs, in politics, as well as in diplomacy. . . . Depending on what attitude is taken by the other side or what move is [made] by the other side, we will have to change--we will have to act accordingly, and in any country there should always be leeway for action to be taken vis-á-vis moves made by the other side.
>
> -- Tojo (quoted in Sathre, 1978: 323)

Introduction

During the summer and fall of 1941, a small number of high Japanese officials held a series of meetings in Tokyo. The outcome is well known: the decision to go to war with the United States. The immediate result was the destruction by surprise attack of much of the US Pacific Fleet at Pearl Harbor. The eventual consequences were the loss of many lives in combat over a string of rocky islands of no importance in themselves and the use of nuclear weapons to devastate Hiroshima and Nagasaki.

We now know that the Allies had no firm commitment to wage war on Japan to drive it from the Asian mainland or to dismember the Empire. We also know that the Japanese decision makers participating in the decision-making group, the Liaison Conference, believed otherwise. To them, the set

of economic restrictions, especially the oil embargo, and military deployments, especially the shift of major naval capital units from the Atlantic to the Pacific,

> suggested not only a willingness but a desire to snuff out the very existence of the nation . . . [and] . . . the Hull note lent credence to the worst fears about American intentions toward Japan; it not only failed to acknowledge the concessions that the Japanese perceived themselves to have made in the negotiations, it suggested that there was no apparent necessity for the United States to make any. (Sathre, 1978: 318)

The point of this story is not to deny the existence of major conflicts over interests and goals between the two governments. These were genuine and of long standing. Instead, we tell this story to introduce the possibility that with better information on both sides the specific decision to go to war would not have been made. Parenthetically, we know from other sources that the surprise attack at Pearl Harbor would not have taken place (Belden, 1977), or at least need not have been a "surprise" (Wohlstetter, 1962). To return to our example, the unwillingness of the Allies to provide some compromise by relaxing the oil embargo apparently reflected the estimate that it would simply enhance Japan's capacity to wage a war to which Tokyo was firmly committed. In Secretary of State Hull's view, Japanese policy makers were unified and inflexible in their pursuit of what he called "a steady, fixed course of conquest that would reach . . . [the United States in Japan's] . . . own chosen time" (Hull, quoted in Sathre, 1978: 322). Careful analysis shows this interpretation to have been false. Instead,

several members of the Liaison Conference which operated under a unanimity rule searched until the end for some sign of a "spirit of reciprocity" on the part of Washington. For many of the key decision makers in Tokyo, the decision to go to war was not simply a pro forma reconfirmation of a firmly entrenched national policy. Instead, it was an unappetizing choice from a set of bad alternatives. From their perspective, their choice was to use their remaining strength in a venture with a very low probability of success or to passively allow the Allies to drain the ability of Japan to avoid dismemberment, a course to which they held the Allies to be firmly committed. The choices put to them by the Allies seemed to be war or the imposition of inferiority and there would only be worse times for the war on which the Allies were bent. The occasion for decision was defined accordingly as one in which to abstain from "striking first" was to accept an irreversible trend toward national subjugation.

In effect, both sides came to believe that a process of what Lindblom has called "partisan mutual adjustment" had been precluded by the other side (Lindblom, 1965). These judgments, together with a perceived negative trend in the strength of one party, led to a decision to initiate war. Even that decision in operational terms was contingent on the response of the enemy, a response which did not take place. Contrary to some standard formulations in international relations theory, necessary and sufficient conditions for war were not provided by the general conflict of

interest and negative effect of each party toward the other (e.g., Scott, 1967). Instead, the sufficient conditions involved a failure to understand the decision situation the United States posed to the Japanese on the one hand, and a Japanese failure to understand the basis for specific US policy moves on the other. And the specific attack would have been postponed with unknown consequences if the US had shown the Japanese that surprise was unattainable.

It is critical to emphasize that nations cannot move directly from a state of conflict to one of peace, but must instead move to an intermediate, transitional set of relationships (Farer, 1977; Bobrow, 1975; Mendlovitz, 1975; Ben-Dak, 1973). The process works in reverse also, in which case the challenge is in the first instance to prevent relations from moving from an intermediate system into one of open conflict. That was not done in the case we have reported. This chapter presents a very partial, incomplete treatment of some information system elements conducive to a shift from a conflictful to a transitional structure of relations and to avoiding retrogression into unconstrained conflict. This emphasis rests on the assumption that an early condition for a transition to peace is that the parties come to have confidence in the operational intentions of each other to the point where surprise attack no longer seems to be a viable or even desirable option on any side. More specifically, it begins by introducing a frame of reference for the transitional state of affairs in relation to some

general conceptions in the decision-making and conflict literature. This frame of reference implies some information system requirements. This chapter focuses narrowly on warning information. After a brief introduction to some pertinent technology for the provision of warning, several simplified, hypothetical types of situations are discussed.

A Frame of Reference

Obviously, a transition stage would be robust if there were an emerging set of shared moral precepts among the previously conflicting parties. Unfortunately, theories of social management which assume that shared moral precepts are operative usually do not deal with their creation and adoption (Ellis, 1971). And in the meantime, continuing conflict deprives forecasts of and programs for a moral consensus of credibility. Fortunately, entry into a transition stage does not require moral community or the trust it enables. What does it require? First, all parties must believe that a winning coalition of the others had not made an irrevocable decision to achieve domination at any cost. Second, they must believe that any change in the balance of power is not irreversible but is, instead, subject to adjustment through bargaining including coercive bargaining (George and Smoke, 1974). The bargaining need not be confined to the parties directly involved. Third, all directly involved parties must believe that they will not incur unacceptable costs by acting as if the first two requirements are met in

practice. In effect, this means confident expectations that information which casts the first two requirements into doubt will be acquired in sufficient time to adapt appropriately. The last requirement matters whether we are concerned with avoiding, limiting, terminating, or resolving conflicts (Doob, et al., 1970; Ikle, 1970; Burton, 1969). Taken together, these requirements stipulate not only that international relations be conducted as a mixed-motive game (Schelling, 1960), but that it be a mixed-motive game with safeguards in terms of timely warning. If there were a comprehensive international regulatory institution, these requirements would be met were the institution effective and impartial. The problem in the absence for the foreseeable future of such a regulatory framework is whether the requirements can be met for historically hostile nations interacting in a world "without rules that fully prescribe their relations to each other" (Lindblom, 1965: 3). We now turn for assistance to the conception of mutual adjustment between interdependent partisans.

Decision makers are partisan when they assume the absence of standards which will be acceptable to all the decision makers involved and yield adjustments. Accordingly, partisans do not search for such standards or appeal to an audience which knows and applies them. They believe that there are genuine conflicts of interest and disagreements about the merits of any solution. Partisans are familiar to students of international conflict. Decision makers

are interdependent when the actions of one (sometimes of necessity, and sometimes only if deliberate caution is not exercised) affect other decision makers by aiding or hindering pursuit of their ends. The effects may be direct or indirect but there is a causal connection. Discussions of regional power balances often rest on this concept of interdependence. What are the attributes of adjusted decisions by interdependent partisans? First, "each decision is adapted to the others in such a way that for each adjusted decision, the adjustment is thought to be better than no adjustment in the eyes of at least one decision-maker" (Lindblom, 1965: 24). Second, "adverse consequences are acted upon as though they were regrettable" (ibid: 154). Clearly, the advocate of partisan mutual adjustment has only modest hopes. The world is not one of Pareto optima but simply one of choosing outcomes which are less than the worst conceivable. Policy proceeds incrementally as imperfect choices are implemented inconsistently. The spirit of "Camelot" is missing--but so is that of Hobbes. Partisan mutual adjustment is, of course, incremental in its approach to change. This incrementalism rests on the belief that partial steps are necessary preconditions for the effective treatment of fundamental problems. In this sense, it is more than a means for buying time, although it surely has that function.

Partisan mutual adjustment can be pursued through many alternative strategies, all of which call for

substantial information about other decision makers. One alternative calls for adjustment to the decisions others have made and are expected to make. Another calls for deliberate efforts to avoid impinging on the values of other decision makers. Still another alternative involves taking into account the preferences of other decision makers. Those adjustment strategies which include some response from other decision makers, Lindblom's "manipulative" strategies, share the need for each decision unit to be informed about the preferences and options of every other, and to be able to communicate with every other. These requirements hold for those manipulative strategies which involve a symmetrical relationship between decision makers and for those which do not. They hold for strategies which promise future gratification to others, e.g., some sort of compensation, and for those which seek to present others with a fait accompli.

The world of partisan mutual adjustment is not a black and white world of eternal friends and enemies. Nor is it one of primarily bilateral decision situations. Instead, it is a world where decision makers are acutely aware of the existence of numerous others with purposes of their own and some degree of leverage on the decision maker's ultimate achievements. Decision makers are aware of predecessors who vanished for overlooking some relevant others and their unique interests (or combination of interests). Issues do not arise singly but in packages

where groups differ on the bounds of the package and the weights to be attached to the items in it. And issues or decisions are not made in a conclusive manner but represent merely partial treatments with long lead times to implementation and great uncertainty about eventual outcomes. If one wishes rapid, comprehensive, sweeping, once-and-for-all decisions and actions, partisan mutual adjustment is unattractive indeed. If, in contrast, one believes that such decisions and actions are either unlikely or will probably turn out to be disastrous, partisan mutual adjustment seems worth exploring. One turns to the conditions under which it will work relatively well. If information and communications conditions are developed appropriately, large numbers of decision participants improve the workings of partisan mutual adjustment. There are more "watchdogs" for different interests instead of representatives of only a few and there is a higher probability that adverse consequences of possible and actual decisions are noted and opposed. Self-defeating policies are more likely to rapidly become matters for review and revision. The set of possible response coalitions becomes larger and the ability of any one decision maker to plan and implement increasingly complex actions with surprise so great as to eliminate the chances of response from some quarter declines. The more evenly matched are the different decision units in terms of destructive potential and assets at risk, the more strongly these tendencies operate for a whole system. However, this does not imply that some sort

of full military symmetry is necessary. What probably is necessary is that each party has grave doubts about the extent to which it alone, or in combination, has a winning strategy. The key perception is that of the lack of a promising coercive option. Preemption must seem unattractive.

The effectiveness of such strategies to transition away from conflict depends in important ways on the information and communications system at work. Such systems are central to compensating for the increased coordination costs and chances of misperception which result from the involvement of multiple parties directly and as third-party monitors and guarantors. If information about the preferences, expectations, and alternatives of others is poor, decisions mistakenly may be thought to have been adjusted. If the communications are not there to support manipulative strategies, the alternatives of, in some sense, going it alone and planning for the worst case are all that remain. Of course, the information and communication conditions must be met in ways compatible with the dispersion and speed of events and decisions. Otherwise they cannot assist in adjustment. While all international actors are not interdependent, most are with some distant others--perhaps in very unplanned for ways. While all decision makers clearly do not and cannot know about each other and communicate with each other all of the time, they must be able to do so on unpredictable occasions. Often those occasions will arise quickly. The

problems involved often do not lend themselves to leisurely treatment. Accordingly, there is a need for rapid communications, fresh, reliable, and near real-time information, and some substantial backlog of knowledge about the utility schedules of the major parties involved which can be drawn on and updated as events unfold.

Clearly, commitment to a strategy of partisan mutual adjustment in the service of transition from conflict to peace implies that the participating regimes and movements perceive themselves to have ways out of the "prisoner's dilemma" situation posed by their respective military preparations (Brams, 1975c; Snyder, 1971). The problem is to reduce the risks involved in adjustment. This poses great difficulties when adversaries are highly mobilized and the time period available to cope with a shift to a coercive domination strategy is very short indeed--hours or less. When the defeat of a domination attempt depends on judgments by third parties about who initiated the move away from adjustment (at least in the period prior to a dominance fait accompli), time sensitivity may be very great. It follows that measures to extend the time interval between coercive dominance actions and their conclusive realization are desirable. Parties already pursuing an adjustment strategy, but uneasy about relying on it, should support steps to increase the time interval. What of parties pursuing a policy of eventual dominance but not in the most

immediately hostile terms? If they believe that their current relationships are stable and not particularly onerous, they have little incentive. However, support for steps to increase the time interval between policy changes by others and their effects is encouraged by concerns that current relationships are unstable and that an adversary may preemptively shift to a more hostile strategy and quickly reap its benefits. Steps to increase the time interval lessen the burden which must be borne by foresight and forecasts. They can diminish pressures for the type of "worst case" planning which can, itself, make the worst case more probable.

Early warning capabilities can weaken the prisoner's dilemma incentives to shun adjustment. They contribute by enhancing the parties' ability to: (a) recognize preliminary rather than penultimate or final steps in defection from adjustment to domination strategies; (b) make such observations with means whose evidence is relatively widely accepted and which are relatively safe from interference; and (c) communicate relevant observations quickly and reliably to those who must act on them for the warnings to have any consequence.

While improved warning may lessen the security need to be certain of the intentions of others, it does not clarify their intentions or capabilities and thus does little to generate momentum for mutual adjustment. Let us assume that timely warning to void the potential

benefits of attempts at coercive domination exists. If, under that condition, each party attributes to the other the ability to predict his strategy choice and interdependence is substantial, then neither has incentives to choose anything other than an adjustment line of policy (Brams, 1975b; Howard, 1971). To stabilize the transitional stage of mutual partisan adjustment, predictability must be mutual and perceived to be so. Parenthetically, predictability, in this context, calls for accurate assessments of the "situation" as defined by the other parties and the decision logics they bring to bear to arrive at policy choice. Possible differences in culture and remembered national experience may be important in these respects (Bobrow, Chan and Kringen, 1977, 1979; Bennett and Alker, 1977; Alker and Christensen, 1972; Alexander and Weil, 1969; McClintock and McNeel, 1966). The kinds of measures which contribute to the prescience this analysis calls for should enhance mutual observation, comprehension of each other's utility schedules and decision processes, and ability to communicate readily the state of knowledge. The world is, of course, not completely predictable. Much about it is fluid and dynamic. Accordingly, predictability regimes must be based on instruments which rapidly reflect: (a) changes in intentions and capabilities; (b) the discovery by participants of utility considerations which, perhaps, they themselves had never recognized explicitly before being caught up in an ongoing situation; and (c) the harmonization of inconsistent policy

maxims and operational code precepts with regard to particular problems. There will always be some doubt about predictive capacity and thus some need to communicate in order to clarify and bargain about the validity and import of interpretive forecasts.

Some analysts have contended that international relations is at least as much a game of chicken as prisoner's dilemma. In the latter, parties would prefer to collaborate other things being arranged properly. In the former, one party seeks to coerce the other through threat and the other reciprocates. Yet, the prize is not worth it to anyone should either party carry through his threat. Decisions hinge on perceptions of resolve. Expectations about the determination of the other are crucial. These involve estimates of the likelihood that the opponent will pursue his threat, and the level of risk associated with implementation. When the acceptable level of risk for both parties is lower than the credibility they attribute to each other's threats, compromise follows. When it is higher, conflict escalates. When there is a difference between the players on these scores, one backs down (Snyder, 1971; Ellsberg, 1959). Partisan mutual adjustment with a corollary escape from prisoner's dilemma suggests reasons for the parties to want rapid and sure communications with each other, mutual predictive capacity, and sufficient warning so that actions by any one party cannot create permanent situations of

great disadvantage for the others. What will be the case in chicken contexts?

First, given that the prize is not worth the consequences if another implements his threat and the uncertainty that he will do so, all parties should wish to have communications which can convey their decision to back down even at the last minute. Such communications can also be employed to signal that the reciprocal threat is credible and the tolerable level of risk high. In a world where parties observing the game may even wish it to end in the execution of threats, the direct participants will wish these communications to be as reliable and independent of third parties as possible. Second, if parties think that each is equally likely to initiate a game of chicken and to demonstrate resolve, then both have an interest in imposing time intervals which lessen the need for precipitate action and continual hyper-vigilance. What of the situation where both believe that one participant is particularly prone to initiate? Here, the reactive party clearly would prefer to increase the probability of having substantial reaction time. The initiator would not unless certain concerns were salient to him. These include fear that the threatened party would see the game as so vital that he could not afford to lose and thus implement a reciprocal threat. Another significant fear would be that third parties with significant threat capabilities may conclude that they can cope with the initiator only if they preemptively adopt his [illegible]

make very serious threats. In a world in which international actors are vulnerable and tense, and in which many parties are in a position to threaten many others, prudence may then create a willingness for arrangements which contribute to substantial reaction times.

Third, mutual interest in predictability based on an understanding of capabilities, utilities, and rules of choice also poses complexities under the chicken framework. Any party which confidently can engage in "advantageous deception" will not prefer mutual predictability. That is, if one party is quite certain that it can, through deception, decisively enhance the credibility of its threats and depress the other's level of tolerable risk, it will find mutual predictability unattractive. However, if a party concludes that deception will probably be exposed with subsequent adverse effects, or that obstructing mutual predictability will lead others to actions which impose a net disadvantage in threat credibility and risk tolerance, then preferences will be different. In sum, even in the framework of chicken, there are numerous conditions in which the parties should find the kinds of information and communication stressed previously to be in their mutual interest.

Perhaps the most persistent argument made against the information and communication elements which seem desirable for a transition from direct violence to partisan mutual adjustment has to do with deception. If one party has strong incentives to engage in deception to set the

stage for domination attempts, the argument asserts that the only consequence of improved knowledge and predictability and communication will be fancier deception gambits and encouragement to aggression (Bremer, 1977). There is no doubt that deception has occurred in international relations and that governments have used and continue to use it to lay the foundations for attack (e.g., Whaley, 1973). The continuing possibility of deception in and of itself is not conclusive for our argument. Rather, the pertinent issues are whether the information and communication conducive to partisan mutual adjustment increase the likelihood of deception attempts and of their laying the basis for successful domination moves. This does not seem to be the case as a matter of general principle, although it may be for particular situations.[1] Indeed, the information and communication which seems desirable and indeed necessary for partisan mutual adjustment may well lower the incentives for deception attempts.

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[1]Brams (1975a) has delineated the costs and benefits of deception in 2 x 2 games under a number of limiting assumptions. He finds that deception is not an attractive strategy for a substantial majority of such games. For a fraction of the games, deception is attractive if not revealed--but the outcome will not necessarily satisfy the deceiver. And he finds a subset of games in which the outcome is sensitive to deception revealed during the course of the game. This sort of analysis obviously needs to be extended a great deal. It does illustrate that the benefits of deception are not uniform across situations and that deception can sometimes even benefit the deceived more than the deceiver.

First, by expanding available reaction times, strategic interaction becomes increasingly characterized by pauses and lags between particular steps and the last available moment for response. Accordingly, the effort required to sustain deception and the probability of exposure both increase. It becomes less probable that either party will be able to gain a substantial advantage through deception. Second, a reputation for a greater than normal proclivity to deceive reduces bargaining assets and subsequent resources for deception: "in repetitive bargaining, lying is curbed" (Lindblom, 1965: 70). Since many situations are repetitive, there clearly are incentives to forego some opportunities for successful short-run deception (Buckley, et al., 1974). Third, the attractiveness of deception suffers when it is uncertain that a "misled" adversary will behave any differently than he would have otherwise. Unless the party considering deception can confidently predict what the other will do in the presence and the absence of the deception, it cannot appraise the benefits from deception (Chen, 1974). Deception seems attractive only for that subset of situations in which a predictive edge leads to the conclusion that successful deception will produce a markedly superior outcome. If the adversary believes itself to be at a predictive disadvantage, it may well seek--within the means available to it--a strategy which takes that into account, i.e., one which attributes deceptive intent to the other, but deprives it of value.

In that event , the first party's opposition to or abuse of mutual predictability systems will not produce a particularly rewarding outcome. Fourth, the participation of a number of parties in the information and communication system, as for example might happen and may be necessary for certain regional situations with strongly involved external governments, also depresses the incentives to and probable net benefits from deception. It is, of course, true that as the number of parties increases, it becomes more difficult for any one to know everyone else's preference ordering (Goodin, 1976). Nevertheless, the larger the number of parties involved, the more who must be deceived. If the parties do not have identical information collection and interpretation systems in the broad sense, the tasks facing the deceiver multiply. Also, the more numerous are the parties interdependent with one another, the less likely it is that successful deception of any one by some particular adversary will result in a decisive outcome In effect, the governmental practice of manipulating uncertainty can often be attributed more value than it merits. And the loss of that capacity, as improved shared warning implies, may not be much of a loss at all.

Appropriate Technology

In the frame of reference of partisan mutual adjustment, the remainder of this paper focuses on warning information systems. That sort of information is obviously much

less than all that is required for mutual predictability and adjustment in that it does not deal with the shared appreciation of goals, interests, and situational interpretations addressed elsewhere (e.g., Kupperman and Goldman, 1975; Kupperman, et al., 1975). However, warning is a crucial requirement for the transition away from violent conflict and thus a precondition for a continuing pattern of partisan mutual adjustment. This section briefly summarizes some pertinent information systems for warning: those for remote sensing. For practical initiatives along the lines implied by our earlier discussion, some basic understanding of the man-machine technological systems seems necessary. Of course, the use of high technology to provide both sides of a potential conflict with warning information in order to defuse a tense situation and invoke external support and arbitration is not new. Examples include the sensors in the Sinai (United States Support Mission, 1975, 1976), the US-USSR "hot line," the measures associated with the SALT Treaty provisions (Article V) for the avoidance of accidental nuclear war, and proposals for United Nations use of satellite imagery to advance strategic arms control (Myrdal, 1974). After the general description of the pertinent systems, we turn, in the next section, to a discussion of the value of the information they can provide to all the parties in a strategic interaction. The security value to a government possessing it unilaterally is generally recognized and the particular technologies under development and

in production by the superpowers have been discussed at length (e.g., SIPRI, 1974; Greenwood, 1972; Adrien and Baumgardner, 1977).

Our discussion deals with the broad range of systems which can provide detailed, accurate, and timely data on type, location, and movement of men and equipment, as well as on natural resources, industrial activity, weather, and a variety of economic activities and environmental characteristics (Freden, et al., 1974). It does not deal with the systems particularly pertinent to transmitting and intercepting communications.

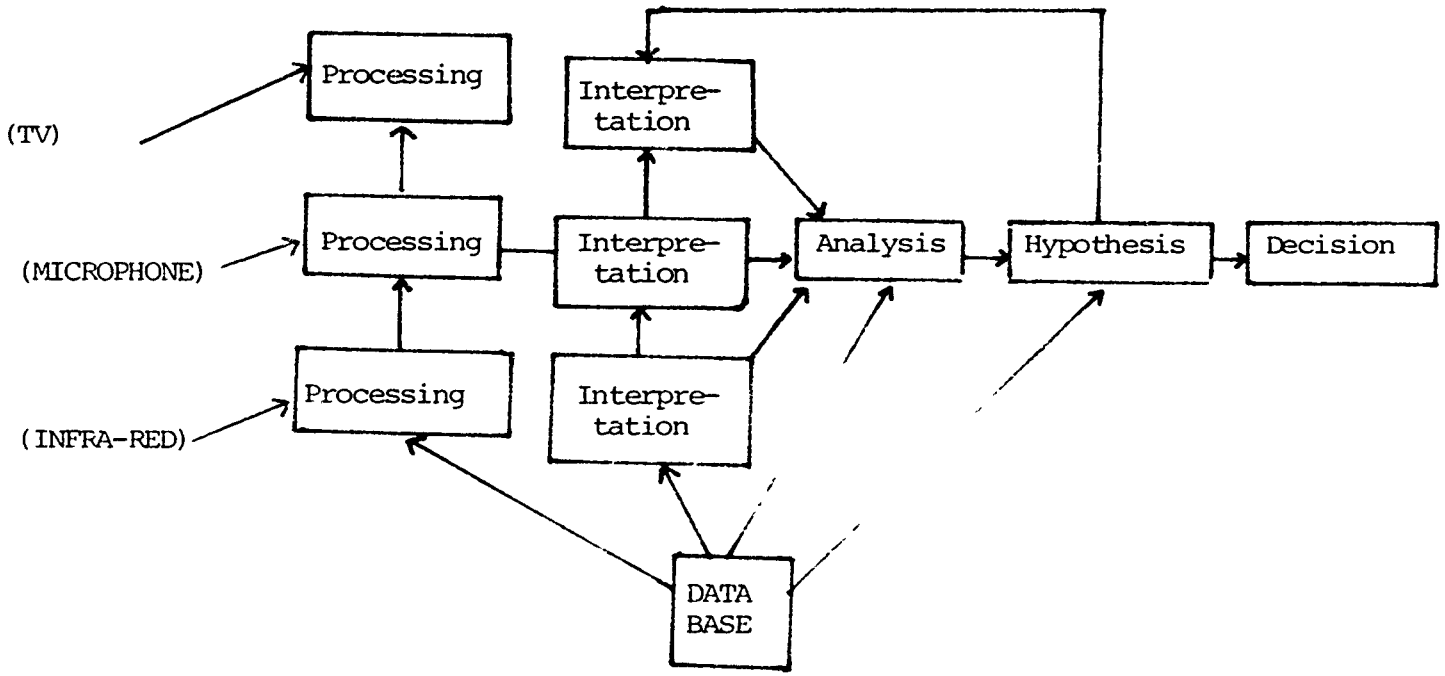
Remote sensing systems operate by detecting the energy emitted or reflected by various objects including detecting objects photographically, through sound detection, or by radar. Most of these systems are highly sophisticated, requiring complex technical support and data processing facilities to be used effectively. The area covered or field of view of these systems depends on a number of factors, including the range of the sensor and how high above the terrain it is operated. Ground level systems, such as vibration and sound detection equipment to detect the passage of men and motorized vehicles, have very short ranges on the order of 10 to 1,000 meters. The range of a radar system, on the other hand, is limited by both its height above the terrain and the radar power. Imaging systems, whether standard photographic, television, or infrared heat detecting systems, are limited only by

their sensitivity and the height above the terrain. When operated from an airplane, their ranges are on the order of hundreds of kilometers. When operated from space, as in the case of a weather satellite, they provide literally world-wide coverage. Other factors, such as timeliness of data, accuracy, resolution, and interpretability, vary with the type of sensor.

Figure 25 is a simplified diagram of a remote sensor system network. In this case, a network of three systems has been set up to detect the passage of motorized vehicles. The first sensor is a television camera; the second, a microphone; and the third, an infrared detector. Each system is sensitive to a different characteristic of the tank pictured in the figure. The television camera images the tank as it goes by. Its resolution and sensitivity are adequate to provide a picture of the tank during daylight hours and good weather. Signals from the television camera are carried back to a processing center where the electrical signals from the television camera are converted into a picture. Personnel in the processing center examine the picture and interpret whether or not a tank is present in the image.

The second sensor, the microphone, provides a means to detect the sound of a passing object (i.e., tanks, trucks, and other vehicles) as well as objects passing close enough to the microphone and provides a noise level loud enough to be detected by the microphone. This sensor will operate twenty-four hours a day and in all weather conditions. The

Figure 25. A Simplified Remote Sensing System Network



electrical signal from the microphone is carried back to a processing center where it is processed and converted into a display. Using data based upon previous calibrations of the microphone against passing motorized objects, the processing center personnel can determine what kind of object has been detected. Multiple microphones might even provide data on direction of travel and speed.

The third sensor, the infrared detector, detects the heat emanating from a passing object. With this sensor, vehicles propelled with a gas turbine, for instance, would stand out from vehicles such as diesel trucks with cooler exhaust systems. The signal from the infrared detector would be carried back to a processing center where, through processing of the signal, the specific type of vehicle could be determined. A display of this information would be interpreted by processing center personnel to clarify ambiguities which could not be differentiated by the data processing system.

Each processing effort depends upon a data base of prior information consisting of, for example, pictures of various motorized vehicles, data on their noise levels, and infrared signatures. The interpretation data from each of the sensors must now be incorporated into an analysis of a given event. For example, the television camera alone may provide a very clear picture of twenty passing tanks, moving towards the border twenty miles an hour. However, and perhaps more likely, because of darkness, the television

camera will provide several shadows of passing motorized vehicles. The microphone might indicate the presence of four vehicles whose signature labels them as gas turbine propelled vehicles. With this data, and a prior knowledge of the military force available to the other side, it is possible to provide an estimate of what the sensor network detected. This analysis will then be provided to decision makers as one factor in generating a hypothesis to explain the event and other possible events detected through other sources. These hypotheses become data on which political-military decisions will draw.

Using this small example, it is possible to see how other sensor systems might be integrated into a decision process. In this particular example, ground-based sensors are shown which would have relatively limited range and might be employed in a mountain pass or a known chokepoint for vehicular travel. Similarly, other sensors could be employed which have a broader area of coverage. One example would be a scanning television camera or radar. Another example might be an aircraft with similar equipment to provide even higher altitude and deeper coverage. A broad field of view and a larger variety of sensor data increases the probability of detecting activities of interest. On the other hand, this complicates the processing system, the interpretation activity, and the ultimate analysis effort.

Satellites, such as the ERTS and weather satellites, provide world-wide coverage of low resolution. In the case of a single country, a satellite system might provide one image of the entire country once a day. This snapshot effect decreases the timeliness of the data even though the amount of data and amount of coverage are increased. Similar factors affect airborne and other scanning remote sensing systems. An airplane with a sensor system on board may only be able to fly for one hour a day or only during the daylight hours or only during good weather. These factors limit the reliability and timeliness of such systems.

Finally, while the detection process occurs instantaneously, the data processing may take anywhere from seconds to hours. A television camera can provide data virtually instantaneously. However, a photographic system requires time-consuming film, transportation, and developing before it can be utilized. Similarly, once processing has been completed, each additional step--interpretation, analysis, and hypotheses generation--adds time and thus affects the usefulness of the information. All of these factors must be weighed in developing a balanced remote sensing network to meet specific warning requirements. It is crucial to view warning as a function of the timeliness and accuracy of all the stages shown in Figure 25. Even the best performance in the stage before interpretation can be deprived of value by delays and mistakes at that juncture.

Risks and Benefits: Hypothetical Examples

Any assessment of the probable risks and benefits of shared remote sensing, and thus of its transition contribution for situations of regional tension, must recognize the importance of a number of factors. Some relate directly to the sensing system itself, for example, the depth of coverage reliability, visibility of coverage, timeliness of data transmission. A number of other important factors involve the nature and equivalence of the security posture of the nations involved in military technology, in the capability of their forces, in the quality of their intelligence and prior knowledge about each other, and in the location and vulnerability of their more highly valued targets. Still other important factors are the policy for treatment of the existence and details of the shared sensing arrangement and the broader domestic political context in which the respective regimes operate. For example, to the extent that the governments are open about the existence of the arrangements and create respect for the reliability and timeliness of the warning which will result, they may be under less pressure from domestic opponents to act as if poised for war. Secrecy about the arrangements and doubts as to their value will not lessen pressure from domestic "hawks" for the sorts of actions which increase tension or deprive them of a broad constituency based on historical suspicions. More broadly, risks and benefits to the surveilled nations will vary as each is

involved positively or negatively with third nations in the region or concerned with or dependent upon actions of extra-regional superpowers or regional and global international organizations. And, of course, the balance of risks and benefits for the nations being surveilled may differ from that for their allies and backers elsewhere in the world.

It is well beyond the scope of this paper to explore the many possible contexts for shared remote sensing to evaluate its attractiveness. The richness and variety of the situations which need to be considered do not vitiate the course of action. After all, most national leaders share a hatred of surprise, a strong desire for personal, physical, and political survival and a healthy appetite for more information about possible foes and their domestic situation. What remains to be seen for any particular set of nations is the extent to which these general tendencies and the particular benefits to a regime from shared surveillance outweigh the risks inherent in improving the warning and perhaps other intelligence available to a possible enemy.

The rest of our discussion considers a relatively simple set of cases involving only Third World countries under important simplifying assumptions. First, the nations involved would prefer to avoid a war with each other, yet they are determined to avoid surprise and acceptance of an attack should war come. Second, the shared sensing system is one which provides all its data to each of the

participants so that both have all the data available to the other. The first assumption obviously excludes some serious cases; the second skips over possible difficulties in implementation.

A useful base case involves two adjacent countries where third parties are not highly committed to backing or opposing either. The countries have a rich history of tension and antagonism but both lack sophisticated weapons. Let us first consider a shared border surveillance system. Such a system would provide improved short-term warning. It does little to reduce perceived needs for military capability or levels of mobilization. The surveillance would have least defensive value to that side which had many high-value assets (e.g., hydroelectric dams, major factories, cities) near the common border and would be most damaged by immediate penetration of its territory. However, this party does gain an improved deterrent posture because earlier warning provides it more time to mount an effective military response or secure third party help. And the other party benefits if the resultant confidence in short-term warning defuses the hair-trigger defense posture of the more vulnerable nation. Shared border surveillance can reduce the odds of the more vulnerable party striking first because of unwarranted perceptions that the other side is engaging in an attack.

The option of shared surveillance in depth certainly permits countries to more accurately estimate long-term

economic patterns as well as providing directly military information. The benefits to each party include the provision of longer term indications and warning" which permits a lower level of mobilization readiness (reducing defense costs, ceteris paribus) and provides a longer period for bargaining and accommodation. Less obviously, it can enable each party to make more efficient decisions about its own defense posture by providing more reliable, complete, and timely information about the military-industrial base, facilities and order of battle of the other party. For the long run, sensing information may permit the parties to identify complementary economic factors, one necessary condition for cooperation in economic development. The information which can generate these benefits also can increase risks. It can improve the ability of either country to plan and carry out in-depth attacks, e.g., bombing, because it will expose targets and monitor their location. The information which can facilitate perceptions of joint economic interests can also be used to plan economic warfare and political exploitation of economic difficulties.

Since all data would be provided to both countries, shared remote sensing for each country provides a new and important source of information for domestic planning and policy and centralized monitoring. Information important to the regime would improve economic planning, environmental management, and intelligence about large-scale domestic

armed opposition. Obviously, this information can be used by the other side to aid and by the regime to suppress internal opponents.

Finally, it is important to address the issue of national susceptibility to deception. If nations believe that shared remote sensing increases the risk of deception, they will reject it. It is important to note that with or without shared remote sensing, both countries will have developed some set of intelligence resources. All intelligence systems are susceptible to some degree of deception. It is difficult to imagine how adding shared remote sensing will result in increased vulnerability to deception unless the effectiveness of the original national systems are decreased or purposely downgraded. It is easy to imagine how the information available from shared remote sensing can decrease the likelihood of successful deception.

Suppose we now have a similar case with one major difference: both nations possess high technology military forces. As a result, each can inflict more severe damage on the other more rapidly. The risks associated with shared border surveillance do not change markedly; if anything, the benefits decrease somewhat due to the shorter response time required of the weapons.

Is that also true for surveillance in depth? If anything, the benefits of defusing an even more hair-trigger posture increase. Benefits derive from more efficient defense planning as military costs mount. Since the risks

associated with war are even greater, a period for bargaining and accommodation seems more valuable. On the other hand, modern weapon technology does increase the value of deception and of successful surprise attack to an agressor; however, the risks of such a policy also increase. The costs of unsuccessful deception or self-delusion about the success of deception are severe.

It may be argued that the case for shared remote sensing becomes much weaker if there is a substantial military imbalance between the two countries under either high or low military technology conditions. The argument would be that secrecy, deception, and guile are more vital to the success of the weaker party. The argument does not seem sound in cases of marked inferiority. The weaker party cannot be worse off if the shared sensing is free, i.e., if it does not have to take resources away from other uses, unless the weakness is not known to the adversary. In that case, the key consideration is not military weakness but the nature of the balance of prior knowledge about each other. Even in the extreme case where shared surveillance can make attack seem more attractive to one party, shared sensing systems may still seem worthwhile if they improve warning in compensating ways.

Unfortunately for part of our argument, most regional antagonisms are not straightforwardly bilateral. As a result, an agreement to share surveillance data of an in-depth sort

between two countries in a given region may result in the unilateral supply of information to a third party with no corresponding increase in the information available to one of the original nations. In this and other respects, the cases we have dealt with are, of course, unrealistic in their simplicity and isolation from other participants in world politics. It seemed best to explore the implications of shared remote sensing for simple cases before turning to their evaluation for more complex situations. Given the multiplicity of arms suppliers and the rivalries and tensions which seem pervasive in the Third World, the costs and benefits of shared remote sensing seem sufficiently attractive to Third World nations to warrant further analysis. At least as important a next step is to examine the costs and benefits from the point of view of external governments and international organizations with regional commitments and stakes in peace in the Third World. Shared remote sensing needs to be assessed for its value in clarifying who initiated and is about to initiate war, and for providing some alternative to third party nations and regional and international organizations fueling relatively unbounded regional arms races or walking away from regional developments with a military aspect.

Conclusion and Prospect

Based on the initial reasoning that partisan mutual adjustment offered a possible transition from situations of

intense, violent conflict to ones of peace, the discussion has proceeded to address one part of the information system conducive to it. Some sense of the nature of remote sensing systems and their risks and benefits has been conveyed for illustrative simplified cases of what Americans would style as Third World regional tension. It seems useful to conclude with some brief comments on appropriate institutional arrangements and on the possible attractivensss of regionally shared remote sensing systems to external powers as well as to the groups who would be under observation.

At its best, shared remote sensing resembles a public utility which provides a collective good. For that to be true in practice, and for the participants to view it in that light, institutional arrangements must be appropriate and the system must be used on a regular basis. The arrangements proposed by Myrdal (1974) with regard to an International Disarmament Agency as part of the United Nations for remote sensing about strategic weapons developments by the superpowers do not provide an appropriate model. The agency she suggests would rely on national sensors and not have ownership and might not even have its own capacity to independently analyze and generate hypotheses about the images provided from national means. A more appropriate conception must involve the multilateralization and joint operation of all the ingredients of the system implied by Figure 25. These include the sensors and the human and computer capacity to conduct processing, interpretation, analysis, and hypothesis

generation. It seems unlikely, and understandably so, that the regional parties involved would have any particular confidence in remote sensing systems in which they did not have an equal operational role or which were under the effective control of some third party whose disinterestedness was open to serious question. Under such circumstances, the unilateral information sharing mentioned earlier could neither be prevented or even known in a timely fashion. Also, for shared remote sensing systems to make the desired contribution to partisan mutual adjustment, the information they provide must become part of the regular policy process of the participants. This seems feasible for two, and possibly three, reasons. First, given the ongoing nature of observations which warning requires, the information flows warrant standardized procedures and professional staffs for the steps in Figure 1, including transmittal to policy officials. Second, the information will bear on numerous policy issues of an ongoing, day-to-day character, as well as on short-lived, intense incidents. Third, for in-depth surveillance, decision makers will find the information about their own society useful for domestic, internal policy issues, as well as for dealing with the other participants.

From a superpower perspective, shared remote sensing systems in areas of regional tension should seem desirable if they wish to make even minimal investments in a transition away from local wars. By facilitating such systems, they probably do not increase the information about

themselves or about the regional situation already available to the other superpower. As for the regional participants, they do not lose privacy to the superpowers given the probably already high level of external surveillance by national means. We have already dealt with possible asymmetries in the benefits and risks the regional participants may incur. If those are acceptable in and of themselves, one can plausibly argue that shared remote sensing under appropriate institutional arrangements will increase the ability of the parties directly involved to manage their own fate and to provide timely, objective evidence to external supporters and mediators.

APPENDIX

PROJECT PUBLICATIONS AND PAPERS

Many of the publications and papers noted were presented in preliminary form at a variety of seminars and professional meetings. We have only listed those items which have significantly unique content and omitted the preliminary versions or less accessible summaries of the final versions.

A. International Economics and National Security

Davis B. Bobrow and Robert P. Stoker, "Economic Issues as National and International Security Issues," Annual Meeting of the British International Studies Association, Oxford, England (Dec. 18-20, 1978).

Davis B. Bobrow, Robert T. Kudrle, and Robert P. Stoker, "Accountability Initiatives and Accountability Constraints: Bargaining between the US and the NIEO," Jerusalem Journal of International Relations, Vol. 5, No. 1 (Fall, 1980), 27-65.

Steve Chan, "The Consequences of Expensive Oil on Arms Transfers," Journal of Peace Research, Vol. 17, No. 3 (1980). 235-46.

Robert T. Kudrle and Davis B. Bobrow, "U.S. Policy Toward Direct Foreign Investment," Annual Meeting of the American Political Science Association, Washington (Aug. 28-30, 1980).

B. Indicators for Foresight and Retrospection

Davis B. Bobrow, "Avoiding War and Avoiding Peace," Jerusalem Journal of International Relations (in press).

Steve Chan, "Temporal Delineation of International Conflicts: Poison Results from the Vietnam War, 1963-65," International Studies Quarterly, Vol. 22, No. 2 (June, 1978), 237-65.

Steve Chan, "An Assessment of Interstate Conflict of Event Data Projects: The CREON Data," project working paper (1976).

Steve Chan, "Sensitivity Analysis of American Actions in the Vietnam War, 1963-65," Annual Meeting of the International Studies Association, Toronto (Feb. 25-29, 1976).

Steve Chan and Davis B. Bobrow, "Horse Races, Security Markets and Foreign Relations: Some Implications and Evidence for Crisis Prediction," Journal of Conflict Resolution (in press).

Steve Chan and Davis B. Bobrow, "International Threat, Danger and Stress: Some Recommended Areas for Further Research," project working paper (1979).

C. Warning and Preventive Control

Davis B. Bobrow, "Security Futures, Intelligence and intelligence," National Security Affairs Institute of the National Defense University, Washington, Jan. 14, 1981.

Davis B. Bobrow," Information Systems to Constrain Conflict," in J. Ben-Dak (ed.), Peace Thinking and the Arab-Israeli Conflict, Ramat-Gan: Turtledove Press (in press).

Davis B. Bobrow, "Arms Control Through Communication and Information Regimes," in R. Harkavy and E. Kolodziej (eds.), American Security Policy and Policy-Making, Lexington: Lexington Books (1980), 115-28.

Davis B. Bobrow, "Communications, Command, and Control: the Nerves of Intervention," in Ellen Stern (ed.), Limits of Military Intervention, Beverly Hills: Sage Publications (1977), 101-20.

Davis B. Bobrow, "Policy Attention and Forecast Bias," Annual Meeting of the International Studies Association, Toronto (Feb. 25-29, 1976).

Davis B. Bobrow, "Innovations for Shared Warning, Diagnosis and Management of Conflict," Annual Meeting of the American Political Science Association, San Francisco (Sept. 2-5, 1975).

Steve Chan, "The Intelligence of Stupidity," American Political Science Review, Vol. 73, No. 1 (March, 1979), 171-80.

D. Diagnosing Foreign Decision Systems

Davis B. Bobrow, Steve Chan, and John A. Krigen, "Change and the Chinese," in N. Oren (ed.), Images and Reality in International Politics, Jerusalem: Hebrew University (in press).

Davis B. Bobrow, Steve Chan, and John A. Kringen, Understanding Foreign Policy Decisions: the Chinese Case, New York: Free Press (1979).

Davis B. Bobrow, Steve Chan, and John A. Kringen, "Alternate Chinese Responses to International Crises: Diagnostic Rules for an Executive Aid," project working paper (1978).

Davis B. Bobrow, Steve Chan, and John A. Kringen, "Capturing Inacessible Decision Processes: Some Chinese Examples," Papers, Peace Science Society (International), Vol. 27 (1977), 11-30.

Davis B. Bobrow, Steve Chan, and John A. Kringen, "Understanding How Others Treat Crises: a Multimethod Approach," International Studies Quarterly, Vol. 21, No. 1 (March, 1977), 199-223.

Steve Chan, "Rationality, Bureaucratic Politics and Belief Systems: Explaining the Chinese Policy Debate, 1964-66," Journal of Peace Research, Vol. 16, No. 4 (1979), 333-47.

Steve Chan, "Action, Perception and Communication: An Analysis of Chinese Media Treatment of the Vietnam War," Annual Meeting of the Association for Asian Studies, Mid-Atlantic Region, Washington (Oct. 28-29, 1978).

Steve Chan, "Chinese Conflict Calculus and Behavior: Assessment from a Perspective of Conflict Management," World Politics, Vol. 30, No. 3 (April, 1978), 391-410.

Steve Chan, Conflict Modelling and Management: Chinese Foreign Policy Behavior in the Vietnam War, 1963-1965. Ph.D. dissertation, Department of Political Science, University of Minnesota (1976).

Steve Chan and John A. Kringen, "The Elusive Black Box: Studying Decision Cultures at a Distance," Annual Meeting of the International Studies Association, Washington (Feb. 22-25, 1978).

Steve Chan, John A. Kringen, and Davis B. Bobrow, "A Chinese View of the International System," in J. David Singer and Michael Wallace (eds.), To Augur Well: Early Warning Indicators, Beverly Hills: Sage Publications (1979), 271-289.

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John A. Kringen, Political Mobilization and Chinese Belief Systems, Ph.D. dissertation, Department of Political Science, University of Minnesota (1978).

John A. Kringen and Steve Chan, "Stalking the Wild Datum: Problems and Prospects," Annual Meeting of the International Studies Association, St. Louis (March 16-20, 1977).

John A. Kringen and A. Brad Smith, "Forecasting and the Analysis of Chinese Political Communication," Annual Meeting of the Association for Asian Studies, Mid-Atlantic Region, Washington (Oct. 28-29, 1978).

E. Overviews and Implications

Davis B. Bobrow, "International Policy Science: A Necessary Pursuit," Annual Meeting of the International Studies Association, Los Angeles (March 19-22, 1980).

Davis B. Bobrow, "Preparing for Unwanted Events: Instances of International Political Terrorism," Terrorism, Vol. 1, Nos. 3 and 4 (1978), 397-422.

Davis B. Bobrow and Warren R. Phillips, "Implications of the Crisis Management R & D Summer Study for ARPA (CTO)," project working paper (1976).

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