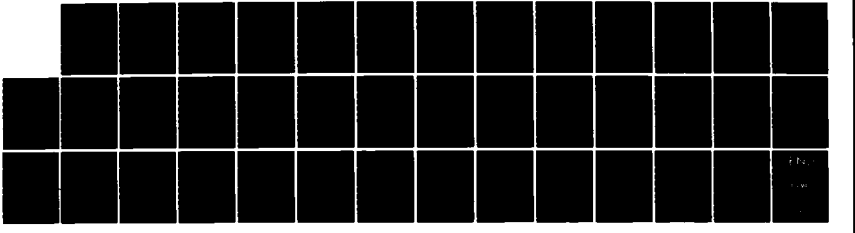
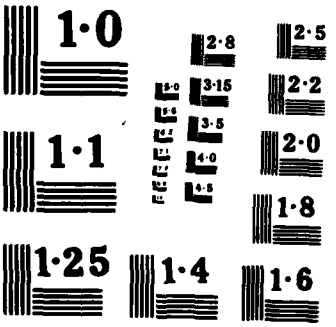
AD-A152 543 US ECONOMIC LEVERAGE AND THE SOVIET UNION(U) RAND CORP 1/1
SANTA MONICA CA J C FERNANDEZ OCT 84 RAND/P-7025

UNCLASSIFIED F/G 5/4 NL




1·0
1·1
1·25
1·4
1·6
1·8
2·0
2·2
2·5
2·8
3·15
3·5
4·0

U.S. ECONOMIC LEVERAGE AND THE SOVIET UNION

Judith C. Fernandez

October 1984

P-7025

The Rand Paper Series

Papers are issued by The Rand Corporation as a service to its professional staff. Their purpose is to facilitate the exchange of ideas among those who share the author's research interests; Papers are not reports prepared in fulfillment of Rand's contracts or grants. Views expressed in a Paper are the author's own and are not necessarily shared by Rand or its research sponsors.

The Rand Corporation, 1700 Main Street, P.O. Box 2138, Santa Monica, CA 90406-2138

U.S. ECONOMIC LEVERAGE AND THE SOVIET UNION

Judith C. Fernandez

October 1984

ABSTRACT

This paper presents a disaggregate model of the workings of economic leverage. The model identifies factors that influence the probability of success in any attempt to use leverage, and those that affect the costs of making such an attempt. The model is used to identify areas of agreement and of controversy in the debate over the efficacy of leverage, and reveals more agreement than might be apparent from the acrimonious literature on the subject. Analysis using the model suggests that the quality of the debate--and the likelihood of achieving some consensus--might improve if participants were to eschew their previous reliance on anecdote and historical example and concentrate instead on gathering systematic information on specific factors that influence leverage outcomes.

U.S. ECONOMIC LEVERAGE AND THE SOVIET UNION*

U.S. trade sanctions against the Soviet Union following the 1979 invasion of Afghanistan, and again after the imposition of martial law in Poland in the waning days of 1981, gave new vigor to a long standing debate concerning the appropriateness and effectiveness of using economic suasion to influence Soviet political and military behavior. In one form or another, both in the United States and in Western Europe, this debate has raged since the end of World War II. Unfortunately, the length of the debate has done little to improve the quality of argument and evidence used in it, nor has it led to much narrowing of the area of disagreement.

This paper provides a detailed model of the workings of one particular form of economic suasion, that of leverage, in the hope that such a model will improve the quality of the debate and ultimately lead to movement toward some consensus. The model is not intended to determine whether leverage will work. Rather, it is designed to indicate in what specific circumstances leverage will be most and least effective, without any judgment as to whether "most effective" means a 10 percent or 90 percent chance of success. More important, the model is designed to highlight areas of controversy that are at least potentially subject to empirical investigation.

---

* The research reported here was supported by the Office of the Undersecretary of Defense for Policy. The conclusions, however, are those of the author and do not necessarily reflect the views of either The Rand Corporation or the U.S. Government. I would like to thank Abraham S. Becker of The Rand Corporation for his many insightful comments concerning this work.

Before discussing the model itself, however, we will clarify a few terms and briefly examine the debate on the efficacy of leverage as it has appeared in the U.S. literature of the last 10-15 years.

ECONOMIC STRATEGIES IN FOREIGN POLICY

In the discussion of potential economic approaches the United States might use in its interactions with the Soviet Union definitions are far from standardized. In this paper, we will follow the typology and terminology used by Abraham Becker.[1] Becker distinguishes among three broad economic strategies, which he terms benefaction, denial, and leverage. He defines benefaction as the conferral of benefits from trade in the belief that economic assistance causes changes in the economic and political structure of the recipient society that enhance the welfare of both donor and recipient. It is different from a policy of laissez faire or free trade because it aims at providing a greater increase in the economic welfare of the target country than free trade alone would provide. Benefaction would encompass, in effect, subsidization of trade with the Soviet Union. In the current and probable future international environment, benefaction is unlikely to be a policy goal for Western governments.

Denial strategies, in contrast to benefaction, seek to impede the growth of the target country economy. Denial may be either general or aimed at specific sectors. In either case the objective is to restrict the gains from trade available to the target country by constraining the level or composition of trade.

Within Becker's framework, a third trade strategy, leverage, may be viewed as an alternative to both benefaction and denial. The purpose of

a leverage policy directed at the Soviet Union is to exploit a Soviet vulnerability through the application of a Western advantage so as to influence Soviet political decisions. The objective is to obtain a modification or reversal of an action or policy in exchange for a promised trade-related reward or to avoid a threatened trade-related sanction. A leverage strategy may aim either to promote or impede economic growth, depending on the circumstances, but its essential goal is to alter the behavior of a government.

THE DEBATE OVER LEVERAGE

The past decade's literature on U.S. trade strategies toward the Soviet Union has been voluminous and, at times, acrimonious. Despite this protracted debate, little progress has been made in resolving the issues, or indeed even in narrowing the area of disagreement. In this section, we discuss only that part of the literature relating to leverage, and suggest some causes of the sterility of the present debate.[2]

One cause is a lack of consensus over the historical evidence. Because participants in the debate disagree on the results expected from leverage, they cannot agree as to whether specific attempts to use it were successful.[3] The difficulty lies in identifying the change in Soviet behavior that leverage is expected to produce. With the 1980 grain embargo, for example, it was not clear whether the objective was Soviet troop withdrawal from Afghanistan, Soviet restraint in other parts of the world, or merely the sending of a message that would underline the extent of U.S. disapproval.

In addition, in any analysis of an historical incident there is room for disagreement in the choice of a counterfactual--that is, in the judgment of what would have occurred in the absence of economic sanctions or rewards. The conclusion concerning whether a change in Soviet action was caused by leverage obviously hinges on this issue, but usually the only basis for choice between counterfactuals is one's prior beliefs or the eminence of the analyst. Because there are eminent analysts on all sides of the debate, the choice tends to depend solely on prior belief, and thus debate leads to no objective resolution.

A few examples may help illustrate this point. The Jackson-Vanek Amendment, passed in 1974, linked granting of most-favored-nation tariff status to emigration policy in an effort to influence Soviet decisions on Jewish emigration. Some analysts argue this linkage was successful, citing the increase in Soviet emigration in 1973-74, when the amendment was being debated.[4] Others label this attempt at leverage as a failure, noting the Soviet rejection of the trade agreement to which the amendment was attached, and arguing that the emigration occurred in spite of, rather than because of, the Jackson-Vanek Amendment.[5] Similar disagreement surfaced after the imposition of sanctions in response to the Afghanistan invasion. Proponents of leverage claimed success, arguing the Soviets were restrained from further moves by the sanctions and that the sanctions "punished" the Soviets for their actions. Those with little faith in leverage note that the Soviets did not withdraw from Afghanistan and argue that their actions in other spheres were unaffected.[6]

Another pervasive problem appearing in the debate over the effectiveness of linkage or leverage is the difficulty of attributing a Soviet action or policy change to a specific U.S. threat or promise. Economic sanctions are not used alone but as part of a package of actions. Diplomatic protests in bilateral and multilateral forums, military moves of some sort (if only putting troops on alert), official warnings of endangerment of other negotiations, all occur at the same time as embargoes and other export or credit restrictions. The difficulty of attributing any Soviet response to a single U.S. act is obvious; the more cautious refuse to try.[7] Carried to its logical extreme, this problem becomes insoluble. The effect of U.S. action in the economic arena will always in some way be affected by action on other fronts, if only by impinging on Soviet perceptions of U.S. priorities and objectives. At some lesser and more meaningful level of abstraction, it is conceptually possible, but in practice difficult, to separate the effect of economic sanctions from simultaneous other actions. If any one action among many is to be designated as "most important" or "most effective," the choice tends to depend on the judgment of the analyst.

Finally, the debate over leverage has been muddied by unresolved questions of fact to which answers may prove elusive. How dependent on imports is the Soviet Union? The answer varies with the expert.[8] When the U.S. sanctions are imposed, how often are exports from other nations substituted? Analysts disagree, although reports of individual instances of substitution abound.[9]

The debate on leverage and sanctions is unsatisfying because arguments and logic are repeated (in less and more convincing ways) with

no real advances made toward agreement. The current arguments, and currently used types of evidence, are unlikely to have much appeal except to the already convinced. Given its present form, progress does not seem likely. Ideally what is needed is a structure for the debate in which all sides agree that a specified observable result supports one position or refutes another, but this is a counsel of perfection. More realistically, new approaches to narrowing and focusing the debate would be useful. We suggest below a model of leverage that disaggregates the actions and influences involved in any attempt to use economic power to alter the political decisions of a trading partner.

THE MODEL

There is a twofold objective in developing a simple model of leverage. First, it will provide a detailed picture of how leverage works. Second, it will permit systematic examination of some of the areas of controversy in the debate concerning the effectiveness of leverage. The value of the model is not that it lends itself to manipulations from which will flow "answers," but rather that it allows us to identify the circumstances influencing application of leverage and the way in which they affect the leverage attempt. Systematic examination of the individual aspects may permit separation of areas of controversy from areas of agreement and suggest ways to resolve some of the controversy. Some areas of disagreement will be beyond the scope of the model, and others will appear in the model but with no apparent method of resolution. Nonetheless, the model will be useful if it narrows the scope of disagreement and points the way to new, potentially more useful ways of discussing the issues involved in leverage.

Figure 1 shows the components of the model. The interconnections are complex, but in general, the most direct effects run between each component and the ones below it, as shown by arrows in the figure.

The model begins with the aspects of the environment in which the leverage attempt takes place, as shown in the top level of Figure 1. These are circumstances that may be regarded as fixed in the short run--the supply and demand conditions in international markets, the state of political relations in the Atlantic Alliance, etc. These circumstances may change in the medium and long run, and in the longer run they depend in part on U.S. policy choices concerning the use of leverage (the attempt to enforce an export embargo on turbines destined for the Soviet

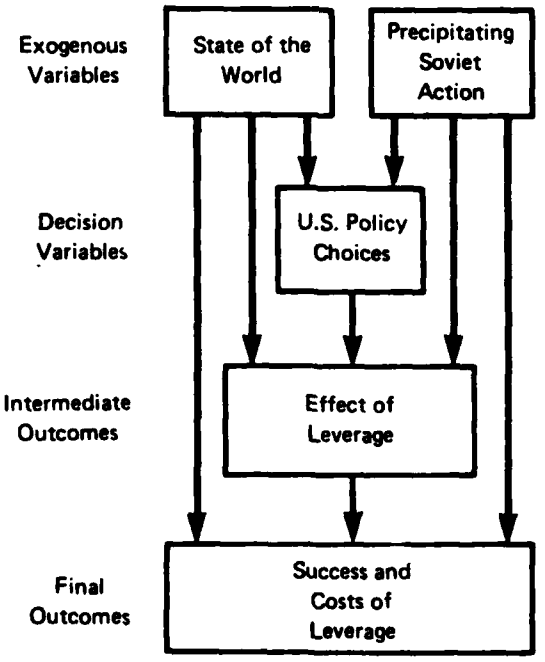


Fig. 1 -- The components of a model of leverage

gas pipeline had a lasting effect on the degree of unity within the Atlantic Alliance, for example). At the time of an individual attempt to apply leverage, however, these factors may be taken as given. The model also takes as given the Soviet action or policy that triggers the attempt to apply leverage.

All other components in the model are influenced by the exogenous variables defining the environment and the trigger action. Some of these variables are decision variables, directly under U.S. control. Others are intermediate or final outcomes in the process of applying leverage.

The model and the interconnections among the components can be most simply expressed in mathematical terms:

Exogenous Variables:

ECONSTATE = a vector of variables defining the economic state of the world

WESTSTATE = a vector of variables defining the general political situation in the United States and within the Atlantic Alliance

EWSTATE = a vector defining the political relations among the United States, Western Europe, and the Soviet Union

TRIGGER = a vector defining the characteristics of the Soviet action or policy that has caused the attempt to apply leverage

Decision Variable:

USPOLICY = a vector defining the tactics used in the leverage attempt

Intermediate Outcome Variables:

SOVSEN = the extent to which the economy of the Soviet Union is sensitive to a trade sanction or blandishment

CREDIBLE = the Soviet judgment of how likely the United States is to proceed with the threatened (or promised) trade action.

ALLIEDCOOP = the degree of cooperation given to the leverage attempt by other countries in the Atlantic Alliance

OTHERCOOP = the degree of cooperation given by other (non-Soviet bloc and non-NATO) countries.

Final Outcome Variables:

SUCCESS = the probability that the attempt to apply leverage will succeed in achieving the desired change in Soviet behavior

COST = a vector defining the political and economic costs of a particular attempt to use leverage

All of these variables are discussed in more detail below. Using the convention that f( ) means "is a function of" or "depends on," our model posits that the following relations among variables are true:

USPOLICY = f(ECONSTATE, WESTSTATE, EWSTATE, TRIGGER)

SOVSEN = f(ECONSTATE, USPOLICY)

ALLIEDCOOP = f(ECONSTATE, WESTSTATE, EWSTATE, USPOLICY, TRIGGER)

OTHERCOOP = f(ECONSTATE, EWSTATE, USPOLICY, TRIGGER)

CREDIBLE = f(ECONSTATE, WESTSTATE, EWSTATE, USPOLICY)

And,

SUCCESS = f(USPOLICY, SOVSEN, ALLIEDCOOP, OTHERCOOP, CREDIBLE)

COST = f(ECONSTATE, WESTSTATE, EWSTATE, TRIGGER, USPOLICY)

The model assumes that the result of a particular attempt to apply leverage can best be judged in terms of its probability of success and

its cost, and that these final outcomes are affected by both the environment (described by the exogenous variables) and policy decisions. Only the more important aspects of the exogenous variables will be considered below. The dependent variables (both decision and outcome variables) may well depend on other factors, but a restricted number of issues will keep the model at least somewhat tractable. The framework and usage of the model would not change, however, if it were expanded to include more dimensions.

The Variables

The variables of the model fall into three conceptual categories: exogenous variables, decision variables, and outcome variables. The exogenous variables in turn can be grouped into those that concern the economic state of the world, those related to the political state of affairs in the United States and between the United States and its allies, those concerning the political state of affairs between the East and West, and those that define the Soviet action or policy that is the triggering force in the leverage attempt.

The selection of precisely which factors to include in the first group, the vector of variables that constitute ECONSTATE, depends to some extent on the particular type of leverage instrument that is contemplated. For example, if an export embargo (e.g., grain or pipeline equipment) is being considered, then the number of alternate suppliers of the good located outside the Soviet bloc, or outside the Atlantic Alliance, is important, whereas the impact of import restrictions depends on more general economic conditions in the U.S. (the level of unemployment, for example) and the international financial

position of the Soviet Union (e.g., the level of hard currency reserves).

In general, the variables measuring the economic state of the world lend themselves to measurement and often are continually tracked in national statistics (e.g., unemployment, balance of payments). Opposing sides in the leverage debate differ as to which subset of economic variables they discuss, rather than over the value of any specific variable. Thus, those who counsel against leverage most frequently cite figures on alternative sources of supply, or unemployment in export industries, whereas those who favor leverage cite the trade dependence of the Soviet Union. Or the two sides may agree on the subset of interest (e.g., the number of alternative suppliers) but disagree as to appropriate measures (whether to count all non-U.S. grain exporters, or only non-NATO suppliers). *In effect*, this latter disagreement reflects implicit differences in the judgment of the degree of Allied or non-Allied cooperation that can be expected in a specific leverage attempt. The value of the model in the midst of such a debate is the following: (1) It forces advocates of various positions to recognize the full set of relevant economic variables; and (2) it explicitly recognizes that third-party cooperation is a distinct aspect of leverage attempts, whose analysis is necessary but conceptually separate from, and affected by different variables than, the economic state of the world.

The political state of affairs within the United States and between the United States and its allies in Western Europe and Japan (WESTSTATE), is a vector whose components are less easy to identify, and much more difficult to measure, than the ECONSTATE vector. The most

important aspect of the political scene is perhaps the general level of support enjoyed by the U.S. administration, both domestically and internationally. In particular, the outcome of an attempt to apply leverage will be influenced by the degree of consensus on general policy goals (of all types, not only of those related to trade policy) within the United States and between the United States and other members of the Atlantic Alliance.

The state of political relations described by the WESTSTATE variable is that existing before a specific attempt to apply leverage. During the course of a leverage episode, relations will change depending on U.S. leverage policies (and European policy reactions). In the structure of the model, however, these changes enter the analysis through the degree of allied cooperation (ALLIEDCOOP), rather than as part of the exogenous variable WESTSTATE. For example, the aspects of U.S.-European relations to be examined when contemplating the sanctions imposed after Poland declared martial law are those relating to the congruence of views between President Reagan and European leaders in late 1981. The intra-Alliance ill will generated by the attempt to enforce the sanctions on European subsidiaries and licensees of U.S. companies would not be part of the exogenous variable WESTSTATE, but rather part of the outcome (COST). Thus previous conditions are conceptually separate from conditions that arise because of the decisions made by policymakers in the course of applying leverage in a specific instance.

Similarly, the state of East-West political relations is an exogenous variable in the model (EWSTATE) and so refers to relations

before the episode under consideration. The aspects of the relation that will most influence the probability of success and the cost of an attempt at leverage are the general level of hostility (or cordiality) between the United States and the Soviet Union and between other Atlantic Alliance countries and the Soviet Union. Also important is the existence of any other negotiations on nontrade aspects of East-West cooperation planned for the near future (e.g., arms control talks).

The last category of exogenous variables is TRIGGER, the vector of factors that define the Soviet action or policy that is the immediate cause of the leverage episode. As with the WESTSTATE and EWSTATE variables, these factors are somewhat amorphous and difficult to measure. Conceptually they include the novelty of the Soviet action or policy (the extent to which it is a departure from past policies), and some judgment of the degree to which the subject and geographic location of the action is in the realm of Soviet (or U.S.) vital interests. Thus leverage was more likely to be a success in affecting Soviet actions in Afghanistan than in Poland, because Afghanistan is less central to Soviet security and because a Soviet invasion in Asia has fewer precedents than intervention in Eastern Europe.

The USPOLICY variable defines U.S. policy choices made during the course of a specific attempt to apply leverage. This vector of factors includes the importance of the demand made of the Soviets as a condition of avoiding the threat (or reaping the promise) made in the leverage attempt, the envisioned scope of the threat or promise made (is an embargo to be applied by the United States alone or by all NATO nations, is it to apply to many export products or few, etc.), the consistency with which the United States pursues its objectives once the attempt has

been launched, and the degree of national and international publicity attendant to the attempt. USPOLICY is affected by the exogenous variables of the model, and in turn it influences the outcomes of the leverage attempt.

The model has two different kinds of outcome variables, intermediate and final. The first intermediate outcome variable, SOVSEN, refers to the Soviet economy's vulnerability to the economic pressure of a leverage threat at trade restriction, or its potential benefit from a leverage promise to expand trade. As with the other intermediate outcome variables, SOVSEN depends not just on the economic state of the world, but also on U.S. policy decisions (e.g., the scope of an embargo policy).

SOVSEN and the three other intermediate outcomes variables--the degree of allied cooperation (ALLIEDCOOP), the degree of third-party cooperation (OTHERCOOP), and the perception that the United States is "serious" (CREDIBLE)--are not easily quantified. For the purposes of this modeling effort, each variable should be thought of as having three or four alternative states: The Soviet economy may be very sensitive to the leverage action threatened or promised, or it may be moderately sensitive, or insensitive. Similarly, the Soviets may judge the United States is very likely to make good on its threat or promise (a high value for CREDIBLE), or they may feel the United States would find it quite difficult to follow through. In both examples, "high" and "low" are not subject to calibration but nonetheless are useful aids to thought.

The final outcome variables of the model are the probability that the objective of the leverage attempt will be achieved (SUCCESS), and

the cost of the attempt (COST). SUCCESS basically has one dimension--how likely are the Soviets to act as desired? COST has several dimensions, both economic and political. The domestic economic cost can be measured in terms of losses from foregone trade. The domestic political costs are less easily measured but obviously exist in the form of lost support or increased domestic opposition to other political goals. The international political costs center on damage done to U.S. relations with other members of NATO, or with Third World countries.[10]

A Digression on Economic Costs

One aspect of the domestic economic cost of a trade-related action needs to be clarified at this point. Discussions of trade sanctions often assume that the economic loss due to potential exports that are not made (for whatever reason) is the total sales value of the products, and that all jobs lost because of foregone exports are a net loss to the domestic labor force. Matters of double counting aside--to count both the sales price of the export and the number of jobs involved in producing it double counts the value of the labor--this reasoning is incorrect. Only the net gains from trade should be considered the economic benefit of trade, or the loss if trade is restricted. This net loss is less than the value of the U.S. exports not shipped, just as the net number of jobs lost is less than the number of people no longer working in the export industry. How much less depends on how complete is the adjustment to changed trade conditions.

If there is total adjustment (i.e., the same amount of unemployed resources after the change as before), the total net loss from a refusal to export to the USSR is the loss in efficiency that results when the

U.S. economy as a whole produces less of the export good(s) and more of the import-competing good(s). This loss is far less than the value of lost trade. At the other extreme, if none of the resources previously used in supplying goods to the Soviet Union are switched to production for other markets or other goods, then (and only then) is the net economic cost the full sales value of the lost trade.

The use of an incorrect concept of the cost of an embargo does not change qualitative discussions of leverage, because the factors that increase the true economic cost of leverage also increase the cost as calculated using the incorrect approach. But the magnitude of the economic cost of an embargo or an export restriction is much less than that commonly cited by those who fail to distinguish between true costs and the sales value of exports.

Tracing Through Effects on Final Outcomes

The model described above is a simple one, but it provides a way of categorizing some of the numerous different issues that arise in any discussion of leverage. To begin with, the model posits that the exogenous variables, which describe the state of the world when a leverage attempt begins, not only influence the outcome of the attempt directly, but also indirectly through their effect on U.S. decisions about how to apply leverage. The more important effects of the exogenous variables are summarized in Tables 1-4; selected important cases are marked with an asterisk.

Each row in the tables is designed to be independent of all other rows. That is, the entries in any single row assume no other factors change. Reading across any row gives the effect of an exogenous variable on the policy or outcome variable indicated by the column

heading. The effect may be positive (+) or negative (-) or there may not be much of an effect (0). Considerable uncertainty as to the effect of the exogenous variable is indicated by (?).

Table 1 shows the impact of exogenous variables on selected dimensions of USPOLICY. The first line indicates that the presence of many substitute suppliers or products will tend to reduce the frequency with which a country attempts leverage and the importance of the concession demanded. Both effects are due to a weak bargaining position. Thus, in 1973 when major Arab oil producers reduced exports to induce European support for a U.N. resolution urging Israeli surrender of occupied territory, the paucity of alternate suppliers contributed immeasurably to the result: the affected countries complied.[11] In contrast, the availability of alternative grain exporters no doubt weakened the American chances for successful leverage in the case of the Soviet invasion of Afghanistan.

Next consider the WESTSTATE variable in Table 1--the level of domestic support enjoyed by the U.S. administration. All else being equal, the frequency with which leverage is applied will increase with domestic support because leverage is less politically costly in such a situation. Also, with a high level of support, the U.S. administration will have a firm political base for follow-through, increasing the probability of a consistent effort. In addition, the firm base means stronger demands on the Soviets may be made without engendering as much disagreement within the U.S. as would otherwise arise. But, there is no *a priori* reason for the level of general support for the administration to affect the specific form of leverage chosen--carrot (trade reward) versus stick (trade restriction).

Table 1

EFFECTS OF THE STATE OF THE WORLD ON U.S. POLICY

Exogenous Variable	Frequency of Leverage Attempts	Consistency of Follow-Through	Importance of U.S. Demands	Likelihood of Using the Carrot Instead of the Stick
ECONSTATE				
* Large number of substitute suppliers or products	-	0	-	+
High U.S. unemployment	-	-	?	+
Healthy state of U.S. balance of payments	+	+	+	?
WESTSTATE				
* High level of domestic support for U.S. administration	+	+	+	0
EWSTATE				
High level of tensions, US-USSR or W. Europe-USSR	+	+	+	-
High level of "reverse leverage" is available to the USSR	-	-	-	+
TRIGGER				
Action is close to Soviet vital interests, further from U.S. interests	-	-	-	0

* Cases discussed in the text.

Exogenous variables such as ECONSTATE, WESTSTATE, and EWSTATE affect policy decisions, which in turn affect the probability of success or failure, as shown in Table 1. In addition, the exogenous variables themselves directly affect the outcome variables. Tables 2 through 4 summarize the direct effects, along with the influence of U.S. policy decisions. In Table 2, and in the tables that follow, the reasoning along any one row is, in a general sense, cumulative. That is, if the degree of Soviet sensitivity increases because of a change in an exogenous variable, and the change also makes the leverage threat more credible, then the probability increases that the leverage action will be successful. If there are opposing tendencies with respect to the intermediate outcomes, such as when there is a decreased likelihood of cooperation but more credibility associated with a change in the state of the world, the final outcome will depend on the relative strengths of the opposing effects.

Table 2 lists the effects of all aspects of exogenous and policy variables that are the same regardless of whether the leverage attempt affects trade (e.g., export embargoes) or finance (e.g., refusal to extend trade credits). Tables 3 and 4 treat effects that are unique to one or the other tactic.

The influence of the degree of domestic unity is the same whether goods or credits are to be used as the leverage weapon, as shown by the second entry in Table 2. Reading across the row, the level of U.S. domestic support for the administration will not affect Soviet vulnerability to the threatened action. It is not clear what the effect of domestic support will be on the likelihood that other countries will

Table 2

FACTORS AFFECTING ALL FORMS OF LEVERAGE

Exogenous or Decision Variable	Effect on Intermediate Outcomes				Effect on Final Outcomes			
						C O S T		
	SOV SEN	ALLIED COOP	OTHER COOP	CRED IBLE	SUCCESS	Domestic Econ.	Domestic Pol.	Internatl Pol.
ECONSTATE								
High level of "reverse leverage" available to USSR	0	-	0	-	-	0	+	+
WESTSTATE								
* High level of general domestic support for U.S. administration	0	?	?	+	+	0	-	?
High level of general cohesiveness of Alliance	0	+	0	+	+	0	-	-
EWSTATE								
High level of tensions, U.S.-U.S.S.R.	0	?	0	+	?	0	-	?
High level of tensions, W. Europe-USSR	0	+	0	0	+	0	0	-
Other important East-West negotiations are occurring	0	?	0	?	?	0	?	?
TRIGGER								
Precipitating action is an isolated event, not a general policy	0	?	?	0	?	0	?	?

Table 2 (con'd)

Exogenous or Decision Variable	Effect on Intermediate Outcomes				Effect on Final Outcomes			
						C O S T		
	SOV SEN	ALLIED COOP	OTHER COOP	CRED IBLE	SUCCESS	Domestic Econ.	Pol.	Internatl Pol.
TRIGGER Action is close to Soviet vital interests, further from US interests	0	-	-	-	-	0	+	+
Action is a continuation of old policies, not a new initiative	0	-	-	-	-	0	+	+
USPOLICY Leverage is used frequently	-	-	-	?	-	+	?	+
U.S. demands are for important concessions (as perceived by the Soviets)	0	-	-	-	-	0	?	+
U.S. follows through on initial actions	+	+	+	+	+	+	-	-
* Use of trade reward rather than punishment	?	+	+	?	?	-	?	-
Large amount of publicity	0	?	?	?	?	0	?	?

* Cases discussed in the text.

cooperate with the U.S. action. One could argue that the support will increase the strength of the U.S. position when it is discussing leverage with its allies. Or one could argue that such effects are so weak as to fade into insignificance when compared with the impact of the allies' own economic and political situations. Similar controversy exists with regard to the cooperation of third parties. A high level of support within the United States, however, will not decrease the likelihood of allied or other cooperation, so the positive effect of an increase in credibility, together with either a positive or no effect with regard to the other intermediate outcome variables, means that there will be a positive influence on the final outcome variable SUCCESS, the probability that the Soviets will accede to the leverage demands. A high level of domestic support will decrease part of the cost of the attempt, namely the domestic political cost. It will not affect the domestic economic cost of the attempt to apply leverage, and the influence on the international political costs is indeterminate.

The final entry in Table 2 is an area of considerable controversy in the leverage debate: whether leverage attempts should proceed by means of threats or promises. The European view favors the carrot, so that the likelihood of allied cooperation increases if promises are used in attempts at leverage rather than embargoes or trade restrictions. As many third party (non-NATO) countries agree with the European viewpoint, the effect on OTHERCOOP is similar.

The Soviet Union may or may not be more sensitive to threat than to promise, hence the carrot-versus-stick issue has unclear consequences for SOVSEN. In the short run, restrictions cause immediate bottlenecks

clearly attributable to the U.S. action. Promised trade rewards are more problematic: They take longer to influence the Soviet economy, and their ultimate value is more difficult to judge. But some analysts believe the Soviets are more likely to respond positively to a promise than to a threat because there is less appearance of giving in to U.S. demands in the latter case.

The net result on the final outcome is an indeterminate effect on success, but a fair amount of agreement that using the carrot carries lower economic and political costs than using the stick. The appropriate form of action to be selected for use in an attempt at leverage--trade restriction versus promises of future trade favors--remains one of the most controversial areas of the leverage debate.

Table 3 deals with exogenous and decision variables that are particularly relevant to a leverage attempt that uses threats or promises concerning trade in goods and services. Most of the entries in this table are self-explanatory, and few question marks appear. One that does appear relates to the entry on the fraction of total U.S. production of the good that is exported. High exports to the USSR, relative to production, make a U.S. threat to embargo less credible, because the Soviets realize the United States is less likely to carry out a threat whose domestic consequences will be painful and visible in terms of lost sales and lost jobs. President Reagan's removal of the embargo on grain and phosphate exports that were instituted by President Carter in response to Afghanistan has been cited as an object lesson in this regard by those who believe that agricultural embargoes are not a credible long-term threat.

Table 3

FACTORS AFFECTING LEVERAGE THAT USES TRADE EMBARGO OR ENCOURAGEMENT

Exogenous or Decision Variable	Effect on Intermediate Outcomes				Effect on Final Outcomes			
						C O S T		
	SOV SEN	ALLIED COOP	OTHER COOP	CRED IBLE	SUCCESS	Domestic Econ.	Domestic Pol.	Internatl Pol.
ECONSTATE								
Large number of supplier countries	-	-	-	0	-	0	+	+
Large number of substitute products	-	-	-	0	-	0	+	+
* High ratio in the U.S. of exports to production	0	+	+	-	?	+	+	-
High ratio in allied countries of exports to production	0	-	0	0	-	0	0	-
High U.S. unemployment in affected sectors	0	+	+	-	?	+	+	-
High unemployment in allied countries in affected sectors	0	-	0	0	-	0	0	+
High ratio of imports to requirements in the Soviet Union	+	?	?	+	+	0	-	0
Products affected have high priority to Soviet leaders	+	?	?	+	+	0	-	?

TABLE 3 (con'd)

Exogenous or Decision Variable	Effect on Intermediate Outcomes				Effect on Final Outcomes			
						C O S T		
	SOV SEN	ALLIED COOP	OTHER COOP	CRED IBLE	SUCCESS	Domestic Econ.	Domestic Pol.	Internatl Pol.
USPOLICY								
High technology products affected rather than agricultural goods	?	+	0	0	?	0	?	-
Increase in scope of embargo (from U.S. production only to licensees)	+	-	0	-	-	0	?	+
Increase in severity of embargo	+	-	-	-	?	+	+	+

* Case discussed in the text.

Higher export ratios, however, increase the chances of allied and third party cooperation and decrease the international political cost. The United States is seen as sharing in the sacrifice if the threat is implemented, rather than as calling for actions that will harm others while the U.S. remains untouched. The European response to the U.S. calls for more restrictive COCOM rules following the imposition of martial law in Poland, for example, was marked by references to unequal export dependence and unequal sacrifices by the European economies compared with the American (references that were made even more apposite by American refusal to restrict grain sales).[12] The net effect of the decreased credibility but increased Allied cooperation on the

probability of success is not clear. The net effect on the costs of the leverage attempt depends on the relative importance of domestic and international costs.

Table 4 shows the influence of exogenous and decision variables that are particularly important when leverage is based on a restriction or expansion of hard-currency loans or export credits granted the Soviet Union. A question mark appears on the U.S. balance of payments position. The reasoning--and the dilemma--is parallel to the one discussed above with respect to export-production ratios. A healthy balance of payments makes credit restrictions less painful, because they do not threaten to weaken the dollar or drive the external account into deficit. If the leverage action is fairly painless to the United States, then the threat is more credible, but the United States will attract less international cooperation, and the international political costs will be greater.

An examination of Tables 1-4 reveals more uncontroversial areas than might be apparent from the literature on economic leverage. There is little controversy over the ways in which changes in economic variables (ECONSTATE) affect the success or costs of an attempt to apply leverage. Similarly, domestic and inter-alliance political relations (WESTSTATE) have fairly straightforward effects on the credibility of a leverage action and on the likelihood of allied cooperation; they therefore have predictable effects on the probability of successful leverage and the costs of the attempt. More controversy exists, however, concerning the effects of certain aspects of East-West relations and the trigger action. The aspects of leverage arousing the

Table 4

FACTORS AFFECTING LEVERAGE THAT USES LOANS OR TRADE CREDITS

Exogenous or Decision Variable	Effect on Intermediate Outcomes				Effect on Final Outcomes			
						COST		
	SOV SEN	ALLIED COOP	OTHER COOP	CRED IBLE	SUCCESS	Domestic Econ.	Domestic Pol.	Internatl Pol.
ECONSTATE								
High unemployment in U.S. export industries	0	+	0	-	?	+	+	-
High unemployment in allies' export industries	0	-	0	0	-	0	?	+
* Improvement in U.S. balance of payments	0	-	0	+	?	-	-	+
Improvement in allies' balance of payments	0	+	0	0	+	0	?	-
High aggregate import/consumption ratio in the USSR	+	+	+	+	+	0	-	0
High level of Soviet hard currency reserves	-	0	0	0	-	0	0	0
USPOLICY								
More drastic curbing of loans and credits	+	-	-	0	?	+	+	+

* Case discussed in the text.

most controversy are those related to U.S. policy choices about the style or substance of an attempt to apply leverage.

Although there are certainly major areas of disagreement, this summary suggests much of the continuing leverage controversy can be traced to differing judgments as to questions of fact--what are the relevant values of the variables? Thus the debate over leverage as a foreign policy tool would benefit from increased attention to factual detail--how many alternative suppliers there are for the good in question, whether other products can be substituted, etc. In light of recent difficulties of the Soviet economy, the overall dependence of the Soviet Union on imports becomes an area where further empirical research would be particularly useful.

Scenarios

If the net effect on the final outcome variables is sometimes difficult to determine for a single exogenous variable or U.S. policy choice, the confusion (and controversy) is compounded when the elements of the model are combined in an actual leverage attempt. In order to explore some aspects of a limited number of combinations of variables, this section abandons the element-by-element approach in favor of scenarios. Two alternative scenarios illustrate threats or promises based on product exports from the United States to the Soviet Union.

Scenario I contains the following exogenous and decision variables of interest:

- There are a moderate number of non-U.S. suppliers of the product

- The U.S. administration has a low level of general support domestically
- Inter-alliance relations are somewhat strained
- The product chosen for the leverage instrument is of high priority to the Soviet Union, and the Soviets are highly dependent on imports to supply their need for it.
- The United States chooses as its leverage instrument an export embargo applied to U.S.-manufactured products (not products produced abroad by subsidiaries or licensees)
- The United States demands and the embargo threat are subject to continuous domestic disagreement that makes follow-through difficult.

The model of leverage presented above guides us to the following conclusions about this scenario. First, the conditions are far from ideal: The probability of success will be adversely affected by political conditions, and there will be considerable political costs associated with the attempt. The chances of success are improved by the reliance on imports of the affected product by the Soviets, although the presence of alternative suppliers reduces the importance of this factor. Major controversies with this scenario will concern (1) whether the presence of alternative suppliers more than outweighs the Soviet vulnerability imposed by high import dependency, and (2) whether the domestic and international political costs of attempting to apply leverage are worth the benefits, should leverage be successful in achieving concessions from the Soviets. The first is an empirical question; the latter is a matter of political judgment.

For Scenario II, assume the following is true:

- There are few non-U.S. suppliers of the product and few substitute products
- The U.S. administration enjoys strong domestic support
- Inter-alliance relations are cordial
- The Soviet action is tentative, in an area not vital to its interests
- The Soviet Union imports a large fraction of its requirements for the product
- The embargo is applied consistently.

Given this scenario, there will be little controversy over the combined effect of the variables on the outcome of the event. Some economic and political costs would be incurred in the episode, but the costs would probably be fairly low and the chances for success reasonably high. A similar scenario could be constructed that would stack the deck against the likelihood that an attempt at leverage would be successful and that would imply high costs would be incurred in the attempt.

Thus what quickly becomes apparent when a scenario approach is used is that two areas of controversy regarding leverage are quite important. First is the question of what, in fact, is likely to be the combination of circumstances U.S. policymakers will face when they must decide whether to use leverage in a specific instance. Analysts who believe Scenario I is the usual situation in the world will have a very different opinion of leverage than those who see the world as looking more like Scenario II. Thus the scenario approach reinforces the conclusion

reached above--more agreement over the effectiveness of leverage might be forthcoming if the state of the world were carefully examined. But the examination must extend beyond individual issues of fact to the more problematic arena of probable constellations of factors.

A second area of controversy illuminated by the scenarios is more difficult: how to determine the net effect on the final outcome of conflicting influences from the exogenous variables. Analysts disagree as to what are the "most important" or "key" aspects of the world for an attempt at applying leverage. Here historical or empirical evidence is less likely to be satisfactory, in part because of the disagreement over which historical attempts at leverage have been successful (if any), and in part because the relative importance of different exogenous variables may well change over time.

CAVEATS AND CONCLUSIONS

In addition to the limitations revealed by the scenario approach of the previous section, there are several important caveats that should be kept in mind when using Tables 1-4 and the model underlying them. The first concerns an omission. The tables have no column indicating the general long term effect of leverage, however used, on international relations. Table 2 made the point that a successful use of leverage will decrease the chances for success the next time around, as the Soviets build defenses against this kind of pressure--witness the multiplication of sources of Soviet grain imports since the Afghanistan sanctions. But there is also the more general argument made by some opponents of leverage that its use leads to undesired side effects. Leverage may lead to the consolidation of the Soviet bloc, or to generally more hostile Soviet policy toward the United States. Leverage

also may lead to unacceptable levels of disunity among Western allies, no matter how great the effort to keep disunity at a minimum.

The model also ignores the use of leverage as a signalling device. The severity of trade sanctions provides a way of expressing the extent of U.S. disapproval of Soviet actions, the argument goes, so leverage is a useful tool even if the specific demands made during a leverage attempt are not met. The appropriateness of this use of leverage depends on whether other signalling devices are available, and what their costs are. This topic is beyond the scope of the model.

Finally, the model does not address the crucial issue of whether leverage will, in fact, work in a specific instance. The tables allow us to judge how the chances for success, and the costs, of applying leverage change with the state of the world or with U.S. policy decisions. But the model says nothing about the actual probability of success in the most favorable scenario. It also says nothing about how likely the United States is to encounter (or engineer) the most likely scenario. However, research guided by the framework of the model--concerning the value of crucial variables as illuminated by the model, and the areas of controversy identified--may provide a solid basis for answering these questions.

Overall, perhaps the most important insight comes from juxtaposing the model with the literature on trade strategies. With a few important and conspicuous exceptions, the literature has addressed the specific variables identified by the model not with systematic evidence but by appeal to either anecdote or, at the other extreme, abstract logic. Frequently, the proponents of one position or another ignore the individual influences altogether and instead argue over the success or

failure of past leverage attempts. This would be a reasonable way to test the hypothesis that leverage works, if there were ways of testing success in any specific historical instance. In practice, little agreement is achieved on the counterfactual--what would have been Soviet behavior had there been no leverage applied--and so this aggregate approach loses its usefulness. The model suggests that a more fruitful approach might be to eschew anecdote and counterfactual and concentrate instead on gathering systematic information on specific factors that everyone agrees will influence leverage outcomes.

FOOTNOTES

1. Abraham Becker, *Economic Leverage on the Soviet Union in the 1980s,* The Rand Corporation, R-3127-USDP, July 1984.

2. For a more extensive review of the literature, see Judith C. Fernandez, *Modelling Economic Leverage,* The Rand Corporation, N-2065-USDP, May 1984, pp. 19-37.

3. Indeed, one of the barriers to the effective use of leverage may be an inability to choose among possible leverage demands.

4. See, for example, Marshall I. Goldman, "The Evolution and Possible Direction of U.S. Policy in East-West Trade," pp. 155-176 in Abraham S. Becker (ed.) *Economic Relations with the USSR: Issues for the Western Alliance,* Lexington Books, Lexington, MA, 1983. Also see Goldman's article "Will the Soviet Union be an Autarky in 1984," *International Security,* 3(4), Spring 1979, pp. 18-36.

5. E.g., Arthur J. Klinghoffer, "U.S. Foreign Policy and the Soviet Energy Predicament," *Orbis,* 25(3), Fall 1981, pp. 557-578.

6. For examples on both sides of this disagreement, see the record of testimony before the U.S. Senate Committee on Banking, Housing and Urban Affairs, *Suspension of United States Exports of High Technology and Grain to the Soviet Union,* hearings on August 19 and 20, 1980, Washington, D.C., 1980. Also see *An Assessment of the Afghanistan Sanctions: Implications for Trade and Diplomacy in the 1980s,* prepared by the Congressional Research Service, Office of Senior Specialists, for the U.S. House of Representatives, Committee on Foreign Affairs, Subcommittee on Europe and the Middle East, April 1981.

7. Dimitri Simes is among those who discuss Soviet reactions in specific cases where sanctions are applied as part of a complex set of actions, ("The Death of Detente?" *International Security*, 5(1), Summer 1980, pp. 3-25). Helmut Sonnenfeldt takes the same approach at a more general level by advocating "strategic linkage," in which policymakers realize all issues--economic, military, and political--are interrelated and cannot be addressed separately, ("Linkage, A Strategy for Tempering Soviet Antagonism," *NATO Review,* 27(1), 1979, pp. 3-5, 20-23).

8. Those who conclude such trade is quite important include Anthony Sutton (*Western Technology and Soviet Economic Development, 1945 to 1965,* Hoover Institution Press, Stanford, California, 1973), and Vladimir Treml and Barry Kostinsky (*Domestic Value of Soviet Foreign Trade: Exports and Imports in the 1972 Input-Output Table,* U.S. Department of Commerce, October 1982). Less convinced of the importance of imports are, for example, Padma Desai ("The Productivity of Foreign Resource Inflows to the Soviet Economy," *American Economic Review,* 69(2), May 1979, pp. 70-79) and Franklyn Holzman and Richard Portes ("The Limits of Pressure," *Foreign Policy,* 32, Fall 1978, pp. 63-80).

9. For example, there are widely varying estimates of the net effect on Soviet imports of the post Afghanistan grain sanctions--see U.S. Senate hearings, *op.cit.*

10. There are international economic costs as well, but in this model they enter only as they affect ALLIEDCOOP or OTHERCOOP.

11. This example is one of the few found by Klaus Knorr to be a successful use of leverage (*The Power of Nations: The Political-Economy of International Relations,* Basic Books, Inc., New York, 1975).

12. For a summary of this aspect of the Poland sanctions, see Jean-Marie Guillaume, "A European View of East-West Trade in the 1980s," in Abraham S. Becker (ed.) *Economic Relations with the USSR: Issues for the Western Alliance,* Lexington Books, Lexington, MA, 1983, pp. 135-154.

END

FILMED

5-85

DTIC