

Multilateral versus Unilateral Sanctions Reconsidered: A Test Using New Data

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Abstract

Although policymakers adamantly argue that multilateral sanctions are more effective than unilateral sanctions, the empirical evidence to date clearly suggests otherwise. Repeatedly, empirical studies using the familiar Hufbauer, Schott, and Elliot dataset demonstrate that unilateral sanctions appear more effective than multilateral sanctions. In this study, we test three theoretical explanations developed to explain this empirical pattern using the new Threat and Imposition of Sanctions (TIES) data. Surprisingly, we find support for the arguments of policymakers over political scientists: that is, multilateral sanctions do appear more effective than unilateral sanctions. However, these observations conform to theories of sanctions effectiveness that utilize spatial theories of bargaining. We conclude that the empirical evidence suggests further use of spatial theory to explain the effectiveness of economic sanctions.

1 Introduction

On October 15, 2006, U.S. Secretary of State Condoleeza Rice claimed that the unanimous U.N. Security Council Resolution threatening to impose sanctions on North Korea would serve as a powerful tool to induce Pyongyang to cease its development of nuclear technology. Rice stated that the vote demonstrated a "unity of purpose,"¹ and that the participation of Russia and China made the threat of sanctions much more credible. As in this case, policymakers frequently advocate the use of multilateral sanctions over unilateral sanctions, arguing that a coalition of states can create stronger signals to a target government, and impose greater costs if the target does not comply with the senders' demands. Even policymakers typically in favor of unilateral approaches to foreign policy, such as U.S. Vice President Richard Cheney, often argue that unilateral sanctions "almost never work."² Yet, despite the convictions of policymakers, scholars consistently demonstrate through empirical research that unilateral sanctions appear much more effective than multilateral efforts (Drezner 2000; Hufbauer, Schott & Elliott 1990; Kaempfer & Lowenberg 1998). This overwhelming evidence led to the development of numerous theoretical arguments designed to explain why, despite the additional coercive power supplied by a multilateral coalition, are unilateral sanctions more effective?

Our purpose in this study is to revisit the question of multilateral versus unilateral sanctions using new information from the Threat and Imposition of Sanctions (TIES) data (Morgan, Krustev & Bapat 2006). Almost all scholarly research examining the efficacy of sanctions is tested using the familiar Hufbauer, Schott, & Elliot (HSE) dataset (Hufbauer, Schott & Elliott 1990). Studies using these data have produced three general explanations for why multilateral sanctions appear less effective than unilateral sanctions. Broadly, the explanations can be characterized as selection effects, public goods, or explanations from spatial modeling (Kaempfer & Lowenberg 1998; Miers & Morgan 2002; Morgan & Miers 1999). The HSE data cover 116 cases where sanctions were imposed in the period from 1914-1990. While TIES is shorter in its timespan, encompassing only sanctions imposed in the period from 1971-2000, TIES contains 888 cases, including 529 instances of sanctions imposition. In addition to the greater number of cases, TIES extends the HSE data by including cases of "low" politics, such as disputes over trade or within international institutions. Using these new data, we present new empirical tests of each of the three explanations for the success of multilateral versus unilateral sanctions. Following our tests, we argue that our results

conform to the predictions from spatial theory.

The study is organized as follows. We first introduce the three explanations, and outline the empirical predictions of each. We next present the TIES data and present a description of several of the key variables in the dataset. Following this description, we outline and test explanations of sanctions effectiveness using selection effects, public goods, and spatial theory. We design individual research designs to best test the explanations presented by the sanctions literature. Following our empirical tests, we conclude by discussing both the theoretical and empirical implications of the findings and make the case for further development in spatial theory explanations of sanctions effectiveness.

2 Explaining Multilateral Failure

Insert Figure 1 about here

With few exceptions (Lopez & Cortright 2004), numerous scholars in the policy literature argue that sanctions in general do not work (Gause III 1999; Haass 1997; Mueller & Mueller 1999; Nurnberger 2003). Yet, despite the claims of sanctions ineffectiveness, the usage of sanctions appears to be growing in the international system (Morgan, Krustev & Bapat 2006). According to the TIES data, the number of sanctions impositions grew from 48 in the 1970s to 97 in the 1980s, and subsequently exploded to 355 in the 1990s. In response to their growing popularity, policymakers and scholars began examining ways to make sanctions imposition more effective at changing the behavior of target states (Drezner 2003; Morgan & Miers 1999; Morgan & Schwebach 1997). Frequently, policymakers argued that sanctions could only be effective if they were a multilateral effort (Barfield & Groombridge 1998; Haass 1997). If sanctions were unilateral, target governments could simply circumvent them by trading with other states or using the black market. For example, consider the case of the U.S. trade embargo on Cuba. The embargo has remained in effect since 1962 for the purpose of denying strategic materials to the government of Fidel Castro. However, since 1975, the U.S. effort has been unilateral. As a result, Cuba consistently obtains access to U.S. materials by trading with secondary partners. While goods do not flow directly from the U.S., Cuba is able to purchase American goods by trading with Mexico, Canada, and numerous other Latin American countries. According to policymakers, this case exemplifies the futility of unilateral sanctions. Despite the tightening of the U.S. embargo in 1992, goods continue to flow from the

U.S. to the Cuban mainland due to the lack of cooperation from Latin American countries. This observation led many policy experts to conclude that if sanctions were to succeed, the effort would need to be multilateral with the support of a coalition of countries.

Despite this conventional wisdom, scholarly examinations of sanctions using the HSE data reveal a consistent pattern: multilateral sanctions are *less* effective than unilateral efforts. Consistently, large N studies of sanctions imposition demonstrate that multilateral sanctions are more likely to fail than unilateral sanctions. In response to these observations, scholars developed three key explanations for why we see a greater number of failures in multilateral efforts, when intuition tells us that they should indeed be more effective than unilateral efforts.

2.1 Selection Effects

The first explanation for why multilateral sanctions appear less effective than unilateral sanctions is an explanation grounded in selection effects (Drezner 2003; Lacy & Niu 2004; Morgan & Miers 1999; Smith 1996). According to this explanation, states are more likely to build multilateral coalitions in response to critical issues, such as those involving security. In other issue areas, such as trade or environmental concerns, states are less likely to expend the effort to build larger coalitions. However, given that the stakes are higher in issue areas where states are more likely to build multilateral coalitions, we observe a higher failure rate for multilateral sanctions. The actual cause for sanctions failure, according to this explanation, is not that sanctions were multilateral or unilateral, it is that the issue in dispute is typically of higher salience when we observe multilateral sanctions.

From this explanation, we can develop two empirically testable hypotheses. First, we would expect multilateral sanctions to occur more frequently if the dispute is security related versus purely economic. Since security issues are more salient, multilateral coalitions should be more likely to form. Second, since the issue is indeed more salient, target governments should be less likely to acquiesce to sender demands in security disputes. Since multilateral coalitions form as a result of security disputes, and target states are less likely to acquiesce in security disputes, target states are more likely to resist multilateral efforts.

Hypothesis 1: Multilateral sanctions are more likely to occur if the issue in dispute is security related.

Hypothesis 2: Security related sanctions are less likely to succeed than non-security related sanc-

tions.

2.2 Public Goods

A second explanation for multilateral sanctions failure relates to the theory of public goods (Kaempfer & Lowenberg 1998; Leidy 1989; Martin 1992). According to this argument, the maintenance of sanctions and the denial of goods to the target represents a public good for a group of states. However, if the good is public, each individual state would have an incentive to free ride off the efforts of the other states in the coalition. Should all states in the coalition free ride, we should expect multilateral sanctions to fail. This can be contrasted with unilateral sanctions, where the individual sender cannot free ride and should therefore maintain sanctions. The clear empirical prediction from this argument is that multilateral sanctions should be less effective than unilateral ones, for both security and non-security related disputes.

Unlike the selection effects hypotheses, the empirical expectation of the public goods explanation is that multilateral sanctions should uniformly be less effective than unilateral sanctions. While in theory multilateral sanctions can impose greater costs on the target, the coalition members' incentives to free ride will ultimately undermine the effort to change target behavior.

Hypothesis 3: Multilateral sanctions should be less successful than unilateral sanctions for all dispute types.

2.3 Spatial Theory of Sanctions

A third explanation of the greater success rate of unilateral sanctions develops its empirical predictions using spatial modeling. Miers and Morgan (2002) develop a formal model to understand why unilateral sanctions appear more effective than multilateral sanctions. According to this model, economic disputes are conceptualized as a bargaining situation between a sender and a target. For example, Sender A threatens the target T with some economic cost c if the target does not shift the status quo closer to A 's ideal point. Assuming sanctions will be costly for both A and T , a set of outcomes should exist such that both A and T prefer a settlement to the costs of sanctions (Fearon 1995; Powell 2002). Now, let us consider a case where A locates a partner B . If A and B form a coalition, they theoretically should be able to combine their ability to impose costs and move T closer to their bargaining position. However, in a multidimensional setting, A and B might

have different preferences regarding the second issue dimension. Previous studies in social choice establish that in this setting, T can strategically make proposals such that any outcome in the space is possible, resulting in the well known Chaos Theorem (McKelvey 1979; Riker 1980; Shepsle 1979). The Chaos Theorem establishes that if T is strategic, T will successfully undermine any attempt to move it from its ideal point. This effectively makes multilateral sanctions less effective than unilateral sanctions. However, Miers and Morgan identify conditions where multilateral sanctions can produce success. In a single-dimensional setting, T is unable to strategically manipulate A and B , and can therefore be compelled to give greater concessions to the coalition. This leads to the first hypothesis concerning sanctions effectiveness from Miers and Morgan.

Hypothesis 4: Multilateral sanctions are more likely to succeed if there is only one issue in dispute.

If there is more than one issue in dispute, T will be able to manipulate the coalition. However, Miers and Morgan further identify the use of an international institution as a strategy for coalitions of senders with multi-issue disputes. If multilateral sanctions are conducted through an international institution, the constraints imposed on the senders might prevent the target from strategically manipulating the coalition. A key finding in the social choice literature is that stability can be found in multidimensional settings if institutions can produce a structurally induced equilibrium (Riker 1980; Shepsle 1979). This stability would allow multiple senders that impose sanctions through international institutions to maintain the imposition of sanctions and avoid target attempts to manipulate the coalition.

Hypothesis 5: Multilateral sanctions involving multiple issues increase the likelihood of success if and only if they are conducted through an international institution. In all other cases, multilateral sanctions involving multiple issues should decrease the likelihood of success.

To explanation from spatial theory offers a nuanced prediction concerning the multilateral/unilateral debate. We would expect multilateral sanctions over multiple issues to be more effective than unilateral sanctions if and only if they are conducted through an international institution. On the other hand, we would expect multilateral sanctions over multiple issues to be no more effective than unilateral sanctions if they are done outside of an international institution. If sanctions are over one issue, we would expect multilateral sanctions to be more effective, with or without an institution. To falsify the spatial explanation, the test would have to demonstrate that the number of issues in dispute and the use of international institutions in multi-issue settings have

little effect on the likelihood of sanctions.

According to the explanation, the chaos theorem, and subsequent decrease in the likelihood of success, occurs when three conditions simultaneously are true:

1. Sanctions are multilateral
2. Sanctions are multi-issue
3. No international institution is present

3 The TIES Data

We construct individual research designs for each explanation using the TIES data. The TIES data contains information about cases in which sanctions were both threatened and imposed from 1971-2000. Within this period, TIES contains information on 888 cases of either sanctions threats or sanctions imposition. There are a total of 506 instances where sanctions were imposed in this period, compared with 116 cases in HSE. Although the time period differs from HSE, which covers cases from 1914-1990, TIES includes all of the HSE cases imposed from 1971-1990. An obvious reason why TIES contains more data is its focus on threats. However, TIES has a significantly higher number of cases of imposition for several reasons. Primarily, unlike HSE, TIES focuses on both economic and security oriented disputes. In doing so, TIES adds a very large number of cases for study. To illustrate, TIES located 350 cases where sanctions were imposed as a result of trade disputes. Trade disputes alone represent a 200% increase over the number of sanctions in HSE. If we add further cases, such as disputes over economic liberalization and environmental practices, we should only expect that TIES would have a larger sample of cases.

Many of the variables within TIES overlap with the variables in HSE. Like HSE, TIES identifies the senders of sanctions (up to five). If sanctions are multilateral, TIES identifies the primary sender within the coalition. TIES further contains information as to whether or not the sanctions are sent through an international institution. Additionally, like HSE, TIES identifies up to three issues in dispute between the sender and the target. In the dataset containing both threats and imposition, TIES identifies 70 cases where the dispute between the sender and the target contained multiple issues, which accounts for only about 8% of the cases. Clearly, it appears that most sanctions disputes are over one and only one issue. If we restrict the sample to just instances

of imposition, however, the proportion of multi-issue disputes increases to 12% - suggesting that we are more likely to observe multi-issue sanctions amongst the imposed sanctions cases.

A critical variable in assessing the effectiveness of sanctions is the economic cost of such activity. HSE measures costs on a scale of 1-4, along with attempting to measure the loss of trade for both the target and the sender. In the TIES data, the cost measure is captured differently. First, instead of using a 1-4 scale, TIES uses a 1-3 scale for both the target and the sender ranging from 1. Minor costs 2. Major costs 3. Severe costs. Additionally, TIES focuses both on the actual costs of sanctions, and on the *anticipated* costs of sanctions. The argument for focusing on anticipated costs is that these are the projections policymakers have ex ante the imposition of sanctions. Policymakers can only realize the true costs of sanctions once they are imposed. Therefore, in assessing a sender's threat, or in assessing whether to acquiesce to sanctions after they are imposed, policymakers do not necessarily have full information on what the true costs of sanctions will be. TIES therefore captures this uncertainty by measuring projections of costs for both the target and the sender using the 1-3 scale.³

To measure the success of imposed sanctions using HSE, scholars use several methods. The HSE data presents a scale of success from 1-16, where a score of 1 represents total sender failure and 16 indicates complete success.⁴ Scholars using HSE utilize various points along the scale to separate "successes" from "failures." Similarly, TIES contains an outcome variable that allows scholars of sanctions to identify what they consider to be sanctions success versus failure. Assuming sanctions are imposed, the outcomes range from total capitulation on the part of the sender, to a negotiated settlement, to total capitulation on the part of the target. TIES further indicates whether either the target or the sender makes partial concessions or "partially capitulates." Although a typical definition of sanctions success might be for the outcome to reach total capitulation on the part of the target, we lower the threshold in our analysis. We consider any movement on the part of the target to be a successful sanctions episode. Therefore, we consider a sanction a success if the target partially capitulates, fully capitulates, or reaches a negotiated settlement. By contrast, we consider cases where the sender capitulates and instances of stalemate to be sanctions failures. By this definition, TIES contains 390 instances of where sanctions imposition failed to alter the target's behavior and 118 cases of success. This approximates to a roughly 30% success rate for sanctions, which is similar to the success rate estimated from HSE.

In comparing TIES and HSE, we see numerous similarities, particularly in the estimates of

sanction success, the infrequency of multilateral sanctions, and the participation of the United States. Although TIES covers a different time period, we would expect the processes behind sanctions imposition to remain consistent in both datasets. Therefore, we expect that in examining the TIES data, multilateral sanctions should be less likely to succeed than unilateral sanctions. Given this empirical regularity, we now seek to use the TIES data to test various explanations behind this empirical pattern.

3.1 Selection Effects

If the selection effects explanation is correct, we should observe a higher proportion of multilateral sanctions in cases related to issues of greater concern, such as security or territorial disputes. A simple way to test the predictions of this explanation is to cross-examine the frequency of multilateral sanctions with security oriented issue disputes. While this is difficult to do with the HSE data due to the lack of low profile cases, TIES has information related to such disputes. Therefore, we are able to create a dichotomous security variable, coded as 1 if the primary issue in dispute between a sender and a target ranges from a score of 1 to 11. If the primary issue in dispute is greater than 11, the dispute involves either trade practices, drug trafficking, environmental policies, or economic reform. In total, there are 131 cases where sanctions were imposed due to security related disputes. This corresponds to approximately 26% of the cases. In the remaining 377 cases, sanctions were imposed for reasons other than security. From Hypothesis 1, we would expect that most of the cases involving security related disputes result in multilateral sanctioning efforts. Likewise, Hypothesis 2 predicts that sanctions involving security oriented issues should be less likely to succeed than non-security oriented disputes. These predictions can be tested using simple contingency tables examining the frequency of sanctions success and the nature of the dispute. From the hypotheses, we would expect that security related disputes should increase the frequency at which multilateral sanctions efforts are attempted. Similarly, security related disputes should decrease the success rate of sanctions efforts. Based on these results, we can conduct our final contingency table, which compares the frequency of multilateral sanctions efforts with success. If it is true that multilateral sanctioning efforts are more frequently attempted in security disputes, and security disputes are more likely to fail, then multilateral sanctioning efforts should also be more likely to fail. If the results follow these predictions, we can conclude that the new data support the predictions of the selection effects explanation.

3.2 Public Goods

The clear empirical prediction from this argument is that multilateral sanctions should be less effective than unilateral ones, for both security and non-security related disputes. To test this explanation, we again test this claim using a simple contingency table to determine if multilateral sanctioning efforts are more likely to fail in all types of sanctions disputes.

3.3 Spatial Theory

To test the spatial explanation, we create three dummy variables to capture each of the three conditions. From TIES, we can identify multilateral coalitions by examining the sender variables. If there is more than one sender present, we coded the multilateral variable as 1. In all other cases, this variable is coded as 0. We further can identify the number of issues involved in the dispute by examining the issue variables. Again, if there is more than one issue in dispute (representing a case where there is more than one dimension in the spatial model), we code the multi-issue variable as 1. In all other cases, the multi-issue variable is coded as 0. Finally, we create a dummy variable indicating whether there is an institution present. Conventionally, such a dichotomous variable would be coded as 0 if no institution is present and 1 if there is an institution present. However, since we seek to assess the effect of the chaos conditions, we require a measure that can predict what occurs when all three conditions occur simultaneously. We therefore create a variable called "no institution," which is coded as 1 if there is no institution present, and 0 if an institution is present. Finally, we create an interaction term labeled Chaos by multiplying each of the three dummy variables together. If the chaos variable is equal to 1, all three of the conditions are present. According to Miers and Morgan, this should *decrease* the likelihood of sanctions success. If, on the other hand, the chaos variable is equal to 0, the individual coefficients on the multilateral and multi-issue variables should increase the likelihood of sanctions success. Since our dependent variable of success is dichotomous, we test the predictions using a probit model with robust standard errors.

4 Results

In this section, we present the results of the three research designs. In testing the theoretical predictions, our expectation was that the results from the new data would mirror previous sanctions

research. Surprisingly, however, the new dataset reveal quite a different conclusion: *multilateral sanctions do indeed appear more effective than unilateral sanctions*. After addressing several possible reasons for this (inclusion of new cases; different time periods; etc.), we find this result to be consistent and robust. At a first glance, this finding suggests that our previous theoretical models of sanctions appear wrong and misleading. However, of the theories developed to explain the failure of multilateral sanctions, we find that predictions from spatial theory do seem to correspond to the empirical record. We therefore conclude that though our analysis does not produce the predicted results, the analysis produces a critical test supportive of spatial theory over both selection effects and public goods explanations.

4.1 Selection Effects

Insert Table 1 about here

We first turn to the results concerning the selection effects explanation. According to the selection effects argument, we would predict greater instances of multilateral sanctions in cases of security disputes. However, the crosstab presented in Table 1 clearly seems to support this claim. We do see that multilateral coalitions do appear to form when the issue in dispute is security related. Almost 70% of the cases of multilateral sanctions involve a security related dispute. By contrast, only about 6% of non-security related issues involve a multilateral coalition. From the evidence, it does appear that multilateral coalitions tend to form when the issue in dispute is security related. If it is true that security related issues are more difficult to solve than non-security disputes, this should explain why multilateral sanctions are likely to fail.

Insert Table 2 about here

However, the contingency table presented in Table 2 reveals a surprising conclusion. Instead of being less prone to a resolution, security oriented sanctions are *more likely* to succeed. The table illustrates that 52% of the successful sanctions are security related. Even more surprising, we see that the success rate of security oriented sanctions is 47%, compared to 15% for non-security oriented sanctions. This indicates that likelihood of successful sanctions is almost 210% higher if the issue in dispute is a security oriented one, compared to an issue involving trade practices or economic reform. The results appear to challenge the predictions of the selection effects explanation.

4.2 Public Goods

Insert Table 3 about here

Like the selection effects explanation, Table 3 fails to find support for the public goods explanation. From the theory of public goods, we should expect that multilateral sanctions should decrease the sanctions success rate. Again, however, the results reveal a surprising conclusion. According to the analysis, multilateral sanctions have an approximately 54% success rate. This represents an almost 203% increase from the 18% success rate of unilateral sanctions. Further, multilateral sanctions account for nearly a third of the cases of sanctions success, even though multilateral sanctions are only used in 15% of the total cases. In addition to casting doubt on public goods explanations, these very simple results strongly contradict the empirical pattern that unilateral sanctions are more effective than multilateral efforts.

Insert Table 4a about here

Insert Table 4b about here

Given that this finding runs contrary to most theoretical and empirical research on sanctions, we are led to the question of whether or not this might be an artifact of the structure of TIES. To check for this result, we create a dichotomous variable capturing the years in HSE that overlap with TIES, which is the period from 1971-1990. After sorting on this variable, we repeat the contingency table to see if this finding is the result of including the period from 1991-2000. Table 4a and 4b present two contingency tables: one for the period included in HSE and one for the 1990s. We see that even if we separate HSE years from the 1990s, the result does not change: multilateral sanctions appear more effective than unilateral sanctions. In the HSE years, 53% of multilateral sanctions succeed, compared to 55% in the 1990s. Additionally, 40% of the successful sanctions during the HSE years were multilateral sanctions, compared with 29% in the 1990s. This is all despite the fact that multilateral sanctions comprised only 26% of the cases during the HSE years and only 9% of the cases during the 1990s. The results from this contingency table are quite clear and consistent: multilateral sanctions do appear much more effective than unilateral sanctions, and that this finding is quite robust.

4.3 Spatial Theory of Sanctions

The results from the previous two tests are very surprising. Consistently, the data reveal that multilateral sanctions do appear more effective than unilateral sanctions. Therefore, for any of our theories to gain empirical support, the theory must identify at least *some* conditions where multilateral sanctions might be more effective than unilateral ones. Clearly, the explanations using selection effects and public goods do not make these claims. However, the spatial theory explanation does suggest that under certain conditions, we should expect multilateral sanctions to succeed with a greater frequency than unilateral sanctions. Outside of the conventional wisdom of policymakers, this theory is one of the only ones we know of that makes the claim in support of multilateral sanctions, under certain conditions. We therefore test to determine if this theory can explain our empirical findings.

Insert Table 5 about here

The results from Table 5 support the theoretical predictions from the spatial theory. We see that each of the terms is significant and in the anticipated direction. To interpret the results, we know that the interaction effect is only present if each of the other variables is equal to 1. In that case, we see that if the case is multilateral, multi-issue, and there is no institution, the likelihood of success decreases, as the spatial theory would predict. However, if no institution is equal to 0, indicating that the sanctions are imposed through an international institution, the multilateral and multi-issue nature of the sanctions case increases the likelihood of sanctions success. In other words, the likelihood of success is maximized if the senders are multilateral, have multi-issue oriented goals, and operate through an international institution. Again, this appears to be in keeping with the spatial explanation.

Insert Figure 2 about here

Figure 1 presents a substantive interpretation of the results in Table 5. In this figure, we see the predicted probability of success, given various states. In the first state, the sender operates unilaterally, over one issue, and does not use an international institution. In this circumstances, the model predicts a success rate of .138. In other words, unilateral, single-issue sanctions without international institutions do not appear likely to work. However, if sanctions remain focused on a single issue, but become multilateral, the likelihood of sanctions success increases to .366. This

represents an increase of approximately 165%, and strongly suggests that multilateral sanctions over single issues are more likely to succeed than unilateral sanctions. On the other hand, if multilateral sanctions become multi-dimensional, and the senders operate outside of an international institution, we would expect the chaos theorem to occur and the likelihood of sanctions success to decrease. We see that under these conditions, the likelihood of sanctions success declines to .171. It is worth noting that despite the chaos effect, this probability is still higher than the likelihood of success with unilateral sanctions alone. However, it is clearly less than the likelihood of multilateral sanctions over one issue. If, however, multilateral, multi-issue sanctions are conducted through an international institution, the predicted probability of sanctions success rises to .829.

Insert Table 6 about here

Not only is the effect an approximately 385% increase over the chaos result, it predicts an exceptionally high likelihood of sanctions success. Given that sanctions are typically predicted to fail, an 83% prediction of success seems very unusual. This study appears to offer a blueprint for sanctions success - if sanctions are multilateral, multi-issue, and conducted through an international institution, they are very likely to succeed. Table 6 presents a cross-tabulation of success and the instances in which each of these three conditions are fulfilled. We see that the optimal formula for sanctions success occurs in only 18 cases, but produces a remarkable 78% success rate.

Insert Table 7 about here

As a check for robustness, Table 7 presents three additional tests encompassing different explanatory variables. In our first test, we test the predictions of the spatial theory along with variables measuring the characteristics of the threat. To do so, we include variables measuring the degree of commitment from the sender. This variable is scaled from 1-3, ranging from weak, moderate, to strong. The second variable included from the threat variable is a measure for behavior specificity. This dichotomous variable captures how clearly the sender articulates the behavior it seeks to change from the target. The behavior specificity variable is coded as 0 if the demands are vague and 1 if the demands are clearly articulated. We anticipate that if the senders demonstrate commitment in their threats, and are specific as to the offending behavior, the likelihood of sanctions success should increase. However, we would also expect that the predictions from the spatial theory would retain significance when controlling for these threat characteristics. The results in Table 7

indicate that the spatial theory does indeed retain significance. In our second model, we include the measures from TIES capturing the costs to both the target and the sender. Intuitively, we would expect that as the anticipated costs to the target increase, the likelihood of sanctions success should increase. Conversely, as the sender(s)' anticipated costs increase, the likelihood of sanctions success should decrease. Controlling for costs, we also see that the spatial theory again retains explanatory power. Finally, we include a model capturing both signals from threats and degree of costs. Again, the Chaos interaction term retains its significance, suggesting that the explanation presented by the spatial theory is indeed robust.

5 Conclusion

The conclusion of the vast majority of theoretical and empirical work on sanctions is that multilateral sanctions are less effective than unilateral sanctions. Due to public goods problems, along with the ability of strategic targets to manipulate coalitions, multilateral sanctions appeared doomed to fail, despite the greater level of costs they could potentially impose. These conclusions were largely derived from the HSE data, which demonstrate convincingly and consistently that multilateral sanctions were less effective than unilateral sanctions. In this study, we attempted to replicate these results using the new TIES data, which included a larger scope of cases by examining instances of sanctions threats and sanctions episodes in the 1990s. Our original belief was that with the new data and greater number of cases, our analysis would replicate, if not strengthen, the finding that unilateral sanctions outperform multilateral sanctions. However, despite numerous efforts and permutations, we consistently found that multilateral sanctions increased the likelihood of eventual sanctions success.

These results cast doubt on numerous previous theoretical findings on economic sanctions. Certainly, the results discount the claim that a selection effect existed in which multilateral sanctions were only imposed for salient issues, thus accounting for their poor success rate. Additionally, the findings ran contrary to the arguments that the imposition of sanctions served as a public good, resulting in free riders that would undermine the effort. The sole previous finding that could account for instances where multilateral sanctions would be more successful than unilateral sanctions came from the spatial explanation. According to this explanation, we would only expect to observe multilateral sanctions outperforming unilateral sanctions if multilateral sanctions were conducted

over a single issue or through an international institution. After testing this proposition, we found that this theory unified our empirical finding with previous studies. These results suggest the promise of spatial theory for the study of sanctions, particularly given that spatial theory offers a more nuanced explanation of this behavior.

From this study, we are able to learn much about the effectiveness of sanctions, and coercive bargaining in general. According to our study of sanctions, a key way senders can eliminate their incentives to break from cooperation is to either focus the coalition on a single issue, or if this is not possible, to hand authority to an international institution. If either strategy is adopted, senders can gain the additional coercive power provided by a larger coalition, while avoiding the problems of free riding or manipulation by a target state. Through the institution, each sender loses its ability to cut a side deal with the target, thereby making the threat of sanctions more credible. With a credible threat and promise of punishment, targets are much more likely to make some concessions. Our theoretical and empirical conclusions clearly undermine arguments about the ineffectiveness of international institutions. To be sure, it is likely that forming a coalition through an institution is likely to be difficult. However, our results indicate that once sanctions are imposed, targets are less able to manipulate coalition members. As a result, targets are more likely to take threats seriously and offer some compromise.

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Notes

¹Carrie Loewenthal. 15 October 2006. US State Department International Information Programs. Available at: <http://usinfo.state.gov>.

²Michael Kranish & Walter Robinson. 26 July 2000. *Boston Globe*, p. A11.

³Additionally, TIES does contain information about the estimated dollar costs of sanctions for both the target and the sender. However, given the difficulty in finding this information for all cases, and the inherent unreliability of such measures, we focus mainly on the 1-3 scale of anticipated costs in our analyses.

⁴In examining "successes," we are focusing only on cases where sanctions are imposed. Each of the theoretical explanations we are testing make predictions concerning the effectiveness of sanctions imposition, rather than examining the effectiveness of threats.

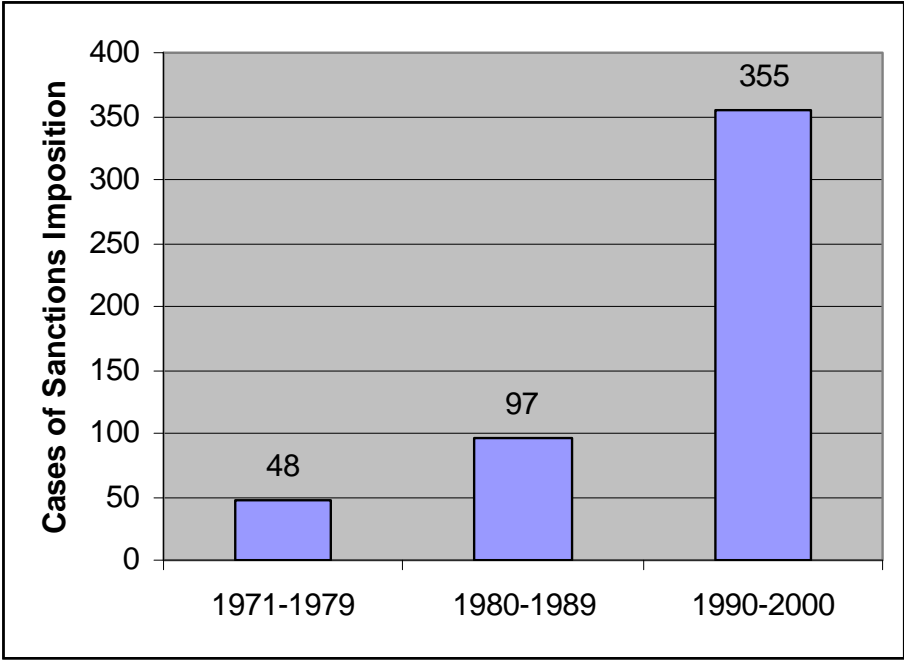


Figure 1. Growth of Sanctions in the Postwar Period

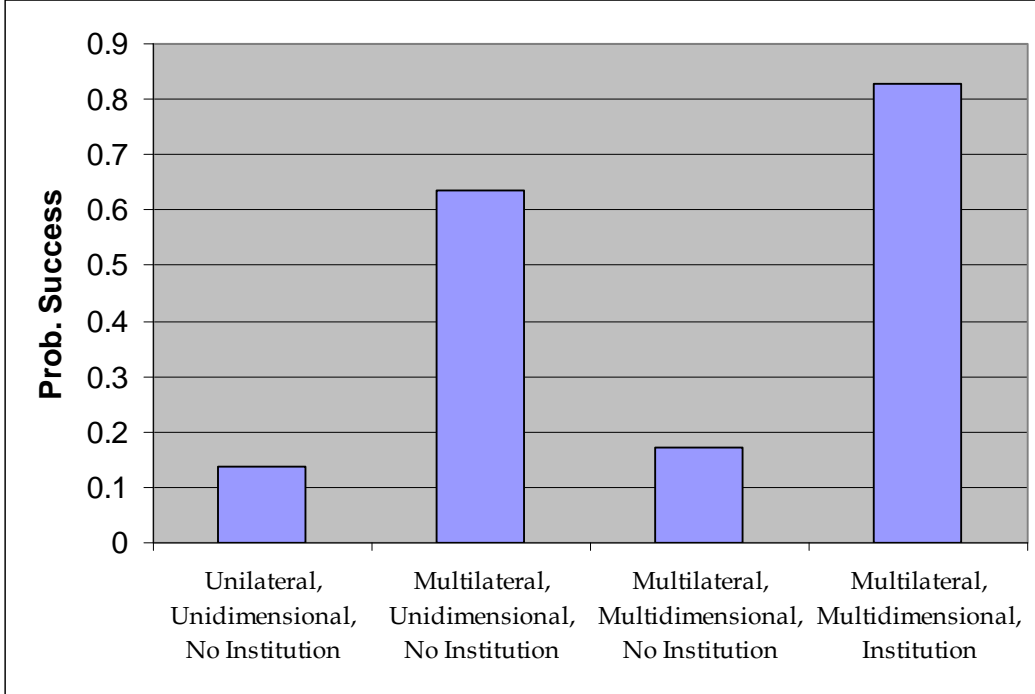


Figure 2. Sanctions Success Predicted Probabilities

Table 1. Effect of Issues on Multilateral Sanctions Coalitions

| | Non-Security | Security | Total |
|---------------------|---------------------|-----------------|--------------|
| Unilateral | 354 (82%) | 78 (18%) | 432 |
| Multilateral | 23 (30%) | 53 (70%) | 76 |
| Total | 377 (74%) | 131 (26%) | 508 |

$Chi^2 = 90.12$

Table 2. Effectiveness of Security-Oriented Sanctions

| | Non-Security Dispute | Security Dispute | Total |
|-------------------|-----------------------------|-------------------------|--------------|
| No Success | 320 (82%) | 70 (18%) | 390 |
| Success | 57 (48%) | 61 (52%) | 118 |
| Total | 377 (74%) | 131 (26%) | 508 |

$Chi^2 = 53.91$

Table 3. Effectiveness of Multilateral Sanctions

| | Unilateral | Multilateral | Total |
|-------------------|-------------------|---------------------|--------------|
| No Success | 355 (91%) | 35 (9%) | 390 |
| Success | 77 (65%) | 41 (35%) | 118 |
| Total | 377 (85%) | 131 (15%) | 508 |

$Chi^2 = 47.29$

Table 4a. Effectiveness of Multilateral Sanctions 1971-1990.

HSE Years

| | Unilateral | Multilateral | Total |
|-------------------|-------------------|---------------------|--------------|
| No Success | 88 (81%) | 21 (19%) | 109 |
| Success | 36 (60%) | 24 (40%) | 60 |
| Total | 124 (73%) | 45 (27%) | 169 |

$Chi^2 = 8.51$

Table 4b. Effectiveness of Multilateral Sanctions 1991-2000.

Non-HSE Years

| | Unilateral | Multilateral | Total |
|-------------------|-------------------|---------------------|--------------|
| No Success | 267 (95%) | 14 (5%) | 281 |
| Success | 41 (71%) | 17 (29%) | 58 |
| Total | 308 (91%) | 31 (9%) | 339 |

$Chi^2 = 34.25$

Table 5. Spatial Theory Explanation of Sanctions Effectiveness

| Variable | Coef. | Robust s.e. | 95% conf. | |
|-----------------------|--------------|--------------------|------------------|-------|
| Multilateral | .732 | .198*** | .344 | 1.12 |
| Multi-Issue | .870 | .217*** | .446 | 1.29 |
| No Institution | -.452 | .158*** | -.763 | -.142 |
| Chaos Interaction | -1.58 | .644** | -2.84 | -.315 |
| Constant | -.639 | .144 | -.921 | -.358 |
| N | 508 | | | |
| Wald Chi ² | 60.61 | | | |

*p<.10; **p<.05; ***p<.01

Table 6. Optimal Spatial Conditions and Sanctions Success

| | Sub-Optimal | Optimal | Total |
|------------------------|--------------------|----------------|--------------|
| No Success | 384 (99%) | 4 (1%) | 281 |
| Success | 104 (88%) | 14 (12%) | 58 |
| Total | 488 (96%) | 18 (4%) | 339 |
| Chi² | 30.95 | | |

Table 7. Robustness Checks

| Variable | Coef. | Robust s.e. | Coef. | Robust s.e. | Coef. | Robust s.e. |
|-------------------|-------|-------------|-------|-------------|-------|-------------|
| Multilateral | .768 | .262*** | .590 | .271** | .424 | .295 |
| Multi-Issue | .568 | .297* | .481 | .326 | .515 | .350 |
| No Institution | -.034 | .215 | -.045 | .222 | .170 | .245 |
| Chaos Interaction | -1.38 | .688** | -1.74 | .807** | -1.51 | .735** |
| Sender Comm. | .533 | .157*** | — | — | .358 | .213* |
| Beh. Specificity | .699 | .196*** | — | — | .974 | .129*** |
| Target Ant. Costs | — | — | .904 | .236*** | .678 | .278** |
| Sender Ant. Costs | — | — | -.590 | .412 | -.658 | .404 |
| Constant | -3.17 | .537 | -1.30 | .401 | -3.44 | .599 |
| N | | 284 | | 277 | | 249 |
| Wald χ^2 | | 58.8 | | 36.08 | | 64.89 |

*p<.10; **p<.05; ***p<.01