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An Institutional Theory of Sanctions Onset and Success

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Why do economic sanctions sometimes succeed, but often fail, to produce a policy change? The authors argue that the effect of economic punishment is conditional on a state's political institutions. In all cases, the key to sanctions success is to generate political costs for the target regime's winning coalition. However, because of different institutional incentives, economically punishing sanctions are less likely to succeed against a nondemocratic target than against a democratic target. Sanctions increase rents. This benefits nondemocratic leaders more than democratic ones. Also, nondemocratic leaders have smaller winning coalitions, so their core constituents suffer less from sanctions than democratic leaders. Additionally, the authors' strategic argument leads to novel hypotheses regarding the initiation of sanctions. They test hypotheses from their political cost argument against all dyadic sanctions cases between 1948 and 1990, using two different dependent variables and a censored selection estimator to take into account the strategic nature of sanctioning.

Keywords: *sanctions theory; democratic institutions; economic restrictions; electorate theory*

In a seminal study on economic sanctions, Hufbauer, Schott, and Elliott (1990) conclude that sanctions are successful about one-third of the time they are used. Most analysts of economic sanctions, however, argue that sanctions are rarely effective in bringing about policy change (Galtung 1967; Wallensteen 1968, 2000; Doxey 1971; Knorr 1975; Barber 1979; Olson 1979; Renwick 1981; Kaempfer and Lowenburg 1988, 1992; Pape 1997; Haass 1998; Askari et al. 2003). Critics of sanctions effectiveness often rely on a few prominent cases of sanctions failure, such as the League of Nations sanctions against Ethiopia in 1935, which failed to make Italy reverse course. Nevertheless, even the staunchest critics of sanctions admit that they sometimes elicit policy changes. For instance, American sanctions

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against Great Britain and France in 1956 are generally viewed as successfully coercing those states into changing policies. This debate motivates our research: why do sanctions sometimes succeed, but often fail, to produce a policy change in the target?

Contrary to research that argues for and consistently finds that “the greater the cost of sanctions to the target, the greater the likelihood they will succeed” (Drury 1998, 508), we argue that the effect of economic punishment is *conditional* on a state’s political institutions. In particular, we hypothesize that economically punishing sanctions are less likely to succeed against a nondemocratic target than they are against a democratic target. The reason for this conditional relationship is two-fold. First, sanctions increase a leader’s ability to extract rents. Greater rents increase a nondemocratic leader’s ability to hold onto power, but greater rents do not increase a democratic leader’s ability to retain office. Second, the pressure to yield to sanctions depends critically on who is bearing the brunt of the costs in the targeted state. To succeed, sanctions need to target the regime’s winning coalition, the size and composition of which depend on a state’s political institutions. Against a democracy, where the winning coalition is large, economic sanctions are more likely to produce a policy change if they are relatively broad and affect many groups in society. Sanctions that are high in cost will generally have this effect. Paradoxically, when dealing with nondemocratic countries, states should avoid broad sanctions that impose high economic costs on the population at large because most people in the country are not part of the autocratic leader’s winning coalition, so the economic costs imposed on the larger population do not translate into political costs for the regime. In brief, because nondemocratic leaders generally have a narrowly defined winning coalition, broad and costly sanctions will be less successful against them than against democratic countries. To make nondemocratic leaders yield, states must be able to impose narrow sanctions affecting the core groups supporting the regime.

Previous research has identified the important role of regime type for understanding the impact of sanctions (Kirshner 1997; Hart 2000; Nooruddin 2002; Brooks 2002; McGillivray and Stam 2004; Allen 2005), but it has neither articulated nor empirically examined a *conditional* relationship between the cost of sanctions and the target’s regime type; yet the theory we just sketched indicates that the influence of cost and regime type are mediated by each other. We investigate this conditional relationship and find that, contrary to conventional wisdom about sanctions, economic punishment does not uniformly increase the success of sanctions. Rather, we find that costly sanctions against democratic leaders tend to lead to policy compliance, but overall economic costs are not significantly related to the success of sanctions against nondemocratic leaders. Sanctions are more likely to make nondemocratic leaders yield if the costs are focused on the target regime’s winning coalition; that is, sanctions are more likely to succeed against nondemocracies if the overall costs are relatively small and narrowly focused.

The article proceeds as follows. In the first section, we present the theoretical debate addressed by this research. In the second section, we present an institutional theory of foreign policy coercion and derive testable hypotheses from it. In the third section, we present a research design for testing both the conditional effects of cost on regime type and the strategic aspect of sanctions imposition. Our empirical results are presented in the fourth section. The article concludes with a discussion of the implications of this research.

The Sanctions Success Debate

Arguments about when sanctions are more or less likely to succeed can be classified into three categories: those that emphasize punishment, those that emphasize expressing particular interests, and those that emphasize institutions. Much empirical research investigating the effectiveness of economic sanctions has been motivated by a simple hypothesis: cause enough economic pain and the target will change its policy. In this traditional, or punishment theory of sanctions, the idea is that if economic sanctions are severe enough, they will harm a target state's economy. In turn, economic harm will lead to political disintegration brought about by an unwillingness of the population in the target country to suffer economically because of an internationally unpopular policy. As a result, increased pressure is placed on the target government to comply with the sanctions demand: "the more value-deprivation, the more political disintegration" (Galtung 1967, 388).

One variation of the economic punishment thesis underscores the value of multilateral sanctions over unilateral efforts (Martin 1992). On this account, unilateral sanctions are less likely to succeed because targets of unilateral sanctions are more likely to find alternative suppliers, thereby minimizing the economic punishment from the sanctions. In contrast, multilateral sanctions are more likely to be successful because they reduce, or eliminate, alternative suppliers. By reducing alternative suppliers, multilateral sanctions impose greater costs on the target and are more likely to succeed.

Theoretically, both the traditional and the multilateral punishment theses fall short as explanations for sanctions success because they fail to account for how economic punishment avoids creating a rally-round-the-flag effect and how institutional factors mediate the influence of economic sanctions. Instead of creating dissatisfaction with the leadership, economic sanctions may make citizens in the target country blame sender countries for their economic maladies (Galtung 1967). Indeed, nationalism often makes states and societies willing to endure considerable punishment (Pape 1997, 93).

In contrast to the punishment theory's focus on the target, the expressive theory of sanctions contends that economic sanctions are less about trying to achieve political change in the target than they are about satisfying the demands

of domestic constituents (see, e.g., Baldwin 1985; Lindsay 1986; Kaempfer and Lowenberg 1992; Bonetti 1997; Dorussen and Mo 2001). To evaluate the success of sanctions, one should not examine the actions of the target but the political support for the sender. Sanctions may “rarely force compliance,” but that “does not refute their overall utility” (Lindsay 1986, 153). If sanctions appease a domestic interest group, then they earn a political benefit and should be considered successful. “Critics may deride the symbolic uses of trade sanctions as empty gestures, but symbols are important in politics” (Lindsay 1986, 171). A symbol is all the more important when it can “defuse domestic political pressure” (Kaempfer and Lowenberg 2000, 160). In their analysis of the length of sanctions, Dorussen and Mo (2001) find that the greater the domestic support for continuing the sanctions in the sender state, the longer they last, and the greater the rents collected by the target government, the longer sanctions last. Nevertheless, the expressive theory does not account for when sanctions actually produce a change in the target’s policies, nor does it distinguish between different types of political regimes. Sanctions are sometimes effective, even if domestic constraints in the sender nation sometimes prevent them from being applied with maximum economic costs to the target.

Institutional theories of sanctions combine elements of the punishment and expressive approaches. Like the punishment perspective, institutional theories aim to elucidate a causal mechanism leading to policy change in the target. Yet like expressive theories, the institutional approach places a greater emphasis on domestic politics. One domestic institution hypothesized to affect sanctions success is a military alliance (Drezner 1999). Dyads that share a military alliance expect less future conflict than dyads that do not share such an alliance, as such allied dyads are more willing to yield in the present since they do not worry about future demands. This approach, however, cannot account for the empirical relationship between democratic states and the initiation of sanctions (Lektzian and Souva 2003), nor the empirical findings on regime type and sanctions success (Nooruddin 2002; Allen 2005; Kirshner 1997).

Another domestic institution hypothesized to affect sanctions compliance is the sender or target’s regime type. Democratic senders of sanctions, for example, will be more successful than nondemocratic senders, owing to a greater ability to generate audience costs; as a result, nondemocratic initiators of sanctions are more likely to end sanctions without success (Hart 2000). In this account, targets comply when they recognize the sender is resolved. Others place the institutional focus on the target’s political regime, arguing that “the type of regime in place mediates the relationship between masses and elites” (Nooruddin 2002, 13; see also Allen 2005; Kirshner 1997; Brooks 2002). Despite the significance of the relationship between the target’s regime type and policy change, it is not the case that all sanctions against nondemocracies fail. In the next section, we extend the institutional line of thought to better account for policy compliance and failure in both democratic and

nondemocratic states. Under what conditions are sanctions most likely to succeed? When are sanctions likely to succeed against nondemocratic targets?

Institutional Theory of Economic Sanctions

We start by assuming that the target is pursuing some policy that the sender finds objectionable, that it gains some benefit from pursuing the policy that is greater than not pursuing the policy, and that it will not stop pursuing the policy of its own accord. The purpose of economic sanctions is to increase the cost to the target for continuing to pursue this policy in defiance of the sender's demands. As is well known, sanctions usually do not succeed in producing a policy change in the target. Sometimes, however, sanctions do succeed. When are sanctions likely to lead to success? In general, two factors are paramount, the political cost of the sanctions imposed on the target's leadership and the demand made of the target. In addition, the ability of economic restrictions to impose political costs on a target regime's winning coalition is influenced by the state's political institutions.

Economic Restrictions, Domestic Institutions, and Political Costs

Where the traditional theory of sanctions emphasizes the importance of imposing economic costs on the general population, we argue that economic sanctions will be most successful when they impose political costs on a leader's winning coalition. Leaders desire to retain political office, and to retain office, leaders respond to the demands of their key constituents, or winning coalitions (see, e.g., Bueno de Mesquita et al. 1999). In nondemocratic states, a leader's key constituency is typically a small group of elites that must remain satisfied for the leader to remain in office. The small size of the winning coalition in a nondemocracy encourages a reliance on the distribution of private goods to keep key constituents satisfied. As Mexican dictator Porfirio Diaz said when explaining how he ruled so long (1876-1911), "A dog with a bone in his mouth cannot do two things: he cannot bark and he cannot bite" (Elliott 1997, 196). As long as this core group of constituents remains satiated with private goods, autocratic leaders face few difficulties in holding office. In a democracy, however, the winning coalition is relatively large, around 50 percent of the population. The difference in the size of democratic and nondemocratic winning coalitions leads to different behavioral incentives, especially in the face of economic pressure. Leaders in democracies are more accountable to their publics than leaders in nondemocracies and are rewarded or punished based on the expected short-term outcome of their policies. Greater accountability means democratic leaders place a higher premium on successful public policies and overall economic prosperity than nondemocratic leaders; as a result, democratic leaders are more likely to be punished for poor public policies or failing economic conditions. This accountability follows from

democracies having larger winning coalitions (Bueno de Mesquita et al. 1999). The larger size of this political institution creates a larger incentive for leaders to pursue *public* goods, while political systems with small winning coalitions favor the pursuit of *private* goods.

These institutional incentives imply that causing significant economic harm to a nondemocracy is not likely to make it yield because nondemocracies do not suffer significant political costs from the economic failings that may arise as a result of economic restrictions. Contrary to the argument that autocracies will be less susceptible to economic sanctions because leaders have fewer constraints and are better able to manipulate the economy to counter the effects of sanctions (Bolks and Al-Sowayel 2000), we argue that even though autocratic leaders may have the capability to manipulate the economy to counter sanctions, they lack the incentive to do so. In nondemocratic regimes, the political costs of economic harm are minimal because the lack of political accountability gives the leader little incentive to alleviate civilian suffering. “They [autocrats] have little incentive to attend to the general welfare of their citizenry, because doing so takes resources away from their critical need to provide private benefits to the essential few” (Bueno de Mesquita and Root 2000, 78). Consequently, imposing strict economic restraints on the economy is unlikely to jeopardize an autocratic leader’s hold on power (see also Wagner 1988) and, as explained below, may stimulate economic opportunities for rent seeking that strengthen the leader’s position.

Economic sanctions also increase the target government’s ability to extract rents from its population, but rent seeking is both easier and more advantageous for leaders of autocratic countries than for those operating under the restrictions of democratic institutions. Rent seeking is promoted whenever restrictions are placed on economic transactions. Autocrats are better positioned to exploit rent seeking than leaders in democratic states because they exercise greater control over the domestic economy. Sanctions restricting imports to the target will raise the prices of previously imported goods, generating excess profits for domestic producers and smugglers of those goods. Restrictions prohibiting exports from the target will result in prices below world market prices and provide incentives for smugglers to purchase those goods domestically and sell them abroad at world prices for a profit. The greater the effect of sanctions on terms of trade, the greater the potential profit to be achieved. Governments with a great deal of control over the economy are well positioned to encourage smuggling and grant domestic contracts in return for political loyalty (Kaempfer, Lowenberg, and Mertens 2004; Kaempfer and Lowenberg 1999). Thus, “The rents from sanctions either present direct economic benefits for the government or allow it to increase political control—that is, indirect political benefits” (Dorussen and Mo 2001, 47).

Another reason rent seeking is more politically advantageous for autocratic leaders than democratic leaders is that strengthening political control over society necessarily conflicts with liberal democratic norms, thereby reducing the benefits

of increased control for democratic leaders, while the societal costs of increased political control for an autocrat are low. In summary, increases in rents increase an autocratic leader's ability to stay in power more than a democratic leader's ability to hold onto office. Moreover, these institutional dynamics imply that the effect of significant economic punishment is conditional on the target's regime type. The greater the economic cost imposed on a nondemocratic regime, the less likely it is to yield. However, significant economic costs imposed on a democratic regime will make it more likely to yield to sanctions.

The Size of the Demand

In addition to the political costs imposed on the leadership, sanctions success depends on *the size of the demand* made of the target. The institutional approach's emphasis on the motivation of leaders to retain office helps focus attention on the importance of the relationship between the political costs of concession compared to the expected political costs that could be imposed through the use of sanctions. Sanctions, even under the best of circumstances, can only generate so much pressure, while some demands, such as leadership change, carry a prohibitively heavy price. The political impact of costly sanctions, then, will be outweighed by the costs of complying if acquiescence to the demand carries greater political costs than the sanctions can threaten to impose. Indeed, Hufbauer, Schott, and Elliott (1985, 80) qualify their conclusions on sanctions success by adding, "The success rate importantly depends on the type of goal sought," with success being considerably more likely for minor goals than for major goals. It is necessary, then, to incorporate the demand into any analysis of sanctions success. Politically costly sanctions may lead to success, but only if the political cost of compliance is not outweighed by the political cost of enduring sanctions.

Initiation and Success

Although the focus of this research concerns when sanctions are likely to succeed in producing a policy change in the target country, our theoretical expectations regarding the success of sanctions are informed by an understanding of the selection process that leads to the use of sanctions. We contend that the set of observed sanctions cases is not random because both the initiator and target select themselves into the sample (see also Nooruddin 2002; Smith 1997), and this has implications for the effect of some independent variables on the success of sanctions. If sanctions are the product of a strategic process, then failure to account for this can bias empirical results. Outside of Nooruddin (2002), not taking into account this selection process is a central flaw in most empirical evaluations of sanctions success.

Political regime type and economic interdependence both exert an influence on the selection of observed cases of sanctions. Sanctions, like any coercive threat,

only occur when a threat is credible but not sufficiently severe to bring about compliance (Hovi 1998; Hovi, Huseby, and Sprinz 2005). If a threat is credible and sufficiently severe, then the target will yield prior to full implementation of the threat. If a threat is not credible, the sender prefers to back down rather than carry out its threat, regardless of the proposed severity.

Because sanctions harm the sender's economy as well as the target's, greater economic interdependence discourages the actual implementation of sanctions by making the sender's threat both sufficiently severe and noncredible. Thus, one side or the other is likely to back down and sanctions are unlikely to occur. On the other hand, when economic interdependence is low, sanctions are likely to be both credible and insufficiently severe, making them more likely to be initiated. The result is that trade interdependence constrains the use of sanctions. Because of these two economic constraints on the initiation of sanctions, contrary to conventional wisdom, we expect that target trade dependence will have little effect on the success of sanctions once they are implemented. Once targets, with full knowledge of their *ex ante* level of trade dependence, select themselves into sanctions, target trade dependence should have little influence on the success of sanctions that are actually implemented.

Previous research examining the initiation of sanctions has argued that democratic regimes not only have larger winning coalitions than nondemocratic states, these larger winning coalitions encompass a greater variety of interest groups (Lektzian and Souva 2003). In turn, more interest groups in a winning coalition results in a greater reliance on sanctions as a policy tool because "sanctions are designed specifically to benefit interest groups in the sanctioning countries"; in other words, "majoritarian democratic politics will tend to overproduce such special interest legislation" (Kaempfer and Lowenberg 1992, 43). The result is that democratic countries will tend to overproduce policies such as economic sanctions in response to domestic demands. Moreover, because they are enacted in response to domestic demand, democracies are likely to devise their sanctions in a way that satisfies the demands of those domestic coalitions, making democracies very credible in their threats of sanctions. This expectation is also consistent with those developed in the democratic peace literature, where it is generally argued that democratic states are better able to make credible threats.

However, while democracies may be very credible in their threats of sanctions, those threats may not always be viewed as sufficiently severe by the target. Generally, democracies are unlikely to impose extremely severe sanctions because these are the type of sanctions most likely to harm the democratic sender's economy if implemented. The result is that democracies will tend to use sanctions more frequently because their threats will tend to be both credible and insufficient. This is particularly likely of sanctions threatened by democracies against autocracies because the targeted leader is both politically isolated from the economic costs of sanctions and ideologically opposed to the overall goals of the sending nation.

By contrast, democratic targets are more likely to be held responsible for economic failings and are more likely to view the threatened costs of sanctions as sufficiently severe. Therefore, while democracies use sanctions more frequently, they tend not to use them against other democracies as often as they use them against autocracies.

If sanctions occur because states select themselves into them, then we cannot evaluate the success of sanctions without first taking into account the factors that lead to the imposition of sanctions.

In summary form, we have the following hypotheses:

Hypothesis 1: The correlation between sanctions initiation and sanctions success is not equal to zero.

Hypotheses on the initiation of sanctions are as follows:

Hypothesis 2: Jointly democratic dyads are less likely to experience sanctions than other types of dyads.

Hypothesis 3: As economic interdependence increases, sanctions are less likely to occur.

Hypotheses on the success of sanctions are as follows:

Hypothesis 4: The marginal effect of economic cost is conditional on the target's regime type. Increasing economic costs is more effective against democratic than nondemocratic targets.

Hypothesis 4a: Against nondemocratic regimes, increasing economic costs to the target economy will not increase the likelihood of success.

Hypothesis 4b: Against democratic regimes, increasing economic costs to the target economy increases the likelihood of success.

Hypothesis 5: The greater the demand made of the target, the less likely the target is to comply.

Research Design

Sample and Unit of Analysis

Given that we are analyzing when leaders of states comply or do not comply with sanctions demands and that this decision is partly dependent on the relationship between the states, the unit of analysis for this research is the dyad-year. To identify cases of sanctions, we employ Hufbauer, Schott, and Elliott's (1990) sanctions data set. As Nooruddin (2002, 6) notes, "The Hufbauer, Schott, and Elliott data set has been the subject of all published empirical studies of sanction success and is the source of the extant knowledge in the discipline on this topic." For cases

involving multiple senders or targets, we disaggregate them into distinct dyads following the coding rules of Lektzian and Souva (2001, 2003) and Nooruddin (2002). For example, Hufbauer, Schott, and Elliott Case no. 71-1 has the United States sanctioning both India and Pakistan in 1971. We treat this as two cases of sanctions, one for the U.S.-India dyad and one for the U.S.-Pakistan dyad.

Method of Estimation

Unlike most research on sanctions, we posit a two-stage process for evaluating sanctions success.¹ In the first stage, one state decides whether to sanction another state. In the second stage, we evaluate the determinants of successful sanctions. The second stage is conditional on the first stage; successful sanctions can only occur if sanctions have first been implemented. The nature of this data-generating process means that the set of observed sanctions is not a random sample of cases. Censored regression estimators address this issue by estimating two equations. After running the first equation on all observations, one computes the inverse Mills ratio. Then, we estimate the model for the selected sample, which in this case is the set of observed sanctions, and include the inverse Mills ratio from the first stage. If the parameter on the inverse Mills ratio is statistically significant, there is sample selection. This permits a test of Hypothesis 1.²

Dependent Variables

Given our theoretical expectations linking the use of sanctions with sanctions success, we have two dependent variables, one for the imposition of sanctions and one for the success of those sanctions that are imposed. The variable *Sanction* is coded one for each year that Hufbauer, Schott, and Elliott (1990) record sanctions as in place for that dyad. Dyad-years in which sanctions are not occurring are coded zero.

What constitutes a successful sanctions episode? Baldwin (1985) argues that if sanctions impose a cost on the target, then they are successful. The problem with this position is that it makes it nearly impossible for sanctions to fail. If trade or aid is curtailed, as sanctions imply, then some economic cost is imposed. On the other hand, Pape (1997) argues that sanctions are successful only if no other factor played any role in the target changing policies. This, of course, is unrealistic. Policy makers rarely employ a single tool. Instead, we argue that *success occurs when the target changes policies*, and we address alternative explanations by explicitly modeling them in our regression equation.

Pape (1997) is concerned about companion military policies, arguing that if sanctions are used in conjunction with low-level military action, then regardless of whether the target changes policies, the sanctions cannot be considered successful. Essentially, the use of low-level military action is a confounding variable, and the more appropriate way to address this concern is to include the confounding variable

on the right-hand side (Ray 2003). If a competing explanation, such as the use of military force, better accounts for cases in which sanctions lead to policy change, then including this variable in a regression analysis will lead our theoretical variables to be insignificant.

Further complicating the determination of success is the existence of multiple goals. For instance, according to Hufbauer, Schott, and Elliott (1990), the U.S. sanctions against Cuba are intended to both create regime change and, initially, to limit Cuba's support for revolutionary activity in Latin America. The sanctions have not achieved the first goal, though they may have contributed to achievement of the second goal (see, e.g., Hufbauer, Schott, and Elliott 1985; Baldwin 1985). An appropriate measure of success, then, needs to examine all of the reasons sanctions were initiated. This is precisely what Hufbauer, Schott, and Elliott (1985) have done. While it is impossible to eliminate subjectivity in coding decisions, the Hufbauer, Schott, and Elliott method ably addresses the thorniest problems and, for our purposes, enhances our ability to compare our results with previous research. Hufbauer, Schott, and Elliott's result variable follows a 4-point scale: 1 = *failed outcome*, 2 = *unclear but possibly positive outcome*, 3 = *positive outcome*, and 4 = *successful outcome*. In our data set, a case is coded as a success in the last year of sanctions if it receives either a 3, "at least somewhat successful result," or 4, "completely successful outcome" on the Hufbauer, Schott, and Elliott result variable. Lam (1990); Dashti-Gibson, Davis, and Radcliff (1997); Hart (2000); and Nooruddin (2002) also code sanctions success in a similar way.

Independent Variables

Our theoretical argument leads us to expect differences between more democratic states and less democratic states. The variable *Target Polity* is a state's aggregate level of democracy (democracy characteristics minus autocracy characteristics) and is drawn from the Polity IV data (Marshall and Jaggers 2000).³ For the initiation stage of our model, we include a variable for joint democracy based on the *polity2* variable, where a dyad is coded as a *Joint Democracy* if both countries have a *polity2* score greater than or equal to six.

A weakness with existing operationalizations of cost is a general failure to incorporate the importance of sustained economic pressure over time. Sanctions tend to rely on *cumulative* economic pressure sustained over a period of time to circumvent an adversary's commitment and wear down the adversary. As Schelling (1966, 69) notes, "A given amount of coercive pressure exercised over an extended period of time, allowed to accumulate its own momentum, is a common and effective technique of bypassing somebody's commitment." Thus, the economic cost of sanctions in any given year is not the key component of cost likely to influence leaders in the target country. The accumulation of these costs is the more important matter (see also Baldwin 1985, 100). The economic costs of sanctions are unlikely

to have immediate political consequences. Sanctions need time to achieve goals (Bergeijk and Marrewijk 1995). This logic is also found in the work of Marinov (2005, 571), who shows that democratic leaders and leaders of mixed regimes are more likely to be replaced during sanctions and that the risk of being replaced grows over time as sanctions proceed. Similar to Marinov, Galtung (1967, 407) argues that the political effect of sanctions will not be immediate.

Drawing on this view of how cost operates within a sanctions episode, the variable *Cost* is the cumulative annual cost as a percentage of the target's gross national product. While most sanctions have a relatively small impact on target GNP, the cumulative effect of these costs over a long period of time can be quite large. For example, while the average annual cost as a percent of GNP that a target incurs due to sanctions is slightly less than 1 percent, the average cumulative cost that a target has incurred at the time that sanctions end is more than 6 percent of target GNP.⁴

According to our theory, sanctions success depends on targeting a regime's winning coalition. However, imposing a large economic cost on a nondemocratic state is an indicator that the sanctions are not efficiently targeting that regime's winning coalition. In fact, because economic displacement increases an autocrat's opportunities for capturing and redistributing rents, large costs may actually strengthen an autocrat's political power. The opposite holds for democratic states. Because a democratic leader's winning coalition is larger and more diverse, sanctions that impose large overall costs on the target are efficiently targeting the regime's core group of supporters and are more likely to be successful. To evaluate the hypothesized conditional relationship between cost and democracy, we create a variable that interacts *Cost* with *Target Polity*.

Demand

Another component of our argument is the demand placed on the target. The more politically costly the demand is to the winning coalition in a state, the less likely that state is to comply with the demand. Although the argument is straightforward, there is much debate in sanctions research about how to incorporate a demand variable in an empirical model. Hufbauer, Schott, and Elliott (1990) record five demand categories: modest policy change, government destabilization, disrupting a minor military adventure, impairing the military potential of a country, and changing a target country's policies in a major way. Hart (2000) and Nooruddin (2002) code modest policy changes as minor demands, and all others as major demands. In contrast, Dashti-Gibson, Davis, and Radcliff (1997, 610) distinguish between two types of demands: destabilization and policy change. This argument calls for the inclusion of a dummy independent variable. Instead, they split their sample. Splitting the sample, however, is only appropriate if all of the independent variables are meant to be conditioned by the demand variable, that is, by

the variable splitting the sample. They offer no argument to this effect. Drezner (1998, 1999) also dichotomizes the sender's demand into two categories: major demands include destabilization, disruption of a minor military adventure, and major policy change; whereas minor demands are measured as minor policy changes. Drezner drops cases where the goal was only to impair the adversary's military potential. But as noted earlier, Drezner does not include demand as an independent variable. Rather, it comprises part of his dependent variable.

Like Drezner (1999), we argue that when conflict expectations between the sender and target are high, the target is likely to fear that concessions will be used against it in the future and will see compliance with sender demands as more costly. Similarly, Colaresi (2004, 556) finds that "leaders are more likely to be thrown out of office if they overcooperate with a rival." To account for this logic, we create a demand variable that incorporates both prior relations and the type of demand made of the target. The demand variable used here incorporates prior relations by indexing our dichotomous demand variable (coded 2 = major demand, 1 = minor demand) with the three-category prior relations variable found in Hufbauer, Schott, and Elliott (1990). The prior relations variable is coded 3 = prior antagonistic relations, 2 = neutral relationship, 1 = friendly relationship. The resulting demand variable reflects concerns for relative gains by giving greater weight to demands made by adversaries than neutrals or friends. Thus, the variable *Demand* is coded 6 = major demand made by an adversary, 5 = minor demand made by an adversary, 4 = major demand made by a neutral, 3 = minor demand made by a neutral, 2 = major demand made by a friendly country, 1 = minor demand made by a friendly country.

In the theoretical section, we hypothesized that trade interdependence will affect the likelihood of sanctions initiation. The greater the level of trade interdependence, the more potential leverage a sender can exercise over a target, but also the greater the potential damage to the sender's economy for using sanctions. We measure *Trade Interdependence* as the ratio of each state's trade dependence on the other state, with trade dependence measured as dyadic trade divided by GDP. Specifically, we divide the smaller trade dependence by the larger dependence producing a variable that is theoretically bounded by 0 and 1 and can take any value in between. As states become more equally dependent on one another this variable approaches 1, and sanctions should be less likely to occur. In our data, trade dependence ranges from 0 to .0011, and trade interdependence ranges from .0097 to 1. Data on dyadic trade comes from Gleditsch (2002).⁵

Alternative Explanations

Because international cooperation may result in more pressure being placed on the target, others have proposed that multilateral sanctions will be more successful. Accordingly, we include a control for whether additional states participated in the

sanctions. Although we do not present this as a theoretical hypothesis, the expectation most consistent with our theory is that because of the increased potential for rally effects and increased opportunity for rent seeking by the target regime, multi-lateral cooperation with the sender will decrease the probability of sanctions success. The variable *International Cooperation* comes from the Hufbauer, Schott, and Elliott (1990) data set and is coded 1 if more than one state was imposing sanctions on the target, 0 otherwise.

Cooperation by other states with the target in combating the sanctions might have a negative effect on success by providing international political support as well as alternative markets to substitute for lost trade with the sender and should be controlled for (Drury 1998). The dichotomous variable *Black Knight* indicates international cooperation with the target. Data come from Hufbauer, Schott, and Elliott (1990).

A variable to measure the distance between states is also included. When two actors are distant from one another, it generally diminishes opportunities to interact and reduces the probability of conflict, be it economic or military. *Distance* is computed using the great circle distance formula, measuring the capital-to-capital distance while controlling for the curvature of the earth.⁶

We include a control for the presence of military force. Pape (1997) argues that sanctions rarely succeed when military force is not used. We control for this alternative argument with the variable *MID*, which equals 1 if a militarized interstate dispute occurred between the sanctioning states in a given year, 0 otherwise. Data on militarized interstate disputes comes from Ghosn, Palmer, and Bremer (2004).⁷

Next, we produce a variable, similar in construction to our trade interdependence variable, to represent the relative strength of the economies for the two states in each dyad. The variable *Relative GDP* takes the GDP of the smaller economy and divides it by the GDP of the larger economy, resulting in a variable that is theoretically bound by 0 and 1. In our data, GDP ranges from approximately 7,191.3 to a little over 6.5 billion, and relative GDP ranges from approximately 0 to 1. As the size of the economies of the two countries in the dyad become more even, this variable approaches values of 1. This allows us to control for the relative economic strength of the two countries in the initiation stage. When the relative economic strength of the states in the dyad is closer to 0, we expect sanctions to be a less attractive policy option. Data for each state's gross domestic product comes from Gleditsch (2002).

Finally, since it is likely that peace begets peace and to address potential temporal dependencies in the data, we also include a measure of sanctions–peace years, the number of years since the states in the dyad last experienced economic sanctions, and three cubic spline variables (Beck, Katz, and Tucker 1998). A brief description of all the variables used in our models is provided in Appendix A.

Table 1
Censored Selection Model of Sanctions Initiation and Success

	Dependent Variable: Success
Democratic sender	0.697 ** (2.76)
Relative trade dependence	−0.451 (−1.25)
Cooperation with sender	−0.097 (−0.52)
Assistance to target	−0.810 ** (−3.40)
Militarized interstate dispute (MID)	0.800 ** (3.09)
Size of demand	−0.251 ** (−3.60)
Target polity	0.027 * (1.80)
Target costs	0.004 * (1.60)
Target Polity × Target Costs	0.0005 (1.00)
Constant	−1.172 ** (−2.76)
	Dependent Variable: Initiation
Militarized interstate dispute (MID)	1.872 ** (12.30)
Ln (Distance)	−0.038 (−0.46)
Democracy	0.442 ** (3.57)
Joint democracy	−0.281 ** (−2.34)
Relative trade dependence	−1.60 ** (−9.66)
Relative GDP	−0.394 (−1.43)
Constant	−0.095 (−0.14)
Rho	.285 ** (3.16)
Observations	301,056
Uncensored observations	654
Wald chi-square (9)	58.87 **

Note: Robust z -statistics in parentheses. Three splines and a peace years variable are included in the model but omitted for space consideration.

* Significant at 10 percent. ** Significant at 1 percent.

Empirical Findings

Before describing the results of the substantive variables in our model, we note that the selection parameter, rho, is statistically significant, indicating that the two processes, initiation and success, are linked. This provides empirical support for Hypothesis 1, as well as supporting the theoretical expectations of Smith (1997) and Nooruddin (2002) that to evaluate success it is necessary to take first-stage censoring into account. Absent a prior and linked estimation of sanctions onset, we cannot draw valid inferences regarding sanctions success.

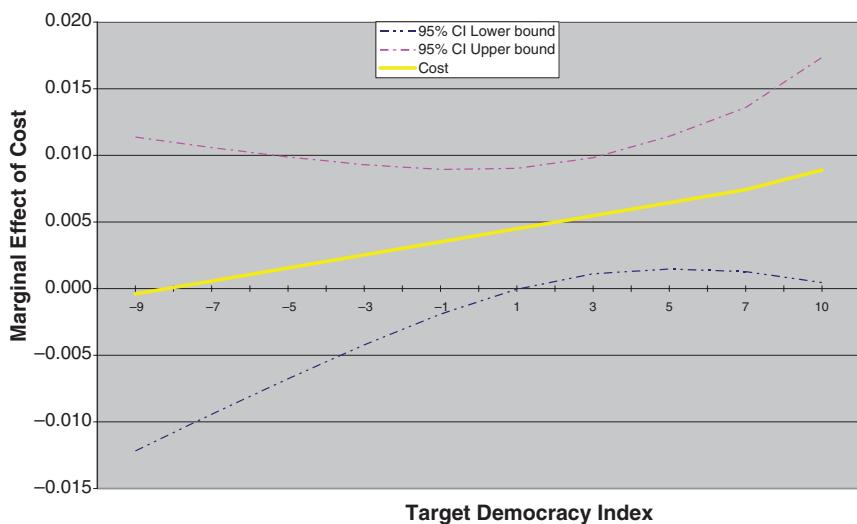
Table 1 summarizes the findings of our multivariate, censored choice model.⁸ Beginning with the hypotheses regarding initiation (the bottom half of Table 1), we observe that as expected by Hypothesis 2, democracies are significantly less likely to use trade sanctions against another democracy. Similarly, as trade interdependence

between two states increases, coercion through sanctions is less likely to occur, supporting Hypothesis 3. These two findings support the logic of the political cost argument developed above. Trade interdependence, for instance, makes sanctions less likely because it increases the expected cost of sanctions to the initiator and the target. The findings on joint democracy and trade interdependence are also consistent with those reported by Lektzian and Souva (2003), specifically that dyads with one democracy are more likely to experience sanctions, but jointly democratic dyads are less likely to have sanctions. The only other significant variable in the initiation equation is *MID*, which is positive and significant, indicating that in general countries are more likely to use sanctions as a complement to militarized force rather than as a substitute.

The top half of Table 1 shows the results of our analysis of factors affecting the success of economic sanctions. We have argued that costly sanctions have different effects on democratic and nondemocratic states because of how they affect the winning coalition in each type of regime. In nondemocratic states, costly sanctions indicate that the sanctions are broad and not efficiently targeted against the small winning coalition characteristic of authoritarian regimes; as a result, costly sanctions should be less likely to succeed against nondemocratic targets (Hypothesis 4a). In democratic states, costly sanctions indicate that the winning coalition is experiencing economic punishment, and according to our theory, the regime should be more likely to yield when this happens (Hypothesis 4b). Because the effect of economic punishment *depends on* the target's regime type, an interaction of economic cost and target regime type is necessary, and substantive interpretation is easiest with a figure. Figure 1 shows that economically punishing sanctions have no statistically significant impact on nondemocratic targets yielding to pressure from sanctions, but economically costly sanctions against a democratic state increase the likelihood of policy change. The substantive effect in our model of increasing economic costs by one standard deviation against a democracy is to increase the probability of successful sanctions by 31 percent.⁹ On the other hand, if the target is an autocracy, the substantive effect of the same one standard deviation increase in costs is to decrease the probability of success by about 3.5 percent. Indeed, as we see in Figure 1, the marginal effect of economic costs is insignificant for autocratic targets. Contrary to extant research, then, we find that the effect of cost is conditional on the target's regime type.

As a robustness check, we also ran our model using leadership change in the targeted country as the dependent variable. We obtained data on the change in leaders during sanctions from the Marinov (2005) replication data set. Marinov argued that if sanctions are to be effective they must weaken targeted leaders, and this should result in a greater likelihood of regime change during sanctions. He concludes that "the leader of a government who comes under economic pressure in a given year is more likely to lose office than a leader who does not" (p. 564). Regarding sanctions against democracies, Marinov found that "pressure directed against democracies causes much more government instability" (p. 573). However, contrary to his

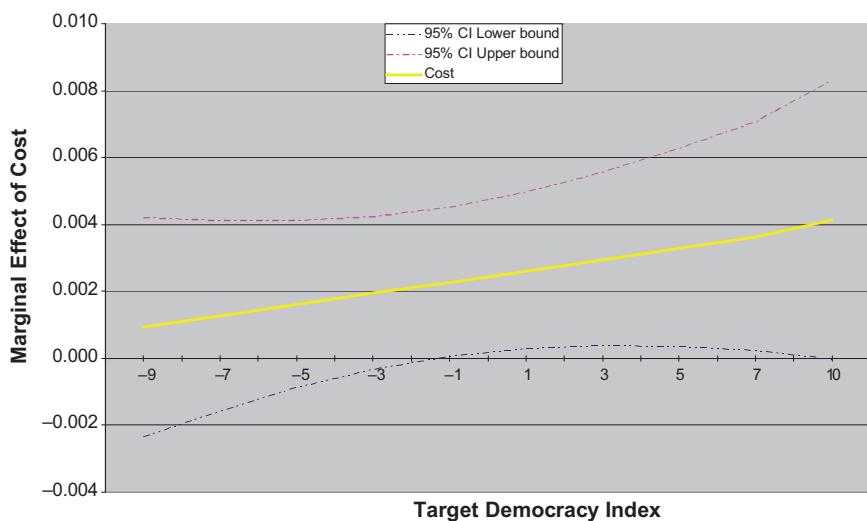
Figure 1
Impact of Cost Conditional on Target's Democracy Index (Dependent Variable: Policy Change)



expectations, he found increasing economic costs to have a generally positive yet statistically insignificant impact on destabilization. Figure 2 helps shed light on this unexpected finding while providing further empirical support for our conditional hypothesis. Upon closer inspection, cumulative costs do have a destabilizing effect on targeted leaders, as Marinov expected, but this effect only begins to reach statistical significance when the targeted government is not a strong autocracy.

To shed more light on the importance of these findings, we point to a few cases that illustrate the logic of the argument. With Hypothesis 4a, we argue that relatively low-cost sanctions are a proxy indicator for the directedness of the sanctions on the target's winning coalition. If the cost of sanctions is high, then the impact is likely to be broad and inefficiently applied, thereby affording autocratic leaders opportunities to collect rents from the sanctions and preserve their hold on office. In this way, autocrats are able to offset economic costs that are directed toward core members or supporters of the regime. The U.S. sanctions against the autocratic regime in Brazil in 1977, for example, were narrowly targeted and relatively successful. Similarly, the U.S. sanctions imposed against the autocratic leaders in Argentina in 1977 led to a change in policy. These sanctions had a small impact on the Argentinean economy, reducing GNP by only 0.1 percent, but because the majority of the costs were tied to losses in military aid and military equipment

Figure 2
Impact of Cost Conditional on Target's Democracy Index (Dependent Variable: Target Leadership Change)



imports, the sanctions hurt the ruling elite. American sanctions on the Dominican Republic in the 1960s are another example of successfully coercing an autocratic regime. These sanctions targeted the ruling Trujillo family by imposing a 2 cent per pound entry fee on Dominican sugar. According to Kirshner (1997), sugar holdings accounted for approximately one-third of the total assets of the Trujillo family, and the loss of wealth as a result of the sanctions played a significant role in weakening his hold on power and his eventual assassination by Dominican business and military leaders holding grievances against Trujillo. In brief, contrary to conventional wisdom, sanctions can make autocratic leaders yield, but the key to success is usually not found in broadly increasing economic costs to the target economy. While the overall economic costs of sanctions to autocracies are generally higher, high overall costs are not a good predictor of successful sanctions against autocrats.

Equally important, we contend that sanctions against democratic states do not always succeed, for sometimes they do not impose enough punishment. The unsuccessful U.S. sanctions against democratic India in 1971 illustrate this type of case. Yet as summarized in Hypothesis 4b, increasing economic costs against democratic targets increases the probability of successful sanctions. Indonesia, for instance, successfully imposed broad sanctions against the Netherlands in 1957, over the

independence of West Irian, with accumulated costs between 3 and 4 percent of the Dutch GNP. Given this large impact against a democracy, it is not surprising that the Dutch transferred control of West Irian to Indonesia in 1963 (Hufbauer, Schott, and Elliott 1990, 169).

In addition to a conditional relationship between the cost of sanctions and the target's regime type, our political cost theory leads us to expect that the size of the demand made of the target influences the likelihood of the target complying. Yielding to sanctions pressure alleviates the cost of the sanctions, but it also results in some political cost for the regime. As a result, greater demands decrease the likelihood of success (Hypothesis 5). This hypothesis is supported by the empirical analysis. As shown in Table 1, the coefficient on the demand variable is statistically significant and negative. Substantively, we see that holding other variables constant at their mean or mode and changing the demand from a minor demand made of an ally to a major demand made of an adversary produces a 66 percent decrease in the probability of sanctions eliciting a policy change. We also see a large substantive difference between trying to elicit a major policy change from a foe as opposed to a friend. Although we employ a different research design, consistent with Drezner (1999), we find that sanctions are about 20 percent less likely to achieve a major policy change from a foe than from a friend.

Finally, we note that support for the hypotheses occurs despite the inclusion of a number of alternative explanations. In light of findings and arguments in extant research, we control for the effects of multilateral sanctions, assistance to the target, the sender's regime type, the target's trade dependence, and the presence of companion military policies. As expected by all theories of sanctions success, assistance to the target by way of a "black knight" coming to its aid as an alternate trading partner reduces the likelihood of the target yielding. Similarly, when sanctions are accompanied by military force, the likelihood of the target yielding increases. Like Hart (2000), we also find that targets are more likely to yield to democratic senders than autocratic ones; despite the inclusion of appropriate control variables, this finding should be viewed with caution because of the large number of cases involving the United States. And we find that multilateral sanctions and the target's relative trade dependence have no impact on the likelihood of success. These latter two findings are inconsistent with the punishment argument but are supportive of the political cost logic advanced herein.

Conclusion

Why do sanctions sometimes succeed, but often fail, to produce a policy change in the target? Extant research suggests that the answer is either that sanctions do not usually impose enough of a cost or, knowing that sanctions are imposed against non-democratic states, sanctions fail because nondemocracies are difficult to punish.

The cost thesis, however, is unable to explain why there is variation in success given a high cost, while the democracy thesis does not explain why nondemocracies sometimes yield to sanctions.

We argue that to assess the effectiveness of sanctions it is necessary to take into account the process generating the use of sanctions. The set of observed sanctions cases is not random, and this has implications for evaluating the success of sanctions. In particular, sanctions are most likely to occur when a threat is credible but not perceived as too severe. Building on this logic, we argue that sanctions are most likely to occur between democratic senders and nondemocratic targets with relatively low levels of trade interdependence. The empirical analysis supports this argument. Why do sanctions ever succeed? Sanctions succeed when the initiator of sanctions is able to calibrate the sanctions such that most of the impact falls on the target's winning coalition.

More generally, we argue that the effect of economic punishment is conditional on a state's political institutions. In all cases, the key to sanctions success is to generate political costs for the target regime's winning coalition. Against democracies, one can target the winning coalition with relatively broad sanctions. Against nondemocracies, broad sanctions that impose significant costs on society allow nondemocratic leaders to extract more rents, thereby strengthening their political position and making them less likely to yield. As a result, the relationship between the cost of sanctions and regime type is conditional. Success against nondemocratic leaders is more likely to come from sanctions focused predominately on the leadership.

Appendix A Variable Descriptions

Variable	Measure and Data Source
Result	A case is coded as a success in the last year of sanctions if it receives either a 3, "at least somewhat successful result," or 4, "completely successful outcome," on the Hufbauer, Schott, and Elliott (1990) result variable.
Democratic sender	Dummy variable equal to 1 if sender of sanctions has a Democracy minus Autocracy index score of six or greater. Source: Polity IV, Marshall and Jaggers (2000).
Relative trade dependence	Smaller trade dependence divided by larger trade dependence. Trade dependence equals dyadic trade divided by GDP. Data from Gleditsch (2002).
Cooperation with sender	Equals 1 if more than one state cooperated with the sender. Data from Hufbauer, Schott, and Elliott (1990).
Assistance to target	Equals 1 if other states cooperated with the target. Data from Hufbauer, Schott, and Elliott (1990).
Militarized interstate dispute (MID)	Dummy variable equal to 1 if a new MID occurs in the dyad in that year. Data from MID 3.1 (Ghosn, Palmer, and Bremer 2004) as generated by EUGene.

(Continued)

Appendix A (Continued)

Variable	Measure and Data Source
Size of demand	Major demand multiplied by prior relations. Major demand equals 1 if the demand is government destabilization, disrupting a minor military adventure, impairing the military potential of a country, or changing a target country's policies in a major way. Prior relations equals 1 if the relationship was friendly, 2 if neutral, 3 if antagonistic. Data from Hufbauer, Schott, and Elliott (1990).
Target polity	Democracy minus autocracy index score for the target of sanctions. Source: Polity IV, Marshall and Jagers (2000).
Target costs	Cumulative annual cost to target as percentage of GNP. Data from Hufbauer, Schott, and Elliott (1990).
Target Polity × Target Costs	Multiplicative interaction term of target polity and target costs.
Sanctions	Cases of sanctions are determined using Hufbauer, Schott, and Elliott's (1990) sanctions data set. Multiple sanctions are disaggregated as described on page 15.
Distance	Natural log of the capital-to-capital distance. Data generated from EUGene.
Joint democracy	Dummy variable equal to 1 if both states in the dyad have democracy minus autocracy index score of six or greater. Source: Polity IV, Marshall and Jagers (2000).
Relative GDP	Smaller state's GDP divided by larger state's GDP. Data from Gleditsch (2002).
Peace years	The number of years since the states in the dyad last experienced economic sanctions.
Splines	Cubic spline variables generated following Beck, Katz, and Tucker (1998).

**Appendix B
Summary Statistics**

Dependent Variable: Success (<i>N</i> = 654)	Mean	SD	Min	Max
Result	0.078	0.268	0	1
Democratic sender	0.751	0.433	0	1
Relative trade dependence	0.787	0.260	0.014	1
Cooperation with sender	0.630	0.483	0	1
Assistance to target	0.488	0.500	0	1
Militarized interstate dispute (MID)	0.291	0.454	0	1
Size of demand	3.750	1.648	1	6
Target polity	-4.470	5.938	-9	10
Target costs	11.122	28.165	-77	182
Target Polity × Target Costs	-56.906	187.977	-924	728
Dependent Variable: Initiation (<i>N</i> = 301,056)	Mean	SD	Min	Max
Sanction	0.002	0.047	0	1
Militarized interstate dispute (MID)	0.006	0.076	0	1

Ln (Distance)	8.239	0.781	1.609	9.421
Democracy	0.499	0.500	0	1
Joint democracy	0.085	0.279	0	1
Relative trade dependence	0.941	0.142	0.014	1
Relative GDP	0.275	0.273	0.00007	0.999
Peace years	17.080	10.882	0	42
Spline1	-4,092.678	4,407.043	-16,848	0
Spline2	-5,776.89	7,028.787	-27,440	0
Spline3	-4,853.337	6,527.994	-26,657	0

Note: Observations are calculated for each variable within sample for Table 1.

Notes

1. Nooruddin (2002) is the only exception, and he also uses a censored selection model.
2. Specifically, we employ Stata's heckprob command.
3. Specifically, we use the "polity2" variable from the Polity IV data.
4. While this operationalization of cost accounts for the cumulative effect of economic pressure applied over time, it is conservative in that it does not compute reductions in growth rates compounded over time.
5. Measuring first-stage interdependence as the weak link of dyadic trade divided by gross domestic product and second stage interdependence as the target's trade divided by gross domestic product does not affect the results.
6. Capital-to-capital distance data is generated using EUGene (version 3.1; Bennett and Stam 2000).
7. The militarized interstate dispute (MID) data was generated using EUGene (version 3.1; Bennett and Stam 2000).
8. Appendix B provides summary statistics within sample for all variables appearing in Table 1.
9. In calculating these changes in predicted probabilities, all other variables were held at their mean or modal value.

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