ANALYSIS OF SENDER'S BEHAVIOR AND
ITS RAMIFICATIONS IN INTERNATIONAL
ECONOMIC SANCTIONS

by

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Abstract

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Previous research demonstrates that only 34% of the cases of international economic sanctions are successful. This number leads the skeptical thoughts of the statesmen on whether economic sanctions should be implemented at all. However, separate analysis of episodes that consists of only threats and only sanctions provides different results. The success rate at the phase of the threat is 46% and at the post-imposition phase 38%. Such variables like the level of sender's commitment, level of sender's precision, offered aid and type of the institution that issued the threat describe the behavior of the sender. All of them appeared to be significant factors that determine the success of the case.

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GLOSSARY

International Sanctions   is an instrument of international relations used to punish those being sanctioned by depriving them of some value in order to pressure them to comply with specific norms or criteria deemed important by those imposing the sanctions.

INTRODUCTION

"When it is obvious that the goals cannot be reached,
don't adjust the goals, adjust the action steps."

Confucius

From the end of World War II to 1990 the United States either alone or with its allies imposed sanctions 77 times[1], while from 1993 to 1996 there were 36 cases of sanctioning by the US[2]. This shows that with the amount of international sanctions increasing every year, states are choosing to utilize economic sanctions as a key weapon in their diplomatic arsenal. Sanctions are used to punish those being sanctioned by depriving them of some value in order to pressure them to comply with specific norms or criteria deemed important by those imposing the sanctions (Galtung 1967).

Considering that only 34% of sanctions are effective (Hufbauer, Schott, and Elliott 1990), more research needs to be done in order to determine how to maximize effectiveness while maintaining a low duration (length of sanction period). The costs to both the sender (party imposing the sanction) and the target (party being sanctioned) are significant when considering the probability of sanctions altering the target's behavior (Morgan, Schwebach 1997). The longer the duration, the more costly and unpopular they become to both sides. Another important factor to consider is whether the senders are genuine in the goals they claim to support

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[1] Hufbauer, Schott, and Elliott, 1990

[2] Kaempfer and Lowenberg, 1999

Official reasons for sender countries to threaten or impose sanctions are usually to improve human rights, improve environmental policies, end weapons proliferation, punish illegal trafficking practices, destabilize regime, border dispute resolution and so forth.

Sanctions are considered started either right after an official announcement of the implementation threat, or imposition the sanctions without the previous announcement. Threats can be proclaimed in a number of ways. It can be a speech by government officials, the drafting of legislation against a target state, or the passage of a conditional law stipulating that sanctions will be imposed if certain target behaviors are not changed (Morgan, Krustev, Bapat 2006).

Sanctions can be utilized in multiple ways, for instance the sender can affect the target by restricting export and import operations with the sender, freezing their assets, threatening to reduce investments, manipulating aid, military invasion and so on. However, the available data shows that the sanctions that are imposed are not always as severe as what has been threatened. As an example, we can look at the case of the United States vs. China, when the United States was punishing China for the Tiananmen Square massacre. The US threatened to suspend all economic agreements, effectively cancelling all previous agreements. When sanctions were actually imposed, the case ended up with import restrictions only. As we can see from this case, the stated and accomplished actions differ significantly. Moreover, there is room left for speculation such as was the United States trying to restrict the import of cheap Chinese goods?

In my research I will conduct an analysis of the actions performed by the sender states. I will separately analyze the cases that consist only of threats, and the cases that consist of the sanctions. The first group has 284 observations, the second – 248. Such division will allow me to introduce a

very detailed analysis of not only the intended and performed actions, but final outcomes as well. As independent variables, I will use a list of variables that clearly demonstrate the attitude the sender had about the imposition of sanctions. E.g. there are two ways the sender can state the demanded requirements and changes in the targets behavior: 1) equivocally and vaguely – "For Afghanistan to avoid the imposition of sanctions by the United Nations, Afghanistan must stop its support of international terrorism" and 2) clearly and explicitly – "For Afghanistan to avoid the imposition of sanctions by the United Nations, Afghanistan must close each of its terrorist camps, seal its border with Pakistan to prevent terrorists from cross border raids, and share intelligence about terrorists with the international community", (Morgan, Krustev, Bapat 2006). This simple example provides the reader with an idea of whether the sender state was serious in their intentions, or some other goals were pursued.

Instead of simply dividing the cases into two categories – effective, not effective – I offer to consider a whole spectrum of possible outcomes that took place in the considered cases. They are: partial or complete acquiescence by the target prior sanction imposition, surrendering of the sender prior the imposition, negotiated settlement prior imposition, partial or complete acquiescence of the target after the sanctions are imposed, surrendering of the sender after imposition, negotiated settlement after imposition. For example, it is quite difficult to judge the efficacy of sanctions with partial acquiescence or negotiated settlement. Moreover, even if we consider them as successful, putting them together in one list with those where the result was a complete acquiescence is not very appropriate. Therefore, in my research using the final outcome of the cases as an independent variable, applying multinomial logit/ordered probit, will allow me to be as precise as possible when analyzing the certain type of senders' behavior that led to a certain type of outcome.

I believe the approach I am offering to take in the international economic sanctions analysis is quite crucial for future research. Previous research on the matter has taken the approach of trying to solve the problem of the effectiveness of the international economic sanctions. Some claim they are not effective (Pape, 1997), while others are trying to find what factors make them effective (Gashti-Gibson, Davis and Radcliff, 1997). However, in my opinion, the conclusions drawn from analyzing all the cases of sanction impositions together are not as efficient and reliable as they could be. Separate analysis is necessary.

None of the researchers place much importance on the sender. What exactly the sender state was trying to achieve when threatening or imposing sanctions. Maybe it is due to the irresponsible sender's action the episode failed.

What I am attempting, is to demonstrate is that previous approaches in this field may be biased, because the claim that sanctions are an ineffective instrument may be based on many cases where the sender was not completely committed to achieving it's stated goal.

Since the end of the Cold War much has changed in international economies and international relations. All this will be taken into consideration while analyzing the senders actions. This new analysis may provide policy makers with a more modern framework and help show what factors they should take into account when developing successful international relations.

The rest of the paper is organized as following. In Chapter 2 I provide a comprehensive literature review on international economic sanctions. Chapter 3 presents methodology I rely on in my research. Data description can be found in Chapter 4 and empirical analysis is in Chapter 5. Chapter 6 – conclusions.

LITERATURE REVIEW

In my literature review I would first of all like to provide the reader with a historical overview of the development of international economic sanctions, followed by a general analysis of relevant research and conclusions.

As was mentioned in the introduction, sanctions are an instrument used in international relations as an action imposed by the sender (party imposing the sanction) against the target (party violating international law), to compel that state to conform to the law (Daoudi and Dajani 1983).

Officially, international sanctions or as they were then called "blockades", appeared in the League of Nations' Covenant, article 16 (1924).

"Should any Member of the League resort to war … it shall ipso facto be deemed to have committed an act of war against all other Members of the League, which hereby undertake immediately to subject it to the severance of all trade or financial relations, the prohibition of all intercourse between their nationals and the nationals of the covenant-breaking State, and the prevention of all financial, commercial or personal intercourse between the nationals of the covenant-breaking State and the nationals of any other State, whether a Member of the League or not".

However, even though articles in the League's Covenant give clear instructions on what needs to be done in the case of resorting to war by one of the members, sanctions as an international policy instrument failed due to

the non-compliance of several European states to the limitations mentioned above.

After World War II, hopes were again placed on economic sanctions, as they were believed to be a very attractive alternative to military action against misbehaving states. Nevertheless, historical experience shows that economic sanctions may not only be inefficient - the outcome would not coincide with the goal - but also unjust, as powerful countries can use it as a means to pressure weaker ones.

While international sanctions were historically utilized to cease military actions, they now serve a slightly different purpose. Usually the issues that require the threat of, or imposition of sanctions are regarding forestalling war, hastening the achievement of freedom and democracy, improving environmental and trade policies, ending weapon proliferation, and improving human rights, etc (Davis and Engerman, 2003).

To achieve these goals states can threaten to sanction, or actually impose sanctions. In the case of sanction imposition, there are multiple ways in which the latter can be executed. Morgan, Krustev, Bapat (2006) defined these types of international economic sanctions as the most frequently utilized forms:

1. Total Economic Embargo.

2. Partial Economic Embargo (only concerning certain types of goods/services).

3. Import Restriction (concerning certain types or goods).

4. Export Restriction (concerning certain types or goods).

5. Blockade (no states are allowed into any kind of economic relations with the target, and might also be compelled physically using military).

6. Asset Freeze (partial or total).

7. Termination of Foreign Aid (partial or total).

8. Travel Ban (partial or total).

9. Suspension of Economic Agreement (partial or total).

This list of international economic sanctions does not cover every type of sanction, and claims to consist of only the most frequently used. Also, the sender might impose a combination of these sanctions or invent new ones.

In my case, economic sanctions imply either a singular or combination implication of financial and trade sanctions. However, economic sanctions are not the only type of sanctions that can be imposed. The sender might want to impose military, cultural or myriad other types of sanctions, although in my thesis the scope of focus will only include economic sanctions.

Scholars claim that economic sanctions are the most likely to have the greatest possible influence on the target (Davis and Engerman, 2003). Nevertheless, there are unresolved issues in trying to achieve the maximum result in their implementation.

William Kaempfer and Anton Lowenberg (2003) claim that the outcome of the sanctions application highly correlates with the ability of the target's home interest groups to overcome the complications that sanctions bring them, and the ability of the sender to influence this target group directly without hurting others. They also believe that if the issue for the sender is related to

destabilizing or changing the target's political regime, opposition groups that are willing to support the sender within the target might also be weakened. This can result in an outcome that is less successful than originally anticipated. These kinds of problems occur quite often in totalitarian states such as Iran, North Korea.

Since my thesis is based on sanctions outcome analysis, in this literature review I will analyze how the scholars were approaching the problem of effectiveness.

Many researchers choose effectiveness as their major interest of study concerning sanctions. It is no surprise considering that only 34% of sanction implementation cases are effective (Hufbauer, Schott, and Elliott 1990). Such a small percentage of effectiveness is explained by a lack of incentives for both the target and the sender to either modify their behavior or to sanction at all, respectively. Researchers continually attempt to answer the question: "Why do statesmen continue to practice economic statecraft when 'everybody knows' that it does not work?"(Baldwin 1985).

Working with the problem of effectiveness, researchers prefer two approaches: develop a model with the help of game theoretic techniques, or apply empirical analysis using econometrics.

Even though game theoretic approach is not applied in my thesis, I believe it will be helpful to mention a few outstanding papers on the subject in order to provide a more complete picture.

George Tsebelis authored the classic work "Are Sanctions Effective? A Game Theoretic Analysis" (1990). He used game theory to explain what causes sanctions to fail and what allows them to be successful. He does not mention any specific sanctioning episodes. Tsebelis' work is focused mostly on the

behavior of the sender and target while sanctioning. He is considering an example whereby a sender country imposes sanctions on the target and if the target then complies, the sender will cease the sanctions. However, as soon as sanctions from the sender cease, the target will resume the behavior that merited the sanctions in the first place and the cycle continues ad nauseum. The conclusion drawn is that regardless of the permutation of strategies, one party will always have an incentive to deviate. Also, if the cost of sanctioning is higher than the costs the target imposes by the misbehavior the sender will not sanction. The target is in a similar situation when the costs inflicted by the sender are not high enough according to the target's standards, the target will not comply. Tsebelis (1990) with the help of game theoretic model drew the equilibrium pair of strategies that could stop the vicious circle.

Simon (1996) in his work explores the theory of moves while analyzing the actions performed by the sender and the target in international economic sanctioning. However, Stone (2001) claimed that the theory of moves is not the best method for studying sanctions since the simultaneous games do not describe sanctioning episodes realistically, as the target cannot comply with the sender's requirements before knowing whether the sanctions will actually be imposed or not. Also according to Simon (1996), both sender's and target's actions are irreversible – the sender lifts the sanctions only in the compliance case – which shows that the model fails to predict success. Therefore he offers to use the repeated games with incomplete information taking signaling into account.

Daniel W. Drezner (2003) in his paper supports my idea regarding the selection problems in empirical analysis. The success rate is highly understated, because in game theoretic models, successful cases of economic coercion are much more likely to end at the threatening stage (Drezner 2003). Thus, under conditions of full information, only two equilibrium outcomes are possible: sender refuses to threaten the enforcement or the target

complies with a threat. This shows that threats have higher success rates. Also in this paper, when speaking about the sample bias, the author puts the emphasis on the fact that the most commonly used data set, developed by Hufbauer, Schott and Elliott (1990) barely contains any data regarding the threats, so the low success rate proclaimed by many scholars is explained by the small data sample used.

The next part of the literature review will center on the empirical work done on international economic sanctions. Most of the works are concerned about the outcome of sanctioning, its success rate and the variables that could maximize it.

Gashti-Gibson, Davis and Radcliff (1997) decided to approach the subject using logistic regression. They focus on the conditions under which sanctions are likely to succeed using econometrics to determine those conditions. Their research has shown that several factors are significant. The political-economic stability of the target, the length of sanctions, and the cost to the target are factors that determine the destabilization. This seems to suggest that short, high cost sanctions imposed on relatively weak targets have the greatest chance of success.

Jing, Kaempfer, Lowenber (2003) were estimating effectiveness – "policy result" – and employed simultaneous equations, taking the kind of sanctions as dependent variables and change of target's policy, assistantship provided by a third country, trade links between the target and the sender, costs of sanctioning, economic health of the target prior to sanctions and the relative size of the sender compared to the target as independent. This coincides with other research stating that the more cordial the relationship between the sender and the target preceding the sanctions, the more effective they will be. They also found that contrary to previous research, the larger the size ratio

the lower the success rate of sanctions, and that effectiveness is not influenced by third-country pressure.

Another approach used by scholars while analyzing international economic sanctions is examining to what extent multilateral or unilateral sanctioning is influencing the outcome of the case. Since multilateralism versus unilateralism is also represented in my work as an independent variable, I believe it makes sense to pay some attention to possible issues in this area.

One way to view multilateralism is through the hegemonic-stability theory developed by Keohane (2001), which claims that multilateral cooperation is a public good that can only be achieved if a powerful state assumes a leadership position. This implies that a lack of hegemonic leadership leaves individual nations with incentives to desert from multilateral agreements. Krasner (2000) points out that formal and informal international organizations are significant when considering possible cooperation. The most common approach to analyzing multilateral agreements is by studying the payoffs received by those involved. Countries choose different paths depending on the payouts as Martin (1992) points out.

It would be quite logical to assume that international cooperation is expected to be more productive than when countries are acting alone. Some researchers support that idea in their works. Dumas (1994) for example, maintains that the effectiveness of a trade embargo is dependent on how much the embargo negatively affects the targets terms of trade internationally. This bolsters the idea pronounced by many scholars that the more costly sanctions are to the target, the more likely success will be achieved (Jing, Kaempfer, Lowenber (2003) and because of this, the economic harm inflicted by a multilateral effort is anticipated to be higher than by a unilateral effort.

This seems cogent until the statistical check ups are performed. It was discovered that there is a negative correlation, or no correlation at all between cooperation and the success of sanctions episodes (Drezner, 2000).

The cases that contain multilateralism probably suffer not only from a relative lack of commitment on the part of the sender(s), but also from the compromising difficulties that arise between the primary sender and the secondary senders. Usually it is quite difficult for the primary sender to convince other states to join the sanctioning. This can be explained by the possible businesses represented in the target area of the potential secondary sender, which the latter believe to be important either for the country or for some private actors. It is believed that multilateralism might be successful only if it is supported by some international organizations. International organizations help the members of sanction imposing coalitions resist different kinds of domestic pressures and stay consistent with a chosen track (Drezner, 2000). This idea meshes well with the aforementioned hegemonic-stability theory developed by Keohane (2001).

The costs to both the sender and the target are significant in the probability of sanctions altering the target's behavior (Morgan, Schwebach 1997) so not many countries are willing to participate. Nevertheless, in my research I am considering cases where one or more senders either threaten or actually impose sanctions.

Termination is an issue that is recently receiving more attention, but there are few works that approach duration directly while analyzing international economic sanctions. The average length of sanctioning is approximately 16 years (Bolk and Al-Sowayel, 2000). This demonstrates that the length directly correlates with costs that are imposed not only on the target but also on the sender, and this clearly has some influence on the success of the outcome. However, in my research am not going to analyze the duration of sanctions

due to possible endogeneity issues and its irrelevance to the main topic of my research.

In conclusion I would like to put more emphasis on why my work is different and what flaws I see in the papers mentioned above.

First, most of the empirical researchers are trying to answer the question why international economic sanctions are not as successful (only 34%) as generally assumed. For that they are using a dataset developed by Hufbauer, Schott and Elliott (1990). This dataset consists of 75 cases of international economic sanctions imposition. Hufbauer, Schott and Elliott developed a variable, which is identified as a success rate. This variable has 16 values. A value of 8 or lower most scholars consider to be unsuccessful, while cases that are greater than 8, up to 16, are believed to be successful. However, not only are the values of this variable rather subjective, it also fails to identify clearly the cases where both sides came to a negotiated settlement as the outcome of the case – which can also be considered as partial success. Therefore, in my thesis, as a dependent variable I am choosing the outcome of international economic sanctions as reported in the research of Elliott K, G. Hufbauer, J. Schott and B. Oegg (2008) and Morgan C, V. Krustev, and N. Bapat (2006). All the outcomes are divided into 2 parts – pre-sanctioning, and post-sanctioning. Pre-sanctioning are those that ended at the threatening stage. Post-sanctioning are those that ended after the sanction imposition. At the same time, each part has three possible values: the target's complete or partial acquiescence, the sender's surrender, or negotiated settlement between two parties. All these outcomes can be found in the above mentioned sources.

The second flaw regarding the success rate I believe is present in the small data set and thus sample selection bias. As was mentioned earlier, Drezner (2003) supports my idea that the lack of data on threats in the Hufbauer, Schott and Elliott (1990) dataset leads to the skewed result in the rate of

success in international economic sanctions. Thus, in my thesis I will be considering three types of datasets. The first one will consist only of threatening cases, the second on imposed sanctions, and third will have a list of combined cases from group one and two. This will let me judge more specifically how successful sanctions are at the threatening stage, compared to the post-sanctioning stage.

Another unique feature of my work is that I am putting great emphasis on the sender's behavior as an important criterion that can affect the outcome of international economic sanctions. Many variables that were found to be significant by numerous researchers do help the sender be more or less successful in its international relations, but are indeed independent, and the sender can only accept them as given. E.g. the state of the domestic economy or homogeneity of the target's society are believed to be important variables that affect the outcome but cannot be influenced by the sender.

Also, none of the earlier research focuses much attention on the sender as an important element of international relations whose actions could distinctly influence the outcome of the case.

Therefore, in my thesis I will try to put as much emphasis on the sender's behavior and its consequences as the data will allow. This may show that very often the goal can be achieved, but its achievability is highly correlated with the initiator's motivation and desire for success.

METHODOLOGY

There is no specific theoretical framework for the researchers that work with international economic sanctions. Since most of the papers on the subject are based on empirical analysis, with the use of econometric techniques, scholars choose the econometric model based on the variables and data they have.

One of the papers that I will be relying on in my empirical analysis is by Jing, Kaempfer and Lowenberg (2003). They are using multivariate logit for estimation. However, in their research, they are observing how three types of sanctions (military action, trade sanctions and financial sanctions) influence the policy result. They use the database developed by Hufbauer, Schott and Elliott (1990).

In my regression I will be using multinomial logit as well. My independent variable – final outcome (*FINOUT)*, takes 6 possible values that are defined by Morgan, Krustev, Bapat (2006):

> 1. Partial or Complete Acquiescence by Target to threat – target agrees with some or all of the requirements that sender is demanding, while sanctions are not imposed.

> 2. Surrendering of the Sender prior to sanctions imposition.

> 3. Negotiated Settlement prior imposition – target alters behavior while the sender does something in exchange. No sanctions imposed.

4. Partial or Complete Acquiescence by the Target State following sanctions imposition.

5. Surrendering of the Sender after Sanctions Imposition

6. Negotiated Settlement following sanctions imposition.

There should not be any problems with multivariate logit estimations, because the explanations provided for different values of the dependent variable differ one from the other and none of them can be substituted or are alternatives to each other. Since there is no defined exact order to the outcome, ordered probit/logit will not work.

Before performing multinomial logit, all the data will be divided into two parts. The first part will consist of cases that ended at the threatening stage, while the second will include the cases where sanctions were imposed. This is done to observe how various factors influence the outcomes differently. Also, specific independent variables may demonstrate different significance on different stages of sanctioning. Thus, two separate regressions for two stages will show why it is necessary to observe cases separately and why one should not draw conclusions from the results.

$$FINAL\ OUTCOME = (const, SENDERS, ISSUE, THREATID, SENDCOMMIT, SENDSPECIF, SANCTYPETHREAT, SANCTYPE, CARROTS, SENDANTCOST, TARGANT\text{--}COST, SENDERCOST, TARGETCOST)$$

As the dependent variable in my regression I am choosing Final Outcome (*FINOUT*).

First I would like to discuss variables that in my opinion define the sender's attitude towards the case. They are: *SENDERS, THREATID, SENDCOMMIT, SENDSPECIF, SANCTYPETHREAT, SANCTYPE, CARROTS.* With these variables I will be able to analyze the behavior of the sender and the outcome(s) of its actions.

One of the first variables that will help me determine the seriousness of the sender's intentions is *SENDERS.* This way I can control my regression for a number of participants. It is believed that multilateral sanctions are likely to bring a less desirous outcome for a sender than a unilateral approach (Kaempfer, Lowenber 1999). My regressions will test this assumption. Moreover, I will be able to judge whether the number of senders is unimportant only in the post-imposition stage. Two separate regressions will show how this variable influences all six outcomes.

(THREATID) will identify the different countries. Since countries have different governmental organization each country's power might be concentrated in different branches. In my thesis I am defining four institutions that can issue threats:

1. Bureaucracy

2. International Institution

3. Legislative Branch

4. Executive Branch

I believe these variables also help provide an idea of how determined the country was when threatening with sanctions. It is assumed that the target also takes this into account before making a decision to comply or not.

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The commitment level of the sender will be identified as *(SENDCOMMIT)* and how specific the sender was when threatening the target *(SENDSPECIF)*. The sender's commitment and specificity can be determined from the requests and threats the sender makes when initiating sanctions. The sender's commitment can be either **weak** (the sender is not very interested in the case and threatens, but is not committed to sanction), **moderate** (the sender while threatening, claims that sanctions will possibly come), or **strong** (the sender uses "if" form, "if ___ then we will impose sanctions", (Morgan, Krustev, Bapat 2006). The same idea follows when speaking about how specific the sender was when threatening: equivocal and general (not providing the target with any specific requirements) or clear and explicit (giving the target direct instructions on what exactly needs to be altered). Both of these variables will give me an opportunity to estimate the sender's intentions and ambitions while threatening and sanctioning. This is important because the less caring and less specific the sender was; the more likely the case's outcome will be the sender's capitulation. So again, before judging the success rate, researchers need to make sure that the sender state was truly interested in a positive outcome.

The identification for the type of sanctions threatened will be *(SANCTYPETHREAT)* and the type of sanctions implemented *(SANCTYPE)*. The type of sanction threatened and implemented is obviously the sender's prerogative and so this is another variable that determines sender's actions. In a number of observed cases, the sanction type the sender is threatening with does not always coincide with the sanction type later implemented. This difference can provide us with information on what the sender's intentions were, and also how it influenced the outcome of the case. In addition, this variable will help me check which type of sanctions on average a target is usually most averse to, and which type of sanctions should be used at the threat stage to increase a desirous result.

We need to consider not only punishment but also reward which will be labeled *(CARROTS)*. This is yet again another variable that gives me an opportunity to judge the attitude of the sender. Carrots would be something the sender offers to the target if the latter agrees to comply. It is likely that the chances of compliance are higher with carrots than without them. So, I can assume that if the sender is interested in convincing the target to comply, they will more than likely provide the target with some kind of aid or benefit. I can claim that this is one more variable that was not taken into account in previous research judging the success rate of sanctions.

The rest of the variables that I have in my regression do not demonstrate the sender's attitude, but they were believed to be significant by previous researchers so for the sake of decreasing the changes of omitted variable bias I will include them as well.

The motive or purpose for sanctioning will be identified as *(ISSUE)*. In my thesis I plan on challenging the common view that sanctions have low success rates. For that I need to know exactly in which cases threatening was enough, in which sanctioning was enough, and in which nothing helped. There should be a pattern that will allow policy makers to formulate wise choices before threatening or sanctioning. E.g. we can consider two opposite cases. In the first one, the stated goal was to improve environmental policies, and in the second one the goal was to destabilize the regime. For the first case, the sanction success rate was 90%, and for the second only 20%. Therefore, controlling my regression for a dummy variable that will explain the reason for conflict *(ISSUE)* will give me a deeper insight into which cases require which treatment without giving a general claim that sanction success rate is low.

Sender's anticipated costs *(SENDANTCOST)* and target's anticipated costs *(TARGANTCOST)* usually differ from actual costs for the sender

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(SENDERCOST) and actual costs for the target *(TARGETCOST)*. The last two variables are usually taken into account in almost all regressions that are concerned with the efficiency of international economic sanctions. The idea is to minimize the costs for the sender and maximize them for the target. However, in my regression I also included anticipated variables. This means that if the sender anticipates high costs from sanctioning, they usually give up on the primary stages, and vise versa. So again, I with the help of these variables I will be able to judge on what is important on threatening stages and what matters on post-imposition stages.

DATA DESCRIPTION

The data I used in this research was created by combining two databases. One was taken from "Economic Sanctions Reconsidered" 3rd edn, by Elliott K, G. Hufbauer, J. Schott and B. Oegg (2008). This book compared to its predecessor, which was published in 1990 and used by most of the researchers, consists of 170 economics sanctions cases, 50 of which were not mentioned in the old edition. The disadvantage of this database is that it consists of only the cases when sanctions were actually imposed. However, since my work is also concerned with threats I also used the set developed by the faculty of Rice University, Morgan C, V. Krustev, and N. Bapat (2006). This data contains the threat cases I am interested in.

The uniqueness of this research is not only in the approach, but in the data as well. Combining the data from the very recently published 3rd edition of "Economic Sanctions Reconsidered" and Morgan C, V. Krustev, N. Bapat (2006) will not only increase the number of observations, but also give me an opportunity to make a comparative analysis of the sender's behavior on two different stages.

In my research I am considering separately two groups of observed cases. The first group consists of the cases when only threats were performed. This group has 284 observations. The second group consists of cases when sanctions were imposed. This group has 248 observations.

In the data description chapter, I am providing the summary statistics for each variable that I am using in my regression. Each of these variables will be

in both regressions. The tables below consist of three big columns: name of the variable, threats and sanctions. The threats and sanctions columns give summary statistics of each variable separately on cases with threats and cases when sanctions were imposed.

Outcome as a dependent variable will be used to demonstrate how the sanctions or threatening episode ended.

Table 1. Summary statistics for types of Outcomes

Variable	*Threats*		*Sanctions*	
Type of Outcome:	*Freq*	*Percent*	*Freq*	*Percent*
• Partial /complete acquiescence by the target (no sanctions imposed)	96	33.80	n/a	n/a
• Surrendering of the sender (no sanctions imposed)	133	46.83	n/a	n/a
• Settlement (not imposed)	55	19.37	n/a	n/a
• Partial /complete acquiescence by the target (after sanctions imposed)	n/a	n/a	65	26.21
• Surrendering of the sender (after sanctions imposed)	n/a	n/a	106	42.74
• Settlement (imposed)	n/a	n/a	77	31.05
Total	**284**	**100.00**	**248**	**100.00**

Partial or complete acquiescence by the target (no sanctions imposed) – the target state consents to several or all of the requirements of the sender(s) and completely or partially adjusts its behaviors respectively, while sanctions are not imposed.

Surrendering of the sender (no sanctions imposed) – the sender declines to impose sanctions in spite of the target's failure to alter its behavior.

Settlement (no sanctions imposed) – both parties agree to alter their behavior before sanctions are imposed.

Partial or complete acquiescence by the target (after sanctions imposition) – the target state consents to several or all of the requirements of the sender(s) and completely or partially adjusts its behaviors respectively, after sanctions are imposed.

Surrendering of the sender (after sanctions imposition) – the target does not change its behavior and the sender eventually removes the imposed sanctions.

Settlement (after sanctions imposition) – Both parties agree to alter their behavior after sanctions are imposed.

Variable *Issue* is used to describe what the original reason(s) for sanction/threat initiation. The data is taken from Elliott K, G. Hufbauer, J. Schott and B. Oegg (2008).

Table 2. Summary statistics for types of Issues

	Threats		*Sanctions*	
Type of Issue:	*Freq*	*Percent*	*Freq*	*Percent*
• Political	16	5.63	30	12.10
• Military	22	7.75	32	12.90
• Human	29	10.21	25	10.08
• Environmental	18	6.34	21	8.47
• Economic	154	54.23	111	44.76
• Other	45	15.85	29	11.69
Total	**284**	**100.00**	**248**	**100.00**

Political – sanctions are used either to stop the target state abusing it's influence over the third state or states; or to destabilize the regime within the target state; or in the case of the target state illegally capturing the citizens or property (e.g. national resources) of either the sender or of the third party; or

it might be a territorial dispute between either the sender and the target or the target and the other state.

Military – sanctions are used either to prevent military actions from the target's side; or stop the target from using certain kinds of strategic materials such as uranium, advanced weaponry, or end weapon proliferation – such as supplying either weapons or strategic materials to a third state; or prevent the target state from supporting non-state organizations, such as international terrorist organizations.

Human – sanctions in this case are used to improve the human rights in the target state, by improving the legal system, ceasing repressive actions; preventing and penalizing the trafficking of illicit substances as well as humans by implementing strict laws against such activity.

Environmental – sanctions are used to force the target to use more environmentally friendly technologies and pursue more environmentally friendly policies as well as increase the punishment level within the country for breaking the new policies.

Economic – sanctions are used either to influence the target's trading activity, such as high tariffs that do not follow international agreements, protectionist measures within the target state, purposeful devaluations, etc.

Other – any reason the sender finds to initiate sanctions, e.g. the target state either plans or is already engaged in any action the sender does not favor.

Sender

In my regressions the variable **Sender** takes two possible values. Much research was done to determine whether it is important for the sender who initiates the threat or sanctions have a back-up in the form of coalitions with other countries so I included it in my multinomial logit as well.

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Table 3. Summary statistics for number of Senders

	Threats		Sanctions	
Sender:	Freq	Percent	Freq	Percent
• Unilateral	237	83.45	191	77.02
• Multilateral	47	16.55	57	22.98
Total	**284**	**100.00**	**248**	**100.00**

Unilateral – sanctions or threats were initiated by one country against one sender.

Multilateral – sanctions or threats were initiated by two or more countries against one target.

ThreatID variable is used to demonstrate who initiated a sanction or threat. It will be used for comparing how the threatening institution relates to the original issue of initiating the sanctioning or threatening episode.

Table 4. Summary statistics for types of Threatening Institutions

	Threats		Sanctions	
ThreatID:	Freq	Percent	Freq	Percent
• Bureaucracy	65	22.89	50	20.16
• Legislative	42	14.79	37	14.92
• Executive	120	42.25	127	51.21
• International Institution	57	20.07	28	11.29
Total	**284**	**100.00**	**248**	**100.00**

Bureaucracy – the threat is issued by a non-domestic institution, e.g. Ministry of Foreign Affairs or Ministry of Trade, etc.

Legislative – the threat is issued by an individual or entire legislative group such as parliament.

Executive – the threat is issued by the head of a state or an employee of the head of state, such as President of the United States, Chancellor of Germany, Secretary of State, etc.

International Institution – the threat is issued by either the head of the international institution, or by all members of a given institution such as the United Nations.

The variable ***Sender s Commitment*** demonstrates the level of dedication the sender has to achieving its goal by imposing sanctions or issuing a threat.

Table 5. Summary Statistics for the Level of Sender s Commitment

	Threats		*Sanctions*	
Level of Commitment:	*Freq*	*Percent*	*Freq*	*Percent*
• Weak	30	10.56	11	4.44
• Moderate	125	44.01	65	26.21
• Strong	100	35.21	76	30.65
• Other	30	10.56	96	38.71
Total	**284**	**100.00**	**248**	**100.00**

Weak – in the sender's statement of threat the sender claims to consider different types of policies towards the target if the target is in non compliance.

Moderate – in the sender's statement of threat the sender will consider sanctions as a method of enforcement to alter the target's behavior.

Strong – the sender in its statement of the threat uses "if … then" phrase, which indicates the imminent imposition of sanctions in the case of noncompliance.

Other – no threat was made.

The variable ***Sender s Precision*** demonstrates how specific the sender was in expressing the specific actions the sender wishes the target to alter in order to preclude sanctions

Table 6. Summary statistics for the level of Sender s Precision

	Threats		*Sanctions*	
Level of Precision:	*Freq*	*Percent*	*Freq*	*Percent*
• Equivocal	69	24.30	51	20.56
• Precise	186	65.49	100	40.32
• Other	29	10.21	97	39.11
Total	**284**	**100.00**	**248**	**100.00**

Equivocal – the sender focuses only on an extensive area of behavior, generalizing the changes it wishes to see in the target's behavior.

Precise – the sender focuses on specific activities and actions the target should perform in order to prevent the imposition of sanctions.

Other – no threat was made.

The variable ***Sanctions Threatened*** indicates the types of possible sanctions the sender might impose in the case of noncompliance from the target's side. Also, it will be used for comparison with the variable Sanctions, which indicates what type of sanctions the sender actually imposed for this certain case.

Table 7. Summary Statistics for the types of Sanctions Threatened

	Threats		Sanctions	
Sanctions Threatened:	**Freq**	**Percent**	**Freq**	**Percent**
• Not specific	42	14.79	12	4.84
• Total /partial embargo	29	10.21	22	8.87
• Trade restrictions	155	54.58	93	37.50
• Other	49	17.25	38	15.32
• No threat	9	3.17	83	33.47
Total	**284**	**100.00**	**248**	**100.00**

Not specific – the sender threatens to implement sanctions but fails to specify what type.

Total or partial embargo – the sender threatens to cease some or all economic exchange between the sender and the target.

Trade restrictions – the sender threatens to limit import and/or export of some good or group of goods, while trading with the target.

Other – the sender threatens to either confiscate all of the target's assets within the sender's jurisdiction, terminate foreign aid to the target, ban traveling to the territory of the target, blockade, etc.

No threat – no threat has been issued.

The variable **Carrots** is used to demonstrate how diplomatic the sender is in persuading the target to alter its behavior. Carrots are considered to be any kind of aid (military, economic, humanitarian), trade access to the market of the sender, political recognition, etc.

Table 8. Summary statistics for the types of Carrots offered

	Threats		Sanctions	
Carrots Offered:	**Freq**	**Percent**	**Freq**	**Percent**
• Yes	248	87.32	141	56.85
• No	36	12.68	107	43.15
Total	**284**	**100.00**	**248**	**100.00**

The variable *Anticipated Costs for the Target* shows the potential damage sanctions might do to the target.

Table 9. Summary Statistics for the level of Anticipated Costs for the Target

	Threats		Sanctions	
Anticipated Costs for a Target:	**Freq**	**Percent**	**Freq**	**Percent**
• Minor	172	60.56	113	45.56
• Major	52	18.31	36	14.52
• Severe	3	1.06	12	4.84
• Unknown	57	20.07	87	35.08
Total	**284**	**100.00**	**248**	**100.00**

Minor – under these sanctions the target's economy will not be affected.

Major – under these sanctions the target's economy will be damaged, e.g. high unemployment, inflation, and decrease in the volume of trade.

Severe – under these sanctions the target's economy will be rendered non-functioning, e.g. the country itself cannot afford the necessary supplies of food, water, oil, etc and cannot trade with other countries.

Unknown – under these sanctions the condition of the target's economy will be unknown.

The variable ***Anticipated Costs for the Sender*** shows how detrimental anticipated sanctions might be for the sender, which in turn indicates whether the sender is likely to actually imposes them.

Table 10. Summary Statistics for the level of Anticipated Costs for the Sender

	Threats		*Sanctions*	
Anticipated Costs for a Sender:	*Freq*	*Percent*	*Freq*	*Percent*
• Minor	226	79.58	142	57.26
• Major	9	3.17	13	5.24
• Unknown	49	17.25	93	37.50
Total	**284**	**100.00**	**248**	**100.00**

Minor – under the possible sanctions the condition of the sender's economy will not be affected.

Major – under these sanctions the sender's economy will be damaged, e.g. high unemployment, inflation, decrease in volume of the trade.

Unknown – under these sanctions the condition of the sender's economy will be unknown.

The variable ***Target Costs*** indicates the actual cost to the target after the imposition of sanctions.

Table 11. Summary statistics for the levels of actual Costs for the Target

	Threats		*Sanctions*	
Actual Costs for a Target:	*Freq*	*Percent*	*Freq*	*Percent*
• Minor	n/a	n/a	187	75.40
• Major	n/a	n/a	31	12.50
• Severe	n/a	n/a	15	6.05
• Unknown	n/a	n/a	15	6.05
Total	**284**	**100.00**	**248**	**100.00**

Minor – after imposing sanctions the target's economy was not affected.

Major – after imposing sanctions the target's economy was damaged, e.g. high unemployment, inflation, decrease in volume of the trade.

Severe – after imposing sanctions the target's economy was rendered non-functioning, e.g. the country by itself cannot afford the necessary supplies of food, water, oil, etc and cannot trade with other countries.

Unknown – after imposing sanctions the condition of the target's economy was unknown.

The variable **Sender Costs** indicates the level of actual costs the sender had to bear after the imposition of sanctions.

Table 12. Summary statistics for the levels of Actual Costs for the Sender

	Threats		*Sanctions*	
Actual Costs for a Sender:	*Freq*	*Percent*	*Freq*	*Percent*
• Minor	n/a	n/a	216	87.10
• Major	n/a	n/a	14	5.65
• Unknown	n/a	n/a	18	7.26
Total	**284**	**100.00**	**248**	**100.00**

Minor – after imposing sanctions the sender's economy was not affected.

Major – after imposing sanctions the sender's economy was damaged, e.g. high unemployment, inflation, decrease in volume of the trade.

Unknown – after imposing sanctions the condition of the sender's economy was unknown.

The variable **Sanctions Type** indicates which types of sanctions were imposed in the different cases.

Table 13. Summary statistics for the Type of Sanctions Imposed

	Threats		Sanctions	
Type of Sanctions Imposed:	**Freq**	**Percent**	**Freq**	**Percent**
• Not Imposed	284	100.00	n/a	n/a
• Total /partial embargo	n/a	n/a	32	12.90
• Trade restrictions	n/a	n/a	147	59.27
• Blockade	n/a	n/a	6	2.42
• Other	n/a	n/a	63	25.40
Total	**284**	**100.00**	**248**	**100.00**

No sanctions imposed – as a result of negotiations, sanctions were not imposed.

Total or partial embargo – in the imposed sanctions the sender ceased all or some economic exchange between the sender and the target.

Trade restrictions – in the imposed sanctions the sender limited import or/and export of either some good or group of goods, while trading with the target.

Blockade – the sender convinced all states to stop conducting any transactions with the target.

Other – in the imposed sanctions the sender terminated the foreign aid to the target, banned traveling to the territory of the target, the freezing of assets, suspended economic agreements between two countries, etc.

EMPIRICAL ANALYSIS

In the empirical analysis chapter, I will provide the results of my regressions, which were performed using multinomial logit. With the help of marginal effects I will interpret these results. For the convenience of interpretation all the outcomes were combined into three groups:

- Target's Acquiescence. This group will consist of outputs for the threat cases and sanction cases when the target decided to comply.

- Sender's Surrender. This group will consist of outputs for the threat cases and sanction cases when the sender gave up on the case.

- Negotiated Settlement. This group will consist of outputs for the threat cases and sanctions cases when the target and the sender came to a mutual agreement.

In the tables below, for each outcome, by the value of marginal effect, there is a column that represents a base group, which was chosen for each dummy variable and used in calculating multinomial logit and marginal effect. Thus, interpreting the results I will emphasize that all the coefficients for each variable are valid only in comparison to the base group.

All the tables were divided into two parts. The first part consists of variable that represent sender's behavior. The second part consists of other independent variables that were found to be significant by other researchers.

- **Target s Acquiescence (outcomes 1 and 4)**

Table 14. Marginal Effects for Multinomial logit, Outcome 1 and 4

	Threats Pr(outcome1)= =.45849449	*Sanctions* Pr(outcome4)= =.38443506	
Variable	dy/dx	dy/dx	*base group*
Sender:			
Multilateral	.0505522 (.1565)	.1286878 (.21001)	Unilateral
Threat ID:			
Legislative	.990234 ** (.0028)	-.3744979 ** (.20328)	Bureaucracy
Executive	.9625248 ** (.00855)	-.4080953 ** (.08928)	
International Institution	.998973 ** (.0032)	-.4395197 ** (.2064)	
Sender s Commitment:			
Moderate	.2825668 * (.17927)	-.1691251 (.3876)	Weak
Strong	.3987957 ** (.1574)	.1772893 (.34317)	
Level of Precision:			
Precise	.5202201 ** (.09354)	.6828512 ** (.1569)	Ambiguous
Sanctions Threatened:			
Total/Partial Embargo	.3179985 * (.17412)	-.3037862 ** (.07469)	Unspecific
Trade Restrictions	.064465 (.17722)	-.0449021 (.21099)	
Other	-.0327385 (.21616)	.1462312 (.26593)	
Carrots			
Offered	.3328067 ** (.11736)	-.0409352 (.17074)	Not Offered
Sanctions Imposed:			
Trade Restrictions		.3703381 (.32662)	Total/Partial Embargo
Blockade		-.1891793 (.24315)	
Other		.36283 (.33463)	

The multinomial logit outcome shows that the probability of the target's acquiescence is higher on the threatening stage than on the post-sanctioning: 46% to 38%. Since in my research I am also focusing on how successful international economic sanctions are; total or partial acquiescence of the target can be considered a success. Thus, the probability of success among threat cases is 46%, while among sanctions it decreases to 38%. This is why the *34%* derived by Hufbauer, Schott and Elliott (1990), is somewhat understated. Moreover, I believe we should not forget about the cases that terminate with a negotiated settlement. They cannot be judged as a pure success, nor can they be considered a complete failure either. Because of this they will also contribute to the efficiency rate which will be looked at later.

The chances that a target will comply decrease by almost 10% after sanctions are imposed. In my opinion the sender should strive to convince the target to give up its undesirable activities at the pre-sanctioning stage.

Further explanation of each variable mentioned in Table 14 will help show what exactly the sender can do to increase the probability of the target's compliance.

- ***Sender (multilateral, unilateral threat and imposition)***

As was anticipated, the number of senders participating in sanctioning is insignificant. Moreover, it is insignificant at both the threatening stage and at the sanction implementation stage. So the theory espoused by Drezner (2000) as well as Jing, Kaempfer, Lowenber (2003) is supported by my research. Also, in analyzing the target's behavior, it is noteworthy that the decision to comply is not influenced by the number of senders either threatening to impose sanctions or actually imposing them.

- *ThreatID (institution that issued the threat)*

Surprisingly enough, according to this data the target takes into account which institution issued the threat to sanction. And the results show that to increase the chances of the target complying at either the threatening stage or at the sanctioning stage, the institution issuing the threat should be either legislative or executive, or represented by an international organization. In different countries governmental branches have different powers. In some countries the judicial branch is very powerful (United Kingdom), in others the executive (United States). The senders in different cases are represented by different countries, and on average both the judicial and executive branches are very powerful. Therefore, when the threat to sanction is proclaimed by a bureaucratic institution (any kind of foreign oriented state service), this is seemingly not taken seriously by the target and international institutions are taken more seriously.

- *Sender s Commitment*

The sender's level of commitment is defined by the way the sender is negotiating with the target at the threatening stage. E.g. if the sender is only considering possible economic sanctions, then the level of commitment is weak. However, when the sender not only mentions sanction imposition but also identifies what type of economic sanctions will be imposed in the case of noncompliance, then the level is strong. The level of the sender's commitment was shown to be an important factor considered by the target. The results show that if the sender increases the level of its commitment from weak to moderate, then the chances of targets compliance will increase by .28. Moreover, if the sender increases the level from weak to strong, then the chances will increase by almost .40. Furthermore, the results show that commitment is insignificant after sanctions were imposed.

- *Sender s Precision*

Sender's precision is demonstrated by how specific the sender is in its requests for the target to alter its behavior. As was anticipated, the more precise the sender is the more likely the target will comply. Also, the conclusion applies to both the threatening and imposition stages. So if the sender changes its level of specificity from ambiguous to precise, the chances the target will comply while threatening will increase by .52, and after sanctions were imposed, increase by .68

- *Type of Sanctions Threatened*

Very often while threatening; the sender does not mention specifically what kind of sanctions will be imposed. The results show that the threat of embargo is powerful. Out of the list of possible sanctions threatened only embargos were significant and the only type that can increase the probability of a target's compliance by .32. At the threatening stage the sender is pressuring the target to comply quickly and therefore chooses to threaten harsher punishment than what they would actually impose later. There is no significant differentiation in results between specified and unspecified with the sole exception being embargos. Blockades are considered the most damaging type of sanction, but the likelihood of usage is very low, so embargos while theoretically less damaging, are pragmatically much more damaging due to the high chance they would be implemented.

- *Carrots*

If the sender offers aid while in negotiations the probability that the target will comply increases by .33. So it appears that carrots are only important at the threatening stage. Post-sanction offers of support or aid is not taken into account by the target when making a decision to comply or not.

- *Type of Sanctions Imposed*

The sender does not seem to discriminate between different types of sanctions the sender imposed. It does not matter if the sender used blockades, trade restrictions, embargos, or any other type of international economic sanctions – they influence target's decision evenly.

Table 15. Marginal Effects for Multinomial logit, Outcome 1 and 4 (continued)

	Threats Pr(outcome1)= =.45849449	*Sanctions* Pr(outcome4)= =.38443506	
Variable	*dy/dx*	*dy/dx*	*base group*
Issue:			
Military	.2740324 (.20873)	-.2002726 (.20669)	Political
Human	.2956163 (.20873)	.182057 (.27363)	
Environmental	**.5697906 **** (.0688)	-.2323504 (.19366)	
Economic	**.5234899 **** (.16738)	-.3388702 (.2267)	
Other	.2647963 (.22356)	**.4272379 *** (.25818)	
Anticipated Costs (Target):			
Major	**.3803675 **** (.10265)	**.0117846 **** (.26061)	Minor
Severe	**.6365954 **** (.0455)	**.5363113 **** (.22134)	
Anticipated Costs (Sender)			
Major	**.-2973588 **** (.14063)	**-.4129941 **** (.08359)	Minor
Actual Costs (Target)			
Major		-.241643 (.25585)	Minor
Severe		**.5663779 **** (.15775)	
Actual Costs (Sender):			
Major		.0108703 (.33122)	Minor

- *Issue*

Variable issue demonstrates how the reason for the sanction threat or imposition influences the outcome of the case. Even though multiple numbers of issues may arise between the countries, only several seem to be significant enough to influence the outcome. Taking political issues as a base group, we can see that military and human issues influence the outcome – target's acquiescence – the same way both at the threatening and imposition stages. Changing the reason for threatening from political to environmental or economic, influences the outcome of the case and makes the target more likely to comply by .57 and .52 correspondingly. Such pliability of the target can be explained by a lack of fundamental principles in the target's behavior in economic or environmental issues. The target likely does not place much value on its unfavorable actions and is therefore more likely willing to comply on such issues than on political or military issues. Human rights issues are hard to track and ameliorate and it does not influence the target's choice any differently than political.

- *Anticipated Costs for the Target/Sender*

Sanction imposition carries costs to both the sender and the target. As was anticipated, the level of these costs is important enough to influence whether the target complies or the sender acquiesces. Results show that if the anticipated costs to the target change from minor to major, and from minor to severe, the probability of their compliance will increase by .38 and .64 respectively. Moreover, if the target anticipates that the sender's costs will increase from minor to major, then the likelihood of their compliance will decrease by almost .30.

- ***Actual Costs for the Target/ Sender***

The results of the regression demonstrate sensitivity to the costs only by the target. Moreover, they seem to be sensitive only to the severe costs: increasing target's costs from minor to severe will increase the probability of their compliance by .57. I believe, insignificance of coefficient for major costs can be explained by the lightness of the border between minor and major costs. Apparently, the target does not experience that much of discomfort when their costs increase and can be classified as major. At the same time, the sender seems to be insensitive for the increasing costs at all. We can observe a big drop in the probability of the sender surrendering at the imposition stage: the likelihood of their surrendering at the threatening stage is .51, while at the sanctioning stage it is only .13. This can be taken as one good explanation of the sender's insensitivity to the high costs from sanctions. Another good explanation is in the number of cases when imposition of sanctions was majorly expensive – only 14, total number of cases is 248. In either case the target's cost are taken into account in the first place when judging the decision whether to comply or not.

- **Surrendering of the sender**

Output – surrendering of the sender – is another reason why there are so many skeptics on the issue of effectiveness of international economic sanctions.

Multinomial logit demonstrates that the sender is much more likely to give up on the case at the pre-sanctioning stage (while threatening), than on post-sanctioning. The numbers are rather stunning: 53% to 13% correspondingly. If the target is more willing to comply with sender's requirements at the pre-sanctioning stage, why does the sender become so impatient they give up before a reaction is received from the target? This is

something the initiating countries have to think about before making a decision to surrender.

Table 16. Marginal Effects for Multinomial logit, Outcome 2 and 5

Variable	**Threats** Pr(outcome2)= =.53100218 dy/dx	**Sanctions** Pr(outcome5)= =.13233363 dy/dx	base group
Sender:			
Multilateral	-.0611793 (.1586)	.040501 (.09029)	Unilateral
Threat ID:			
Legislative	**-.9691135 **** (.0078)	.2026136 (.17188)	Bureaucracy
Executive	**-.9464013 **** (.1037)	**-.0998591 *** (.0572)	
International Institution	**-.9843336 **** (.0016)	-.0543518 (.10639)	
Sender s Commitment:			
Moderate	**-.2882054 *** (.17698)	**-.1930214 *** (.10678)	Weak
Strong	**-.4112012 **** (.15297)	**-.2631738 **** (.12642)	
Level of Precision:			
Precise	**-.5222271 **** (.09301)	-.086528 (.06944)	Ambiguous
Sanctions Threatened:			
Total/Partial Embargo	**-.30668 *** .17337	.9179565 (.03947)	Unspecific
Trade Restrictions	**-.0403547 *** (.17761)	.6551529 (.19004)	
Other	**.0399391 *** (.21573)	.6048936 (.31263)	
Carrots			
Offered	**-.3387398 **** (.11545)	.0250017 (.08353)	Not Offered
Sanctions Imposed:			
Trade Restrictions		.0344458 (.19147)	Total/Partial Embargo
Blockade		.0782866) (.30893)	
Other		.0045652 (97) (.17062)	

Just as it was anticipated the variable sender turned out to be insignificant for this type of outcome. Applying the explanations above, the decision of the sender's capitulation is evenly influenced by sender's multilateralism or unilateralism. The same can be told about the variable that describes which types of sanctions were imposed. Just like for the previous outcome, the decision to surrender is not influenced equally by all types of sanctions that the sender could have imposed.

- *ThreatID*

The results achieved for the variable ThreatID in the outcome that demonstrates the surrendering of the sender, either at the threat stage or at the imposition stage, correspond to the results achieved in the outcome that demonstrates the target's compliance. While for the outcome that brings the target's compliance, all institutions in comparison to bureaucratic will increase the probability of the target's acquiescence; for the outcome that brings sender's surrendering all institutions in comparison to bureaucratic will decrease the likelihood of sender to surrender. This again can be explained by the importance and significance of these institutions. They are less likely to change their mind to sanction than any kind of governmental foreign affairs service.

- *Sender s Commitment and Precision*

The level of the sender's commitment and precision negatively influenced the chances of the sender to surrender. From weak commitment to moderate we observe the decrease in probability by .29, and from weak to strong by .41 at the threatening stage; and by .19 and .26 on sanctions imposed stage correspondingly.

Thus the more committed the sender is the less likely they are to give up. Precision is important only at the threatening stage, thus the changes of the sender's surrendering will decrease by .52 if the sender choose to be clear in its demands instead of ambiguous.

- *Carrots*

Correspondingly to the previous results for the target dependent outcome, the presence of carrots negatively influences the sender's likelihood of surrendering, and will decrease the possibility of its occurrence by .33. Apparently, the sender offers aid or any other kind of support when they take the case seriously, thus they are not very willing to give up. And just like in previously demonstrated results for target's dependent outcome, carrots only matter at the threatening stage.

- *Sanctions Threatened*

Just like for the target, the sender is also considering the type of sanctions they threaten as an important factor in the decision-making process. Increasing the seriousness of possible sanctions decreases the chances of the sender surrendering. Partial or total embargo compared to unspecific type of sanctions decreases the probability of this type of outcome by .30, while the other types will decrease it only by around .4.

Table 17. Marginal Effects for Multinomial logit, Outcome 2 and (continued)

	Threats Pr(outcome2)= =.53100218	*Sanctions* Pr(outcome5)= =.13233363	
Variable	*dy/dx*	*dy/dx*	*base group*
Issue:			
Military	-.1508948 (.22647)	.0839619 (.16235)	Political
Human	-.3026358 (.20095)	.2755461 (.23248)	
Environmental	**-.5749526****	**-.1408261 ****	

	(.0592)	(.04967)	
Economic	**-.5678723 ****	.031833	
	(.15782)	(.103)	
Other	-.2588678	.185874	
	(.22045)	(.2462)	
Anticipated Costs (Target):			
Major	**-.3771769 ****	-.1598799 **	Minor
	(.1024)	(.04936)	
Severe	**-.6244577 ****	-.0389695	
	(.04538)	(.21259)	
Anticipated Costs (Sender):			
Major	**.2801642 ****	-.1467805	Minor
	(.14636)	(.0399)	
Actual Costs (Target):			
Major		**-.1698683 ****	Minor
		(.05518)	
Severe		**-.157813 ****	
		(.03885)	
Actual Costs (Sender):			
Major		**.5011892 ***	Minor
		(.34188)	

The conclusions drawn from the costs variables is that they all are important – just as it was predicted. The higher the anticipated costs for the target, the less likely the sender will give up. Correspondingly, higher possible costs for the sender at the threatening stage, increases the probability of surrendering by .28. The same can be applied to the actual experienced costs for the target and the sender, however, for the probabilities, major actual costs seem to be more important for the sender's decision to give up than anticipated costs, as they increase the likelihood of occurrence of this outcome by .5.

Just like for the previously discussed outcome, variable *issue* is important for the outcome of the possible sender's surrendering. Considering the explanations applied for this variable above, the sender takes environmental and economic issues as the ones that are not principally important for the target – thus, the latter is more likely to change its behavior in the case of dumping for example, than the case of mass weapon proliferation.

- **Negotiated Settlement (outcomes 3 and 6)**

For the negotiated settlement outcome first thing to mention would be that it is about 47% more likely to occur at the sanctioning stage than at the threatening. Thus the variables that are important while threatening are not that important here.

Table 18. Marginal Effects for Multinomial logit, Outcome 3 and 6

	Threats Pr(outcome3)= =.01050333	*Sanctions* Pr(outcome6)= =.48323132	
Variable	*dy/dx*	*dy/dx*	*base group*
Sender:			
Multilateral	.0106271	-.1691888	Unilateral
	(.01095)	(.21109)	
Threat ID:			
Legislative	**-.0209099****	.1718843	Bureaucracy
	(.00684)	(.21712)	
Executive	**-.0161235 ****	.5079544	
	(.00481)	(.09941)	
International Institution	**-.0155637 ***	.4938715	
	(.0043)	(.1789)	
Sender s Commitment:			
Moderate	.0056386	.3621464	Weak
	(.01085)	(.4497)	
Strong	.0124055	.4404631	
	(.015455)	(.40375)	
Level of Precision:			
Precise	.002007	**.5963231 ****	Ambiguous
	(.00423)	(.13767)	
Sanctions Threatened:			
Total/Partial Embargo	**-.0113184 ****	**-.6141704 ****	Unspecific
	(.00387)	(.07166)	
Trade Restrictions	**-.0241103***	**-.6102508 ****	
	(.01239)	(.18173)	
Other	.0072006 (25)	**-.4586623 ****	
	(.00636)	(.21001)	
Carrots:			
Offered	.0059331	.0159335	Not Offered
	(.00879)	(.17584)	
Sanctions Imposed:			
Trade Restrictions		-.4047839	Total/Partial
		(.3947)	Embargo
Blockade		.1108928	
		(.45988)	
Other		-.3673952	
		(.3382)	

It can be observed that the variables that are defined by the sender as rather important for previous cases do not play that crucial a role for this type of outcome. However, precision seems to matter. Moreover, this is the only case when the precision is important only at the sanctioning stage. If the sender chooses to be clear in its requirements to the target, the likelihood of a positive outcome in the form of a negotiated settlement after the imposition will increase by almost .60.

Commitment being highly significant in threatening cases for outcomes 1,2, 4 and 5, demonstrates insignificance for this type of outcomes. As I was writing earlier, commitment is defined by how the sender is acting on pre-sanctioning phase. Such unimportance of this variable can be explained by the low probability of occurrence of negotiated settlement while threatening – only 1%.

Just like for previous outcome the sender variable is not significant, nor is the type of sanctions that were imposed. All the previously mentioned explanations can be applied to these outcomes cases as well.

Variable ThreatID is also significant, and all its values have negative impact on this type of outcome. If instead of bureaucratic, the threatening institution will be related to executive or legislative power brunches, or will be represented by international organization, then the chances of the negotiated settlement will decrease on average by .018. As it was mentioned earlier, the results show, that all threatening institutions but bureaucratic are taken by the target more seriously. Thus, due to the gravity of the intentions, these institutions are less likely to make a decision to negotiate, and will probably prefer the outcome in the form of either total or partial target acquiescence.

Table 19. Marshal Effects for Multinomial logit, Outcome 3 and 6 (continued)

Variable	Threats Pr(outcome3)= =.01050333 dy/dx	Sanctions Pr(outcome6)= =.48323132 dy/dx	base group
Sender:			
Multilateral	.0106271 (.01095)	-.1691888 (.21109)	Unilateral
Issue:			
Military	**-.1231376 **** (.031)	.1163106 (.26764)	Political
Human	.0070197 (.02418)	**-.4576031 **** (.13022)	
Environmental	.005162 (.02478)	**.3731765 *** (.19717)	
Economic	**.0443823 *** (.02683)	**.3070372 *** (.21694)	
Other	-.0059285 (.01086)	**-.6131119 **** (.07792)	
Anticipated Costs (Target):			
Major	-.0031906 (.00501)	.1480952 (.26673)	Minor
Severe	**-.0121377 **** (.00303)	**-.4973418 **** (.11983)	
Anticipated Costs (Sender):			
Major	.0171947 (.03306)	**.5597746 **** (.09086)	Minor
Actual Costs (Target):			
Major		**.4115113 *** (.2753)	Minor
Severe		**-.4085649 **** (.1536)	
Actual Costs (Sender):			
Major		**-.5120596 **** (.07751)	Minor

For this type of outcomes we can observe a big change in the behavior of variable issue. All possible values of variable *issue* demonstrate significance. Just like in previous cases, due to the ease of possible agreements, environmental and economic problems that could have aroused are more likely to end up with the negotiated settlement than corresponding political. For environmental increase will be by .37, while for economic it will by .31.

Both will have to occur after the sanctions were imposed. It seems like the target prefers settling environmental issues a little more than economic. But in either case, this can be considered as a success in international relations.

The rest types of issues have negative impact on the occurrence of negotiated settlement outcome. The highest negative impact has issues connected with human rights (by -. 46). This can be explained by the imperfection, vulnerability and even lack of corresponding laws that control human rights in the target countries. Consequently, the likelihood of fixing the problem immediately is rather small. Military issues in comparison to political nfluence this outcome only by -12.

Interestingly enough, variables that are connected with costs perform absolutely different for this type of outcome than for any other.

Severe anticipated costs for the target in comparison with minor costs decrease the probability of occurring outcomes 3 and 6 by .012 and .50. The same can be told about actual costs for the target. As soon as they from minor turn to severe the likelihood of negotiated sentiment deceases by .41. Such unwillingness of the target to negotiate as soon as their costs level switch to severe, can be explained by the statement - time is money. It is well known that negotiations might last for a really long period of time. And the longer they last they more costs the target will have to bare. Therefore, instead of negotiated settlement as an outcome of the case they might want to prefer the acquiescence.

However, as soon as the actual target's costs switch from minor to major after the imposition, their willingness to negotiate increases as well. Thus, the probability of occurrence of outcome 6 under major actual costs for the target will increase by .41. Apparently, the target understands that the case might be lost and negotiations are considered as optimal outcome.

The same type of logic can be applied explaining the coefficient of anticipated and actual costs for the sender. As the sender's anticipated costs turn from minor to major, their willingness to negotiate will increase by .56. But as soon as their actual costs turn to major their willingness to negotiate will drop by -.52. This is explained by sender's not wanting to lose money under the possible negotiations, which might take awhile before the agreement is settled.

Different tests were performed for both multinomial logit regressions.

First of all it is believed that the main disadvantage of this model lays in the assumption of independence of alternatives. To check that, I performed Hausman –McFadden test for each group of cases. It turned out that for the first group of cases that consisted of only threats, all alternatives offered by the outcome (target's acquiescence, sender's surrendering and negotiated settlement) are independent. Thus I can claim that independence assumption holds and disturbances are independent and homoscedastic and the model is correctly specified. However, for the second group of cases, outcome four (target's acquiescence on post-sanctioning stage) didn't not perform as well. There are 65 cases out of 248 that ended up with target's acquiescence – outcome 4. Consequently, even though test showed that it cannot be considered independent, I believe this outcome remains being important and can not be excluded.

With the help of Likelihood Ratio test I was testing the hypothesis of necessity of inclusion variables that are responsible for the sender's behavior. A pair models was tested. First model consisted of all variables mentioned above, while second model consisted of all possible variations of excluding different variables. The results were quite interesting. Not only it was proved that determining the sender's actions variables are important, they are even more important for the regression than the variables that describe the costs of the sanctions. I believe this can be explained by the difference in results for costs received for all six outcomes. As it was mentioned earlier, the signs of

the outcomes that are responsible for the negotiated settlement are opposite to those received under the target acquiescence or sender surrender conditions. This could have caused slight decrease of the value of LR chi2 that dropped from 48.99 – for the model that had the sender variables excluded – to 26.03 – for the model that had costs variables excluded. However, this property is observable only fro the threats cases.

In addition to the provided results I also did multinomial logit for the combined that that consisted of all the cases with threats only and with sanctions imposed. The received results vary form those described above. Due to the mixed data, certain variables that were significant only on the threat stage are not significant in the mixed data regression. Therefore, my approach, that separately observes all the possible actions and outcomes leads to the more detailed results. However, after performing Hausman-McFadden test all the outcomes were independent, which didn't occur in the separate analysis.

C h a p t e r   5

CONCLUSIONS

With the amount of international sanctions increasing every year, states are choosing to utilize economic sanctions as a key weapon in their diplomatic arsenal.

Previous research demonstrates that only 34% of all imposed sanctions are effective. In my research due to the division of all cases into two groups: threats and sanctions, I am able to judge on the effect of different variables on different stages of sanctions imposition.

Six different outcomes were analyzed. It turned out that the target is more likely to comply on the threatening stage (46% vs. 38%), the same can be implied about the sender. The likelihood of sender's surrender on the phase of the threat is 53% vs. 13% on the post-imposition stage. This is clear evidence on why international economic sanctions are taken so pessimistically by the implementers. Consequently, the sender has to reconsider its behavior to increase the success rate.

My primary focus was on the variables that determine sender's behavior.

Received results support the hypothesis that the outcome of the cases depends not only the independent from the sender factors like economic and political situation within the target, but from the variables that describe sender's attitude towards the threat or imposition.

Findings are:

- The level of sender's commitment plays significant role at the stage of the threat and can increase the likelihood of the target's acquiescence by almost 40%. Moreover, this variable works both ways: the higher is the level of the sender's commitment the higher is the probability of the target's compliance and the lower the probability of sender's surrendering on the pre-sanctioning and post-sanctioning stages.

- The level of precision is important on both stages: when the threat was announced and when the sanctions were imposed. Whenever the sender is clear in its demands the more likely the target will comply.

- Any kind of offered aid is important only at stage of the threat. It increases the chances of target's compliance.

- The institution that issues the threat also appeared to be significant. For the successful output of the case, the sender has to make sure it is either the legislative or executive brunch or international organization that initiated the threat. Any other institution that represents the sender is not taken by the target seriously enough.

The rest of the variables used in the research proved to be significant and followed in the sign as it was predicted by earlier researchers.

Consequently, international economic sanctions should be utilized as the alternative to the military actions, but the statesmen should not forget that their success depends on the sender's actions as well.

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