DOMESTIC POLITICAL INCENTIVES AND INTERNATIONAL NEGOTIATIONS: HOW DO ELECTORAL INSTITUTIONS AFFECT LEADER PERFORMANCE?

by

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For my loving family & in memory of my grandfathers Feridun Necdet Okay and Halit Muderrisoglu
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CHAPTER I

Introduction

As head of the first democratic government of Germany in more than two decades, Konrad Adenauer’s attempts at peace with the French after World War II was more than successful. The main reason for the German ratification of the Paris Peace Agreement was the Saar referendum of October 1955. The Bundestag resistance led by the opposition Socialist Ollenhauer had to be convinced to vote for the agreement.\(^1\) Adenauer used the Saar Statute attached to the Paris Accords of 1954 as a way of gaining the opposition support for the full agreement. The French Prime Minister Mendes-France, himself trying to obtain the support of his Socialist opposition in the French National Assembly, agreed to the referendum confident of a result in favor of the French. Contrary to his expectations, the ‘no’ result of the referendum meant the Saar would be returned to Western Germany by January 1, 1957.

The referendum brought a result in favor of Germany at 67.7 % to 32.3 %, with a 95.6 % turnout rate. The question mostly asked about the referendum is the motivations of the leaders in initiating the referendum and what Adenauer thought the referendum could contribute to his political standing. Considered to be a reformist statesman, Adenauer publicly supported the Saar Statute and its requirements. The Statute had been Adenauer’s idea. On the other hand, the French premier Mendes-

\(^1\)— ‘The Third Man,’ *Time Magazine*, January 21, 1957.
France who had to bribe the opposition in the National Assembly in the the earlier London Agreement (by passing emergency relief for French workers), was once again forced to face the Socialist Opposition leader Guy Mollet and his 105 strong MPs. Mendes-France is said to have offered the Socialist leader six positions in his cabinet to gain Mollet’s party support for the Paris Treaty. The leaders of both states had to convince their legislatures to ratify the agreement.

There is also a belief that Adenauer obtained a more conciliatory position from the French premiers, Pierre Mendes-France and Edgar Faure, on the Saar in return for support in France’s decolonization conflicts in Indochina, Vietnam, and Algeria. This meant the French who had agreed to the referendum confident of a different result, had to put away their plans to have Saar fall under the control of the Western European Union. The concerns of both the Germans and French for Soviet influence in Europe and the economic strength of Germany had made the French Prime Minister Mendes-France more willing to find common ground with the Germans. In exchange for this, the French would be assured of future protection by the British and the Americans from the rest of Europe. The international reasons for wanting to rearm Germany and integrate them into the democratic states of Western Europe were important to the French reasons for signing the Treaty of Paris. The German Chancellor was likewise eager to have his half of the country join the West once again. The British and the Americans had been pressuring the French government to make up with the Germans.

The theory presented here gives a domestic explanation for the referendum, also accounting for the international politics explanations. I argue that even though the Allies had won the war, the French and Germans were forced to unite for the

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2—‘Yes or No,’ *Time Magazine*, October 17, 1955.
future of Europe. The wars in the colonies had just begun for the victors of the Second World War. In the face of an avalanche of requests for self-determination abroad, supported domestically by the Communist and Socialist opposition within France, Mendes-France knew he would have to agree to the referendum. As it turned out, Mendes-France then used as a hook to get the Germans to agree to the treaty. The Saar had been a highly contentious issue between the two states prior to a territorial dispute over land that exchanged ownership between them many times before. The Chancellor thought the treaty gave back the Germans more than they had anticipated after a brutal defeat in war, but the legislative resistance of the leftist parties in Germany claimed the treaty served the French more than the Germans. The domestic political processes behind the signing of the treaty reveal more of the reasons for acceptance of the Paris Accords by either side. The leaders who both faced the choice between legislative ratification and the use of a referendum had to select the right method of ratification or they risked jeopardizing the whole agreement.

1.1 Principal-Agent Theory as it Applies to Negotiations

The direct consultation of electorates on territorial negotiations has yielded benefits for leaders for both their domestic reelection prospects and the course of their international negotiations. The first of these benefits is the consultation of people in disputed territories, giving them an option for self-determination. A second benefit is that for controversial decisions such as territorial dispute settlement, leaders need to have a way to satisfy their domestic oppositions when agreeing to certain concessions in territory. Thirdly, the resolution of territorial disputes in a certain agreement is justified, if confirmed by electorates at the end of negotiations (with another state)
as it satisfies the demands of both sides in a dispute. The referendum is a way of incorporating the both sides’ publics into these negotiations.

The challenge for the leaders is to agree on a mutual resolution that can get the domestic endorsement of the regular mechanisms of approval of the leader when he proposes a new law. For democracies this means ratification by the legislature and for autocracies it means approval by the group of military or religious leaders that support the government. The electorate will not be directly consulted until an election on this and other general issues, since the leader and/or the legislature is thought to represent their views on foreign policy, in addition to domestic policies. For the electorate to have a say on the agreement in its negotiated form, the leader may choose to carry out a referendum. So, what are the conditions under which a leader may choose to consult the public through a referendum?

According to principal-agent theory, the electorate knows what motivates the leader and uses that knowledge to get the leader to do what they want. Ferejohn (1986) explains the switch in the roles of principal and agent in his theory, by assuming voters evaluate past performances of leaders (what is also called retrospective voting), instead of assuming voters motivate the leader to get what they want (prospective voting). His study, like this one, is based on Fiorina (1981) who says this about reversal of roles of electorates and leaders:

“...[I]n formulating policies they [leaders] don’t feel tightly bound by citizen preferences (except on occasional highly salient issues). Rather, they feel constrained to have those policies appear successful by the time of the next

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election. Politicians need not discern the precise policy preferences of their 
constituents. They need only anticipate the reactions of their constituents 
to the conditions brought about by the policy instruments they adopt. And 
the latter is not so difficult."

The principal (electorate) uses this delegation mechanism to keep the leader in 
line, especially, because the electorate doesn’t have as much information about the 
state of affairs as the leader. The agent, or leader, on the other hand, knows that 
he has to demonstrate his political competence to get reelected. The electorate is 
aware that electoral promises will not be kept and are aware of the constraints facing 
leaders. Therefore, both sides know there are only a few ways the leader can impress 
with foreign policy success.

In return, political leaders will develop strategies of their own: including negoti-
ating international agreements the electorate wants in order to boost their chances 
of reelection. The leader will also recognize that international success can make up 
for domestic problems in the eyes of the electorate. The concerns of political leaders 
for their electoral prospects hinge on proving their competence to voters. Political 
leaders believe that if they are able to demonstrate competence to lead the country, 
then they will survive their political term and also have the chance to get reelected.

One way of showing competence is to perform during the time that the leader has

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Fiorina, Morris P., Retrospective Voting in American National Elections, New Haven, CT: Yale University Press, 
7Morrow, James D., ‘Electoral and Congressional Incentives and Arms Control,’ Journal of Conflict Resolution, 
assumes the bargainer as an agent of the principal or the public where there is asymmetric information in terms of 
the minimal offers that the public will accept.
35, 1991: pp. 248-249, dub this the electoral constraint on arms control bargaining ; Smith, Alastair, ‘International 
Crises and Domestic Politics,’ The American Political Science Review, Vol. 92 (3); (Sep 1998): pp. 626-627, 
emphasizes that the relationships between domestic and international politics is ruled by a series of complicated 
relationship agreeing that leaders are interested in the domestic consequences of their foreign policy choices – though 
his paper has a difference from my assumptions, in that he models crises situations where in equilibrium, false 
promises regarding foreign policy commitments are punished electorally.
been in office.⁹ The logic is that the electorate is satisfied with the performance of the leader, voting retrospectively, the electorate will vote him/her back into office. This makes sense in conflict theory sense of accountability. Those that underperform will not get reelected. The domestic institutional arguments for the democratic peace have emphasized that institutional accountability matters directly (Rousseau, Gelpi, Reiter and Huth, 1996) and indirectly (Bueno de Mesquita, Morrow, Siverson and Smith, 1999).¹⁰ Both analyses link political survival to peace and say the relationship varies via institutional constraints on leader actions.

Democratic leaders are just as concerned for their political survival as autocratic leaders but they have different ways of attaining it. This explains their reluctance to take action that will jeopardize their political survival. Smith (1998) shows that this partly comes from the leaders’ concerns with demonstrating competency in dealing with international, as well as, domestic affairs. How much competence matters for peace is reiterated in Guisinger and Smith (2002) where the leader’s own credibility depends on the level of accountability that democracies subject them to.¹¹ The motivations of leaders for political survival are true for both democratic and autocratic leaders. The differences in domestic institutional arrangements explain the differences in accountability. I argue that signing successful international agreements is one way the leader can demonstrate satisfactory performance in international affairs.¹²

In democracies the signing of successful international agreements can be a way

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¹²Morrow, James D., ‘Electoral and Congressional Incentives and Arms Control,’ Journal of Conflict Resolution, Vol. 35 (2), (Jun 1991): pp. 253, says the signing of an agreement demonstrates effort on the part of the leader for reelection prospects, which can be substituted for serious domestic economic failure on the part of the leader.
for the leader to do what pleases the electorate in preparation for the next election. The electorate may be for settlement, but not be happy with the results of the particular agreement. Such reasons have been given in the past for why electorates have rejected agreements in referendums for settlement of territorial disputes. The principal-agent framework outlined above requires a modification in the cases where the leader seeks referendums for international negotiations.\textsuperscript{13} I argue that the political leader may choose to switch positions with the electorate from principal to agent via a referendum, in order to find out if they are in favor of the negotiated agreement. As a result, the leader will know before elections whether the agreement negotiated was deemed favorable enough for reelection.\textsuperscript{14}

This agency of the electorate is the first reason for focusing on the particularities of the agreements negotiated. The features of the agreements looked at are concerns the voters would have with an internationally negotiated treaty of territorial disputes.\textsuperscript{15} As agents of the leader, the electorate will then be in a position to reject aspects of the agreement they have issues with.\textsuperscript{16} The territory of Saar which has rich steel mines and coal deposits was a key reason for legislative resistance to turning it over by the legislatures of both sides.\textsuperscript{17}

A second reason for looking at the agreements more directly, is the different concerns that exist across international negotiations when they might be up for referendum voting: information availability about the treaty, understanding of the

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{14}— ‘Solved at Last,’ \textit{Time Magazine}, June 18, 1956.
  \item \textsuperscript{16}Morrow, James D., ‘Electoral and Congressional Incentives and Arms Control,’ \textit{Journal of Conflict Resolution}, Vol. 35 (2), (Jun 1991): pp. 254, explains that the higher the opposition (r) to arms control, the less the leader is likely to negotiate an arms control agreement, producing an ‘electoral incentive’ regarding priorities to internationally negotiated agreements.
  \item \textsuperscript{17}— ‘Solved at Last,’ \textit{Time Magazine}, June 18, 1956; notes the terms of the agreement finally signed between PM Guy Mollet and Konrad Adenauer, which notes the terms of agreement with France being given economic rights in the Saar coals until 1960.
\end{itemize}
\end{footnotesize}
conditions of the treaty, and the individual opinions of the costs of the treaty by voters. Moreover, the electorate is going to be more or less subject to the information revealed to them by their leaders and the public/media campaigns regarding the referendums. Features of the agreement which lead to loss of jobs, or strategic insecurity in terms of exposure to foreign companies are the two of the most important reasons for rejection of treaties. By placing the electorate in the decision seat, the leader is (1) finding out what the electorate thinks about the treaty, (2) gaining support before going to the legislature, and/or (3) using the referendum to make more extensive offers to the other negotiating party. This confirms the sense of the electorate as an agent of the leader in the case of such referendums.\(^1^8\)

1.2 Legislative Control and Electoral Promises

The theoretical focus of this dissertation will be to demonstrate how referendum use varies across international negotiations and over time, establishing a causal relationship between ratification methods, domestic institutions (regimes, electoral institutions) and features of the international agreements themselves (complexity of issues, demands made upon the two signatory states). I argue that if legislative blocks against agreements occur out of domestic regime differences then this implies variance in the costs of obtaining legislative majorities and referendums.\(^1^9\) However, if legislative blocks occur out of electoral system differences then costs of reaching legislative majorities and referendums.\(^2^0\) The alternative to a referendum is legislative logrolling or finding other ways of convincing the individual legislators to pass

\(^{18}\)Ferejohn, John, ‘Incumbent Performance and Electoral Control,’ *Public Choice*, Vol. 50 (5), (Jul 1986): pp. 10-12, summarizes the performance criteria for a leader in retrospective voting models, according to which the incumbent will determine a level of effort that is required to demonstrate that performance to the electorate.

\(^{19}\)Huth, Paul and Todd Allee, *The Democratic Peace and Territorial Conflict in Twentieth Century*, New York: Cambridge University Press, 2002: pp. 72 - 75, characterize this notion as the domestic political vulnerability of the political leader in power.

the agreement. Legislative support, if lacking, could be obtained by bribery in the legislature or consulting of the public to obtain majorities in the legislature.

Explaining the use of direct consultation of the electorate before legislative approval presents two competing views which place the electorate in the various roles of principal and agent. The hypotheses that flow from the two views will then be the basis of the empirical study. Prior studies have emphasized the importance of majority control over the legislature in territorial disputes settlements. The use of referendums and snap elections for international negotiations does not replace the importance of having a majority in the legislature. However, what it does do is reveal the conditions under which the political leader cannot obtain the majority and would rather use the electorate to gain legislative backing.\footnote{Putnam, Robert, ‘Diplomacy and Domestic Politics,’ \textit{International Organization}, Vol. 42 (3), (Summer 1988): pp. 436, analyzes the impact of domestic politics on bargaining in his Level I - II framework where he also differentiates between the negotiation phase and the ratification phase as a reminder that negotiations could be continuous/iterative only consulting public opinion when ready to ratify – he mentions Alfonsin as lacking legislative support; Schelling, Thomas and Morton H. Halperin, \textit{Strategy and Arms Control}, New York: The Twentieth Century Fund, 1961: pp. 80 - 81, 86, discusses how the content and complexity of an agreement will play themselves out in the legislature. He also points out that the separate branches of government affects the communications of the government with the other Negotiating Party (the Soviets). Morrow (1991) theorizes on arms negotiations, such as this.}

Adenauer’s main challenge in the debate in the Bundestag over the Paris Agreement came in two parts, opposition against the agreement and opposition to the Saar Statute. The Socialists led by Erich Ollenhauer were against both negotiation points and were publicly critical of Adenauer. Adenauer dealt with voting on the agreements by accusing the socialists of having the same criticisms of the treaty as the Soviets. In effect, Adenauer said he would call them out as Communists if they voted against the treaty. As a result, he won out on all six counts of the vote and
took the Saar Statute to referendum.\textsuperscript{22}

However, Adenauer is said to be less in control of his legislature than Mendes-France was of the French National Assembly. The German leader faced constant criticism from other MPs for being unpatriotic, while the French Premier kept his legislature in line with bargains and legal bribery and whatever else was needed to obtain support for his foreign policy choices. As the target of a territorial challenge on the Saar, the French agreed to the referendum, because of the domestic criticisms Mendes-France faced for his colonial attitude (on the war in Algeria and the agreements on Indochina). The Socialists and Communists within the National Assembly had made it necessary to project a more balanced attitude on territorial claims, though they were aware of Mendes-France’s relative success in dealing with the clean-up of the war.

Both Adenauer and Mendes-France had to negotiate an international agreement they could take to the legislature at the completion of negotiations. Both sides had come out of a grueling war and the opinions on the agreement from legislators promised serious criticisms in legislative debates. The challenges in the legislature prompted the Germans to ask for referendum over the Saar. Adenauer and Mendes-France had different reasons for choosing the referendum option over legislative approval.\textsuperscript{23} I attribute these to:

- the electoral systems of these two democracies. France’s electoral system is a majority system and West Germany’s is proportional representation;

- the complexity of the whole of the Paris Accords, because there were so many issues that were negotiated within that same agreement. The complexity of an

\textsuperscript{22}— ‘The Third Man,’ Time Magazine, January 21, 1957.

agreement raises the resistance at the legislature, which increases the need to convince the legislators to pass the agreement.

With regards to this case, I assume Mendes-France had less trouble getting votes in the legislature (for electoral systems reasons) and agreed to the referendum to make it easier for Adenauer to pass the Paris Agreement through the Bundestag. The game-theoretic model will discuss the effect of increasing legislative resistance on the leader’s actions. While the empirical study will extend this idea and investigate what domestic conditions make use of referendums a part of negotiations in international agreements.

1.3 Incomplete Information, Electoral Institutions and International Agreements

This dissertation explains what types of domestic institutional variations of negotiating parties and qualities of the agreement are most favorable to approval by a referendum. It does this by examining the behavior of leaders under domestic and international constraints. The study looks at two different models and the five hypotheses that have been drawn from these domestic and international agreement conditions. The motivations for wanting a referendum of the French and German sides is easier to comprehend once we have accounted for several factors. These include (1) the domestic oppositions the leaders faced during the negotiations, (2) the type of legislative dynamics they met with when they went to have their agreement ratified, and (3) the public concerns or reservations with the agreements about to be finalized. For instance, the French were quite unhappy with the security aspects of the Paris Accords since the buffer regions between the two states were being tied to the Germans.\footnote{Boyce, Robert W.D., 'Business as usual: the limits of French economic diplomacy, 1926-1933,' French Foreign and Defence Policy, 1918-1940: The Decline and Fall of a Great Power, Routledge, 1998: pp. 106-108.} Moreover, these areas such as Rhineland, Alsace-Lorraine and the
Saar were a source of income for many unemployed miners and laborers in France, not to mention a major contribution to the national productivity.\textsuperscript{25} Similarly, the complexity of the agreement with its many statutes and conditionalities meant there was many compromises that had to be made. The French allowed the Germans to have the option of the referendum on the Saar and made it easier for the whole agreement to go through.\textsuperscript{26} I divide the institutional factors that affected the referendum into two parts: domestic institutions and features of the agreement. The direction of the coefficients will determine how much the two groups of explanatory variables contribute to the leader’s decision to consult the electorate.

In addition to the preferences of the leader for ratification, domestic institutions can make a difference in the method used by the leader to ratify the negotiated agreement. As the second explanatory group of variables, regimes and electoral institutions influence the type of method used for ratification because they influence the costs of referendum vs. costs of ratification via the legislature. The third group of variables are control variables of international politics, economics and institutional features of the agreements. The reason for including international politics variables is to account for the security considerations involved in the signing of the bilateral agreements.

The game theoretic model and the empirical tests of the model will reveal a focus on domestic negotiation strategies employed by the political leader in his/her efforts to gain public acceptance for settlement of the territorial dispute. Problems involved with this are the consequences of letting voters who are not as informed about international affairs decide issues crucial to security of the state.\textsuperscript{27} However,

\textsuperscript{25}— ‘Yes or No’, Time Magazine, October 17, 1955.
\textsuperscript{26}— ‘Yes or No’, Time Magazine, October 17, 1955.
for domestic political concerns leaders may be wanting to more directly find out what the electorate may be thinking about a territorial agreement. According to prior empirical tests the factors leading to settlements in territorial disputes are as follows: (1) changes in the international security and existing alliances that will result, (2) domestic economic costs of settlement, (3) talks being on hold for at least two years, (4) getting enough concessions after having challenged a border or continued a dispute, and (4) existence of ethnic co-nationals. I argue that territorial dispute agreements will go to referendums if: (1) there are no serious security concerns associated with the agreement, (2) no economic costs (such as loss of significant resource-rich territory), (3) stalemated talks (of five years or more), (4) more complex an agreement, and (5) ethnic co-nationals with ties. This study builds on prior work in its choice of control variables and several determinants of settlement.

It is difficult to attribute motivations to leaders and distinguish among their reasons for going to referendum. As explained above, Adenauer and Mendes-France had several different reasons for agreeing to a referendum on the Saar. We can however identify two types of motivations: the domestic politics motivation and international politics motivation. For example, Mendes-France had trouble convincing his Socialist opponents in the legislature that the agreement was strong enough to stop the Germans. The second is the international motivation: Mendes-France had to convince the Germans to take part in the Western European Union and to be there armed and ready in case of a Soviet attack. The problem for Adenauer was that the rest of the world did not agree that the people of the Saar wanted to be a part of Germany. By agreeing to the referendum, the French were satisfied with the German uncon-

ditional acceptance of the Paris Agreement and the security guarantees to France that came with it. The Germans were satisfied that they got back the Saar and some rearmament rights against the Soviets. Thus both of these domestic explanations come with the international security guarantees to the signatories which came with the Paris Accords. The Saar referendum reveals that there are both domestic and international motivations the leader may have for calling a referendum on an international treaty. These can be generalized as follows:

- **Domestic Politics Motivations**
  1. referendums are a part of partisan aspect of politics since all disagreements are between political parties
  2. referendums are used to convince other groups in the legislature in the face of indecision
  3. referendums allow the electorate to have a voice in foreign policy making
  4. referendums show the legislators what the electorate wants

- **International Politics Motivations**
  1. referendums determine what is in the national interest as an expression of sovereignty
  2. referendums express the majority opinion in a democracy
  3. referendums force opponents to consider self-determination as an option
  4. referendums act as a final arbiter in international negotiations

By looking at what explains the domestic ratification mechanism of a bilateral negotiated accord, we can get at the concerns of the leaders when they are legislating

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29—‘Yes or No’, *Time Magazine*, October 17, 1955.
an international agreement. What makes this easier is that by accounting for the ratification of one side, we are able to explain the domestic ratification mechanism of a bilateral agreement, since both sides have to successfully ratify the agreement for it to exist.\textsuperscript{30} The choice of bribery, referendum or doing nothing (for domestic ratification) by the leader is made depending on the likelihood of getting a negotiated agreement passed through the legislature. In order to get at what explains this choice, I look at two types of variations: (1) domestic institutions (regimes and electoral institutions) and (2) issue types (territorial disputes vs. foreign investment vs. sovereign debt).

The variation in issue types imply two other types of variation: (1) complexity of the agreements (how much do the agreements look like each other; how standardized they are) and (2) international/domestic economic and security control variables.

1.4 Referendums in Political Economy Issues

The concern with international security in referendum decisions as part of proving leader performance also permeates into international political economy (IPE) questions. International negotiations on privatization with multinational corporations and negotiations for rescheduling with sovereign debt lenders such as the Paris Club also fit into the above model of electoral incentives for leader performance. The theory explains differences in referendum use in territorial disputes and several IPE issues subject to referendum use. The commonalities between the three issue areas are: (1) both security concerns and opposition to economic costs are involved in ratification and referendum decisions; (2) electorates are not more informed about international negotiations in these two areas than they are with the territorial dis-

putes; and (3) political leaders can use approval or rejection of the agreement to win elections if the electorate’s views are in line with the contributions of the negotiated agreement. The differences across the issue chapters are: (1) the challenger’s bargaining position vis-a-vis the other negotiating party, (2) the dominance of domestic economic concerns over security and vice-versa; and (3) complexity of the agreement being negotiated (sovereign debt agreements are more focused than privatization agreements which are less complex than territorial agreements, especially in terms of number of issues varying across agreements among different countries).

Political leaders, in their efforts to bring about privatization in corrupt and inefficient state enterprises, have to sometimes stand up to legislatures that block their chances at reform. Although globalization advocates have pointed out the benefits of foreign direct investment (FDI) for economic growth, employment, productivity and technological diffusion; there has also been considerable domestic opposition to what has been overwhelmingly characterized as the sweeping momentum of globalization. The common concern of anti-globalization movements has been about the welfare effects of increased competition brought on by movement of capital, goods and labor. These concerns may be to blame for legislative oppositions, but the empirical test will reveal how much regime politics accounts for use of referendums.31

Sovereign Debt repayments also bring domestic and international interests at odds with one another, just as with territorial conflicts and privatization decisions. In this case, within democracies, the median voter will almost always vote to reschedule the payment due to the resulting lower domestic interest rate. The tradeoff there is that the rescheduling increases interest payments on future loans and extends time to repayment. The third empirical analysis will relate regimes, electoral institutions and

31Hays, Jude, ‘Globalization and Capital Taxation in Consensus and Majoritarian Democracies,’ World Politics, 2003: pp. 86-90, finds PR democracies are more likely to look after the interests of labor.
agreement features to the political leader’s choice in the face of legislative opposition to the rescheduling of loans.

What unites the three empirical chapters are firstly, the influence of domestic regime structures and electoral systems within democracies on the leader’s ability to gain support in the legislature and the electoral motivations that follow. Secondly, the populist aspects of territorial dispute negotiations, privatization offers and debt control decisions which tend to permeate regular elections. Thirdly, the security aspects of foreign direct investment deals and debt repayments, which have a similar effect as economic aspects of territorial agreements on electoral votes. Fourth, the similarity in actions of political leaders in passing all three types of internationally negotiated agreements evident in the game and empirical results. Fifth, the empirical sections allows the testing of the same variables of regime, electoral systems and features of the agreements and show how the electoral motivations of leaders work in the same way across these issues. Sixth, the direction of influence of domestic institutions in domestic ratification choices of leaders, is the same in various international political economy and international security questions.

Table 1.1 summarizes the percentage of negotiation cases across the three issue areas, and for the domestic outcomes of referendum, legislative approval or continuing negotiations. \(^{32}\) The number of foreign investment cases are greater than the other two, because there were often more than one privatization case in a strategic industry qualifying to enter the dataset. The source for the Territorial Disputes dataset is the updated version of Huth and Allee (2002) dataset. The cases of the FDI section are based on news reports of privatization progress in each state. The cases of the Sovereign Debt section are listed as borrowers in the records of the Paris Club.

\(^{32}\)Continuing negotiation cases are those that have not been ratified by year end 2007.
The common aspects of the empirical models that run the three chapters are (1) the dependent variable is the result in the current round of negotiations, which is denoted by $y$, (2) two major groups of explanatory variables that are denoted by the vector $x$. With regards to the dependent variable, I define the three possible outcomes of the empirical study (categories for $y$) as follows:

- **$A$** = the outcome where the legislature accepts terms of the negotiated agreement, (or accept legalized dispute resolution, or accept military defeat),
- **$B$** = the outcome where the legislature accepts the terms agreed upon by referendums,
- **$C$** = the outcome to continue negotiations (because negotiations are ongoing, no domestic ratification being sought).

Let $Pr\{y = j\}$ be the probability that the outcome falls in the $j$-th category; e.g., $Pr\{y = A\}$ is the probability that outcome $A$ is observed. Assuming that the response categories are mutually exclusive and exhaustive, the probabilities add up to one,

$$Pr\{y = A\} + Pr\{y = B\} + Pr\{y = C\} = 1.$$  

I consider models for determining probabilities $Pr\{y = j\}$, $j = A, B, C$, where each probability depends on a vector $x$ of $K$ explanatory variables. Following the main line of thought in multinomial logit modeling, in each empirical chapter, I set one of the response categories ($A$, $B$ or $C$) as a baseline, calculate the log-odds for all other categories relative to this baseline, and then let the log-odds be a linear function of
the explanatory variables. For example, if \( C \) is chosen to be the baseline

\[
Y_{A|C} = \ln \left( \frac{\Pr\{y = A\}}{\Pr\{y = C\}} \right) = \beta_{A|C,0} + \beta_{A|C,1}x_1 + \beta_{A|C,2}x_2 + \ldots + \beta_{A|C,K}x_K
\]

where \( Y_{A|C} \) is defined as the log-odd for outcome \( A \) versus \( C \) with \( \beta_{A|C,0} \) being a constant and \( \beta_{A|C,k} \) for \( k = 1, \ldots, K \) being the regression coefficients. Similarly,

\[
Y_{B|C} = \ln \left( \frac{\Pr\{y = B\}}{\Pr\{y = C\}} \right) = \beta_{B|C,0} + \sum_{k=1}^{K} \beta_{B|C,k}x_k,
\]

\[
Y_{C|C} = \ln \left( \frac{\Pr\{y = C\}}{\Pr\{y = C\}} \right) = \ln 1 = 0.
\]

Using the log-odds, the probabilities \( \Pr\{y = j\} \) can be written as

\[
\Pr\{y = j\} = \frac{e^{Y_{j|C}}}{e^{Y_{A|C}} + e^{Y_{B|C}} + e^{Y_{C|C}}} \quad \text{for} \quad j = A, B, C.
\]

The substitution of the log-odds into the expression above yields

\[
\Pr\{y = A\} = \frac{e^{Y_{A|C}}}{e^{Y_{A|C}} + e^{Y_{B|C}} + e^{Y_{C|C}}} = \frac{e^{(\beta_{A|C,0} + \sum_{k=1}^{K} \beta_{A|C,k}x_k)}}{e^{(\beta_{A|C,0} + \sum_{k=1}^{K} \beta_{A|C,k}x_k)} + e^{(\beta_{B|C,0} + \sum_{k=1}^{K} \beta_{B|C,k}x_k)} + e^0} = \frac{e^{(\beta_{A|C,0} + \sum_{k=1}^{K} \beta_{A|C,k}x_k)}}{e^{(\beta_{A|C,0} + \sum_{k=1}^{K} \beta_{A|C,k}x_k)} + e^{(\beta_{B|C,0} + \sum_{k=1}^{K} \beta_{B|C,k}x_k)} + 1},
\]

\[
\Pr\{y = B\} = \frac{e^{Y_{B|C}}}{e^{Y_{A|C}} + e^{Y_{B|C}} + e^{Y_{C|C}}} = \frac{e^{(\beta_{B|C,0} + \sum_{k=1}^{K} \beta_{B|C,k}x_k)}}{e^{(\beta_{A|C,0} + \sum_{k=1}^{K} \beta_{A|C,k}x_k)} + e^{(\beta_{B|C,0} + \sum_{k=1}^{K} \beta_{B|C,k}x_k)} + e^0} = \frac{e^{(\beta_{B|C,0} + \sum_{k=1}^{K} \beta_{B|C,k}x_k)}}{e^{(\beta_{A|C,0} + \sum_{k=1}^{K} \beta_{A|C,k}x_k)} + e^{(\beta_{B|C,0} + \sum_{k=1}^{K} \beta_{B|C,k}x_k)} + 1},
\]

\[
\Pr\{y = C\} = \frac{e^{Y_{C|C}}}{e^{Y_{A|C}} + e^{Y_{B|C}} + e^{Y_{C|C}}} = \frac{e^0}{e^{(\beta_{A|C,0} + \sum_{k=1}^{K} \beta_{A|C,k}x_k)} + e^{(\beta_{B|C,0} + \sum_{k=1}^{K} \beta_{B|C,k}x_k)} + e^0} = \frac{1}{e^{(\beta_{A|C,0} + \sum_{k=1}^{K} \beta_{A|C,k}x_k)} + e^{(\beta_{B|C,0} + \sum_{k=1}^{K} \beta_{B|C,k}x_k)} + 1}.
\]
The parameters of the model, $\beta_{j|C,k}$ for $j = A, B$ and $k = 0, 1, ..., K$, are estimated by maximum likelihood.

The empirical results will present binary comparisons of $A$ versus $B$, $C$ versus $A$, and $C$ versus $B$. These comparisons emphasize the relative likelihoods of leaders choices when presented with two domestic ratification options or continuing negotiations. The decision entails making two choices: (1) to continue negotiations or take the agreement as it is in for domestic approval, and (2) once having decided to take it in for domestic approval, whether he/she wants to take it to the legislature right away or go for a referendum before going to the legislature. The baseline will either be domestic approval via legislative ratification [outcome $C$] or legislative approval via referendum [outcome $B$]. The rest of the binary logits will be derived using the above three results.

The definition of a case is any challenger action across months in a particular territorial dispute (e.g. the dispute between China and Pakistan that began in 1947 and ended in 1963 for the disagreement over the border between Kashmir and Xinjiang), host state action across months in the privatization of a state entity (e.g. the privatization of British Steel in the U.K. between October 1984 and February 2006), and borrower action across months of Paris Club lending to a member (e.g. Club lending to Albania between December 1993 and January 2000). Cases are identified by the country-months in which an action is taken to negotiate a disagreement with another state, investor or Paris Club joint lending action. There will at times be multiple cases of disputes for each country, for example China is the challenger in ten of its disputes, including that with Nepal, Pakistan, Portugal, USSR among others. The unit of analysis is country-month as defined by each row of the dataset, 33See Appendix A for a complete list of cases for the three empirical chapters.
and unit of observation is round of negotiations (across country-months) for each case that enters the dataset. The unit of analysis is defined as the underlying data structure of the analysis. The unit of observation is defined as any composites of the unit of analysis, which statistical attributes are attached to. For the Territorial Disputes dataset has a total of 171 cases. The Foreign Direct Investment dataset has 203 cases, and the Sovereign Debt dataset has a total of 77 cases. Territorial negotiations last an average of 9 months per round (usually having one major meeting within a year), foreign direct investment deals last 5 months per round, and sovereign debt negotiations last an average of 5 months per round (but tend to meet twice per year). The institutional outcomes of the cases have been coded using newspaper articles, and books on the dispute/privatization case or sovereign debt negotiations announcements. The percentage of each domestic approval outcome can be summarized in Table 1.1.

<table>
<thead>
<tr>
<th>Issue Area</th>
<th>Legislative Approval</th>
<th>Referendum</th>
<th>Continue Negotiations</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territorial Disputes</td>
<td>91</td>
<td>27</td>
<td>53</td>
<td>171</td>
</tr>
<tr>
<td>Percentage of Cases</td>
<td>53.2%</td>
<td>15.8%</td>
<td>31%</td>
<td>100%</td>
</tr>
<tr>
<td>FDI</td>
<td>107</td>
<td>30</td>
<td>66</td>
<td>203</td>
</tr>
<tr>
<td>Percentage of Cases</td>
<td>52.7%</td>
<td>14.8%</td>
<td>32.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Sovereign Debt</td>
<td>54</td>
<td>15</td>
<td>8</td>
<td>77</td>
</tr>
<tr>
<td>Percentage of Cases</td>
<td>70.1%</td>
<td>19.5%</td>
<td>10.4%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The empirical chapters will test the same five hypotheses. These will be outlined at the end of Chapter 2, after I have presented the game of their origin. The hypotheses make claims about the affects domestic institutions and features of the agreements will have on the leader’s probabilities of choosing any of the domestic ratification choices to each other and to continuing of negotiations and vice versa. The first two

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34See individual chapters for more detailed information on number of country-months and rounds of negotiations per dataset, on pp. 61 for Chapter 3, pp. 97 for Chapter 4, and pp. 77 for Chapter 5.
hypotheses relate to the domestic institutional questions posed as part of the model relating to regime and electoral system differences. The other three refer to features of the international agreements in terms of their complexity, or opposition to the agreement resulting from economic costs and security concerns. As the three main aspects of differentiating across agreements and their difficulties of getting domestic ratification, I test these in both Models 1 and 2. The reason for testing them in the same equations as the domestic institutional factors are they are not the main determinants of domestic ratification choices of leaders. They are also not a major feature of the game theoretic model of Chapter 2. However, features of the agreement are important because they give us clues as to the type of opposition that exists in the legislature, when there is opposition to domestic ratification. The characterization of legislative opposition using features of the agreements to characterize potential domestic oppositions.

Another important aspect of the empirical chapters are the features of the agreements variables (complexity, economic costs, security concerns) that can potentially arise from each agreement included in the three datasets used for this study. Figure 1.1 summarizes the distribution of the ratings per agreement of these features. These features of the agreements make it possible to test the reaction of political leaders to legislative oppositions that are sourced in one or more of them. There are three graphs per agreement, designated as complexity, economic and security costs. The reader should examine them to look for similarities in different features across the issue areas.

Figure 1.1 also presents some limitations of the data. Firstly, foreign direct investment/privatization deal cases only contain strategically (in the national security sense) important industries (such as telecommunications and transportation). This
Figure 1.1: Percent of Cases across Levels of (Legislative Opposition to) Features of the Agreements: Complexity, Economic Costs and Security Concerns
was the preferred criteria because the controversial nature of the such deals and their potency for creating problems when seeking legislative ratification. The prominence of security concerns explains why the investment data have relatively high levels of complexity than would be expected. Second, the data for Chapter 5, relating to sovereign debt, are derived from Paris Club debt only. This means there is a slight attribution of the results to that international organization’s lending practices. This is also not a major issue, since the behavior is not that specific. Finally, the territorial disputes data, from the yet unpublished version of the Huth and Allee (2002) dataset, do not contain cases where agreements have not become a source of dispute. All three chapters use methods of random selection, where the negotiation does not enter the dataset until one side (identified as the challenger) makes a claim that challenges the status quo. The statistical models then identify when negotiations are occurring, and when the case has gone to domestic approval by the challenger. This two step method of selection makes the data fit to analyze statistically. Chapters 4 and 5 emulate this method of selection, introduced by Huth and Allee (2002). 

1.5 Overview

Chapter 2 will lay out the game theoretical model for the argument. The next three chapters will test this theory of referendums using Multinomial Logit models. Chapter 3 will show what institutional factors prompt the leader to undertake referendums in territorial disputes. Chapter 4 and 5 will test the argument for privatizations and sovereign debt reschedulings to the Paris Club, respectively. The results of the data analyses are presented in the respective chapters along with the implications and analysis. Chapter 6 presents the conclusions. The cases used in

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the study are listed in Appendix A. The technical details of the referendum game (derivations of utility functions and the equilibrium of the game) are omitted in the main text and given in Appendix B. Finally, Appendix C is dedicated to the codebook for the empirical studies.
CHAPTER II

Theoretical Framework

2.1 When the Agent becomes the Principal

The model assumes retrospective voting (Fiorina 1981), where elections are seen as a way to force political leaders to keep their campaign promises (Ferejohn 1986) in a one-period asymmetric information model which builds on Morrow (1991).\footnote{Fiorina, Morris P., ‘Retrospective Voting in American National Elections,’ New Haven, CT: Yale University Press, 1981: pp. 9 notes agent-principal based voting demands less of the electorate than other models, but given that leaders are office-seeking, the electorate manages to maintain an ex ante and effective accountability; Ferejohn, John, ‘Incumbent Performance and Electoral Control,’ Public Choice, Vol 50(5), 1986: pp. 9-11; Morrow, James D., ‘Electoral and Congressional Incentives and Arms Control,’ Journal of Conflict Resolution, Vol 35, 1991: pp. 243-263.} The incumbent is judged on retrospective achievements in elections, where the electorate’s utility function is different from that of the incumbent’s. The asymmetry is brought out by the reversal of principal-agent roles among the leader and the electorate in a referendum. The actors once again assume their respective roles of principal and agent when regular elections come around.

2.2 The Model

Consider a single round game with three players: a leader (L), an electorate (E), and a negotiating party (NP). L believes that signing an international agreement with the counterpart (who is referred to as NP) brings him utility; hence, he/she has an incentive to make a deal with NP. L and NP negotiate over the division of
one unit. L offers \( x \in [0,1] \) to NP where \( x \) is the share of L and \( 1-x \) is NP’s share from the agreement. Thus, while L prefers higher values of \( x \), NP is in favor of lower offers. The utility function of NP from the agreement is

\[
u_{NP}(x) = u_0 - x,
\]

(2.1)
in which \( u_0 \) is the threshold for not signing an agreement. The value of \( u_0 \) is private information to NP. Before the offer of L, NP knows the value of \( u_0 \). On the other hand, \( u_0 \) is unknown to L, and it is believed to be distributed uniformly over \([0,1]\) by L.

Although L wants the agreement to be signed, the legislature’s reaction to the agreement (especially the level of the concessions given to NP) may be different from L’s. Let \( r \) denote the resistance of the legislature to an agreement with NP. Any agreement that is less than \( r \) cannot pass the legislature. In some sense, \( r \) is the minimum share from the agreement that is domestically acceptable, below which the legislature would not ratify. L knows the exact value of the legislature resistance before offering an agreement to NP.

The leader is unsure about the stance of E with respect to the agreement, and the utility he/she gets from it \((\tau(x))\). E is either type FE (Friendly Electorate which Favors the Agreement) or UFE (Unfriendly Electorate which Disfavors the Agreement) depending on whether he/she supports an agreement or not. The probability distribution of the type of E is

\[
\Pr\{E \text{ is type } Y\} = \begin{cases} 
p_L & \text{if } Y = \text{FE} \\
1 - p_L & \text{if } Y = \text{UFE} \end{cases}
\]

(2.2)

with \( 0 \leq p_L \leq 1 \). Further, the utility that E obtains from the agreement is based on
her type:

$$\tau(x) = \begin{cases} 
\tau^+(x) = x & \text{if } E \text{ is type FE} \\
\tau^-(x) = x - 1 & \text{if } E \text{ is type UFE.}
\end{cases}$$

(2.3)

L knows that with probability $p_L$, $E$ is in favor of the agreement and obtains a utility of $x$ once the agreement is ratified, i.e., $\tau(x) = \tau^+(x) = x$. With probability $1 - p_L$, $E$ prefers no agreement; hence, in case the agreement passes the legislature, $E$’s payoff from the agreement would be $\tau(x) = \tau^-(x) = x - 1$. Note that if $E$ does not favor the agreement, then her utility decreases as more is offered by $L$ to NP (i.e., as $x$ decreases).

The agreement can also have an impact on the reelection of $L$. Let $p$ be the probability of $L$ being reelected at the end of his/her term just before the agreement negotiations had begun. The value of keeping office to $L$ is $\omega$, hence his/her expected utility from the elections just before the negotiations is $p \omega$. If $E$ is type FE and the agreement passes the legislature, then this may boost his/her popularity and increase his/her probability of reelection to $(1 + \theta_1)p$ with $0 \leq \theta_1 \leq (1 - p)/p$.\(^2\) Similarly, if $E$ is type UFE and the agreement is ratified, then this may damage his/her popularity and decrease the probability of reelection down to $(1 - \theta_2)p$ with $0 \leq \theta_2 \leq 1$, which would be reflected in the payoffs obtained by $L$.\(^3\)

If $L$’s offer ($x$) is accepted by NP, then the resistance at the legislature ($r$) forms, and $L$ has three options to undertake:

\(^2\)Note that the increased probability $(1 + \theta_1)p$ cannot exceed 1 due to the definition of probability, so $(1 + \theta_1)p \leq 1$ leads to $\theta_1 \leq (1 - p)/p$.

\(^3\)Note that the new probability $(1 - \theta_2)p$ cannot be less than 0, so $(1 - \theta_2)p \geq 0$ leads to $\theta_2 \leq 1$. 
(i) take the agreement to the legislature as it is,
(ii) bribe all or some portion of the legislature in order to decrease
     the resistance,
(iii) go to a referendum and use the power of electorate to convince
     the legislature.

In case (i), L obtains different payoffs under different realizations of \( r \). If \( x \geq r \), then L would be able to get the agreement to pass the legislature and obtain
\( x + (1 + \theta_1)p\omega \) or \( x + (1 - \theta_2)p\omega \), depending whether E is type FE or UFE, respectively.
L may choose the bribery option (case(ii)) for getting the agreement passed the legislature. This requires the use of the resources in an inefficient way, which causes
L and E respective costs of \( c \) and \( B \), where \( c \) is the cost of bribery to ensure \( x \) be ratified. The cost of bribery depends both on the level of resistance of the legislature
(\( r \)) and the type of the state: authoritarian or democracy.

The last option (case (iii)) is to hold a referendum and use the power of E to convince the legislature about the agreement. This would decrease \( R \) units of utility from L and E where \( R \) denotes the public cost of holding a referendum.\(^4\) If the outcome of the referendum turns out to be \( no \), depending on whether \( x \geq r \) or \( x < r \), additional reputational costs may arise: \( m_1 \) and \( m_2 \), \( m_2 \geq m_1 \). The logic behind the selection of the reputation costs are as follows. When L holds a referendum for an agreement that has no legislative support, if the result turns out to be \( no \) then this has more reputation-wise consequences (\( m_2 \)) than an agreement with legislative support (\( m_1 \)).

In the remainder of this section I define the actions of the players formerly, present
the flow of the game (the time line for the game) and discuss the explicit assumptions

\(^4\)When L holds a referendum, many activities should be organized as campaigns have to be conducted to bring people to the polls, ballots have to be prepared, observers have to be placed, etc. These activities use the resources of the public, so \( R \) is a proxy representing all such costs related to holding a referendum.
and private/public information known to the players.

2.2.1 Decisions

As discussed previously, there are three players making four decisions:

- L decides on what to offer to NP \((x)\), whether to hold a referendum \((k = 1)\) or not \((k = 0)\) and whether to bribe the legislature \((b = 1)\) or not \((b = 0)\). Holding a referendum and bribing are mutually exclusive\(^5\), so L chooses from the action set \(\{(k = 1), (k = 0, b = 0), (k = 0, b = 1)\}\). I refer to action \((k = 1)\) as referendum, \((k = 0, b = 0)\) as do nothing and \((k = 0, b = 1)\) as bribery.

- NP accepts or rejects L’s proposal \(x\),

- E decides on whether to vote yes or no in case of a referendum.

2.2.2 The Flow of the Game

The sequence of events in the game is depicted in Figure 2.1 and the decision tree is given in Figure 2.2 with payoff vectors for L and E. The game starts with the leader choosing an \(x\) to offer. Next, NP decides on whether to accept or reject the offer. If rejected, L and E obtains the respective payoffs \(p_\omega\) and 0 (see Figure 2.2) and the game ends. Otherwise, L decides on how to proceed for ratification of the agreement. Here L has three options to choose from: referendum, do nothing or bribery. Next, the nature (N) chooses a type for the electorate, FE or UFE, by a Bernoulli trial. E is assigned to type FE with probability \(p_L\) and to UFE with probability \(1 - p_L\). Only E knows the type assigned by N, i.e., E’s type is a private information and only known by E. L knows the probability distribution of E being FE or UFE.\(^6\) If L has selected do nothing or bribery actions, then L and E get their

\(^5\)There is no such action as \((k = 1, b = 1)\).

\(^6\)Note that in Figure 2.2 the dotted lines are showing the information set of L. Since L is not aware of the type of E, he/she can be at one of the two points in the decision tree.
respective payoffs depending on the relationship between $x$ and $r$ (whether $x \geq r$ or $x < r$) and the type of E, see Figure 2.2. Otherwise, referendum is held and E votes yes or no based on the type assigned by N. Similarly, the equality relationship between $x$ and $r$ and the vote of E determines the payoffs L and E obtain as shown in Figure 2.2.

2.2.3 Assumptions

In this subsection, the important assumptions of the model are listed explicitly. Although they all have been introduced previously, I also add some discussion on issues concerning these assumptions.

- The leader is in favor of getting the agreement accepted by NP and ratified by the legislature. In other words, any agreement $x > 0$ increases the utility of L.

- The resistance of the legislature ($r$) is known by L before he/she makes an offer ($x$) to NP. L can estimate the level of resistance at the legislature, the sources of the resistance would generally be known by L in advance. However, one can also argue that although L has a vague idea of the legislative resistance, the extent of the resistance becomes clearer once the agreement is negotiated and the details are made public. This can easily be incorporated into the model in the expense of explicit derivation of $x$ at the equilibrium. This issue is further discussed in §2.4.

- No matter how high the resistance of the legislature or how persistent the legislature about its stance regarding the issue, if the offer of L is accepted by NP and the outcome of a (possible) referendum is yes, then the legislature ratifies the agreement.
Figure 2.1: The flow of the referendum game.
Figure 2.2: Decision tree for the referendum game. The first and the second elements of the payoff vectors are for L and E, respectively.
2.2.4 Private vs. Public Information

It is highly important to distinguish between the private and public information available to the players in the game before proceeding with the analysis. First, I discuss the information NP knows about. NP does not have a priori knowledge of any parameters of the game except $u_0$, which is the threshold for not signing an agreement. This is a private information and only known to NP. Hence, L does not know the exact value of $u_0$ before he/she makes an offer, but knows that $u_0$ is uniformly distributed over $[0,1]$.

$R$, $B$ and $r$ are the three parameters of the game that are known to E. What is private information to E is his/her type assigned by the nature. Thus, L does not know the exact type of E before he/she makes his/her decisions, but knows the probabilities of E being assigned type FE or UFE ($p_L$ and $1 - p_L$).

Finally, I discuss the leader. The following parameters of the game are private information of L: $c$, $\theta_1$, $\theta_2$, $p$, $\omega$, $m_1$ and $m_2$. Although not private, L has the information of $r$, $R$ and $B$, too.

In terms of actions, both E and NP are aware of what L plays as $x$. The decision of NP is visible to all players in the game. The ratification decision of L (referendum, do nothing or bribe) is known by E because he/she has access to the information of $r$ and $x$, and is aware of the three possible actions that L can play for the ratification of the agreement if the agreement is accepted by NP.

2.3 The Analysis

This section is dedicated to the analysis for determining the subgame perfect equilibrium of the game introduced in §2.2. Backward induction is the method employed. I start at the end of the game tree and work sequentially backward
through each decision. As such, the analysis of each stage is done with the knowledge of players’ anticipated responses in subsequent decisions.

Before the decisions of L are analyzed, the actions of E and NP at the equilibrium are derived in the next two subsections. Let $a^*_E$ and $a^*_NP$ be the respective actions of E and NP at the equilibrium.

### 2.3.1 E’s Action at the Equilibrium

The actions of E are the possible outcomes of the referendum: $a_E \in \{yes, no\}$. As shown in Figure 2.2, depending on the type, whether FE or UFE, the actions and the corresponding payoffs for E differ. On the one hand, if E is FE ($\tau(x) = \tau^+(x) = x$), then E chooses action $yes$, no matter what the resistance turns out to be at the legislature. Note that when L goes to a referendum and E is type FE, the utility E gets by voting $yes$ is $x - R$, while saying $no$ gives a payoff $-R$ whether $x < r$ or $x \geq r$. On the other hand, if E is type UFE ($\tau(x) = \tau^-(x) = x - 1$), then the action E selects is $no$. While $yes$ brings $x - 1 - R$, voting $no$ gets E a payoff of $-R$, again, independent of what the level of resistance turns out to be. The discussion can be summarized as

$$a^*_E = \begin{cases} yes & \text{if E is type FE} \\ no & \text{if E is type UFE.} \end{cases}$$

### 2.3.2 NP’s Action at the Equilibrium

Recall from §2.2 that the utility of NP is $u_0 - x$ if $x < u_0$ and 0 otherwise, see (2.1). NP has two action he/she can play: accept or reject. It is clear from $u_{NP}(x)$ that any offer that is equal or above the minimum acceptance level $u_0$ brings nonpositive utility, so NP plays reject for such offers and obtains zero utility. Any offer that is smaller than $u_0$ brings positive utility to NP. Since rejecting such an offer leads to
zero utility and rational behavior dictates preferring an action with positive utility over another with zero, NP plays accept. These arguments lead to

$$a_{NP}^* = \begin{cases} 
accept & \text{if } x < u_0 \\
reject & \text{if } x \geq u_0.
\end{cases}$$  \hspace{1cm} (2.5)

L knows that $u_0$ is distributed uniformly over $[0,1]$, the probability of NP accepting an offer $x$ can be derived as follows:

$$\Pr\{\text{NP accepts } x\} = \Pr\{x < u_0\} = 1 - \Pr\{u_0 \leq x\} = 1 - x.$$  \hspace{1cm} (2.6)

Similarly,

$$\Pr\{\text{NP rejects } x\} = \Pr\{u_0 \leq x\} = x.$$  \hspace{1cm} (2.7)

Having E’s and NP’s actions at the equilibrium determined, I focus next on the decisions of L.

2.3.3 L’s Actions at the Equilibrium

There are two decisions that L makes. The first is to determine his/her share from the agreement, $x \in [0,1]$. The second is to select a strategy to get the agreement ratified, denoted by $a_L$, if the offer is accepted by NP. In the latter, L has three actions to select from:

$$a_L \in \{(k = 0, b = 0), (k = 0, b = 1), (k = 1)\},$$

---

where \((k = 1)\) is holding a referendum, \((k = 0, b = 1)\) is bribing the legislature and \((k = 0, b = 0)\) is doing nothing (simply neither bribery nor referendum). Although these actions come after the decision of NP in the flow of the game, NP’s decision only depends on \(x\) not the decision of L for ratification. Therefore, L’s decisions can be analyzed as if they are made simultaneously at the beginning of the game without effecting the equilibrium of the game.

It is apparent from the payoff vectors in Figure 2.2 that the utility of L depends on the type of E and the value of \(x\) relative to \(r\) (whether \(x \geq r\) or \(x < r\)). The type of E is not affected by L’s decisions, so in the following two subsections, I analyze the decisions of L based on whether he/she sets \(x\) less than \(r\) or not. Before that I introduce new notation. Let \(x^*\) be the value of the offer at an equilibrium, \(a^*_L\) be the action for ratification L selects at the equilibrium, and

\[
A_i = \begin{cases} 
   c - p\omega(p_L\theta_1 - (1 - p_L)\theta_2) & \text{for } i = 1 \\
   \frac{R}{p_L} + \frac{1 - p_L}{p_L}m_2 - \theta_1 p\omega & \text{for } i = 2 \\
   \frac{c - R}{1 - p_L} + \theta_2 p\omega - m_2 & \text{for } i = 3.
\end{cases}
\]

(2.8)

The definitions of \(A_1\), \(A_2\) and \(A_3\) follow from the dominance relationship between the three actions \((k = 0, b = 0)\), \((k = 0, b = 1)\), \((k = 1)\), which is discussed in detail in §B.2.

2.3.4 Case (i): L Sets \(x \geq r\)

In this section, I analyze the case if L decides to offer an \(x\) that is no less than \(r\). Depending on his/her type, the response of E to a possible referendum would be different. As discussed in §2.3.1, if E is type FE (UFE), then the outcome of a referendum would be yes (no). Compare the payoffs of L when \(x \geq r\) and E is type
FE in Figure 2.2. If L plays \((k = 0, b = 0), (k = 0, b = 1)\) or \((k = 1)\), then he/she obtains \(x + (1 + \theta_1)p\omega, x - c + (1 + \theta_1)p\omega\) and \(x - R + (1 + \theta_1)p\omega\), respectively. Since the payoff of \((k = 0, b = 0)\) is greater than or equal to the others, L plays *do nothing*. The same holds when \(x \geq r\) and E is type UFE. The payoff of \((k = 0, b = 0), x + (1 - \theta_2)p\omega\), is greater than or equal to any other action’s payoff, so L plays *do nothing* again. No matter what action E chooses, if \(x \geq r\) then action \((k = 0, b = 0)\) dominates the other actions. In other words, given \(x \geq r\), the best response of L to E’s action at the equilibrium (*yes* if E is type FE and *no* if E is type UFE, see (2.4)) is \((k = 0, b = 0)\), which is denoted by

\[
B_L(\text{yes}|\tau^+(x), x \geq r) = B_L(\text{no}|\tau^-(x), x \geq r) = (k = 0, b = 0). \tag{2.9}
\]

Having determined what L plays for ratification if he/she sets \(x \geq r\), I continue with how \(x\) is set. L offers \(x\) that maximizes his/her expected utility, \(E[u_L(x)]\). Define \(g_r(x)\) as the expected utility function of L if \(x \geq r\). From (2.9), it is known that L chooses action \((k = 0, b = 0)\), so

\[
g_r(x) = \Pr\{\text{NP accepts } x\}E[u_L((k = 0, b = 0))|x \geq r] \\
+ \Pr\{\text{NP rejects } x\}(p\omega), \tag{2.10}
\]

where

\[
E[u_L((k = 0, b = 0))|x \geq r] \\
= E[u_L((k = 0, b = 0))|x \geq r, E \text{ is type FE}]\Pr\{E \text{ is type FE}\} \\
+ E[u_L((k = 0, b = 0))|x \geq r, E \text{ is type UFE}]\Pr\{E \text{ is type UFE}\} \\
= (x + (1 + \theta_1)p\omega)(p_L) + (x + (1 - \theta_2)p\omega)(1 - p_L) \\
= x + p\omega + p_L\theta_1p\omega - (1 - p_L)\theta_2p\omega \\
= x + p\omega + p\omega(p_L\theta_1 - (1 - p_L)\theta_2). \tag{2.11}
\]
First adding and subtracting $c$ to the right-hand-side of (2.11), and then substituting $A_1$ (see (2.8)) leads to

$$E[u_L((k = 0, b = 0))|x \geq r]$$

$$= x + p\omega + c - c + p\omega(p_L\theta_1 - (1 - p_L)\theta_2)$$

$$= x + p\omega + c - (c - p\omega(p_L\theta_1 - (1 - p_L)\theta_2))$$

$$= x + p\omega + c - A_1.$$  \hspace{1cm} (2.12)

Substituting (2.6), (2.7) and (2.12) into (2.10) gives

$$g_r(x) = (1 - x)(x + p\omega + c - A_1) + x(p\omega)$$

$$= x + p\omega + c - A_1 - x^2 - xp\omega - xc(r) + xA_1 + xp\omega$$

$$= -x^2 + x(1 - c + A_1) + p\omega + c - A_1.$$  \hspace{1cm} (2.13)

As shown in §B.1, $g_r(x)$ is a concave function of $x$ reaching its maximum at

$$x_r = \frac{1 - c + A_1}{2}.$$  

The expected utility $L$ obtains by offering $x_r$ is

$$g_r(x_r) = \left(\frac{1 + c - A_1}{2}\right)^2 + p\omega.$$  

A plot of $g_r(x)$ can be found in Figure 2.3.

The results so far suggest that if $L$ decides to offer an agreement that satisfies the legislature $(x \geq r)$, then provided that NP accepts the offer, $L$ sends the agreement directly to the legislature for ratification (action $(k = 0, b = 0)$). In order to maximize his/her own expected utility, $L$ offers

$$x = \begin{cases} 
  x_r & \text{if } x_r \geq r \\
  r & \text{if } x_r < r.
\end{cases}$$
As can be seen from Figure 2.3, \( g_r(x) \) increases in region \([0, x_r)\), so if \( r < x_r \) then offering \( x_r \), an offer that is more than the legislative resistance, brings more expected utility. However, \( g_r(x) \) decreases in the region \([x_r, 1]\). If \( r > x_r \) then making any offer larger than \( r \) would decrease \( L \)'s expected utility, so \( L \) just offers \( r \). In plain words, if \( L \) decides to make an offer that has support in the legislature \((x \geq r)\), then under a particular criterion \((x_r \geq r)\), \( L \) makes an offer that is more than the minimum acceptable offer \((x_r)\). In other words, \( L \) gives an offer that gives less concessions to NP even though the legislature is ready to accept more concessions. If the criterion is not satisfied, i.e., \( x_r < r \), then \( L \) makes an offer that is equal to the minimum acceptable offer that the legislature demands \((r)\).

### 2.3.5 Case (ii): \( L \) Sets \( x < r \)

If \( L \) decides to make an offer that is less than the resistance, it is not straightforward (unlike in case (i)) to determine which action \( L \) chooses by just comparing the payoffs in Figure 2.2. For example, under the conditions \( x < r \) and \( E \) is type UFE, the payoffs of the actions \( (k = 0, b = 0) \), \( (k = 0, b = 1) \) and \( (k = 1) \) are \( p\omega, x - c + (1 + \theta_1)p\omega \) and \( x - R + (1 + \theta_1)p\omega \), respectively. It is not possible to determine the highest payoff without knowing the values of \( x, c, R \) and \( \theta_1p\omega \). Hence, I restore to deriving the expected utility functions for each action. The details for the derivations are omitted in the main text and can be found in Appendix B.

Define \( g_{dn}(x) \) as the expected utility function of \( L \) if \( x < r \) and \( L \) decides to do nothing, i.e., \( (k = 0, b = 0) \). Then\(^8\),

\(^8\)See §B.1 for the details of the derivation of \( g_{dn}(x) \).
Figure 2.3: An Illustration of Functions (a) $g_r(x)$, (b) $g_{bri}(x)$, (c) $g_{ref}(x)$, (d) $g_{dn}(x)$.

(a) $g_r(x) = -x^2 + x(1-c + A_1) + pw + c - A_1$

(b) $g_{bri}(x) = -x^2 + x(1+A_1) - A_1 + pw$

(c) $g_{ref}(x) = -p_u x^2 + p_u x(1+A_2) - p_u A_2 + pw$

(d) $g_{dn}(x) = pw$
\[ g_{dn}(x) = \Pr\{\text{NP accepts } x\}\mathbb{E}[u_L((k = 0, b = 0))|x < r] + \Pr\{\text{NP rejects } x\}(p_\omega) \]
\[ = (1 - x)(p_\omega) + x(p_\omega) \]
\[ = p_\omega, \]

The expression simply says that if L offers an x that is less than r and decides to do nothing to get it passed the legislature, then L obtains an expected utility of \( p_\omega \), which is independent of x. This is intuitive because offering \( x < r \) and doing nothing to get the legislature ratification (neither bribing the legislature nor holding a referendum) simply means L is left with the expected utility obtained from the next elections: \( p_\omega \).

Let \( g_{bri}(x) \) be the expected utility function of L if \( x < r \) and L decides to bribe, i.e., \((k = 0, b = 1)\). In this case\(^9\),
\[ g_{bri}(x) = \Pr\{\text{NP accepts } x\}\mathbb{E}[u_L((k = 0, b = 1))|x < r] + \Pr\{\text{NP rejects } x\}(p_\omega) \]
\[ = (1 - x)(x - A_1 + p_\omega) + x(p_\omega) \]
\[ = -x^2 + x(1 + A_1) - A_1 + p_\omega, \]

which is shown to be concave and maximized at
\[ x_{bri} = \frac{1 + A_1}{2}, \]

see Figure 2.3. The maximum utility L obtains by offering \( x_{bri} \) is
\[ g_{bri}(x_{bri}) = \left(\frac{1 - A_1}{2}\right)^2 + p_\omega. \]

\(^9\)See §B.1 for the details of the derivation of \( g_{bri}(x) \).
Similarly, let $g_{ref}(x)$ be the expected utility function of $L$ if $x < r$ and $L$ decides to hold a referendum. Then\(^\text{10}\)
\[
g_{ref}(x) = \Pr\{NP \text{ accepts } x\} \mathbb{E}[u_L((k = 1))|x < r] + \Pr\{NP \text{ rejects } x\}(p\omega)
\]
\[
= (1 - x)(p_L(x - A_2) + p\omega) + x(p\omega)
\]
\[
= -p_Lx^2 + p_Lx(1 + A_2) - p_LA_2 + p\omega.
\]

It is shown that $g_{ref}(x)$ is a concave function of $x$ and is maximized at

\[
x_{ref} = \frac{1 + A_2}{2}.
\]

Substituting $x_{ref}$ into $g_{ref}(x)$ gives the maximum utility $L$ obtains by offering $x_{ref}$:

\[
g_{ref}(x_{ref}) = p_L\left(\frac{1 - A_2}{2}\right)^2 + p\omega.
\]

See Figure 2.3 for a sketch of function $g_{ref}(x)$ and §B.1 for the detailed derivations.

The results derived up to this point are summarized in Table 2.1.

**Table 2.1: Expected utility functions conditioned on $x$.**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Action</th>
<th>optimal $x$</th>
<th>optimal expected utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>$x \geq r$</td>
<td>$(k = 0, b = 0)$</td>
<td>$x = \frac{1-c+\theta_1}{4}$</td>
<td>$g_{ref}(x) = \left(\frac{1+c-A_1}{2}\right)^2 + p\omega$</td>
</tr>
<tr>
<td></td>
<td>$(k = 0, b = 1)$</td>
<td>$x \in [0,1]$</td>
<td>$g_{dn}(x) = p\omega$</td>
</tr>
<tr>
<td></td>
<td>$(k = 1)$</td>
<td>$x_{bri} = \frac{1+\theta_1}{2}$</td>
<td>$g_{bri}(x_{bri}) = \left(\frac{1-A_1}{2}\right)^2 + p\omega$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$x_{ref} = \frac{1+\theta_2}{2}$</td>
<td>$g_{ref}(x_{ref}) = p_L\left(\frac{1-A_2}{2}\right)^2 + p\omega$</td>
</tr>
</tbody>
</table>

$A_1 = c - p\omega\left(p_L\theta_1 - (1 - p_L)\theta_2\right)$, $A_2 = \frac{R}{p_L} + \frac{1-p_L}{p_L}m_2 - \theta_1p\omega$, $A_3 = \frac{c-R}{1-p_L} + \theta_2p\omega - m_2$

Pairwise comparisons of the functions $g_{dn}(x)$, $g_{bri}(x)$ and $g_{ref}(x)$ give the dominance relationships between the corresponding actions when $x < r$. Before discussing this further, I introduce the following assumption, which keeps the presentation compact.\(^\text{11}\) If the expected utility of any two or more actions of $L$ are equal then it is

\(^\text{10}\)See §B.1 for the details of the derivation of $g_{ref}(x)$.

\(^\text{11}\)When the payoffs of two actions are the same, then the player would be indifferent between selecting any of the actions. This gives rise to multiple equilibria, which complicates the notation without bringing in any additional insight.
assumed that $L$ prefers $x \geq r$ and $(k = 0, b = 0)$ over $x < r$ and $(k = 0, b = 0)$; $x < r$ and $(k = 0, b = 0)$ over $x < r$ and $(k = 0, b = 1)$; $x < r$ and $(k = 0, b = 1)$ over $x < r$ and $(k = 1)$, i.e.,

$$(x \geq r, (k = 0, b = 0)) \succ (x < r, (k = 0, b = 0)) \succ (x < r, (k = 0, b = 1)) \succ (x < r, (k = 1)).$$

The details of the dominance relationships between the actions can be found in §B.2. The findings are summarized in Table 2.3.5. The definitions of $A_1$, $A_2$ and $A_3$ in (2.8) follow from the conditions on $x$ in the table. If $x$ is above $A_1$ then action $(k = 0, b = 1)$ dominates $(k = 0, b = 0)$; below $A_1$ action $(k = 0, b = 1)$ is dominated by $(k = 0, b = 0)$. Similarly, $A_2$ and $A_3$ are the points that determine the dominance relationship between actions $(k = 0, b = 0)$ and $(k = 1)$, and $(k = 0, b = 1)$ and $(k = 1)$, respectively.

Table 2.2: The conditions for pairwise dominance ($\succ$) relationships between the actions $(k = 0, b = 0)$, $(k = 0, b = 1)$ and $(k = 1)$ given that $x < r$.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Relationship</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>$(k = 0, b = 0)$</td>
<td>$\succ$</td>
<td>$(k = 0, b = 1)$ if $x \leq A_1 = c - p_L \left( p_L \theta_1 - (1 - p_L) \theta_2 \right)$</td>
</tr>
<tr>
<td>$(k = 0, b = 0)$</td>
<td>$\succ$</td>
<td>$(k = 1)$ if $x \leq A_2 = \frac{R}{p_L} + \frac{1 - p_L}{p_L} m_2 - \theta_1 p_L$</td>
</tr>
<tr>
<td>$(k = 1)$</td>
<td>$\succ$</td>
<td>$(k = 0, b = 1)$ if $x &lt; A_3 = \frac{c - R}{1 - p_L} + \theta_2 p_L m_2$</td>
</tr>
<tr>
<td>$(k = 0, b = 1)$</td>
<td>$\succ$</td>
<td>$(k = 1)$ if $x \geq A_3 = \frac{c - R}{1 - p_L} + \theta_2 p_L m_2$</td>
</tr>
<tr>
<td>$(k = 0, b = 1)$</td>
<td>$\succ$</td>
<td>$(k = 0, b = 0)$ if $x &gt; A_1 = c - p_L \left( p_L \theta_1 - (1 - p_L) \theta_2 \right)$</td>
</tr>
<tr>
<td>$(k = 1)$</td>
<td>$\succ$</td>
<td>$(k = 0, b = 0)$ if $x &gt; A_2 = \frac{R}{p_L} + \frac{1 - p_L}{p_L} m_2 - \theta_1 p_L$</td>
</tr>
</tbody>
</table>

Although Table 2.3.5 shows when an action dominates another, one needs to know
which action is chosen by L under which condition. There are six different cases arise from the equality relationship between $A_1$, $A_2$ and $A_3$:

1. $A_2 \leq A_1 \leq A_3$
2. $A_3 \leq A_1 \leq A_2$
3. $A_2 \leq A_3 \leq A_1$
4. $A_1 \leq A_2 \leq A_3$
5. $A_1 \leq A_3 \leq A_2$
6. $A_3 \leq A_2 \leq A_1$.

In §B.3, it is shown that cases 3-6 are not possible. Thus, only two cases have to be considered. Table 2.3.5 shows which ratification action L chooses if he/she decides to make an offer that is less than the resistance ($x < r$). This table is another way of presenting the results in Table 2.3.5. In order to demonstrate how Table 2.3.5 is constructed, consider the condition $A_2 \leq A_1 \leq A_3$. If $x \leq A_2$ then due to the relationship between $A_i$, $i = 1, 2, 3$, $x \leq A_1$ and $x \leq A_3$ are also true. These three conditions correspond to the first three dominance relationships in Table 2.3.5, which allows one to conclude that L plays ($k = 0, b = 0$). Next, consider $A_2 < x \leq A_1$, which leads to the conditions $A_2 < x$, $x \leq A_1$ and $x \leq A_3$. These three conditions correspond to the first, third and sixth dominance relationships in Table 2.3.5, from which it is concluded that ($k = 1$) dominates the other two actions. Continuing in this manner completes Table 2.3.5.

Table 2.3.5 is read as follows. If L decides to make an offer that is less than the resistance at the legislature ($x < r$), then he/she substitutes the values of the parameters of the game ($p, \omega, R, c, p_L, \theta_1, \theta_2, m_2$) into (2.8) and computes the values
of $A_1$, $A_2$ and $A_3$. Depending on the individual values, condition $A_2 \leq A_1 \leq A_3$ or condition $A_3 \leq A_1 \leq A_2$ is satisfied. As an example, let condition $A_2 \leq A_1 \leq A_3$ holds. The table simply says that if L makes an offer that is no more than $A_2$, i.e., $x \leq A_2$, then the ratification action that he/she should choose is do nothing, $(k = 0, b = 0)$. If the offer is between $A_2$ and $A_1$, i.e., $A_2 < x < A_1$, then he/she selects the referendum option for ratification, $(k = 1)$, and so on.

Table 2.3: The conditions when an action is selected by L for $x < r$.

<table>
<thead>
<tr>
<th>Condition for $A_1$, $A_2$, $A_3$</th>
<th>Condition for $x$</th>
<th>Action chosen by L</th>
</tr>
</thead>
<tbody>
<tr>
<td>$A_2 \leq A_1 \leq A_3$</td>
<td>$x \leq A_2$</td>
<td>$(k = 0, b = 0)$</td>
</tr>
<tr>
<td></td>
<td>$A_2 &lt; x \leq A_1$</td>
<td>$(k = 1)$</td>
</tr>
<tr>
<td></td>
<td>$A_1 &lt; x &lt; A_3$</td>
<td>$(k = 1)$</td>
</tr>
<tr>
<td></td>
<td>$A_3 \leq x$</td>
<td>$(k = 0, b = 1)$</td>
</tr>
<tr>
<td>$A_3 \leq A_1 \leq A_2$</td>
<td>$x &lt; A_3$</td>
<td>$(k = 0, b = 0)$</td>
</tr>
<tr>
<td></td>
<td>$A_3 \leq x \leq A_1$</td>
<td>$(k = 0, b = 0)$</td>
</tr>
<tr>
<td></td>
<td>$A_1 &lt; x \leq A_2$</td>
<td>$(k = 0, b = 1)$</td>
</tr>
<tr>
<td></td>
<td>$A_2 &lt; x$</td>
<td>$(k = 0, b = 1)$</td>
</tr>
</tbody>
</table>

I analyzed the actions of L based on the equality relationship between $x$ and $r$ (whether $x \geq r$ or $x < r$) in the previous two subsections. It is shown in §2.3.4 that $(k = 0, b = 0)$ is the dominant action for ratification if $x \geq r$. In §2.3.5, the conditions under which a ratification action dominates another are explicitly derived for $x < r$. These results simply tell that the following actions should be considered further to characterize the equilibrium:

$\left( x \geq r, (k = 0, b = 0) \right)$, $\left( x < r, (k = 0, b = 0) \right)$,

$\left( x < r, (k = 0, b = 1) \right)$, $\left( x < r, (k = 1) \right)$.

Hence, the equality relationships between the expected utility functions $g_r(x)$, $g_{dn}(x)$, $g_{bri}(x)$ and $g_{ref}(x)$ need to be analyzed in order to determine the conditions under which one of the four actions above is preferred by L over the others. This is done
in §B.4.

2.3.6 Characterization of \((x^*, a^*_L)\)

In this subsection, I analyze \((x^*, a^*_L)\), i.e., the offer and the ratification action at the equilibrium. Depending on the values of \(A_1\), \(A_2\) and \(A_3\), what \(L\) offers at the equilibrium changes. In the remainder of this chapter, I analyze the case where

\[
0 < A_i < 1 \quad \text{for} \quad i = 1, 2, 3. \tag{2.15}
\]

The reason for this selection is two-fold. First, if \(0 < A_i\) for \(i = 1, 2, 3\), then it is always possible to normalize the parameters such that \(0 < A_i < 1\) for \(i = 1, 2, 3\). Second, in comparison to the settings like \(A_2 \leq A_1 \leq 0 \leq A_3\) or \(A_3 \leq 0 \leq A_1 \leq A_3\), this case is more general. As will be apparent in the remainder of the analysis, the same approach can be used to derive the equilibria for other cases, too.

Next, I introduce two assumptions. In the remainder of this chapter, it is assumed that

\[
A_3 - \frac{c}{1 - p_L} \leq 0, \tag{2.16}
\]

where the left hand side of the inequality is a point that \(g_r(x)\) and \(g_{ref}(x)\) intersect.

Also, it is assumed that

\[
1 + A_1 > c. \tag{2.17}
\]

The second assumption ensures that \(x_r = \frac{1-c+A_1}{2} > 0\):

\[
1 + A_1 > c \\
1 + A_1 - c > 0 \\
\frac{1 + A_1 - c}{2} > 0 \\
x_r > 0. \tag{2.18}
\]
The actions at the equilibrium, \((x^*, a^*_L)\), are derived in detail in \(\S\)B.5. There are two equilibria of the game and the specific conditions for each are discussed next.

**Bribery Equilibrium**

The first equilibrium is coined as the *bribery equilibrium* with

\[
(x^*, a^*_L) = \begin{cases} 
(x_r = \frac{1-c+A_1}{2}, (k = 0, b = 0)) & \text{if } r \leq x_r \\
(r, (k = 0, b = 0)) & \text{if } x_r < r \leq \bar{x} \\
(x_{bri} = \frac{1+A_1}{2}, (k = 0, b = 1)) & \text{if } \bar{x} < r \leq 1, 
\end{cases} 
\tag{2.19}
\]

where

\[
\bar{x} = x_r + \sqrt{(1-x_r)^2 - \left(\frac{1-A_1}{2}\right)^2}. 
\tag{2.20}
\]

The name refers to the property of the equilibrium that there is no referendum option being utilized by the leader. This equilibrium corresponds to picture (a) in Figure 2.4. The figure depicts the offer \((x^*)\) as a function of the legislature’s resistance \(r\) and shows which action \(L\) chooses for ratification for different intervals of \(r\). While the \(x\)-axis shows \(r\), the \(y\)-axis is for the equilibrium offer \(x^*\). The interpretation of the bribery equilibrium is as follows.

- If the legislative resistance is low \((r \leq x_r)\), then the legislature is ready to accept a lower-value agreement. However, in this condition, \(L\) gives an offer that is higher than what the legislature is ready to accept \((x^* = x_r > r)\) and takes the agreement to the legislature if accepted by NP. In other words, \(L\) chooses do nothing action, \((k = 0, b = 0)\).

- If the legislative resistance is moderate \((x_r < r \leq \bar{x})\), then \(L\) offers what the
legislature asks for \((x^* = r)\) and if accepted by NP takes the agreement to the legislature for ratification (do nothing option).

- If the legislative resistance is high \((\bar{x} < r \leq 1)\), then L exercises the bribery option, \((k = 0, b = 1)\). This allows L to make an offer that is less than the resistance: \(x^* = x_{bri}\). Unlike in the other cases, L does not satisfy the legislature (by having an offer equal to at least \(r\)); instead he/she uses bribery to give more concessions to NP.

If any of the conditions below holds, then the solution of the Referendum Game is the bribery equilibrium:

\[
A_3 \leq A_1 \leq A_2,
\]

or

\[
A_2 \leq A_1 \leq A_3 \text{ and } x_{ref} = \frac{1 + A_2}{2} \geq A_3,
\]

or

\[
A_2 \leq A_1 \leq A_3, \quad x_{ref} < A_3 \text{ and } g_{bri}(x_{bri}) \geq g_{ref}(x_{ref}).
\]

Referendum Equilibrium

The second equilibrium is coined as the referendun equilibrium. As the name suggests, this equilibrium has no bribery option exercised by the leader. Figure 2.4 (b) depicts the referendum equilibrium. The actions of L at this equilibrium are

\[
(x^*, a^*_{L}) = \begin{cases} 
(x_r = \frac{1-c+ A_1}{2}, (k = 0, b = 0)) & \text{if } r \leq x_r \\
(r, (k = 0, b = 0)) & \text{if } x_r < r \leq \bar{x} \\
(x_{ref} = \frac{1 + A_2}{2}, (k = 1)) & \text{if } \bar{x} < r \leq 1,
\end{cases}
\]
where

\[ \hat{x} = x_r + \sqrt{(1 - x_r)^2 - p_L \left( \frac{1 - A_2}{2} \right)^2}. \]  \hspace{1cm} (2.23)

Similar to the former equilibrium, there are two cut-off points \( x_r \) and \( \hat{x} \) creating three resistance intervals. The interpretation of the referendum equilibrium is as follows.

- If the legislative resistance is low \((r \leq x_r)\), then L gives an offer that is higher than what the legislature is ready to accept \((x^* = x_r > r)\) and takes the agreement to the legislature if accepted by NP \(((k = 0, b = 0)).\)

- If the legislative resistance is moderate \((x_r < r \leq \hat{x})\), then L equates his/her offer to the legislature’s resistance \((x^* = r)\) and if accepted by NP, takes the agreement to the legislature for ratification \(((k = 0, b = 0)).\)

- If the legislative resistance is high \((\hat{x} < r \leq 1)\), then L goes for a referendum, \((k = 1)).\) This allows L to make an offer that is less than the resistance: \(x^* = x_{ref}\). This way, he/she can give more concessions to NP.

The condition for the referendum equilibrium is

\[ A_2 \leq A_1 \leq A_3, \ x_{ref} < A_3 \text{ and } g_{bri}(x_{bri}) < g_{ref}(x_{ref}). \]  \hspace{1cm} (2.24)

Note that both equilibria have a similar structure. The two differences are

- the cut-off points of legislative resistance beyond which L gives an offer less than the legislature’s resistance \((x^* < r)\): the cut-off points are \(\bar{x}\) for the bribery equilibrium and \(\hat{x}\) for the referendum equilibrium.

- the ratification actions chosen: bribery, \(a^*_L = (k = 0, b = 1)\), in bribery equilibrium and holding a referendum, \(a^*_L = (k = 1)\), in the referendum equilibrium.
Figure 2.4: An Illustration of (a) the bribery equilibrium, and (b) the referendum equilibrium.
2.3.7 Sensitivity Analysis of the Equilibrium

In this subsection, I discuss how the bribery and the referendum equilibria are affected by the changes in various parameters of the game. I start with the bribery equilibrium.

Bribery Equilibrium

There are three offers by the leader: \(x_r, r\) and \(x_{bri}\), see Figure 2.4. Both \(x_r\) and \(x_{bri}\) depend on the parameters of the game. Substituting \(A_1\) given in (2.8) into (B.1) leads to

\[
x_r = \frac{1 - c + A_1}{2} = \frac{1 - c + c - p\omega(p_L\theta_1 - (1 - p_L)\theta_2)}{2} = \frac{1 - p\omega(p_L\theta_1 - (1 - p_L)\theta_2)}{2} = \frac{1}{2} - \frac{p\omega p_L \theta_1}{2} + \frac{p\omega(1 - p_L)\theta_2}{2}.
\]

Similarly, substituting \(A_1\) into (B.9) leads to

\[
x_{bri} = \frac{1 + A_1}{2} = \frac{1 + c - p\omega(p_L\theta_1 - (1 - p_L)\theta_2)}{2} = \frac{1 + p\omega p_L \theta_1}{2} + \frac{p\omega(1 - p_L)\theta_2}{2}.
\]

I take the derivatives of \(x_r\) and \(x_{bri}\) given above with respect to the parameters \(p, \omega, p_L, \theta_1, \theta_2\) and \(c\). The results are given in Table 2.4.

The effects of \(\theta_1\) and \(\theta_2\) on the offers is inverse. The derivatives of \(x_r\) and \(x_{bri}\) with respect to \(\theta_1\) are equal and negative suggesting that any increase in the probability of reelection (because of \(E\) being in favor of the agreement) results in lower offers by
L in two regions. The logic behind is that if the ratification of the agreement yields a higher chance of reelection then L gives more concession to NP in order to increase the probability of NP accepting the offer. However, \( \frac{\partial x_r}{\partial \theta_2} = \frac{\partial x_{bri}}{\partial \theta_2} \geq 0 \) implies that an increase in \( \theta_2 \) leads to higher offers. Recall from §2.2 that \( \theta_2 \) is the decrease in the probability of L being reelected due to L getting an agreement not supported by E ratified. Hence, if the possible damage on L’s reelection (due to an unpopular agreement) increases then L proposes higher offers, i.e., asks for more concessions from NP.

The effects of \( p \) and \( \omega \) on the offers are similar, but more intricate. The net impact of the ratification of the agreement on the probability of reelection is \( p_L \theta_1 - (1 - p_L) \theta_2 \). If this term is positive then any increase in the probability of reelection (\( p \)) or the value of keeping the office (\( \omega \)) allows the leader to give more concessions to NP, i.e., lower offers. Otherwise, L offers higher \( x_r \) and \( x_{bri} \).

The derivatives with respect to \( p_L \) are negative. If the probability of E supporting the agreement increases then L gives more concessions, i.e., lower offers. The effect of \( c \) is different from the others: while \( \frac{\partial x_r}{\partial \theta_2} = 0, \frac{\partial x_{bri}}{\partial \theta_2} = 0.5 \). Hence, any increase in the cost of bribery only increases the offer if L chooses to exercise the bribery option. Note that \( x_r \) is unchanged if \( c \) is perturbed. Bribing the legislature consumes from the resources of the leader, so if L utilizes the bribery option then any increase in \( c \) leads to a higher offer.

**Referendum Equilibrium**

The offers in the referendum equilibrium are \( x_r, r \) and \( x_{ref} \), see Figure 2.4. Substi-
tuting $A_2$ into (B.14) leads to

$$x_{ref} = \frac{(1 + A_2)}{2} = 1 + \left(\frac{R}{p_L} + \frac{1-p_L}{p_L} m_2 - \theta_1 p_L \omega\right)$$

$$= \frac{1}{2} + \frac{R}{2p_L} + \frac{(1-p_L)m_2}{2p_L} - \frac{\theta_1 p_L \omega}{2}.$$

The derivatives of $x_r$ and $x_{ref}$ with respect to various parameters is given in Table 2.5. On the contrary to the bribery case, the derivatives of the offers are different in value, which implies the change in $x_r$ and $x_{ref}$ would be different in magnitude.

The derivatives of $x_r$ and $x_{ref}$ with respect to $\theta_1$ are both negative suggesting that an increase in $\theta_1$ leads to more concessions given to NP. Although the derivative of $x_r$ with respect to $\theta_2$ is nonnegative ($\frac{\partial x_r}{\partial \theta_2} \geq 0$), note that $\frac{\partial x_{ref}}{\partial \theta_2} = 0$.

The interpretation is as follows. If the conditions for a referendum are satisfied, any change in $\theta_2$ does not effect the value of the offer ($x_{ref}$). However, if the conditions for $x^* > r$ and do nothing hold, then an increase in $\theta_2$ results in less concessions given to NP ($x_r$ goes up as $\theta_2$ increases).

The impact of $p$ and $\omega$ on $x_r$ has already been discussed for the bribery equilibrium. The effect on $x_{ref}$ is such that any increase in $p$ and/or $\omega$ leads to a lower offer (meaning more concessions given to NP) provided that $\theta_1 > 0$. Both $\frac{\partial x_r}{\partial p_L}$ and $\frac{\partial x_{ref}}{\partial p_L}$ are negative, which implies an increase in the probability of E being FE leads to more concessions given to NP.

The cost of holding a referendum ($R$) has no effect on $x_r$, but any increase in $R$ results in a higher $x_{ref}$. $R$ consumes the resources of both L and E, so any increase in the value requires compensation on the agreement side, which translates into higher $x_{ref}$. Similarly, if the reputation-wise cost of a referendum ($m_2$) increases, this does not effect $x_r$, see that $\frac{\partial x_r}{\partial m_2} = 0$. However, if the referendum conditions are
satisfied, then any increase in \(m_2\), which can be interpreted as the risk of holding a referendum, requires an increase in the expected utility from the agreement, simply a higher offer. This implies less concessions made to NP.

Table 2.4: The derivatives of \(x_r\) and \(x_{bri}\) with respect to various parameters of the game.

| \(\frac{\partial x_r}{\partial p}\) | \(-\frac{\omega \left( p_L \theta_1 - (1 - p_L) \theta_2 \right)}{2}\) | \(\frac{\partial x_{bri}}{\partial p}\) | \(-\frac{\omega \left( p_L \theta_1 - (1 - p_L) \theta_2 \right)}{2}\) |
| \(\frac{\partial x_r}{\partial \omega}\) | \(-p \left( p_L \theta_1 - (1 - p_L) \theta_2 \right)\) | \(\frac{\partial x_{bri}}{\partial \omega}\) | \(-p \left( p_L \theta_1 - (1 - p_L) \theta_2 \right)\) |
| \(\frac{\partial x_r}{\partial \theta_1}\) | \(-\frac{p \omega}{2}\) | \(\frac{\partial x_{bri}}{\partial \theta_1}\) | \(-\frac{p \omega}{2}\) |
| \(\frac{\partial x_r}{\partial \theta_2}\) | \(-\frac{p \omega (1 - p_L)}{2}\) | \(\frac{\partial x_{bri}}{\partial \theta_2}\) | \(-\frac{p \omega (1 - p_L)}{2}\) |
| \(\frac{\partial x_r}{\partial m_2}\) | \(0\) | \(\frac{\partial x_{bri}}{\partial m_2}\) | \(0\) |

Table 2.5: The derivatives of \(x_r\) and \(x_{ref}\) with respect to various parameters of the game.

| \(\frac{\partial x_r}{\partial p}\) | \(-\frac{\omega \left( p_L \theta_1 - (1 - p_L) \theta_2 \right)}{2}\) | \(\frac{\partial x_{ref}}{\partial p}\) | \(-\frac{\theta_1 \omega}{2}\) |
| \(\frac{\partial x_r}{\partial \omega}\) | \(-p \left( p_L \theta_1 - (1 - p_L) \theta_2 \right)\) | \(\frac{\partial x_{ref}}{\partial \omega}\) | \(-\frac{\theta_1 p}{2}\) |
| \(\frac{\partial x_r}{\partial \theta_1}\) | \(-\frac{p \omega p L}{2}\) | \(\frac{\partial x_{ref}}{\partial \theta_1}\) | \(-\frac{p \omega}{2}\) |
| \(\frac{\partial x_r}{\partial \theta_2}\) | \(-\frac{p \omega (1 - p_L)}{2}\) | \(\frac{\partial x_{ref}}{\partial \theta_2}\) | \(0\) |
| \(\frac{\partial x_r}{\partial p_L}\) | \(-\frac{p \omega (1 + \theta_1 \theta_2)}{2}\) | \(\frac{\partial x_{ref}}{\partial p_L}\) | \(-\frac{R + m_3 \left( 1 - p_L \right)}{2 p_L^2} \) |
| \(\frac{\partial x_r}{\partial R}\) | \(0\) | \(\frac{\partial x_{ref}}{\partial R}\) | \(-\frac{R + m_3 \left( 1 - p_L \right)}{2 p_L^2} \) |
| \(\frac{\partial x_r}{\partial m_2}\) | \(0\) | \(\frac{\partial x_{ref}}{\partial m_2}\) | \(-\frac{1 - p_L}{2 p_L} \) |
2.4 Extensions of the Game

This section is dedicated to three possible extensions of the Referendum Game. First, I discuss how the legislature’s resistance can be extended. In the current model, resistance of the legislature $r$ is known by the leader with certainty before he/she plays any action. However, L might have a vague idea of the legislative resistance. The extent of the resistance may become clearer once the agreement is negotiated and the details are made public. In other words, the leader may not know the level of $r$ before he/she makes an offer to NP. This can be incorporated into the model by assuming a distribution function for $r$ rather than an exact value. As an example, let $r$ have three possible values: $r_l$, $r_m$ and $r_h$ satisfying $0 \leq r_l < r_m < r_h \leq 1$. While $r_h$ corresponds to a high resistance at the legislature, $r_m$ and $r_l$ are medium and low resistance, respectively. The probability distribution function of $r$ is

$$\Pr\{r = s\} = \begin{cases} 
\alpha_l & \text{if } s = r_l \\
\alpha_m & \text{if } s = r_m \\
\alpha_h & \text{if } s = r_h,
\end{cases}$$

where $\alpha_l + \alpha_m + \alpha_h = 1$. In other words, with probability $\alpha_l$, $\alpha_m$ and $\alpha_h$ the resistance of the legislature is low, medium and high, respectively. Treating $r$ as a random variable would not change the analysis in principle, but would make it more intricate. The explicit derivation of $x^*$ (offer at an equilibrium) and $a^*_L$ (ratification action at an equilibrium) would not be as neat as it is in the current model.

The second extension is the incorporation of bargaining power for NP. Due to his/her utility function, NP does not accept any offer greater than $u_0$, which is a private information to NP.\(^{12}\) The leader only knows the distribution of $u_0$, which is uniformly distributed over $[0,1]$ in the current model. By playing with the range of

\(^{12}\)Recall that the lower the offer $x$, the more preferable it is for NP.
$u_0$, it is possible to vary the stance of NP. For example, if it is assumed that $u_0$ is uniformly distributed over $[0, 0.5]$, then one can conclude that a tougher NP is in the picture compared to the one in the current model. It is not possible that this NP accepts an offer larger than half ($x > 0.5$) because the maximum value $u_0$ may obtain is 0.5. However, in the current model, $u_0$ can take any value between 0 and 1.

Finally, I discuss how the assumption given in (2.15) can easily be relaxed. Recall that $A_1$, $A_2$ and $A_3$ follow from the dominance relationship between the actions of the leader when $x < r$, see §B.2. Any of these variables being negative implies that one ratification action dominates the other for any $x \in [0, 1]$. If $A_1$, $A_2$ and $A_3$ are positive and any of them is greater than 1 (possible two of them or even all of them), then it is possible to normalize the parameters of the game such that all variables are less than or equal to 1. Hence, I believe that the case with

$$0 < A_i < 1 \quad \text{for } i = 1, 2, 3$$

is more complex and interesting. The other possible cases like $A_2 < A_1 < 0$ and $A_3 > 1$; $A_2 < A_1 < 0$ and $A_3 > 0$; or $A_2 > A_1 > A_3 > 1$ can be analyzed following the approach presented in this chapter.

\subsection*{2.5 Implications}

In the previous sections of this chapter, the actions of the players at the equilibrium are derived and analyzed in detail. I dedicate this section to the discussion of the implications of the findings from the analysis of the referendum game. First, I summarize the main results of the analysis in §2.5.1. Then, I continue with a discussion on the differences across the issue areas, more specifically comparing territorial disputes against international political economy (IPE) issues, in §2.5.2. An impor-
tant factor that varies across and within issues is the complexity of an agreement. The impact of this on the offers proposed by the leader is discussed in §2.5.3. Finally, I conclude with the explanation of how the referendum game is connected to the empirical models in §2.6.

2.5.1 Summary of the Results for the Referendum Game

The referendum game is a single-period asymmetric information game theoretical model. There are three players: the electorate (E), the leader (L) and the negotiating party (NP).\textsuperscript{13} The interaction between the players leads to two distinct equilibria: bribery and referendum. The names follow from the actions that the leader may use in each equilibrium. Some of the parameters of the game\textsuperscript{14} determine the values of $A_1$, $A_2$ and $A_3$, which follow from the dominance relationships between the leader’s actions. Depending on whether one or the other condition given in (2.21) or (2.24) is satisfied (these are mutually exclusive conditions based on $A_1$, $A_2$ and $A_3$), the equilibrium of the game is identified. Even though the actions of the electorate and the negotiating party are independent of the equilibrium that arises (whether bribery or referendum equilibrium), in the end what the leader plays may differ.

Once the equilibrium is known, the only determinant of the leader’s actions is the legislative resistance $r$. What the leader offers ($x^*$) and which action to choose for the ratification of the agreement depends on how high $r$ is, see Figure 2.4. If $r$ is low or medium,\textsuperscript{15} what the leader chooses to offer and the corresponding ratification action do not change with the type of the equilibrium. It is when $r$ is high that the

\textsuperscript{13} Although nature (N) is another player in the game, her action is restricted to the assignment of electorate’s type (FE or UFE). Hence, her action at an equilibrium can safely be ignored.

\textsuperscript{14} $p_L$: probability of the leader being reelected in the coming election; $\omega$: utility of holding office for the leader; $R$: public cost of holding a referendum (in units of utility); $c$: cost of bribing the legislature (in units of utility), $p_L$: probability of electorate being in favor of the agreement, i.e., E being type FE; $\theta_1$: increase in the probability of the leader being reelected after a referendum with an outcome yes; $\theta_2$: decrease in the probability of the leader being reelected after a referendum with an outcome no; $m_2$: reputational cost of no as an outcome of a referendum to the leader (in units of utility).

\textsuperscript{15} Referring $r \leq \bar{x}$ in the bribery equilibrium and $r \leq \hat{x}$ in the referendum equilibrium
actions of the leader differ from one equilibrium to another. If $r$ is low\textsuperscript{16} then the leader proposes an offer that is higher than the legislative resistance ($x^* > r$). Note that even though the legislature is ready to accept an offer that is low, the leader chooses to give less concessions to NP. In this case, since the offer is higher than what the legislature asks for, the offer will be ratified by the legislature. If $r$ is medium\textsuperscript{17} then the leader proposes an offer that is equal to $r$, $x^* = r$. In this case, leader’s offer is determined by the domestically accepted minimum. Similar to the case where $r$ is low, the legislature will be eager to ratify the agreement.

The leader resorts to actions that aim to convince the legislature in the case that $r$ is high.\textsuperscript{18} The logic behind this behavior is as follows. Recall that while the leader prefers higher offers ($x$), the negotiating party favors lower valued offers. Hence, the probability of NP accepting an offer is inversely proportional to the value of the offer. If $r$ is very high and the leader acts in a way to please the legislature, then the chance that it is accepted by the negotiating party is very slim. Therefore, the leader seeks for ways to convince the legislature to accept offers that are lower, i.e., making more concessions. In the bribery equilibrium, as the name suggests, the leader bribes some or all the legislature. This way, he/she can give more concessions to the negotiating party, $x^* = x_{bri} < r$. In other words, through bribery, the leader lowers the resistance at the legislature, which costs him/her valuable resources. Bribery is used here in a broader sense, such as the leader’s buying of opposition legislator’s votes, i.e. logrolling, or the use of private goods in political bargains.\textsuperscript{19}

The action for ratification in the referendum equilibrium is holding a referendum. Having a yes as an outcome of the referendum makes the offer by the leader get

\textsuperscript{16}Low corresponds to $r \leq x_r$.
\textsuperscript{17}Medium corresponds to $x_r < r \leq \bar{x}$ in the bribery equilibrium and $x_r < r \leq \hat{x}$ in the referendum equilibrium.
\textsuperscript{18}High corresponds to $r > \bar{x}$ in the bribery equilibrium and $r > \hat{x}$ in the referendum equilibrium.
\textsuperscript{19}The idea is central to much of comparative politics work, as well as, Bueno de Mesquita, Morrow, Siverson and Smith (2002) where private goods and public goods analogies were introduced to differentiate between regimes.
ratified in the legislature. Similar to the other equilibrium, the leader may give more concessions, $x^* = x_{ref} < r$, by a referendum. However, unlike in the bribery equilibrium, the outcome of the leader’s action is not certain. The electorate may vote down an agreement.

The reader will note that using the referendum or the bribery option are extreme actions in a democratic system. An important contribution of the referendum game and its findings is that it provides an explanation of how, why and when these options may be adopted. The regular course of action for the leader is to give the offer corresponding to the level of resistance in the legislature. It is not until the resistance in the legislature gets very high that the leader will need to resort to bribery or referendum.

It is difficult to say, with many parameters entering into the dynamics of the game, what the leader will do without interpreting each parameter of the game individually. Given what we know from previous empirical studies looking at legislative ratification, we need to make additional assumptions to the referendum game to be able to test its implications:

- The cost of a referendum ($R$) varies across regime type,
- The cost of bribery ($c$) varies across regime type and electoral systems,
- As the complexity of an agreement increases, the legislative resistance rises (increasing $r$) and the support of the electorate drops (decreasing $p_L$).

When testing, I also consider the relevance of the agreement to the election following the leader’s decision to make an agreement (how $\theta_1$ and $\theta_2$ influence whether bribery or referendum will be employed), in addition to the three assumptions above. The domestic institutional factors (regime type, electoral system) are all products of
these costs and relevant election variables. In order to consider the aspects of the agreements that matter for our empirical analysis, we need to first talk about the differences across the three issue areas.

2.5.2 Territorial Disputes vs. IPE Chapters

What determines the variation in the leader’s choices across the three empirical chapters are: (1) complexity of the agreement – number of points of disagreement of the treaty being negotiated, and (2) differences in the levels of legislative resistance in international negotiations with other parties. These two factors vary across international security agreements and international economic agreements. Firstly, complexity of an agreement will be less for the economic issues than for territorial disputes because the former follow more standard formats. FDI deals follow existing molds of agreements and specifications, whereas territorial dispute negotiations take longer and are tailored to individual cases. For example, the UNCTAD FDI/TNC database has all Bilateral Investment Treaties (BITs) signed between states and most firm-level investment deals are then made taking these legal frameworks into consideration when applicable.

FDI agreements are more specific than debt agreements. This is because Paris Club has various terms of agreements already drawn up in previous debtor-lender meetings which they use to reschedule or refer to when drawing up debt-relief agreements in later negotiations. At the same time, it makes sense that the complexity of the agreements also varies within the three issue areas. Complexity of the agreement influences the leader’s choice by affecting: (1) the level of resistance in the legislature (denoted by $r$ in the referendum game), and (2) the understanding of the

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20 These are called the Standardized Terms of Treatment and range from the “Classic” terms to the “Cologne” terms now replaced with the “Lyon” terms of treatment, each catering to the borrower state’s income brackets ranging from Middle-Income Countries to Heavily-Indebted Poor Countries at the very bottom as determined by the World Bank.
electorate of the issues included in the agreement (denoted by $p_L$ in the referendum game).

Secondly, the variance in bargaining power of a state when negotiating with a state vs. an MNC vs. an international (lending) organization (IO) is also demonstrated through the consistency of levels of resistance in the legislature. The resistance will be more persistently high when the leader is negotiating with an MNC than an international lending organization. This is because I assume MNCs have no sovereign power and therefore less legal clout. A lending organization such as the Paris Club, on the other hand, will have more power over a sovereign borrower than vice-versa. This will be true to the extent that the MNC is weaker than the state and the IO is a strong and capable one.

The referendum game captures this relationship through the distribution of $u_0$. The NP which the political leader is negotiating with will not accept any offer greater than $u_0$ – which is the offer threshold of not signing an agreement. If I had to elaborate, as is, this threshold is assumed to be distributed uniformly between 0 and 1. In order to show that a party has more bargaining power, I would have to assume it to be distributed uniformly between 0 and $a$, where $a < 1$. In that case, the lower the $a$, the stronger would be the NP in terms of bargaining power. It is within these theoretical boundaries that in two of the three empirical chapters I predict the optimal conditions for use of referendums by leaders when privatizing for foreign investors and when entering debt negotiations with the Paris Club.22

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21 The Paris Club is known as one of the most influential international financial organizations that helps to coordinate the lenders and borrowers, removing the problems associated with independent lending by states.

22 The IMF acts as a precursor to Paris Club agreements, where the IMF does the major negotiating with borrower states and the Paris Club states then renew their agreements on a more standard format, meeting less frequently and only when an IMF agreement has been successfully signed preceding that particular round of negotiations.
2.5.3 The Impact of the Complexity of the Agreement on the Offers

The complexity of the agreement can mean the leader will make concessions on many issues, which would mean the leader will see more resistance in the legislature. Sovereign debt agreements will be pretty standard, FDI deals will be less so and territorial disputes will be the most case-sensitive and one of a kind because of their historic, legal and geographic specificity. The complexity of the agreement promotes a willingness to go to the legislature over referendums in leaders, because of the relatively uninformed nature of electorates. It also promotes a willingness to continue negotiations as much as possible, (before or) over going to the legislature, because of the difficulties of negotiating a more complex agreement. The first point is significant, because referendums entail consulting the public, who are dependent on what they are told by their leaders and rarely have time to devote to full understanding of the details of a deal except in very crude terms. The second point is significant, because it hints at why some agreements may in fact take longer to negotiate than others.

The referendum game suggests that depending on the values of the parameters of the game \( (R, c, p_L, p, \omega, m_2, \theta_1 \text{ and } \theta_2) \), the leader ends up in a bribery or referendum equilibrium as in graphs (a) and (b) in Figure 2.4, respectively. Whichever the equilibrium, the offer being made and the action for ratification depends on the legislature’s resistance \( r \). An increase in the complexity of the agreement raises \( r \) further and lowers \( p_L \). Decreasing \( p_L \) results in the condition \( A_2 \geq A_3 \) which places the leader in the bribery equilibrium. Once there, the effects of increasing \( r \) could work to increase or decrease the offers made by the leader. On the one hand, if the resulting resistance is low or medium \( (r \leq \bar{r}) \) then the offer \( x^* \) increases, decreasing

\[\text{See how } p_L \text{ plays a role in the model.}\]
the concessions made to NP. On the other hand, if $r$ becomes too high ($r > \bar{x}$) then the leader chooses bribery for ratification and decreases his offer increasing the concessions made to NP. This last point is in line with what Morrow (1991) has already shown. Morrow (1991) notes that the offer made to the Soviet Union (or negotiating party NP) will be giving more concessions in arms control negotiations as the unemployment and inflation levels in the United States increases (as the economy performs badly). This study captures that idea through increases in the resistance of the legislature that rise with the domestic economic/security costs of the state negotiating with the NP.24

2.6 The Referendum Game and the Empirical Models

The referendum game shows how the resistance in the legislature influences the offers made. The economic and security concerns of the electorate will affect the level of resistance faced in the legislature. This is important because the resistance in the legislature and its persistence will imply whether the leader can take an agreement to referendum. The empirical models make binary comparisons of the likelihood of use of referendums and continuation of negotiations, or bribery and continuation of negotiations. The reason for this is the base outcome of doing nothing for domestic ratification or continuation of negotiations can more easily be compared to the options of bribery and referendum in empirical terms. The models do not test interaction terms (i.e., combined effects of economic and security features of agreements interacted with the effects of domestic institutions). This is due to the nature of the referendum model, as it is first of its kind in terms of tradeoffs of referendum and bribery. Taking the referendum game as its starting point, the empirical models will

compare across the issue areas the likelihood of continuing to negotiate over using referendum or bribery. These results should provide some guidance as to what types of legislative resistance (economic or security related) will be more likely to lead to referendums. Future research on referendums will be analyzing these relationships in more depth.

2.6.1 Hypotheses

The empirical study builds on the game theoretic model and seeks to test three different aspects of the game and the hypotheses derived from the game. The first is the cost of referendums ($R, m_2$), the second is the cost of bribery ($c$), and the third is the importance of the agreement for reelection ($\theta_1$ and $\theta_2$). These variables speak to three variations that explain the use of referendums by states. I make three assumptions to go from the model to the empirical hypotheses: (1) costs of referendums vary across regime types, (2) costs of bribery vary across electoral systems and regime types, and (3) importance of the agreement for reelection changes with the importance of the settlement of the issue for that particular set of elections.

The foreign policy choices that need to be explained by the theoretical model is the choice between continuing negotiations and taking the agreement negotiated in for domestic approval. The problem is that not all legislatures will agree to ratify or approve an international agreement. Therefore, as the leader is negotiating he has to make the calculation of whether to take the agreement to the legislature or directly to the voters for their approval. Once negotiations have finalized and a settlement has been agreed upon, the leader has to have the agreement approved domestically by the legislature. This approval could come from the legislature or first go to the electorate and then the legislature more indirectly. Anything approved by the electorate and then the legislature more indirectly. Anything approved by the electorate...
electorate has to be approved by the legislature (de facto or automatically) meaning that the referendum could be used to convince the legislature that the electorate would like this agreement to pass. Given the electoral motivations of political leaders, the leaders may sometimes force agreements into referendums which the legislature will have a resistance to.

The motivations of the leaders are difficult to read, however we can get at the function of the referendum by looking at the factors that were important for the choices made between negotiating and going to referendum, and between negotiating and going to the legislature.

**H1:** The more democratic the state, the more likely is the leader to use legislative approval and referendums than continuing negotiations, and the more autocratic the state, the more likely is the leader to use referendums than legislative approval than continuing negotiations.

**H2:** Among democracies, Proportional Representation systems are more likely to use continuing negotiations than legislative approval than referendums, than Plurality/Majority systems which more likely to use continuing negotiations and legislative approval than referendums.

**H3:** The more complex the agreement (or difficult to negotiate) the more likely is the leader to use legislative approval than referendums; and to choose to continue negotiations than legislative approval and referendums.
**H4:** Domestic costs of an agreement are more likely to increase resistance in the legislature and more likely to lead to continued negotiations than referendums.

**H5:** National security concerns of an agreement are more likely to increase resistance in the legislature and more likely to lead to referendums than continued negotiations.

### 2.6.2 Testing the Theory

Chapters 3 through 5 will test the referendum game with respect to the hypotheses above using three different datasets. The first dataset comes from an updated version of the Huth and Allee (2002) data between 1945-2000. The second dataset constructed for this dissertation looks at privatization decisions of strategic enterprises between 1945-2006. The third dataset constructed for this dissertation is of Paris Club borrower nations and their rescheduling decisions and meetings between 1945-2006. The datasets are all examined in monadic terms and explain legislative decisions and ratification of international agreements negotiated by leaders. The leaders whose objective is to get reelected would prefer to negotiate treaties which the electorate approves of. The study will show the effects of the regimes, electoral institutions and agreement features on the leader’s decision. It is these constraints of domestic institutions and the agreement’s influence on domestic interests as represented in the legislature that leads to the various outcomes of domestic ratification. Referendums are modeled in terms of their use by political leaders, with the goal of convincing their legislatures to ratify the agreements. If no satisfactory treaties emerge from negotiations, the leader is coded as continuing to participate in ongoing
negotiations.\textsuperscript{26}

Table 2.6.2 below is a first cut at the empirical problem modeled in the referendum game. The main explanatory variables are: DEMOCRACY (democratic regime type), AUTOCRACY (autocratic regime type), PROPORTIONAL REP (proportional representation as electoral system), PLURALITY/ MAJORITY (plurality/majority as electoral system), COMPLEXITY (complexity of the agreement), ECONOMIC COSTS (domestic economic costs associated with an agreement), and SECURITY CONCERNS (security concerns associated with an agreement). The hypotheses predict a positive relationship between complexity of the agreement and all three odds comparisons. The regime variables (DEMOCRACY, AUTOCRACY) are thought to have opposite effects to each other, on the choice between continuing to negotiate, and going to the legislature, and going to the legislature and taking the agreement to referendum. Electoral systems (PROPORTIONAL REPRESENTATION, PLURALITY/MAJORITY), with predictions more relevant to the more consistently democratic states, have positive expectations for continuing negotiations versus legislative approval, and negative for legislative approval versus referendum for PR, and negative expectations for continuing negotiations versus legislative approval, and positive for legislative approval versus referendum. The last two variables (ECONOMIC COSTS, SECURITY CONCERNS) pertain to the choice between going to referendum and continuing negotiations with opposite effects, because they both obstruct legislative approval. The empirical model cannot make predictions beyond the relationships and assumptions allowed by the referendum game. This is why some of our predictions are not applicable to this analysis. Those are relationships that we can’t presume to predict with the set up of the game and the definition

\textsuperscript{26}See also Appendix A for a list of the cases, details of the variables are included in Appendix C.
of the problem, though as the reader probably knows this is typical of multinomial logit comparisons.
Table 2.6: Referendum Decision Predictions by Explanatory Variable and Issue Area

<table>
<thead>
<tr>
<th>Variables</th>
<th>Territorial Dispute</th>
<th>Foreign Direct Investment</th>
<th>Sovereign Debt</th>
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<td>continue negotiations vs. legislative approval</td>
<td>continue negotiations vs. referendum</td>
</tr>
<tr>
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<td>+</td>
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<tr>
<td>AUTOCRACY (H1)</td>
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<td>-</td>
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<tr>
<td>PROPORTIONAL REP (H2)</td>
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<td>NA</td>
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<tr>
<td>PLURALITY/MAJORITY (H2)</td>
<td>-</td>
<td>+</td>
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<tr>
<td>COMPLEXITY OF AGREEMENT (H3)</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<td>ECONOMIC COSTS (H4)</td>
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<tr>
<td>SECURITY CONCERNS (H5)</td>
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<td>ECONOMIC COSTS (H4)</td>
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<td>SECURITY CONCERNS (H5)</td>
<td>NA</td>
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Note: A positive sign (+) indicates that in the statistical tests the estimated coefficients should be > 0; a negative sign (-) indicates that in the statistical tests the estimated coefficients should be < 0; “NA” indicates that there is no hypothesis to be tested.
CHAPTER III

‘Convincing’ the Legislature: Institutions and Conflict Behavior

In December of 1983 the Radical Civic Union’s Raul Alfonsin emerged as the newly elected leader of Argentina. His main challenge from the outset was to prove himself politically as the first democratic leader elected after two decades of military junta rule.¹ Part of that challenge involved overturning the legacy of the Peronists to make a name for himself before the next elections. The signing of the Peace and Friendship Treaty between Chile and Argentina over the Beagle Channel Dispute was the first step in demonstrating Alfonsin’s good performance in office. Even though mediation efforts on the dispute had begun by the Vatican at the end of 1979, it wasn’t until his coming that the tone of the negotiations turned positive. Argentina had already objected to the Papal proposal of 1981, but Alfonsin managed to get the April 1984 proposal approved by Congress in full. Previously, the Argentines had been wary of any ICJ (International Court of Justice) arbitration, because of their weak legal position on the disputed waters. They also did not want to go to war over this issue, although they came very close to military conflict with the Chileans in 1978. As a result of the escalation in that year, both sides agreed to have the matter resolved through mediated negotiations by year end. The referendum of November

25, 1984, then sealed the deal on the Argentine side, even though the result was not binding to the Argentine Congress. The Peronists were nonetheless forced to accept the deal after a 77% approval in the referendum. Alfonsin knew there was a good chance the agreement would be accepted by the electorate. The positive response of the electorate to the referendum campaign had reassured him of the result.

The Beagle Channel dispute was settled through the domestic and international initiatives of President Alfonsin. The President knew he had to overcome the Peronist opposition in the legislature to be able to establish any kind of staying power. This was especially difficult because of the economic situation left to Alfonsin by the past administrations. In terms of the relations between the two states, Alfonsin knew there was mistrust of Pinochet of Chile in the Argentine electorate. He also knew the legislative opposition would not allow him to pass this agreement and get credit for the agreement on a dispute that had lasted for 79 years. He tried to make a deal with the Peronists in the legislature, but the votes didn’t add up and the deals became too costly. Alfonsin then decided to convince the Peronists by other means. He carried out a referendum and found out the proposed agreement did have support in the electorate. This is a prime example of how electorates and referendums aid in domestic and international negotiations. Alfonsin’s combined goal of satisfying both Chile’s Pinochet and the Peronists was made possible by an electorate that favored that particular agreement.

This chapter explores the use of referendums in international territorial dispute negotiations. The main premise is that there are political incentives to making international agreements, to the degree that the electorate would like to see the signing of that agreement. Territorial disputes are one area where leaders choose

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to demonstrate effort to make up for domestic political accomplishments that fall short of what is required to get reelected. My argument is that referendum use will vary (1) with how complex an agreement is required by the dispute, (2) across the regime types of challengers, and (3) according to the electoral systems of challengers in territorial disputes. It is possible then to group the explanatory variables into two categories: those relating to the domestic institutional variables and those relating to the features of the agreement. My approach has implications for the study of territorial disputes and for the study of referendums in international relations.

3.1 The Argument: Referendum use in territorial dispute settlement

Convincing the legislature to approve territorial dispute settlement agreements is difficult, but this requirement works to prevent the leaders from engaging in reckless behavior in negotiations. The legislature’s approval is necessary for an agreement to pass, and is the preferred option when the leader does not know whether the electorate favors the agreement or not. Asking the electorate whether they would approve an agreement is risky, which is one of the reasons why referendums are so rare. On the other hand, asking the electorate (provided that the outcome is positive) may mean reelection for a leader who faces opposition in the legislature and does not have a good enough record to go to elections without the agreement.

There are four main points that should be taken from the success case of the Beagle Channel: (1) what happens in cases where the electorate is not supportive of the agreement; (2) what can we say about the position of the legislature in relation to the electorate’s; (3) what are the factors that might increase the resistance of the legislature, requiring additional action by the leader; and (4) what does the literature say about the tradeoff between domestic political costs it takes to convince
the legislature across various domestic institutional variables? The empirical analysis shows some of the conditions under which referendums occur. The Beagle Channel case is one out of the 32 referendum cases in my dataset. All of the referendum decisions used in the analysis are listed in Table 3.1.

In all of these cases, the resistance in the legislature was at a point that required either further bribery by the leaders or a referendum to get approval. Where referend-
dums are less costly and bribery is too expensive, referendums were carried out. In addition to the regimes and electoral systems, three other factors are deemed important to this analysis: complexity of the agreements, and the type of opposition in the legislature: economic costs of the agreement and/or security concerns of the agreement. With the Beagle Channel, the maritime extensions of the water gave the owner fishing and mineral rights. Besides the economic value of the waters surrounding the islands of Lennox, Nueva and Picton, settling the dispute would mean a serious slash of the military budget of Argentina. This fact made the Peronists, who had strong military backing, to oppose the proposed settlement proposed by Alfonsin. As the first civilian and democratically elected leader of Argentina for some time, Alfonsin took the issue to referendum. The dataset itself comes from an updated version of the Huth and Allee (2002) dataset, that has been recoded to fit the research design here. The negotiation rounds have all been reviewed and new variables have been coded to account for the variance in domestic opposition in the legislature and referendum cases. That original dataset contains 1,710 rounds of negotiations across all disputes between the years 1945 and 2006, making 8,237 country-months within all rounds of negotiations. This puts the dataset for this chapter somewhere between the sizes of the datasets for Chapters 4 and 5. The analysis is carried out on 171 cases from 188, after 17 are dropped due to bad data and/or missing information. There is an average of 10 rounds of negotiations per state. The outcome dataset is made up of 1,976 country-months.

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3—‘Argentina: Military Budget To Be Slashed After Beagle Channel Accord,’ *Inter-Press Service*, Dec 12, 1984.
3.1.1 Literature Review: The Democratic Peace: Institutional Constraints Arguments vs. Other Explanations

Democratic peace theories have emphasized the differences in behavior of democracies and autocracies in wartime (Russett 1993, Rousseau et al. 1996, Smith 1996, Bueno de Mesquita, Morrow, Siverson and Smith 1999, Bennett and Stam 2001). Current discussions in the democratic peace literature come from a long line of research on the link between domestic politics and international behavior. What was once a theoretical and empirical dispute between the structural, institutional and normative (Maoz and Russett 1993, Chan 1993, Oneal and Russett 1997, Doyle 1999) arguments for the observed regularity of the democratic peace, has lent itself to a different debate. The refined discussion features various rational choice and neo-liberal institutional arguments (BdM and Lalman 1992, Bueno de Mesquita and Siverson 1995, Rousseau et al. 1996, BdM2S2 1999, Oneal and Russett 2001) against other variants such as common interest (Farber and Gowa 1997a, Gowa 1999) and a democratic affinity/preference for peace (Gartzke 1998, Gleditsch and Hegre 1997) among democracies. More recent claims have led to a push for better specification of leaders’ own incentives and the influence of the electoral cycle. This dissertation builds on the debates where political leader incentives and electoral gain intersect. I ask: What are the domestic institutional constraints that allow the leader to manipulate domestic audiences to overturn oppositions in the legislature?

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As of late, the persistence of questions of war and variance in regime type has spilled into the intervening variable of institutions. It is thought that the determinants of public support for a leader’s actions are affected by the type of domestic institutions. The focus of these studies has also shifted to the ending and initiation of conflict, so as to better able to assess the impact of civilian leadership on what the state does to peace. The relevance of electoral cycles to conflict has also been robust across types of electoral systems (minority, coalition or majority). Auerswald (1999) compares the behavior of executives and the use of force in the face of accountability via various institutions: parliamentary, presidential and premier-presidential. 

Ireland and Gartner (2001) find that minority governments are less likely to initiate wars, while coalition and majoritarian governments are more likely to initiate. Peceny, Beer and Sanchez-Terry (2002) find no strong evidence for an autocratic peace across personalist, military or single party regimes. They say there is a need to further specify autocratic institutional variations.

The arguments these empirical results are based on depend on the theory of institutional constraints where democratic leaders have to face legislative oppositions. The assumption is that the legislature is acting on behalf of the voters, and representing their interests. But what if what the electorate wants is revealed in a

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7Ireland, Michael J. and Scott Sigmund Gartner, ‘Time to Fight: Government Type and Conflict Initiation in Parliamentary Systems,’ The Journal of Conflict Resolution, Vol. 45 (5), (Oct 2001): pp. 563, examine whether minority governments (as the most constrained of all types) should have a longer duration of peace using hazard rates and find support for monadic hypotheses; Reiter, Dan and Erik R. Tillman, ‘Public, Legislative and Executive Constraints on the Democratic Initiation of Conflict,’ The Journal of Politics, Vol. 64 (3), (Aug 2002): pp. 814, look at conflict initiation and several domestic institutional characteristics such as parliamentary vs. presidential, fraction of the public that votes and single-party majorities and find significant support for regime type but not legislative dynamics (number of parties in the legislature).
referendum? The opposition will usually not contest any international actions taken by the political leader for issues it thinks the electorate supports.\textsuperscript{11} This is because the opposition would like to share the credit from doing what the electorate wants in the next elections. Since neither side can be sure what the electorate believes on certain controversial issues until an election is actually held after an action is taken, they will not oppose a leader who they think is in sync with the electorate.\textsuperscript{12} ‘Convincing’ the legislature is not so difficult if the legislature thinks the electorate is supporting a policy introduced by the leader. Territorial dispute agreements are a typical example of what it would take to convince the legislature to make peace in the face of legislative opposition.

Separating the stages of a conflict and evaluating electoral motivations for leader helps to determine when the voters would be permitted to weigh in on territorial dispute decisions.\textsuperscript{13} The dearth of empirical evidence for the voter’s role in the domestic institutions argument in democratic peace may be remedied by looking for indirect evidence of the audience costs question in territorial disputes (Fearon 1994, 1998, Schultz 1999, 2001). Territorial disputes are an issue area which is amenable to the study of interstate crises, and empirical evidence has strongly linked domestic politics to state behavior in these disputes (Partell and Palmer 1999, Eyerman and Hart 1996, Gelpi and Griesdorf 1997).\textsuperscript{14} I show that leaders seeking reelection may use voter support to side-step more severe domestic political costs for failure, if there is strong opposition for concessions in the legislature (Gartzke 1998, Gaubatz 1999, }


\textsuperscript{12}Schultz, Kenneth, A, ‘Domestic Opposition and Signaling in International Crises,’ The American Political Science Review, 92, pp. 8.

\textsuperscript{13}Huth (1996) and Huth and Allee (2002).

Guisinger and Smith 2002). By taking the issue directly to voters, leaders may choose to give pre-approved concessions; but what about cases where the electorate is against the signing of a peace agreement for the territorial dispute?

This scenario will mean that the leader will first try to do everything it can to obtain legislative majorities in other ways. The result of a failed referendum will likely be non approval by the legislature and a loss of elections. Therefore, the costs of carrying out referendums can be quite high, which also explains why they are not more prevalent. The risks involved in carrying out a referendum suggest that the leader has to be more certain of the results before he undertakes such a confidence vote. There are many cases however, where the result was negative.16

To be able to integrate these ideas into the democratic peace, Russett and Oneal (2001) characterize the rational-choice view of liberalism as a summary of the important aspects of Kantian liberalism of (1) popular selection and (2) replacement of leaders.17 Huth and Allee (2002) equate these measures to the domestic determinants of negotiation behavior of states.18 They operationalize the two most important independent variables as one side having the majority in the legislature and the timing of electoral cycles.19 The importance of legislative majorities is also outlined in Allee and Huth (2008) as having a monotonic relationship with the amount of concessions

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19Russett and Oneal (2001) also note that Kantian liberalism includes a more comprehensive set of relationships of: loyalty to the institutions (nationalism) gained by consensus between persons and groups; legitimacy of the institutions of government (willingness to follow the laws); and obligations of the government to society (social welfare as a moral imperative). Their measures also reflect the importance of legitimacy of the government. The key role given to the legislature and the obligations of government draw attention to the role of democracy on peace or war demanding a closer examination of how well the institutions reflect the general will.
offered to the negotiating party. This comes from the idea that the leader would have to be politically secure within the state before it can make concessions on territorial dispute negotiations.\textsuperscript{20} The empirical study used here agrees that legislative majorities are an obstacle to leader success in passing agreements it would like to get domestic approval for. I am proposing that they will use a referendum or bribery to gain legislative majorities if they do not already have them.

The flip side of this is that the leader is not secure politically, meaning he/she does not hold majority support in the legislature. I suggest that the leader will then seek to use the international agreement to make up for this weakness in the next elections. Morrow (1991) proposes resistance in as an important constraint in international negotiation behavior of states in a bilateral agreement. Thus, lack of legislative support for a newly negotiated international agreement is seen as essential for the agreement to pass and help the leader in the next general election. Referendums are one way of convincing the legislature to pass an agreement, with the end result of winning the following elections.\textsuperscript{21} The goal then is to convince the legislators because once they know the electorate favors the agreement, they will have to accept the agreement, and the leader can then enter the next election with a stronger hand.\textsuperscript{22}

The timing and type of elections depend on the electoral systems, which can also mean referendums are going to be used at different frequencies.\textsuperscript{23} The office-seeking leader will be aiming to win the next elections, and what will get him there


\textsuperscript{22}Huth, Paul and Todd Allee, ‘Domestic Political Accountability and the Escalation and Settlement of International Disputes,’ Journal of Conflict Resolution, Vol. 46 (6), (Dec 2002): pp. 754-790; show the empirical importance of majority control in the legislature and electoral incentives for territorial dispute negotiations.

will be approval of the agreement by the legislature, with or without a referendum. The use of the electorate in this way suggests that the leader will be switching the principal and agent roles of an elected leader, long enough to have the electorate vote to convince the legislature. The reason why this becomes a dominant strategy is because the electorate will evaluate the incumbent leader on his performance in office, and not on whether or not he has kept his electoral promises.\textsuperscript{24} Allee and Huth (2007) find that leaders with a stronger political position will be more likely to give concessions in territorial dispute negotiations.\textsuperscript{25} Alfonsin recognized that to create a legacy for himself he would have to overcome the Peronist control of the legislature. In order to achieve this goal he used the electorate to pass the international agreement through the legislature. The referendum on the Beagle channel was a sure-fire way of convincing the legislature that the voters wanted peace and the talks were largely successful.

Alfonsin’s success in the security arena was not paralleled in economic policy; as he followed statist policies at a time when Argentina fell deeper into bankruptcy. His Beagle Channel victory was not enough to get him out of this failure. Even Menem, the Peronist leader who came after Alfonsin, switched from the statist tradition to one of privatization. He recognized the need to get the country out of bankruptcy, which Menem did by switching allegiances from unions to the business owner set in the legislature and interest groups. As a result, the Menem government was successful in pulling Argentina towards economic growth and general stabilization of the economy with the funds brought in by the privatizations.

islators and the military authorities in Argentina in the early 1980s. This is one of the reasons why Alfonsin could not obtain majority support for his measures in the legislature. Alfonsin was faced with two choices according to the principal-agent model: to prove his competency, he would have to either win over the swing votes of provincial party legislators, or seek to carry out a referendum as a show of effort to the electorate. He chose the latter option. As a political leader, he had to make the choice of using private goods to win over legislative blocks, or using a public good such as an international treaty to win over the electorate. The public good of settlement of the territorial dispute was less costly than trying to obtain majority among the MPs through logrolling and side-benefits. The use of the referendum allowed Alfonsin to convince the legislature. Alfonsin’s referendum is a way to demonstrate to the legislature what the electorate would like to have happen. The dynamics in Alfonsin’s case described so far is confirming to the equilibria result of Chapter II. The empirical study will distinguish the determinants of the use of referendums and why the leader chooses to undertake them.\footnote{Martin, Lisa, Democratic Commitments: Legislatures and International Cooperation, NJ: Princeton University Press, 2000: pp. 23-24, speaks to the effects of logrolling and side-benefits as a source of influence on legislators, who do not just care about the law.}

3.1.2 Literature Review: Political Survival, Domestic Outcomes and Type of Electorate

The use of two different groups to obtain domestic approval for policies is not new to international relations. The arguments regarding policy failure and political survival have previously examined variations across regimes in the relative sizes of selectorates and winning coalitions.\footnote{Bueno de Mesquita, James D. Morrow, Randolph M. Siverson and Alastair Smith, ‘Political Institutions, Policy Choice and the Survival of Leaders,’ British Journal of Political Science, Vol. 32, (Fall 2002): pp. 7.} The argument for the use of private goods (i.e. in kind benefits) to construct winning coalitions has two sides. It also argues that public goods (i.e. good public policies) can be an alternative method of winning over
coalitions within selectorates. The same logic applies to the Referendum Game of Chapter 2. I argue that the use of bribery to obtain majority support in the legislature is not the only option available to a leader. In fact, for leaders trying to gain electoral credit for negotiating peace, referendums can remove uncertainties which stand in the way of majority support in the legislature for the agreement.

Two main predictions can be made using their findings: Authoritarian states have smaller winning coalitions, though the benefits received by members of these coalitions are much greater than in democratic states, where the winning coalitions are larger. The leaders of the more authoritarian states have to bribe from among members of selectorates, to stop defectors from their winning coalitions. This dissertation reconciles the legislative constraints arguments of democratic peace with the winning coalition argument of the political survival literature. For democratic states, the most significant institutional constraint is that of the legislature restraining of the executive. Legislative opposition is greater for some electoral systems than others, making bribery more prevalent where oppositions occur more frequently. The electoral system is the one defining feature of democracies and their international behavior. If legislative opposition varies considerably across electoral systems, then winning coalitions may be more probable in one than the other. This makes the electoral system with less guarantee of winning coalition support more likely to use both private goods/bribery and referendums to achieve the same results. I will be examining the relationship between electoral systems and leader effort in the next section.

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28 Ibid., pp. 3-4.
29 Ibid., pp. 4-6.
3.1.3 Hypotheses

The theory suggests the following hypotheses for territorial dispute settlements:

**H1(i):** The more democratic the state, leaders are:
(a) more likely to use legislative approval than referendum;
(b) more likely to continue negotiations than legislative approval.

**H1(ii):** The more autocratic the state, leaders are:
(a) less likely to use legislative approval than referendum;
(b) less likely to continue negotiations than legislative approval;
(c) less likely to continue negotiations than referendum.

**H2(i):** Among democracies, the leaders of Proportional Representation electoral systems are:
(a) more likely to use legislative approval than referendums;
(b) more likely to continue negotiations than legislative approval.

**H2(ii):** Among democracies, leaders of Plurality/Majority electoral systems are:
(a) less likely to use legislative approval than referendums;
(b) more likely to continue negotiations than legislative approval;
(c) less likely to continue negotiations than referendums.
**H3:** The more complex the agreement (or difficult to negotiate), leaders are:

(a) more likely to use legislative approval than referendums;

(b) more likely to continue negotiations than legislative approval;

(c) more likely to continue negotiations than referendums.

**H4:** Domestic costs of an agreement are more likely to increase resistance in the legislature and leaders are:

(a) more likely to continue negotiations than legislative approval;

(b) more likely to continue negotiations than referendums.

**H5:** National security concerns of an agreement are more likely to increase resistance in the legislature and leaders are:

(a) more likely to continue negotiations than legislative approval;

(b) less likely to continue negotiations than referendums.

### 3.1.4 Empirical Models

The political crises caused by economic and security concerns of the electorate affects the leader’s choices in territorial dispute negotiations. Features of any territorial deal made with targets will have costs to the electorate. Territorial dispute agreements, as they are analyzed here, have to follow formats established in previous studies. The more popular ways of resolving disputes among states include: (1) escalation of military conflict, where the winner takes ownership of the disputed
territory, and (2) adjudication in international courts (typically, the ICJ or ECJ\textsuperscript{32}), which use legal rules and codes established by international law to identify the legal owner of the disputed territory.\textsuperscript{33} The logic of this chapter is that only cases passing these two criteria qualify for referendum use. According to Huth and Allee (2002), actors in territorial disputes are divided into challengers and targets of the dispute at various times. By methodological design, the challengers are defined as those without legal possession of the area, but with continued claims to ownership. The claims are specified as challengers of the status quo state of ownership. This is the reason for including the binary military capabilities ratio variable in the analysis. This variable (\textit{milbin}) controls for the military discrepancy between the sides included in the analysis.

The targets are typically the militarily stronger side. The assumption is that, no challenger would wait with a claim to the territory, but would take it over using its relatively strong military capabilities. This would be true, unless the target has a strong legal claim to the territory (such as would be proven with evidence of historic ownership). In which case, the issue would have already been resolved and would have to be domestically ratified through use of legislative approval, in accordance with the rules and decisions of an international court. The statistical model accounts for the military differences between the sides, by the inclusion of the explanatory variable called \textit{milbin}. For the military capabilities relationship to hold, the military capabilities of the challenger have to be greater than the target’s by a ratio of 0.4.

The empirical model thus builds upon the Referendum Game of Chapter 2. The domestic institutional variables to be tested are democracy and autocracy in

\textsuperscript{32}European Court of Justice
Model 1. The electoral systems variables are proportional representation and plurality/majority as in Model 2.

The general formula of equations to be estimated in Model 1 are as follows:

**Model 1:**

\[
Y_{ij} = \beta_0 + \beta_1(milbin) + \beta_2(democracy) + \beta_3(autocracy) \\
+ \beta_4(complexity) + \beta_5(economiccosts) \\
+ \beta_6(securityconcerns) + \beta_7(ethnicvaluedterritory) \\
+ \beta_8(stalematedtalks5yr) + \varepsilon,
\]

where

- \(Y_{ij}\) = domestic political outcome,
- \(milbin\) = challenger to target military capabilities ratio,
- \(democracy\) = democratic regime,
- \(autocracy\) = autocratic regime,
- \(complexity\) = complexity of an agreement,
- \(ethnicvaluedch\) = dummy for ethnically valued territory for the challenger,
- \(stalematedtalks5yrs\) = dummy for stalemated talks of five years,
- \(economiccosts\) = domestic economic costs of an agreement,
- \(securityconcerns\) = security concerns associated with an agreement,
- \(commonopponent\) = dummy variable for challenger and target having a common opponent.
The control variables used for the territorial disputes study are conceptual aspects of territorial settlements that were important in Huth and Allee (2002) and Huth and Allee (2007). The two that were significant were ethnic valued territory dummy \((\text{ethnicvaluedterritory})\) and stalemated talks of 5 years dummy \((\text{stalematedtalks5yrs})\). These variables relate an aspect of the dispute and an aspect of the negotiations to domestic ratification.

### 3.2 Data Analysis and Results

There are three possible outcomes that are not clearly ordered. Hence, a model that treats outcomes as nominal instead of ordinal is required, so I utilize a multinomial logit model. The primary drawback of multinomial logit is the fairly restrictive independence of irrelevant alternatives (IIA) assumption. However, I employ the best-known Hausman test of IIA assumption and all the models pass this test. The multinomial logit coefficients estimated by Stata for Model 1 and 2 are given in Tables 3.2 and 3.4, respectively. I also present the discrete change results to facilitate a better interpretation of variable effects in Tables 3.3 and 3.5. Moreover, these tables provide the impact of a unit change in the explanatory variables on certain outcomes, by holding all other variables constant at their means.

Table 3.2 presents the results of the empirical test of Model 1 of the territorial disputes hypotheses. For democracies, legislative approval over referendum yields a coefficient of -3.226, continuing negotiations over legislative approval gives 0.712, and continuing negotiations over referendum yields -2.514. This means a democratic leader is more likely to choose referendums over legislative approval and continuing negotiations (with high relative risk ratios), and continuing negotiations over legislative approval. For autocracies, I am assuming there is a legislative body (this
could be the leader’s advisory council for dictatorships and monarchies) and/or the
governing party (in single-party autocracies or military-style autocracies) which the
leader consults before settling a territorial dispute. The results for autocracies are
different from the ones for democracies: referendums are more likely to be chosen
over legislative approval and continuing negotiations (with high relative risk ratios,
but less than the ones for democracies), but legislative approvals are more likely to
be selected over continuing negotiations. Autocracies seem to want to avoid nego-
tiations as much as possible. Democratization effects become more apparent from
the results in Table 3.3. If the main (binary) explanatory variable of democracy is
increased from 0 to 1, the probability of choosing legislative approval drops by 50.5%
while referendum probability goes up ten-fold, which is twice as much as a unit in-
crease in autocracy. The large jump in probability of using referendums due to the
change in regime is an interesting result, supporting the conclusions from Table 3.2.

With regards to the features of the agreement variables, the first one I consider
is complexity of the agreement (measuring difficulty of negotiation, multiple issues).
The results show that complex territorial agreements are less likely to continue nego-
tiations before referendums and legislative approval, and less likely to seek legislative
approval before referendums. This result has the opposite effect than expected, and
complexity in territorial agreements does not mean the negotiations will take longer.
In fact, leaders will be anxious to get whatever has been negotiated ratified before
more issues arise. In doing so, they choose to have the legislature approve the mea-
ure, before they would consider referendums. As can be observed in Table 3.3, one
unit change of complexity increases the probability of the leader holding a referen-
dum by 221.1%. We can say that referendums of territorial disputes do become more
likely with a rise in the complexity of the agreement. I attribute this to failures by
the legislators to give a majority support (in the legislature) for any agreement with
multiple points of contention among MPs.

The Referendum Game of Chapter 2 lays out what incentives legislative resistance
poses to the leader’s efforts to get approval for a negotiated agreement. The model
accounts for legislative resistance through two variables: economic costs the agree-
ment will bring, and the national security implications of the negotiated agreement.
The results of Table 3.2 demonstrate that: (1) legislative resistance caused by high
economic costs will not prevent agreements from going to the legislature (a leader
prefers legislative approval over referendum and continuing negotiations with respec-
tive positive coefficients of 1.584 and 0.207), but (2) legislative resistance caused
by high security concerns will prevent leaders from seeking legislative ratification (a
leader prefers referendums over the other two options with coefficients of 1.393 and
2.104). The findings show that security concerns of territorial peace agreements are
more conducive to referendums, than economic costs. The referendums help convince
disparate legislatures, where majority support is difficult to obtain. This argument
is supported by the results of the discrete change analysis of Table 3.3. (Note how a
unit change in security concerns increases the probability of referendums more than
six-fold.)

The control variables of Table 3.2 are dummies for ethnically valued territory
for the challenger, stalemated talks of five years, and the existence of a common
opponent between the challenger and target. If the territorial settlement is being
negotiated over territory containing ethnic co-nationals for the challenger, then the
political leader of the challenger state will be less likely to choose legislative approval
over referendums. These disputes will also lead to lesser odds of choosing legislative
approval and referendums over continued negotiations. This implies that the strong
Table 3.2: MNML Challenger Concessions in Negotiations: Model: Domestic Institutional Outcomes Model 1.

<table>
<thead>
<tr>
<th></th>
<th>legislative approval vs. referendum</th>
<th>continue negotiations vs. legislative approval</th>
<th>continue negotiations vs. referendum</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILBIN†</td>
<td>-0.429 (0.176)*</td>
<td>-0.195 (0.083)*</td>
<td>-0.624 (0.160)**</td>
</tr>
<tr>
<td>DEMOCRACY</td>
<td>-3.226 (0.345)**</td>
<td>0.712 (0.114)**</td>
<td>-2.514 (0.329)**</td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td>-1.828 (0.344)**</td>
<td>-0.051 (0.094)</td>
<td>-1.879 (0.334)**</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>-1.130 (0.282)**</td>
<td>-0.052 (0.109)</td>
<td>-1.182 (0.264)**</td>
</tr>
<tr>
<td>ECONOMIC COSTS</td>
<td>1.584 (0.288)**</td>
<td>-0.207 (0.121)</td>
<td>1.377 (0.265)**</td>
</tr>
<tr>
<td>SECURITY CONCERNS</td>
<td>-1.393 (0.271)**</td>
<td>-0.712 (0.090)**</td>
<td>-2.104 (0.257)**</td>
</tr>
<tr>
<td>ETHNIC VALUED CH</td>
<td>-0.071 (0.180)</td>
<td>0.205 (0.079)**</td>
<td>0.134 (0.166)</td>
</tr>
<tr>
<td>STALEMATED TALKS 5 YRS</td>
<td>-0.482 (0.190)*</td>
<td>-0.149 (0.078 ‡)</td>
<td>-0.631 (0.177)**</td>
</tr>
<tr>
<td>COMMON OPPONENT</td>
<td>-0.809 (0.195)**</td>
<td>0.396 (0.102)**</td>
<td>-0.413 (0.172)*</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>5.314 (0.485)**</td>
<td>2.629 (0.136)**</td>
<td>7.943 (0.470)**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>LR χ²(18)</th>
<th>Prob &gt; χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>legislative approval vs. referendum</td>
<td>8237</td>
<td>433.97</td>
<td>0.000</td>
</tr>
<tr>
<td>continue negotiations vs. legislative approval</td>
<td>8237</td>
<td>433.97</td>
<td>0.000</td>
</tr>
<tr>
<td>continue negotiations vs. referendum</td>
<td>8237</td>
<td>433.97</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: ‡p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001, two tailed test. Standard errors are in parentheses. Hausman test of IIA assumption: finds no evidence to reject IIA.
No evidence has been found to reject the assumption of independence of irrelevant alternatives (IIA) by Hausman test.
†: binary variable = 1 if ratio of military capabilities of challenger greater than 0.4 of target’s capabilities, 0 otherwise.
<table>
<thead>
<tr>
<th>Variable Value</th>
<th>Probabilities of Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>legislative approval</td>
</tr>
<tr>
<td>MILBIN</td>
<td>from: 0 (capratio&lt; 0.4)</td>
</tr>
<tr>
<td></td>
<td>to: 1 (capratio≥ 0.4)</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
</tr>
<tr>
<td>DEMOCRACY</td>
<td>from: 0 (not democratic)</td>
</tr>
<tr>
<td></td>
<td>to: 1 (democratic)</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td>from: 0 (not autocratic)</td>
</tr>
<tr>
<td></td>
<td>to: 1 (autocratic)</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>from: 0 (less complex)</td>
</tr>
<tr>
<td></td>
<td>to: 1 (more complex)</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
</tr>
<tr>
<td>ECONOMIC COSTS</td>
<td>from: 0 (no)</td>
</tr>
<tr>
<td></td>
<td>to: 1 (yes)</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
</tr>
<tr>
<td>SECURITY CONCERNS</td>
<td>from: 0 (no)</td>
</tr>
<tr>
<td></td>
<td>to: 1 (yes)</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
</tr>
<tr>
<td>ETHNIC VALUED CH</td>
<td>from: 0 (no)</td>
</tr>
<tr>
<td></td>
<td>to: 1 (yes)</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
</tr>
<tr>
<td>COMMON OPPONENT</td>
<td>from: 0 (no)</td>
</tr>
<tr>
<td></td>
<td>to: 1 (yes)</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
</tr>
<tr>
<td>STALEMATED TALKS 5 YRS</td>
<td>from: 0 (no)</td>
</tr>
<tr>
<td></td>
<td>to: 1 (yes)</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
</tr>
</tbody>
</table>
attention paid to ethnic co-national habited territory will make the leader seek the best possible result before settling. As soon as there are terms acceptable to both sides, the leader will seek legislative approval. Only if there is difficulty obtaining legislative support, will there be an attempt at a referendum. We can tell from the unit change in ethnicity ($\text{ethnicvaluedch}$ increasing from 0 to 1), the probability of referendum increases by almost 16.8%, and legislative approval by 10.7%. The problem with these results is that the multinomial logit coefficients for the first and third column are not statistically significant.

Territorial disputes have been known to go on for decades, but the other dimension of talks is the progress made. To account for this, the second control variable is that of stalemated talks. Continued negotiations is not always a sign of progress towards a settlement. As we know from really long border conflicts, more negotiations could mean greater disagreements on issues.\textsuperscript{34} Results of Model 1 show that referendums are preferred to legislative approval (with a coefficient of 0.482) and continued negotiations (with a coefficient of 0.631) if the talks have been dead for some time. Moreover, a leader is 1.160 times more likely to prefer legislative approval over continuing negotiations. The results of Table 3.3 also support these findings: a discrete change in stalemated talks yields 84.3% and 13.8% increase in the respective probabilities of holding a referendum and seeking legislative approval. I interpret stalemated talks of five years as being stalled talks. The findings from Tables 3.2 and 3.3 simply say that leaders are eager to resolve these stalled territorial disputes, so they restore to domestic approval (referendum or legislative ratification), which serve as an alternative to continuing and prolonged negotiations.

The last control variable is the existence of a common opponent between thechal-

\textsuperscript{34}For examples see Appendix A for length of conflicts in years of Argentina’s disputes with its neighbors (i.e. Chile, Uruguay and Paraguay), and China’s disputes with some of its colonists (i.e. Britain, Portugal and France). Most of these disputes been around since 1919.
Exponentiating the coefficients in Table 3.2 leads to the following interpretations: a leader is (1) 2.246 times more likely to choose referendum over legislative approval, (2) 1.511 times more likely to choose referendum over continuing negotiations, (3) 1.486 times more likely to continue negotiations than to seek legislative approval. The results of Table 3.3 are in agreement with Table 3.2. All these suggest that referendums will be more often chosen if there is a common opponent with the target of the territorial agreement.

Overall, Model 1 supports the expectations laid out at the end of Chapter 2, in Table 2.6.2. The results are mostly significant except for the complexity variable, and some of the negotiations vs. legislative approval comparisons. Model 2 analyzes the choices of domestic approval for a bilateral agreement across electoral systems. The electoral systems of democracies are compared to autocracies in their use of referendums. What is interesting about this model is the option it provides of comparing leader behavior across electoral systems within democracies. The general formula of equations to be estimated in Model 2 are:

\[
Y_{ij} = \beta_0 + \beta_1(milbin) + \beta_2(proportional\ representation) + \beta_3(plurality/majority) + \beta_4(autocracy) + \beta_5(complexity) + \beta_6(economic\ costs) + \beta_7(security\ concerns) + \beta_8(ethnic\ valued\ territory) + \beta_9(common\ opponent) + \beta_{10}(stalemated\ talks5\ yrs) + \varepsilon,
\]

where
\( Y_{ij} \) = domestic political outcome,

\textit{milbin} = challenger to target military capabilities ratio,

\textit{proportionalrep} = proportional representation system,

\textit{plurality/majority} = plurality/majoritarian system,

\textit{autocracy} = autocratic regime,

\textit{complexity} = complexity of the agreement,

\textit{ethnicvaluedch} = dummy for ethnically valued territory for the challenger,

\textit{stalematetalks5yrs} = stalemated talks of 5 years,

\textit{economiccosts} = domestic economic costs of an agreement,

\textit{securityconcerns} = security concerns associated with an agreement,

\textit{commonopponent} = dummy variable for challenger and target having a common opponent.

Table 3.4 shows the results of Model 2 testing for territorial disputes and domestic approval choices of leaders from Huth and Allee (2002) data. The empirical findings are mostly consistent with that hypothesized, this time across the leader’s options of trying to resolve the dispute with the other negotiating party. The first explanatory variable of Proportional Representation (PR) systems reveals that the leaders in those electoral systems are more likely to go to legislative approval before wanting to continue negotiations. In the same binary comparison of outcomes, leaders of Plurality/Majority (PLMAJ) systems have a higher log odds of choosing to continue negotiations over legislative approval (compare the log odds of -0.053 for PR and 0.575 PLMAJ). This suggests that legislative approval is the preferred option for
territorial disputes for the PR systems, but not so much for the Plurality/Majority systems. Moreover, PR system leaders are also 1.189 times more likely to choose to go for legislative approval than referendums, while PLMAJ system leaders are going to be more in favor of choosing referendums over legislative approval with an odds of 5.452. What does match with my predictions is the tendency of PR systems to want to go to the legislature first, and continue negotiations as the second best option. The results of Table 3.5 support these conclusions: The probability of a leader choosing legislative approval increases by 5.1% (decreases by 42.8%) while the chance of selecting referendums decreases by 11.6% (increases by 211.8%) when a unit change is introduced for PR (PLMAJ) variable.

Another important aspect of these results is the insignificance of the coefficients for Proportional Representation systems. Table 3.4 shows that Plurality/Majority systems are more significant, at the $p < 0.001$ level for legislative approval over referendums, and negotiations over referendums; and at the $p < 0.05$ level for continuing negotiations over legislative approval. A second disappointing result is that of complexity. Once again complexity is negative in relation to all three binary comparisons (with coefficients -0.952, -0.103 and -1.055). This result echoes the complexity as a feature of agreements result of Model 1 above. The findings together indicate that the more complex agreements will not be leading to the longest territorial dispute negotiations. Instead, we should expect there to be resolutions via legislative approval or referendums as early as possible. The result comparing options legislative approval against referendum indicates that the leader is 2.591 times more likely to remain with the referendum option. The increase of 181.2% in the probability of choosing referendums in case of a unit increase in the complexity variable in Table 3.5 is in line with the preceding observation. This is reminiscent of the earlier inter-
interpretation that difficulties of negotiating disputes with many issues will prompt the leader to go for referendums before all else.

The other two features of territorial agreements looked at were the economic and security costs incurred by approving a particular agreement. The theoretical model did not make a prediction about the preference of legislative approval versus referendums, and continuing negotiations versus legislative approval (see the column of NA predictions for these variables from Table 2.6.2). The oppositions to the economic and security dimensions of territorial agreements yield the following coefficients: 1.228 and -1.291. These results mean referendums will be preferred over legislative ratification for strategic concern based legislative oppositions; and legislative approval will be sought for economic based legislative oppositions. The second column brings a result in favor of continuing negotiations over legislative approval for both agreement features with -0.078 and -0.775. Again with security concerns having greater affect on the choice of the leader to seek legislative approval before negotiations.

Of the two predictions made regarding the type of legislative opposition, the economic concerns variable on the negotiations over legislative approval does not hold up. The theory predicts that economic demands from territorial agreements would make it difficult to seek legislative approval at any one point. The reason for this prediction is the chance that economic issues may be a serious obstacle to settlements. The results show that economic issues will lead to leaders continuing negotiations with odds of 0.924 over legislative approvals. The case study used earlier is an example of this, as in Adenauer’s choice of going to the legislature, over the Paris Accords in 1954 as outlined in the introductory chapter (Chapter 1). The agreement negotiated by the leader of the challenger government will drop the option
of continuing to negotiate in favor of legislative approval. I presume the negotiations in the face of the economic costs, led the leader to seek legislative approval.

If the opposition is economic, then the leader will prefer to continue negotiations with odds of 3.158, and go to referendums with odds of 0.316. If the opposition to the agreement is sourced in national security concerns, then the leader has odds of 3.636 times more likely to go to referendum before legislative approval, and 2.171 times more likely to go for legislative approval instead of continuing negotiations. The leader will choose referendum than continue negotiations by almost eight times. Thus, security concerns will be more likely to go to referendums first, then legislative approval, then resuming negotiations. The results of Table 3.5 suggest that a unit increase in economic costs (security concerns) yields to -68% (620.2%) change in the probability of referendums, and 1.2% (-8.8%) change in the chance of continuing negotiations. The analysis for the two variables reveals that economic concerns will not be going to referendums as much as opposition to approval by security measures of an agreement. Therefore, we can say that the two types of oppositions get differing responses from the leader. The economic reasoned legislative resistance leads to less referendums and longer negotiation periods; and the security based legislative resistance leads to more referendums and shorter negotiations.

The control variables of Chapter 3, both for Models 1 and 2, are the ethnic value of a territory for the challenger, stalemated talks of five years and the existence of a common opponent for the challenger and target. The results show that the presence of ethnic co-nationals on a territory will make the leader of the challenger state less likely to seek referendums to convince the legislature, and less likely to seek legislative approval. Ethnic territories are deemed to have the most public attention, for Huth (1996) and Huth and Allee (2002). Their results had revealed that leaders are going
Table 3.4: MNML Challenger Concessions in Negotiations: Domestic Institutional Outcomes Model 2.

<table>
<thead>
<tr>
<th></th>
<th>legislative approval vs. referendum</th>
<th>continue negotiations vs. legislative approval</th>
<th>continue negotiations vs. referendum</th>
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</thead>
<tbody>
<tr>
<td>MILBIN †</td>
<td>-0.825 (0.186)***</td>
<td>-0.086 (0.084)</td>
<td>-0.911 (0.171)***</td>
</tr>
<tr>
<td>PROPORTIONAL REP</td>
<td>0.173 (0.292)</td>
<td>-0.053 (0.130)</td>
<td>0.119 (0.269)</td>
</tr>
<tr>
<td>PLURALITY/MAJORITY</td>
<td>-1.696 (0.308)***</td>
<td>0.575 (0.228)*</td>
<td>-1.120 (0.223)***</td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td>0.326 (0.206)</td>
<td>-0.409 (0.086)***</td>
<td>-0.083 (0.191)</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>-0.952 (0.290)***</td>
<td>-0.103 (0.167)</td>
<td>-1.055 (0.274)***</td>
</tr>
<tr>
<td>ECONOMIC COSTS</td>
<td>1.228 (0.293)***</td>
<td>-0.078 (0.120)</td>
<td>1.150 (0.272)***</td>
</tr>
<tr>
<td>SECURITY CONCERNS</td>
<td>-1.291 (0.273)***</td>
<td>-0.775 (0.091)***</td>
<td>-2.067 (0.260)***</td>
</tr>
<tr>
<td>ETHNIC VALUEDCH</td>
<td>0.182 (0.175)</td>
<td>0.142 (0.078)†</td>
<td>0.323 (0.162)‡</td>
</tr>
<tr>
<td>STALEMATED TALKS 5 YRS</td>
<td>-0.580 (0.187)***</td>
<td>-0.103 (0.077)</td>
<td>-0.682 (0.174)***</td>
</tr>
<tr>
<td>COMMON OPPONENT</td>
<td>-0.691 (0.196)***</td>
<td>0.395 (0.103)***</td>
<td>-0.296 (0.172)†</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>3.155 (0.361)***</td>
<td>2.952 (0.130)***</td>
<td>6.107 (0.342)***</td>
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<th>N=8237</th>
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<tr>
<td>LR $\chi^2$(20)</td>
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<td>349.79</td>
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<tr>
<td>Prob &gt; $\chi^2$</td>
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<td>0</td>
<td>0</td>
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Note: †p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001, two tailed test. Standard errors are in parentheses. Hausman test of IIA assumption: finds no evidence to reject IIA in model 2. No evidence has been found to reject the assumption of independence of irrelevant alternatives (IIA) by Hausman test. †: binary variable = 1 if ratio of military capabilities of challenger greater than 0.4 of target’s capabilities, 0 otherwise.
<table>
<thead>
<tr>
<th>Variable Value</th>
<th>Probabilities of Outcomes</th>
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<td>PLURALITY/Majority</td>
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<td>Stalemated Talks 5 Yrs</td>
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to be more persistent in their attempts at diplomacy for ethnic valued territory.\textsuperscript{35} The findings here support their conclusion that territory with ethnic co-nationals will have more magnified support from the public than they would otherwise since they attract more of public’s attention. These disputes are 1.2 times more likely to be resolved by legislative approval than referendums, and would lead to continued negotiations more than 1.381 times it goes to referendums. As I discussed for Model 1, under the light of these results, I conclude that ethnic co-national habited territory will make the leader seek the best possible result before settling, hence, the leader will prefer to continue negotiations.

Stalemated talks, an often cited reason for prolonged negotiations in territorial disputes, has values very close to those predicted with Model 1. Among the three option available to the leader, the binary comparisons reveal that referendums will be chosen over legislative approval over continued negotiations. Common opponents, a third control variable make referendums prevail over legislative approval and continued negotiations. This suggests that leaders will be more eager to settle with another state that has the same enemy as them. Observe that when common opponent variable has a discrete increase from 0 to 1 in binary variable \textit{commonopponent}, the probability of legislative approval shows a decrease of 30.7\% (from 0.100 to 0.069), while the probability of referendum increases by 38.4\% (from 0.012 to 0.016). Adenauer and Mendes-France’s choice of referendum is supportive of this finding, because both legislatures were aware of the dangers posed by the Soviets in Europe in the post-World War II period. I attribute the referendum on the Saar to this common purpose. This referendum then led to the eventual acceptance of the the Paris Accords by both legislatures.

\textsuperscript{35}Huth and Allee (2002), pp. 78-80, 157 and 186.
3.3 Conclusion

Empirical testing of the two models reveals that barring the complexity variable in both models and the PR variable in Model 2, the data is supportive of the theoretical predictions of the referendum game. Therefore, Chapter 3 has the following implications for our hypotheses:

For **Model 1**, we do not reject: $H_{1i}(b), H_{1ii}(a), H_{1ii}(b), H_{1iii}(c), H_{4}(b), H_{5}(a), H_{5}(b)$; and can reject $H_{1i}(a), H_{3}(a), H_{3}(b), H_{3}(c)$, and $H_{4}(a)$.

For **Model 2**, we do not reject: $H_{2i}(a), H_{2ii}(a), H_{2ii}(b), H_{2ii}(c), H_{4}(b), H_{5}(a), H_{5}(b)$; and can reject $H_{2i}(b), H_{3}(a), H_{3}(b), H_{3}(c)$, and $H_{4}(a)$.

The analysis here uses existing data and contributes the following to the discussion in territorial disputes: (1) it introduces a first cut set of predictions and results to what the domestic political causes of referendum use in territorial disputes might be; (2) it examines the domestic processes behind legislative approval of negotiated territorial agreements; and (3) it highlights the leader’s own role in achieving domestic ratification for agreements being negotiated.
CHAPTER IV

Resisting Globalization: Domestic Institutions & [Electoral] Influence

Uruguayan voter’s rejection of the proposal for a Public Enterprises Law of December 9, 1992, was the major determinant of the country’s future course of privatization and economic openness. The referendum went against the law with 72% of the votes, choosing to reject the five part proposal. The law would have aided in the government’s attempts to forge an oil policy allowing the monopoly ANCAP to partially privatize 49% of the state owned oil company. The more immediate auction for the telecommunications firm ANTEL would go through.¹ Luis Alberto Lacalle’s loss in the referendum meant the legislature would not be passing any laws on privatization for some time to come. Moreover, his main opposition in the legislature, Julio Sanguinetti of the Colorados gained some ground to win over the next general elections.²

As a result of the vote, Lacalle’s five year term met with serious obstacles, in the end, leading his party to lose the following elections. The president’s reason for undertaking the referendum was to overcome the domestic opposition to market reforms. The opposition groups included unions, students and center-left politicians.³

³—‘In Uruguay, a puzzling vote over privatization,’ Agence France Presse, July 5, 1992.
The Broad-Front (‘Frente-Amplio’) opposition coalition carried out a strong campaign against the referendum. The campaign focused on slogans such as ‘Don’t sell your country’ and ‘Keep foreigners out’, with strong support across the board. Instead of privatization, what the voters wanted was a continuation of the socialist traditions, such as life-long employment. Uruguay’s example demonstrates how crucial legislative support for privatization is for a political leader when in negotiations with foreign investors.\(^4\) The referendum was initiated as a result of the gridlock of the three main parties in parliament. In the November 1994 elections that followed, the lack of progress in privatization in Lacalle’s term put an end to the reputation of Lacalle as the most free-market oriented president of Uruguay.

4.1 Use of referendums to privatize

The entry of foreign direct investment (FDI) imposes two decisions on the political leader: identifying and deciding upon (1) the domestic beneficiaries of the privatization and (2) the foreign awardees of the investment. Lacalle was hoping to find a long-term solution to the economic problems creeping up on Uruguay through this law. The referendum game of Chapter 2 explains that domestic institutions can account for the choice of ratification mechanism of the leader. Privatization with foreign capital demands that the leader consider both economic and political aspects of any deal and decide accordingly. Legislative oppositions often represent strong interest groups, as labor unions and those to be unemployed after restructuring in the enterprises.\(^5\) They will also campaign against privatizations on grounds of se-

\(^4\) —Politics gridlocked as 3 parties wrestle; Runaway statism can’t be reined in, ‘The Washington Times’, January 7, 1996.

\(^5\) Henisz, Witold J., and Edward D. Mansfield, ‘Votes and Vetoes: The Political Determinants of Commercial Openness,’ International Studies Quarterly, Vol. 50 (1), 2006: pp. 200, mentions others who have looked at domestic fragmentation and trade policy and uses a Political Constraints variable by Henisz, measuring the likelihood of disagreement between the executive and one or more institutional veto points. This variable does not fit the research design used here, but will be used in future studies; Biglaiser, Glen and David S. Brown, ‘The Determinants of Privatization in Latin America,’ Political Research Quarterly, Vol. 56 (1), (Mar 2003): pp.81-82, speaks to domestic legislative opposition, and pp. 85, examines the delay in ANTEL’s (national telecommunications) sale in Uruguay.
curity interests of the state and sovereignty over natural resources. These criticisms will influence the leader’s decision to go to referendum over the difficult issues of privatization.

What makes foreign direct investment (FDI) decisions even tougher for the political leader is identifying which groups will bear the costs of the privatization. Making these decisions is costly in electoral terms. The reelection plans of any leader can be upset by those who have lost their jobs or capital in the privatizations. The challenge for the leader is to be able to balance these distributional concerns before agreeing to any foreign investment deals. The pressures are lessened for cases where privatization was only open to domestic investors. The difficulties multiply when foreign investors are included in the sales. The fear of voters includes exploitation of natural resources and local labor by foreign firms. This aspect of privatizations makes referendums on the sales more controversial. Legislative opposition could be dealt with using backroom deals to bribe opposition to privatizations. By removing the domestic critics of privatizations in the legislature, the leader can ensure the privatization deal will be passed through. Studies on FDI note patterns in variance of legislative opposition. The opposition can sometimes be caused by the unequal distribution of economic burdens of privatizations. Similarly, the inflow of funds due to legislative resistance to privatization.


7The use of referendums in privatization is not a new concept. Leaders may choose to carry out referendums to mitigate some of the electoral costs of the privatization. By giving the whole of the electorate a say in the privatization, the leader is getting approval before doing something the electorate does not want. The implication is that the electorate will have an idea of how much of the privatization deal is made with foreign investors, and whether they themselves will be hurt by the sale. The identity of the foreign party in a privatization is generally not made public to protect the deals. The most the electorate will be asked to vote on, is whether or not a state owned enterprise should be privatized. The electorate is not assumed to understand the details of the privatizations, though they would know the general outlines of the deals as explained to them by the political leaders.

8Biglaiser, Glen and Karl DeRouen, Jr., ‘Security, Property Rights and US Foreign Direct Investment,’ Working Paper, (Nov 2005): pp. 7 argues that political stability caused by regime type is an important explanatory variable for FDI in other studies; pp. 17, finds defense alliances a significant predictor of U.S. Foreign Investors. They emphasize the security interests can complicate FDI deals.
from privatization usually goes to the treasury, but many privatization deals end up with corruption scandals. This tends to occur when leaders try to distribute the windfalls of the privatizations to please legislative supporters and others within the enterprises. Managements of state enterprises that are privatized, will often get rewarded or bribed if they support the privatization.

Many emerging market states have had varying degrees of success with regards to privatization negotiations. The challenge for the leader is to find an agreement that satisfies both domestic voters and the negotiating party or firm. The advantage for the leader is that he (or his negotiators) determine how the privatization will be carried out (floating of shares on local or international stock markets, bilateral negotiations with a firm of choice or auctions). These methods vary by the choice they give to the privatizing state over how much control they want to keep: such as ability to limit the amount of offers coming in, the option to reject more than one bid in an auction, the choice of how much of the shares will be sold as stock, and the ability to announce bid floors before auctions. The role of the legislative opposition is crucial to any privatization deal, especially if it is a strategically important industry such as the ones included in this dataset. I include utilities, mining, energy, transportation, defense and agriculture in this group of strategic industries.

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10Chamberlain, John R. and Jackson, John E., ‘Privatization as Institutional Choice,’ Journal of Policy Analysis and Management, Vol. 6 (4), (Summer 1987): pp. 305-521; note the most successful privatizations are those where the rents coming from the sales are distributed between both public and private actors – in other words, those that make an effort to include the general public will generally have more wide-spread support. Burgoon, Brian, ‘Globalization and Welfare Compensation: Disentangling the Ties That Bind,’ International Organization, Vol. 55 (3), (Summer 2001): pp. 512-514, presents four of the main arguments on welfare compensation. His empirical study on pp. 534-546 explains that investment openness has differential effects on the types of welfare benefits used, as with retirement, family, retraining and health-care benefits.


12Stiglitz, Joseph E., Making Globalization Work, W.W. Norton, September 2006: pp. 25-61, in this chapter titled The Promise of Development, Stiglitz recounts the devastating effects multinational corporations bearing FDI have had on the natural resources and human rights of various newly democratized states. He then outlines ways that globalization could be made to work to benefit local communities.
tization of the strategically key industries is going to be subject to more scrutiny by the electorate, because of the national security aspects of the sales. The electorate will be apprehensive of any leaders who give up control over strategic enterprises to foreign investors.\footnote{Westlake, Michael, ‘Future Up in the Air: Doubts Surround Thai Airways Privatization Plan,’ Far Eastern Economic Review, May 18, 1989, Vol. 144 (20), pp. 60; Jensen, Nathan, Nation-States and the Multinational Corporation: A Political Economy of Foreign Direct Investment, NJ: Princeton University Press, 2006: pp. 47, examines the reverse, or the considerations of political risk for multinational corporations when negotiating an FDI agreement.}

My theory follows the literature linking democracy and FDI openness, arguing that domestic institutions can explain a political leader’s choice of approval of privatization policies. I argue that referendum use varies (1) with the privatization agreement being negotiated, (2) across regime types, and (3) for electoral systems. The explanatory variables are of two types, those relating to the features of the agreement and institutional explanations. This approach accepts that there are domestic institutional structures which influence outcomes of the domestic politics of an international agreement. In Uruguay, the rising radical left parties opposed the privatization of oil on the economic terms of the sale. The majority coalition which Lacalle had formed with the Blancos was also not in full support of the deal. The security concerns for privatization of the national oil company was prevalent among the moderates in the coalition in government. The existence of various reasons to oppose agreements, makes features of the agreement relevant. This is true for oppositions in cases such as Lacalle’s. This aspect of the empirical models cannot be examined independent of domestic institutions, but only as a complementary group of explanatory variables. I include the complexity of the agreement among this group of variables. The more complex the agreement, the greater will be the likelihood that the agreement will meet legislative opposition.
4.1.1 Literature Review: Privatization, FDI and Democracies

Governments are pressured from inside the state against privatization, and from outside the state to open up their economy to investment. Within states there is a constant battle for resistance to international economic trends of capitalism and a defending of status quo policies. Voters become relevant to FDI decisions of states in one of two ways: when there are significant layoffs in privatization restructurings and when legislative opposition has security concerns with the deal.\textsuperscript{14} Theories of Foreign Direct Investments debate the causes of a state’s choice of one course of economic policy over another. Statist theories say it is policy preferences of state leaders and political institutional structures that together determine the supply of capital liberalization policies. The counter-argument is that interest groups can better explain the relationship between FDI and democracy. The latter emphasizes the influence of unions and lobbying groups on investment decisions by the state.\textsuperscript{15}

I show that the domestic cost of privatizations vary across domestic institutions, depending on whether the executive decides to make use of referendums to alter the course of negotiations for proposed privatizations. The duality of the relationship between democracies and FDI is evident in FDI attractions to democracies and the relative inability of democracies to reverse privatizations. Li and Resnick (2003) show that (1) electoral institutions may be the key to explaining variance across democracies, and (2) that democracies are in fact more responsive than autocracies to the concerns of the voters regarding foreign multinational company (MNC) presence.


\textsuperscript{15} Swank, Duane, ‘Funding the Welfare State: Globalization and the Taxation of Business in Advanced Market Economies,’ \textit{Political Studies}, Vol. 46 (3), 1998: pp. 674, assumes that economic performance is key to reelection. He examines the role of taxation in capital account openness, where domestic institutions and economic structures are taken as intervening variables.
in their country.\textsuperscript{16} Following them, this dissertation looks at domestic institutions in the study of FDI flows, and explains several domestic causal processes for divergence of behavior among democracies.

Oneal (1994) notes that developed democracies provide the most advantages to FDI, but that authoritarian states [among developing democracies] will provide the most stable environment for an outside investor.\textsuperscript{17} The difficulty with developing democracies is that there may be a reversion of policies at any time. Another key study is Guisinger and Smith (2002). They show the differences between attributing political risks to states versus the political leader. They argue that international reputations are made by the governments in power, not the states themselves. Their finding demonstrates that it is leaders and political institutions that have impact on state behavior. Scholars of FDI have more recently turned to the role of domestic institutions in the measurement of political risk for investment. Although the causality could be going the other way. Just as Li and Reuveny (2003) find that globalization leads to more democracy though the effect seems to be reduced over time.\textsuperscript{18}

The nature of the relationship between democracy and FDI is best summed by Li and Resnick (2003), who claim democracies are more likely to follow popular opinion on foreign direct investment and autocracies are more likely to follow elite policy:

\textit{“Under democratic institutions, politicians have incentives to develop public policies reflecting the popular sentiment. Representative democracy also allows various interests to be represented in the legislature, thereby constraining executive power. Even in fledgling democracies, the state is subject to}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{16}Li, Quan and Adam Resnick, ‘Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries,’ \textit{International Organization}, Vol. 57(1), (Winter 2003): pp. 181.
\end{itemize}
\end{footnotesize}
a broad spectrum of political interests as it attempts to broker compliance with democratic rules, offering relevant political actors welfare improvements to induce their consent. Hence, democratic political processes are characterized by the influence of diverse opinions over electoral and public policymaking outcomes.”

Li and Resnick’s (2003) test of 53 states between 1982-1995, finds that democracy has negative effects on FDI inflows. They highlight that both international and domestic factors have effects on privatization. They argue that democracy is more volatile than autocracies and therefore can lead to political instability. Jakobsen and de Soysa (2006) claim this is a feature of the cases selected and add to Li and Resnick’s (2003) dataset to show that democracy may have a positive influence on privatization. Statist theories have found empirical evidence in other areas of international political economy (IPE): including varieties of trade protection, the setting of exchange rates and maintenance of central bank independence.

In the interest group view, the demands of multinational enterprises buying into the newly privatized industries and their operations within states are seen as political compromise and an issue of distributional politics. This side of the debate contains proponents who see economic value of factors of production are key to supporting privatization policies. The inequalities in incomes brought about by globalization

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19 Li and Resnick 2003, pp. 181.
20 Li, Quan and Adam Resnick, ‘Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries,’ International Organization, 57(1), (Winter 2003): pp. 181.
are then thought to be responsible for the backlash by labor and other interest groups who stand to lose most from opening up the economy to foreign investors.\textsuperscript{24} The most recent studies have moved from distributive debates of interest groups to electoral systems and onto which are likely to empower one group over the other.\textsuperscript{25} I argue that among democracies electoral institutions will also make a difference in which policies get to go to referendum.

4.1.2 Relevance of Domestic Political Costs and Unions to the Study of FDI

This chapter, rather than look at aggregate measures of globalization, asks what the causal process is behind the political decision to follow or abandon privatizations through referendums.\textsuperscript{26} In addition to the democratic accountability arguments, what electoral arguments can be had for tendency to consent the public regarding strategic enterprise privatizations. Electoral institutions is an explanatory variable that captures the policy preferences of those who might be hurt by privatization of the economy.

One argument is that domestic business interests would like the IMF and private funding such as FDI to continue to come in. Therefore, big business and corporations will often support liberalization and the opening up of the economy (Jensen

\begin{footnotesize}
\begin{itemize}
\end{itemize}
\end{footnotesize}
2006, Hays 2007). Another argument specifies that producers will be stronger in proportional representation (PR) systems, since majoritarian systems will give more power to the median voter, approximated by consumer interests (Rogowski and Kayser 2002). Race to the bottom (RTB) theories emphasize the competition among states in terms of taxation policies affecting FDI. Basinger and Hallerberg (2004) model the RTB among states in terms of the domestic political competition in each state.

Resistance to liberalization of the economy often comes from voters - those most concerned about the loss of jobs from costly restructurings involved in privatizations. Thus, the majority of voters could be for/against privatization, depending on the opposition displayed in the legislature and policy favored by the government. Consultation of the voters through referendums or elections allows the political leader to find out his/her chances for reelection with the approval of the agreement negotiated and expand political support for policy beyond the legislature.

Empirical evidence has been found for parallels between prices, taxation levels and domestic institutions in host countries. The most recent debates have centered on the differences between electoral systems and their tendencies towards taxation of corporations vs. labor. The differences are likely to show which electoral system

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31Boeri, Tito and Katherine Terrell, ‘Institutional Determinants of Labor Reallocation in Transition,’ Journal of Economic Perspectives, Vol. 16 (1), (Winter 2002): pp. 53 - 57, 58 - 59; in their comparison of transition states in Eastern Europe via privatizations call all social safety nets towards unemployment ‘nonemployment’ insurance. Their argument that the state (to workers unemployed, disabled and retired by the economic transition) is not to blame for the difficulties of the transition, is a strong counter-claim to the campaigns of globalization’s opponents. They attribute the inflexibility of the workforce to labor flows across sectors and rates of employment turnover as a feature of the economy, and as part of the institutional features of the transition flexibility of a privatizing state. This is an interesting and novel viewpoint.
is more FDI friendly and hence harsher on labor. Rogowski and Kayser (2002) for instance, claim that majoritarian systems will have more populist appeal leading to taxation of capital, while proportional representation systems would be more in favor of the elite view.\\footnote{Rogowski, Ronald and Mark Andreas Kayser, ‘Majoritarian Electoral Systems and Consumer Power: Price-Level Evidence from the OECD Countries,’ The American Journal of Political Science, Vol. 46 (3), 2002: pp. 526-539.} Similarly, Hays (2003) finds that PR democracies will be more likely to redistribute and have higher capital taxation rates. Hays (2009) cites PLMAJ systems as having been most hurt by globalization of trade, because of their difficulties with redistribution and embedded liberalism.\\footnote{Hays, Jude, ‘Globalization and Capital Taxation in Consensus and Majoritarian Democracies,’ World Politics, 2003: pp. 95, 99-101 ; Hays, Jude, Domestic Institutions, and the New Politics of Embedded Liberalism, New York: Oxford University Press, 2009 (forthcoming): pp. 138-140 argues that Plurality/Majority democracies will be the ones having trouble with globalization of capital, since corporate taxes are more prominent for those electoral systems, and race-to-the-bottom of corporate taxation will mean less funds for majoritarian states.}

More recently, there has been research done on the debate that combines the interest group and statist theories.\\footnote{Henisz, Witold J. and Edward D. Mansfield, ‘Votes and Vetoes: The Political Determinants of Commercial Openness,’ International Studies Quarterly, Vol. 50 (1), 2006: pp. 189-212.} The design of the study enables a comparison of tendencies to use referendums vs. legislative logrolling to determine the results of privatization talks. The voters only become relevant if the leader wants a privatization, but cannot pass it through the legislature either because of interest groups or legislative opposition.

4.1.3 What is the role of the legislature?

This research conceptually builds upon veto players and credible commitments literatures in studies of the international political economy. Both these literatures claim democracies are favored by foreign investors over authoritarian states. By emphasizing democratic guarantees against expropriation, credible commitment evidence favors democracies in the study of FDI. The strongest argument (Gaubatz 1996, Martin 2000, Jensen 2005, McGillivray and Smith 2005) uses audience costs as one way of capturing the credibility of a state’s words or actions in IPE policies.
Credibility of commitments to privatization and foreign direct investments is threatened by national security priorities and regime turnover. The commitments include those made by states upholding various partnerships and investments from foreign capital. Past credibility of commitments endangered by expropriations in coup d'états, civil wars, elections, and inter-state wars also concern foreign capital. Most guarantees come by way the reassurances provided by today’s political leaders and may not be upheld when circumstances change and there is a new administration in place.

The instability of politics reflects on the economic arrangements (e.g. tax breaks and joint ventures) made by states to attract FDI in the first place (Resnick 2001, Jensen 2005). The political risks involved are thus an example of the fear of lack of commitment on the part of states to foreign capital. Because of their domestic institutions, democratic states are thought to be less likely to renege on their commitments to FDI (Li and Resnick 2003). It is only through undertaking measures that remove or alleviate audience costs, that democratic states can change their existing policies.

Veto players have also been used in examination of difficulty of overturning the status quo in policy-making (Tsebelis 1995, 1999, Hallerberg 2002, Keefer and Stasavage 2002). The veto player literature does include elections (and thus voters) as a potential veto player accounting for the partisan differences among veto players to predict outcomes. A similar approach is taken here with regards to referendums.

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where voters are introduced as a way to prevent further privatizations. The greater number of veto points in Tsebelis (1995) predicts that parliamentarian systems will be more stable in policy-making. What this study does is to show that empirically, referendums and untimely elections are a way to resolve legislative blockage of privatizations.

### 4.2 Referendums and Patterns in Privatization

Table 4.1 summarizes the 15 cases of referendums that make up the outcome of interest in the dataset. Some of the states met the same types of oppositions to different cases of privatizations, because several privatizations often took place at the same time. The income obtained from privatizations is a strong incentive for governments to undertake them. The Czech, Uruguayan and Italian cases are examples of this type of initiative. There are others privatizations that did go through with legislative approval. These are the ones where the legislature had serious opposition to prompting referendums.

Almost all the FDI agreements which end in referendums rate at the highest for security concerns and at the middle levels for economic concerns associated with the agreement. The two cases of referendum where the economic concerns are the lowest were Tocumen International Airport privatization for Panama and the Kenyan Port deals. The security issue was quite high for all of the privatization cases, since my focus remains that of the strategic sectors. Privatizations tend to come in waves as reformist governments are inclined to negotiate a few of them at a time.

Privatizations also come with regional patterns of behavior by liberalizing leaders. For instance, one pattern to note in East European privatizations were the common legislative oppositions to Russian ownership of privatized enterprises. For
example, there is Belarus’s resistance to sale of Beltransgaz to Gazprom in a joint-venture agreement. Bulgaria’s insistence against Yukos and LUKoil bids for Petrol AD ownership which was of a similar nature. The Slovak preference for sale of Slovak Electrarne is also telling: with Prime Minister Meciar’s influence resulting in 66% of ownership going to Italy’s ENEL and away from Russian control. Bunce (2001) shows the difficulties of forming coalitions when carrying out economic reform after democratization in Eastern Europe in her case studies. Vachudova (2005) supports this in her examination of six Post-Communist countries outlining the importance of strategic and security concerns on liberalization of the economy and their relevance to the legislative oppositions in these states. She points out that after 1989, European states became a clear alternative to Russian influence. As a result, the economic development of three of the states (Poland, Hungary and the Czech Republic) which sought European foreign investors, diverged from the others (Bulgaria, Romania and Slovakia) who permitted precedence of Russian bids for ownership. The dataset is designed to reflect such preoccupations with security when privatizing strategic enterprises.

The security concerns of Eastern Europe varied over two groups: those closer to Russian influence, and the rest. The states that still had strong relations with Russia were Belarus, Bulgaria, Albania (as recently as 2006), and Romania and Slovakia (until 1998). The group which from the start had opposition to Russian ownership in the FDI contracts were Czech Republic, Hungary, Poland and the Ukraine. As a result, the states that had problems with the old-style economic relationships with Russia were more open to partnerships with Europe and the United States. The op-

Table 4.1: Referendum Decisions in Privatizations, 1948-2006

<table>
<thead>
<tr>
<th>Host Country</th>
<th>Firm</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>ENTEL</td>
<td>Dec 2, 1992</td>
</tr>
<tr>
<td>Bolivia</td>
<td>YPFB</td>
<td>Jul 18, 2004</td>
</tr>
<tr>
<td>Colombia</td>
<td>ETB</td>
<td>Oct 25, 2003</td>
</tr>
<tr>
<td>Mexico</td>
<td>Cananea Copper Mines</td>
<td>Aug 22, 1989</td>
</tr>
<tr>
<td>Uruguay</td>
<td>ANTEL</td>
<td>Dec 14, 1992</td>
</tr>
<tr>
<td>Uruguay</td>
<td>ANCAP</td>
<td>Jul 23, 2005</td>
</tr>
<tr>
<td>Peru</td>
<td>PETROPERU</td>
<td>Apr 19, 1996</td>
</tr>
<tr>
<td>Paraguay</td>
<td>PETROPAR</td>
<td>Apr 26, 1996</td>
</tr>
<tr>
<td>Paraguay</td>
<td>ANTELCO</td>
<td>Dec 15, 1992</td>
</tr>
<tr>
<td>Panama</td>
<td>Tocumen International Airport</td>
<td>Oct 30, 1998</td>
</tr>
<tr>
<td>Panama</td>
<td>INTEL</td>
<td>Oct 22, 2006</td>
</tr>
<tr>
<td>Venezuela</td>
<td>PDVSA</td>
<td>Aug 12, 2004</td>
</tr>
<tr>
<td>Kenya</td>
<td>Kenya Electricity Generating Company</td>
<td>Nov 21, 2005</td>
</tr>
<tr>
<td>Kenya</td>
<td>Kenya Ports Authority</td>
<td>Nov 21, 2005</td>
</tr>
<tr>
<td>Thailand</td>
<td>PTTEP</td>
<td>2008-2009*</td>
</tr>
<tr>
<td>Belarus</td>
<td>Mozyr and Novopolotsk Oil Refineries</td>
<td>Nov 24, 1996</td>
</tr>
<tr>
<td>Belarus</td>
<td>BELTRANSGAZ</td>
<td>Nov 24, 1996</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Petrol AD</td>
<td>Nov 10, 1989</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>Tesla-Liptovsk, Tesla-Karin</td>
<td>Nov 17, 1989</td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>Czechoslovakia Airlines (CSA)</td>
<td>Nov 17, 1989</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Czech PTT/Telecom</td>
<td>Nov 17, 1989</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Czech Energy Works (CEW)</td>
<td>Nov 17, 1989</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Czech Radio</td>
<td>Nov 17, 1989</td>
</tr>
<tr>
<td>Iceland</td>
<td>Karahnjukar Hydropower Project</td>
<td>2008-2009*</td>
</tr>
<tr>
<td>Italy</td>
<td>STET Telecom</td>
<td>Jun 14, 1997</td>
</tr>
<tr>
<td>Italy</td>
<td>ALITALIA</td>
<td>Apr 1, 2001</td>
</tr>
<tr>
<td>Italy</td>
<td>ENEL</td>
<td>Nov 8, 1987</td>
</tr>
<tr>
<td>Italy</td>
<td>ENI</td>
<td>Jul 27, 1992</td>
</tr>
<tr>
<td>Poland</td>
<td>Roads &amp; Polish State Railways</td>
<td>Oct 13, 2003</td>
</tr>
<tr>
<td>Slovakia</td>
<td>Slovak Electrarne</td>
<td>Sep 25, 1998</td>
</tr>
</tbody>
</table>

* Privatization decisions for these cases are to be determined by referendums also put off to a later date due to disagreements in the legislature.
position to sale of ‘strategic’ enterprises sometimes forced governments into rejection of bids or rearranging of auction rules. Sometimes it took the form of restricting foreign ownership to less than the controlling shares (the golden share concept). Bulgaria used this latter strategy with respect to the sale of Balkan Air (99.9% sold to the Balkan Hemus Group), Hungary with respect to RABA (Railway Carriage Corporation) where only 19% of shares were sold to a U.S. company, and the Czech Republic with respect to Czech Energy Works and Czech Radio Communications (privatized with 16% and 7% floats respectively).

For example, one of the strongest oppositions to privatization of state enterprises was felt during the incumbency of Prime Minister Vladimir Meciar of Slovakia. Slovakia’s privatization battle began in 1994 and Meciar managed to turn around the political opposition long opposed to the the sale of strategic enterprises, such as the Slovenska electricity firm. Between 1994 and 1998 Meciar privatized Slovak Telecom and Bratislava Airport’s operations, besides some others. The referendum regarding the Constitutional Law on energy privatizations took place in September 1998, on account of the strong opposition in the legislature (The Slovak National Council). The referendum later failed and Meciar lost his position in government, yet most of the firms were successfully privatized by late 2006.

The political crises, caused by economic and security concerns of the electorate, also affects the leader’s choices of legislative approval in privatization decisions. Features of any privatization deal made with foreign companies will be seen in terms of various types of costs to the electorate. The empirical model builds upon the referendum game of Chapter 2. The game made available three main explanations for the occurrence of referendums in domestic approval processes of an internation-

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38—’Nor good red herring,’ *Finance East Europe*, October 6, 1995; — ‘Meciar is for Plebiscite on ban on privatising energy companies,’ *Czech News Agency*, July 109, 1998.

ally negotiated agreement. These include the costs of referendum \((R)\), the cost of bribery to gain support in the legislature \((c)\), and the pertinence of the agreement to the following elections \((\theta_1\) and \(\theta_2)\). In translating these into an empirical test of the hypotheses, the research design makes use of three main explanatory variables. The domestic institutional variables to be tested include both regime and electoral systems variables. The regime variables to be tested are democracy and autocracy in Model 1 (Hypotheses 1(i) and 1(ii)); the electoral systems variables are proportional representation and plurality/majority in Model 2 (Hypotheses 2(i) and 2(ii)). The third group of variables are features of the agreement. These serve to explain factors that exist independently of the domestic method of approval, but still have an effect on the leader’s choice. These are outlined in Hypotheses 3(a), 3(b), 3(c), 4 and 5.

4.2.1 Hypotheses

The theory suggests the following hypotheses:

**H1(i):** The more democratic the state, leaders are:

(a) more likely to use legislative approval than referendum;
(b) more likely to continue negotiations than legislative approval.

**H1(ii):** The more autocratic the state, leaders are:

(a) less likely to use legislative approval than referendum;
(b) less likely to continue negotiations than legislative approval;
(c) less likely to continue negotiations than referendum.
**H2(i):** Among democracies, leaders of Proportional Representation electoral systems are:

(a) more likely to use legislative approval than referendums;
(b) more likely to continue negotiations than legislative approval.

**H2(ii):** Among democracies, leaders of Plurality/Majority electoral systems are:

(a) less likely to use legislative approval than referendums;
(b) more likely to continue negotiations than legislative approval;
(c) less likely to continue negotiations than referendums.

**H3:** The more complex the agreement (or difficult to negotiate) leaders are:

(a) more likely to use legislative approval than referendums;
(b) more likely to continue negotiations than legislative approval;
(c) more likely to continue negotiations than referendums.

**H4:** Domestic costs of an agreement are more likely to increase resistance in the legislature and leaders are:

(a) more likely to continue negotiations than legislative approval;
(b) more likely to continue negotiations than referendums.
**H5:** National security concerns of an agreement are more likely to increase resistance in the legislature and leaders are:

(a) more likely to continue negotiations than legislative approval;

(b) less likely to continue negotiations than referendums.

The dataset constructed for Chapter IV contains 246 cases and a total of 27,919 country-months. The original 246 states dropped to 203, because the rest of the cases had missing information and/or lower data quality. With around 15 rounds of negotiations per state, there is a total of 3,045 rounds of negotiations, and 27,919 country-months within all rounds of negotiations. The outcome dataset alone is composed of 7,439 country-months. All of the variables included in the dataset and their sources are available in Appendix C. The following section will lay out two multinomial logit models testing the political leader’s choices of continuing negotiations or domestic approval of negotiated agreement (legislative approval or referendum). All the variables have been recoded and entered in binary form.

The control variables used for the territorial disputes study are aspects of FDI agreements that were important to Li and Resnick (2003) and Jensen (2003), in that there is an emphasis on general direction of FDI inflows as a precondition for investment. Out of these I formulated my own variable of ‘reduced annual FDI entry’ dummy \(\text{negativefdientry}\). This variable has two dimensions, as it relates to an aspect of the FDI deal and an aspect of the privatization negotiations to domestic ratification.
4.3 Empirical Models, Data Analysis and Results

The general formula of equations to be estimated for Model 1 are:

Model 1:

\[ Y_{ij} = \beta_0 + \beta_1(finbin) + \beta_2(democracy) + \beta_3(autocracy) \]
\[ + \beta_4(complexity) + \beta_5(securityconcerns) \]
\[ + \beta_6(economiccosts) + \beta_7(negativefdientry) + \varepsilon, \]

where

\( Y_{ij} \) = domestic political outcome,

\( finbin \) = percentage ownership to be privatized,

\( democracy \) = democratic regime,

\( autocracy \) = autocratic regime,

\( complexity \) = complexity of an agreement,

\( securityconcerns \) = security concerns associated with an agreement,

\( economiccosts \) = domestic economic costs of an agreement,

\( negativefdientry \) = negative current year FDI entry.

Model 1 examines the relationship between the regime variables and the differences in the political leader’s choice of continuing negotiations or obtaining domestic approval, for the latest version of investment deal. Model 2, on the other hand, looks for evidence of electoral system influence on the same. The multinomial logit coefficients estimated by Stata for Model 1 and 2 are given in Tables 4.2 and 4.4, respectively. In order to provide a more substantive interpretation of variable effects, I also present the change in probability estimates in Tables 4.3 and 4.5. The impact
of discrete changes in an explanatory variable on the log odds of a certain outcome is estimated by holding all other variables at their mean values. I use both the coefficient results (Tables 4.2 and 4.4) and the predicted probability results (Tables 4.3 and 4.5) to test the hypotheses introduced in the previous section. As in Chapter III, I used Hausman test of IIA assumption and found no evidence to reject the independence of irrelevant alternatives assumption.

The results of Table 4.2 suggest that democracies will be more likely to choose legislative approval over referendums (with an odds ratio 2.113), and continue negotiations over legislative approval and referendums (with odds ratios 1.126 and 2.380). The variable of autocracy, (coded 1 for the negative values of the net autocracy score of the Polity 2001/2003 datasets), demonstrates that the leaders of autocracies prefer referendums over legislative approval, and both legislative approval and referendums over continuing negotiations. This implies that autocracies will be more open to going to referendum over legislative approval, and democracies will be more in favor of legislative approval over going to the electorate first.

The difference in the coefficients of democracy and autocracy’s methods of acceptance of foreign investment deals of Table 4.2 is not as obvious from the second column, since those coefficients are revealed to be less significant for this multinomial logit run. The insignificant coefficients have autocracies avoiding negotiations and democracies preferring negotiations over legislative approval. The negative coefficients on the autocracy variable in each binary comparison is consistent with the predictions of the referendum model. Note that the democracy variable is consistent for all hypothesized; the choice of legislative approval over referendums and negotiations over referendums are both in the expected direction.

The discrete change analysis in Table 4.3 points out interesting results for leaders
Table 4.2: MNML Host State in Negotiations Domestic Institutional Outcomes Model 1

<table>
<thead>
<tr>
<th></th>
<th>Legislative Approval vs. Referendum</th>
<th>Continue Negotiations vs. Legislative Approval</th>
<th>Continue Negotiations vs. Referendum</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINBIN†</td>
<td>-0.080 (0.133)</td>
<td>1.041 (0.035)***</td>
<td>0.961 (0.131)***</td>
</tr>
<tr>
<td>DEMOCRACY</td>
<td>0.748 (0.339)∗</td>
<td>0.119 (0.103)</td>
<td>0.867 (0.331)∗</td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td>-0.523 (0.235)∗</td>
<td>-0.143 (0.107)</td>
<td>-0.666 (0.354)†</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>-0.483 (0.116)***</td>
<td>0.237 (0.028)***</td>
<td>-0.246 (0.114)∗</td>
</tr>
<tr>
<td>SECURITY CONCERNS</td>
<td>-1.626 (0.359)***</td>
<td>-0.552 (0.056)***</td>
<td>-2.178 (0.357)***</td>
</tr>
<tr>
<td>ECONOMIC COSTS</td>
<td>0.827 (0.366)∗</td>
<td>0.156 (0.082)†</td>
<td>0.983 (0.363)∗</td>
</tr>
<tr>
<td>NEGATIVE ENTRY</td>
<td>-0.959 (0.134)***</td>
<td>0.264 (0.039)***</td>
<td>-0.694 (0.131)***</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>4.670 (0.373)***</td>
<td>0.200 (0.061)***</td>
<td>4.870 (0.371)***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N</th>
<th>26433</th>
<th>26433</th>
<th>26433</th>
</tr>
</thead>
<tbody>
<tr>
<td>LR χ²(14)</td>
<td>1235.72</td>
<td>1235.72</td>
<td>1235.72</td>
</tr>
<tr>
<td>Prob &gt; χ²</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: †p < .1, ∗p < .05, **p < .01, ***p < 0.001, two tailed test. Standard errors are in parentheses.

No evidence has been found to reject the assumption of independence of irrelevant alternatives (IIA) by Hausman test.

†: binary variable = 1 if privatization of percentage ownership of firm greater than 0.33, 0 otherwise.
Table 4.3: Challenger Concessions Model 1 - Discrete Changes in Probabilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>Probabilities of Outcomes</th>
<th>legislative approval</th>
<th>referendum</th>
<th>continue negotiations</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINBIN</td>
<td>from: 0 (% ownership&lt; 0.3) to: 1 (% ownership≥ 0.3)</td>
<td></td>
<td>0.430</td>
<td>0.014</td>
<td>0.556</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-50.5</td>
<td>-46.4</td>
<td>40.2</td>
<td></td>
</tr>
<tr>
<td>DEMOCRACY</td>
<td>from: 0 (not democratic) to: 1 (democratic)</td>
<td></td>
<td>0.261</td>
<td>0.017</td>
<td>0.722</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-7.6</td>
<td>-56.3</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td>from: 0 (not autocratic) to: 1 (autocratic)</td>
<td></td>
<td>0.224</td>
<td>0.005</td>
<td>0.770</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>11.0</td>
<td>87.2</td>
<td>-3.8</td>
<td></td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>from: 0 (less complex) to: 3 (more complex)</td>
<td></td>
<td>0.313</td>
<td>0.006</td>
<td>0.681</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-42.0</td>
<td>147.1</td>
<td>18.1</td>
<td></td>
</tr>
<tr>
<td>SECURITY CONCERNS</td>
<td>from: 0 (no) to: 1 (yes)</td>
<td></td>
<td>0.173</td>
<td>0.002</td>
<td>0.825</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>52.3</td>
<td>673.8</td>
<td>-12.3</td>
<td></td>
</tr>
<tr>
<td>ECONOMIC COSTS</td>
<td>from: 0 (no) to: 1 (yes)</td>
<td></td>
<td>0.268</td>
<td>0.020</td>
<td>0.712</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-9.8</td>
<td>-60.6</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td>NEGATIVE FDENTRY</td>
<td>from: 0 (no) to: 1 (yes)</td>
<td></td>
<td>0.254</td>
<td>0.008</td>
<td>0.738</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-19.1</td>
<td>111.1</td>
<td>5.4</td>
<td></td>
</tr>
</tbody>
</table>
of democratic and autocratic countries. On the one hand, the probability of a leader choosing a domestic resolution (legislative approval with 0.261 or referendum with 0.017), falls significantly as the regime shifts from being not democratic to democratic (-7.6% and -56.3% respectively). On the other hand, the probability of choosing the same rises when the state becomes more autocratic (11.0% and 87.2%). This reaffirms the notion that democracies will be more willing to make preparations to get a better deal, while autocracies will be choosing to get deals done by selecting who they will give the privatization deal to. The authoritarian states will be choosing who they negotiate with before hand, removing competitiveness of their auctions. It also confirms that democracies will have more to deal with in terms of opposition to privatization by domestic groups that will be hurt by the privatizations.40

Complexity of the agreement makes it more likely that the leader will continue negotiations than choose legislative approval (coefficient of 0.237) and less likely to continue negotiations than referendums (coefficient of -0.246), and less likely to choose legislative approval over referendums (coefficient of -0.483). Therefore, we can say, in cases where there is complexity, the leader will likely go for referendums than continuing negotiations than legislative approval. Complexity of FDI agreements makes it so that the leader will try to convince the legislature through referendums, and continue negotiations longer due to the complexity. The only prediction consistent with our hypothesis is the choice of continuing negotiations over legislative approval. I attribute this to the difficulty of removing resistance in the legislature for privatization deals.

The general theory of the Referendum Game had predicted that the economic and security concerns of an agreement would lead to increased resistance for the

particular negotiated agreement, making it difficult to go for the legislative approval option. What is tested empirically, is what the response of the political leader will be to each type of opposition. In other words, the empirical tests are about what the leader’s choice will be, when faced with legislative opposition of either type. This is a continuation of the Referendum Game discussions. The hypotheses that came out of the game extend this to what the leader’s response would be. The predictions of the hypotheses H4(a), H4(b), and H5(a) are supported by the empirical results. It is only the security based oppositions predictions of the last column, that goes against hypothesis H5(b). If the privatization/FDI deal has some security consequences, there is a significant log odds of the leader going for referendums instead of continuing to negotiate. Otherwise, both types of oppositions will lead to more negotiations. The predictions are thus only correct in 3 out of the 4 hypotheses.

The security concerns seem to be more dominant of the two influences (compare the magnitudes of the coefficients for security concerns against economic costs in Table 4.2). The difference in the two effects, becomes even more obvious when we look at the discrete change results presented in Table 4.3. A unit change in economic cost based opposition in the legislature yields a sharp 60.6% decrease in the probability of referendums, and 9.8% drop in the probability of legislative approvals. One unit change of the security concerns variable, on the other hand, translates into 52.3% increase in the probability of legislative approvals, and the probability of referendums becoming more than six-fold. The interpretation of the results of Tables 4.2 and 4.3 is that oppositions to privatization based on national security will not be as effective as those based on economic concerns. The leader will take the issue to legislative approval and referendums instead of continuing negotiations (if the opposition is security based) suggesting that the leader will be more adamantly to
get approval if the opposition is not economically based. Economic oppositions to FDI deals will do more to prevent domestic approval than security based ones. What is also noteworthy is the percentage fall in the probability of referendums outcome for a unit increase in economic cost oppositions (0.020 to 0.008), and major rise in the legislative approval option for a unit increase in security cost oppositions (0.002 to 0.013). Note the very small initial probability of choosing referendums when there is no security opposition.  

The dummies for the negative annual FDI entry, indicative of an unattractive state of a borrower economy has a positive influence on referendums and continuing negotiations, but a negative effect on legislative approvals. This control variable makes referendums most preferred, followed by negotiations and then legislative approval. The results are significant at \( p < 0.001 \) level. The percentage change in the probability of referendum outcome in Table 4.3 for this dummy is very high (111.1%), which means a fall in the level of FDI coming in will increase the probability of referendum on ongoing privatization deals.

The general formula of equations to be estimated for Model 2 are as follows:

**Model 2:**

\[
Y_{ij} = \beta_0 + \beta_1 (\text{finbin}) + \beta_2 (\text{proportionalrep}) \\
+ \beta_3 (\text{plurality/majority}) + \beta_4 (\text{autocracy}) \\
+ \beta_5 (\text{complexity}) + \beta_6 (\text{securityconcerns}) \\
+ \beta_7 (\text{economiccosts}) + \beta_8 (\text{negativefdientry}) + \varepsilon,
\]

where

---

41The security and economic concerns associated with privatization agreements are “not applicable” or NA (see Table 2.6.2) for the choices between legislative approval and referendums, so no predictions have been made. It is easier to predict that leaders will continue negotiations when faced with oppositions of either kind in the legislature. The same is true of the comparisons of negotiations before referendum coefficients for democracies and proportional representation systems, which are more difficult to discern with our model. Thus, the table of predictions contains NA for these choices.
\( Y_{ij} \) = domestic political outcome,

\( finbin \) = percentage ownership to be privatized,

\( proportionalrep \) = proportional representation system,

\( plurality/majority \) = plurality/majoritarian system,

\( autocracy \) = autocratic regime,

\( complexity \) = complexity of an agreement,

\( securityconcerns \) = security concerns associated with an agreement,

\( economiccosts \) = domestic economic costs of an agreement,

\( negativefdientry \) = negative current year FDI entry.

The second table of results for this chapter, Table 4.4, summarizes the findings of electoral system (a continuum that has been recategorized into two - Proportional Representation (PR) or Plurality/Majority (PLMAJ) and the remaining cases that fall into the authoritarian set that have no elections/electoral systems). We note the insignificance of the legislature versus referendum of the PR and PLMAJ variables. The rest of the predictions are significant at \( p < 0.001 \) level. The electoral systems variables have positive log odds, except for the legislature to referendum comparison for the PR variable. (There is statistical evidence that this variable may also have a positive coefficient.) The discrete change results for PR and PLMAJ probabilities for different outcomes are very close, with referendums falling more for a unit increase in PLMAJ (61.9%) than a unit increase in PR (46.4%), and legislative approvals falling more for a unit increase in PR (48.5%) than a unit increase in PLMAJ (46.4%).

The first two columns of Table 4.4 are more significant for the complexity variable. From these, we can infer that the complexity of the FDI agreements is going to
Table 4.4: MNML Host State in Negotiations Domestic Institutional Outcomes Model 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Legislative Approval vs. Referendum</th>
<th>Continue Negotiations vs. Legislative Approval</th>
<th>Continue Negotiations vs. Referendum</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINBIN †</td>
<td>-0.194 (0.137)</td>
<td>1.111 (0.036)**</td>
<td>0.917 (0.136)**</td>
</tr>
<tr>
<td>PROPORTIONAL REP</td>
<td>-0.086 (0.241)</td>
<td>0.887 (0.060)**</td>
<td>0.801 (0.239)**</td>
</tr>
<tr>
<td>PLURALITY/MAJORITY</td>
<td>0.341 (0.256)</td>
<td>0.812 (0.060)**</td>
<td>1.153 (0.254)**</td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td>0.136 (0.265)</td>
<td>-0.804 (0.064)**</td>
<td>-0.668 (0.263)*</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>-0.468 (0.116)**</td>
<td>0.240 (0.028)**</td>
<td>-0.228 (0.115)*</td>
</tr>
<tr>
<td>SECURITY CONCERNS</td>
<td>-1.470 (0.368)**</td>
<td>-0.653 (0.058)**</td>
<td>-2.122 (0.366)**</td>
</tr>
<tr>
<td>ECONOMIC COSTS</td>
<td>0.690 (0.373)†</td>
<td>0.179 (0.083)*</td>
<td>0.869 (0.370)*</td>
</tr>
<tr>
<td>NEGATIVEFDIENTRY</td>
<td>-0.925 (0.134)**</td>
<td>0.223 (0.039)**</td>
<td>-0.702 (0.132)**</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>4.716 (0.373)**</td>
<td>0.204 (0.062)**</td>
<td>4.920 (0.371)**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>N 26307</th>
<th>N 26307</th>
<th>N 26307</th>
</tr>
</thead>
<tbody>
<tr>
<td>LR $\chi^2$(16)</td>
<td>1446.13</td>
<td>1446.13</td>
<td>1446.13</td>
</tr>
<tr>
<td>Prob &gt; $\chi^2$</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: † $p < .1$, * $p < .05$, ** $p < .01$, *** $p < 0.001$, two tailed test. Standard errors are in parentheses.
No evidence has been found to reject the assumption of independence of irrelevant alternatives (IIA) by Hausman test.
†: binary variable = 1 if privatization of percentage ownership of firm greater than 0.33, 0 otherwise.
Table 4.5: Challenger Concessions Model 2 - Discrete Changes in Probabilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>Probabilities of Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>legislative approval</td>
</tr>
<tr>
<td>FINBIN</td>
<td>from: 0 (% ownership &lt; 0.3)</td>
<td>0.442</td>
</tr>
<tr>
<td></td>
<td>to: 1 (% ownership ≥ 0.3)</td>
<td>0.209</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-52.7</td>
</tr>
<tr>
<td>PROPORTIONAL</td>
<td>from: 0 (not PR)</td>
<td>0.321</td>
</tr>
<tr>
<td>REP</td>
<td>to: 1 (PR)</td>
<td>0.164</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-48.8</td>
</tr>
<tr>
<td>PLURALITY/MAJORITY</td>
<td>from: 0 (not PLMAJ)</td>
<td>0.294</td>
</tr>
<tr>
<td></td>
<td>to: 1 (PLMAJ)</td>
<td>0.158</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-46.4</td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td>from: 0 (not autocratic)</td>
<td>0.142</td>
</tr>
<tr>
<td></td>
<td>to: 1 (autocratic)</td>
<td>0.269</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>89.2</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>from: 0 (less complex)</td>
<td>0.312</td>
</tr>
<tr>
<td></td>
<td>to: 3 (more complex)</td>
<td>0.180</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-42.5</td>
</tr>
<tr>
<td>SECURITY CONCERNS</td>
<td>from: 0 (no)</td>
<td>0.160</td>
</tr>
<tr>
<td></td>
<td>to: 1 (yes)</td>
<td>0.266</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>65.5</td>
</tr>
<tr>
<td>ECONOMIC COSTS</td>
<td>from: 0 (no)</td>
<td>0.271</td>
</tr>
<tr>
<td></td>
<td>to: 1 (yes)</td>
<td>0.240</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-11.5</td>
</tr>
<tr>
<td>NEGATIVE FDIENTRY</td>
<td>from: 0 (no)</td>
<td>0.251</td>
</tr>
<tr>
<td></td>
<td>to: 1 (yes)</td>
<td>0.210</td>
</tr>
<tr>
<td></td>
<td>% change:</td>
<td>-16.4</td>
</tr>
</tbody>
</table>
decrease the odds that the leader will choose to continue negotiations over referendum (-0.228), and reduce the odds to choosing legislative approval over referendum (-0.468). As the complexity increases (see Table 4.5), the chances of seeking a referendum increases by 134.4%, and the leader turns away from direct legislative approval. The results of both Models 1 and 2 are consistent, with only the negotiations to legislative approval option giving a positive coefficient.

The dummy variable negativefdientry has consistent results for Models 1 and 2. Hence, our observations and conclusions in Model 1 related to the two variables carry over to the interpretation of the results of Model 2. Similarly, the results for security concerns and economic costs for Model 2 are aligned with the results of Model 1. The other control variable used for all tests in this chapter is the binary variable finbin, and contains only those cases of privatization where foreign ownership is greater than 1/3. This threshold of percentage ownership have an impact on the decisions of privatization when continuing negotiations is one of the options, for both models, the other binary comparison of legislative approval to referendum is not significant. This confirms the reason for inclusion of the variable, such that it would not make a choice between the method of domestic approval, as much as it would affect the decision to continue negotiations when there is only one option available for domestic ratification: either legislative approval or referendum. These are both in the same direction and magnitude. The negotiation option for Model 1 (democracy versus autocracy) is slightly more preferred by 1.111 (equal to odds of 3.037) if the only other domestic option available is to go to the legislature. The negotiation option for Model 2, is slightly more preferred by 0.917 (equal to odds of 2.501) if the only other domestic option available is to go to referendum. The significance of this variable is encouraging for the dataset, since the threshold of
0.33 as a foreign ownership percentage seem to be an important one according to the FDI dataset. This number was obtained from the substantive information about problematic privatization decisions, and is an estimation obtained from the data.

4.4 Implications

The leader’s domestic priorities with regards to privatizations will have some weight in the amount of FDI entering the country. FDI by definition depends on the direct deals made between governments and the firms they make investment agreements with. The rejection of a privatization law by the legislature or referendum will put an end to any negotiations with outside investors. The results of the multinomial logit model demonstrates referendum use in privatization decisions is not necessarily a populist act, but one that is dependent on the legislative resistance posed to the leader by parliament members who represent the voters. The maximum-likelihood analysis employed here takes electoral systems as the primary determinant of the choice between legislative approval and referendums. The results of the analysis are as follows:

For **Model 1**, we do not reject H1i(a), H1i(b), Hiii(a), Hiii(b), Hiii(c), H3(b), H4(a), H4(b), H5(b); and can reject H3(a), H3(c), H5(a).

For **Model 2**, we do not reject H2i(b), H2ii(b), H3(b), H4(a), H4(b), H5(b); and can reject H2i(a), H2ii(a), H2ii(c), H3(a), H3(c), H5(a).

4.5 Conclusion

The central argument of this study is that referendums can be rational in terms of the leader’s own calculations and for demonstrating his/her performance. The counter-argument to this is that referendums are a tool of populist politics and therefore may be irrational. This empirical study supports the former argument by
providing statistical evidence that (i) there are electoral reasons for the leader’s choice of carrying out referendums, and (ii) there is evidence that domestic institutions (in terms of both regimes and electoral systems) can account for use of referendums, and that complexity of the agreements matters.
The Costa Rican rescheduling of Paris Club debt of 1982 was one of the most significant negotiations of recent past, with talks lasting for almost two years. Negotiations with the IMF, which preceded the Paris Club’s own negotiations, had brought serious belt-tightening measures for Costa Ricans in exchange for $53 million in loans.\textsuperscript{1} The Paris Club meetings which followed entailed the recontracting of the $111 million dollars due. The Paris Club debt agreement was also significant because once signed, it became part of the accomplishments of President Louis Alberto Monge.

The more challenging task for Monge was not the negotiations, but passing the agreement through the legislature. This was mostly because the parliament did not want to pass such tough measures through. In the end, Monge convinced the center-right Unity Coalition to agree to approve the measures in exchange for the government’s promise to cut public spending.\textsuperscript{2} After Monge’s term was over, he is credited with causing his party The National Liberation Party, PLN’s victory and the election of the next candidate of the Oscar Sanchez Arias.\textsuperscript{3}

Monge’s accomplishment is more significant when compared with the performance

\begin{footnotesize}
\begin{enumerate}
\end{enumerate}
\end{footnotesize}
of Rodrigo Carazo Odio of the Unity Party. Carazo who served between 1978 and 1982, dealt with legislative opposition to debt agreements with letters warning of a moratorium to all lenders. Costa Rica was at that time suffering from a fall in coffee prices and a rise in the price of oil. Furthermore, the Unity coalition in government was not supportive of economic measures such as raising taxes, which led Carazo into more borrowing. The lending financed fiscal budget eventually grew so much as to increase foreign debt owed to $2.6 billion.\(^4\) The Unity Party itself began to lose support in the legislature, plunging the government into further economic crisis. When the Costa Rican government prevented the IMF from inspecting its books, the agreement for a $325 million loan was frozen. After this, the negotiations with the IMF collapsed. As inflation reached 100%, capital flight rose to a maximum. Along with a stoppage on the servicing of all foreign bank debt, Costa Rica announced a moratorium of all of its sovereign international obligations.\(^5\)

Carazo lost the following elections; he was not able to overcome the next electoral hurdle due to the legislative block and his inability to give the IMF what they wanted. In contrast to Monge’s strong presence in the legislature, Carazo’s lack of control meant he was unable to pass reforms. Carazo’s loss of support by unions and determination not to revalue the currency (colón) (which he could have done by removing the multiple pegs to the dollar), led to further unraveling of support.\(^6\) One major reason for the strong opposition in the legislature were issues associated with Carazo’s involvement in the U.S.- Nicaraguan controversy and Costa Rican help in arms shipments. As a result, the elections that followed became a referendum against Carazo’s decision to defy the IMF. In the end his party lost the 1982 elections to


\(^5\)The IMF agreement was signed, but after Carazo did not carry out the structural-adjustment measures, the agreement was no longer valid.

the Nationalist Party. The general view is that the legislature was against Carazo and refused to cooperate due to economic and security concerns associated with the agreement. The legislature was afraid of violence and social unrest in the country resulting from the IMF prescriptions. Their fears came on the heels of the massive union protests against carrying out the programs. Moreover, the legislature wanted to bring an end to Carazo accusing him of arms trafficking and allowing Sandinistas to stay in Costa Rica. It was also these security concerns surrounding Carazo’s decision to seek U.S. aid to replace the IMF lending that led the legislative resistance against Carazo.7

The IMF programs required the government to raise in the prices of public utilities and major cuts in the fiscal deficit and the social spending programs in the budget. This was a politically difficult plan to follow. Like Costa Rica, many of the states that borrow from the Paris Club tend to be heavily dependent on donors for their economic well-being, making electoral incentives relevant to debt repayment. This is especially so for states where economic policy changes are due to regime instability. More recent theories of the conditions for repayment of sovereign debt tend to focus on the effects of the median voter or of the representativeness of the legislature for interests other than capital.8 Saiegh (2007), Rogowski and Kayser (2002), and Vreeland (2003) note that the income of the median voter is key to rescheduling payments, whereas Saiegh (2005) and Stasavage (2003) emphasize the representation of the interests of lenders in legislative institutions.9 I focus on finding empirical support for the latter set of arguments using domestic institutional explanations.

Keeping in mind the nature and purpose of the Paris Club and its role in sovereign debt lending, it is fair to assume that most of the states are newly democratic or democratizing states with circumspect elections and an old-guard in the legislature. The debates over debt repayments are done at the same time as deals are made with the previous military leaders who oppose any and all reform measures that are likely to place past military spending up for evaluation.\textsuperscript{10} Take the newly democratized state of Albania for instance. The Stalinists of Fatos Nano were replaced by Sali Berisha and the new Democratic Party. The new group then formed legislative coalitions with the ethnic minority parties, so that the conditions to debt payments could be fulfilled. This led Albania to a better position in terms of fulfilling its international obligations. The new anti-communist parties and leaders had better relations with the Europeans, allowing them to perform better in the international economy, compared to their communist counterparts.\textsuperscript{11}

The domestic political explanations for the choice of legislative approval come in three parts: (1) domestic institutional variables (electoral systems), (2) latent variables of interests represented in the legislature other than capital (costs to unions and the military of budget cuts), and (3) features of the debt agreements. Schultz and Weingast (2003) also start out their analysis by looking at domestic constraints on international commitments. These variables further specify some domestic constraints.\textsuperscript{12}

\textsuperscript{10} Okonjo-Iweala, Ngozi, Charles Chukwuma Soludo and Mansur Muhtar, \textit{The Debt Trap in Nigeria: Towards a Sustainable Debt Strategy,} Africa World Press, June 2002: pp. 172-173, recalls the Nigerian negotiations with the Paris Club in October of 2005 for a debt write-off, presenting the Nigerian view of sovereign debt – the agreement was a major breakthrough for a state mired in debt. She details the Nigerian process of preparing for Paris Club meetings. Shows that out of the whole of Nigerian sovereign debt in May 2001, the Paris Club made up 69% of total, and of the Paris Club debt 58% was the principal in arrears borrowed, 34% was interest and 18% was the principal balance.

\textsuperscript{11} Eichengreen, Barry and Richard Portes, ‘After the Deluge: Default, Negotiation, and Readjustment during the Interwar Years,’ in \textit{The International Debt Crisis in Historical Perspective}, Barry Eichengreen and Peter H. Lindert, eds.: pp. 17-20, emphasize the relationship between past debt repayment and future treatment by lenders.

5.1 Literature Review: Elections & Sovereign Debt

The terms of restructuring are pretty standard, even though they vary across criteria of poverty and past good behavior. This standardization makes the domestic determinants of reschedulings a more prominent feature of our explanation here.\textsuperscript{13} According to the implications of the referendum model, the lack of say by the state in the major terms of repayment (for equal treatment purposes) does not negate the leader’s role in reschedulings with the Paris Club.

The domestic institutional variables differentiate between democratic electoral systems and democracies vs. autocracies.\textsuperscript{14} Elections are assumed to serve as a test of the economic performance of leaders in most of the borrowing states. The leaders will be paying serious attention to domestic deals and their competence in dealing with international lenders for the economic advancement of the state.\textsuperscript{15} The study assumes the elections following the Paris Club rescheduling negotiations will be relevant to repayment, especially when the economic situation is not going well.\textsuperscript{16}

I look at legislative oppositions to repayment in the context of electoral systems.\textsuperscript{17} More specifically I use the opposition to rescheduling agreements by various groups, to code partisanship of the legislative opposition. The left may be against repayment since their budget discipline often involves union wage freezes or cuts in employment for newly reformed states.\textsuperscript{18} The right-wing maintains their priority on military


\textsuperscript{17} Block, Steven A., Burkhard, N. Schrage, and Paul M. Vaaler, ‘Democracy’s Spread: Elections and Sovereign Debt in Developing Countries,’ \textit{William Davidson Institute, Working Paper Number 575}, June 2003: pp. 7-9; underscores the importance of candidates for possible future default.

\textsuperscript{18} Ibid., pp. 137 - 139.
spending as is assumed in most of the partisan literature on budgets. The latent variables chosen in this case are the oppositions to IMF agreements which cut costs from one or the other budgetary items: union pay and military portions of budgets.

Stasavage (2003) emphasizes that borrowers have to have good relations with the lenders and its extension is that borrowers have to demonstrate some effort towards democratization to be able to maintain good relations. Yet, there are various forms of capital and both are capable of cooperation with the lenders abroad making domestic interest representation in the legislature more important for the developing states that have recently become democratic. On the other hand, empirical research on foreign direct investment has shown political stability is more important than type of regime for there to be economic relations with other states. This paper uses the Paris Club as its sole source of cases of borrowers, the question posed here is more relevant to domestic opposition to IMF agreements which serve as the pre-requisites to rescheduling for this particular group of lenders. The domestic opposition to measures posed by international lending agencies as conditions to further lending and/or rescheduling. The two types of oppositions outside of the domestic capital with friends abroad, include cuts to military spending and increases in union wages. This set up builds on Stasavage’s theory that types of representatives in the legislature may differentiate the source of sovereign debt abroad.

The incentives for reelection of leaders are tied to the state of the economy and other deals struck by international lenders such as the Paris Club in our model.

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19Ibid., pp. 139 - 142.
20Stasavage, David, Public Debt and the Birth of the Democratic State: France and Great Britain, 1688-1789, Cambridge University Press, Political Economy of Institutions and Decisions Series, 2003, pp. 23, discusses how credibility of public debt can involve undemocratic means such as restricting access of certain groups to the political system.
21Eaton, Jonathan and Mark Gersovitz, ‘Debt with Potential Repudiation: Theoretical and Empirical Analysis,’ Review of Economic Studies, Vol. 48 (2), 1981: pp. 289 - 303, note that typically countries are not one-time borrowers, and base their argument on the assumption that the costs of default will be proportional to the retaliation by lenders.
22www.clubdeparis.org/en
What usually happens is the Club lenders will meet each year to consider potential rescheduling of the year, often made through requests of leaders of borrowing states in the months leading up to the annual meetings. Incidentally, states that have defaulted or rescheduled in the past are negotiated with under more cautionary terms and face higher interest rates for the rest of the borrowed amounts. The preferred course of action for leaders who have rescheduled in the past is to strike political agreements with the legislative opposition in order to pay their lenders on time. The international reputational costs for default are outlined in Stone (2002) and Tomz (2007).  

What about the domestic institutional incentives for the electorate and the leader of borrower states? We had stated earlier that legislative control was an important factor in debt repayment, furthermore as Saiegh (2007) shows, there is less likelihood that coalitions repay their debt than majorities in the legislature.  

5.2 Elections as Referendums

The dataset contains 15 cases of referendums and/or elections where economics of debt became a decisive-issue in elections. These are summarized along with their lenders for the agreement in Table 5.1. Several of the cases are autocracies, including, Indonesia in 1997, Kyrgyz Republic in 1994, Mexico in 1985, Jordan in 1989, Yemen in 1993, Senegal in 1993, and the Ukraine in 1998. The democracies include Argentina in 1993, Bolivia in 1983, Costa Rica in 1982, Guatemala in 1991, Pakistan


The preconditions of the International Monetary Fund (IMF) and Paris Club debt has been problematic for several countries, autocracies and for democratic states right after their democratization. The design of the dataset and its analysis resembles a limited information multinomial logit (LMNL). Sovereign debt negotiations for Paris Club borrowers are preconditioned on IMF agreements. The Paris Club lenders will usually not reschedule loans, unless the IMF has agreed to lend to that country. The reason for this is that IMF lending comes with policy conditions that have to be met before more funds can be released. The model captures this relationship by coding the Complexity, Economic Costs and Security Concerns variables of Models 1 and 2, according to the IMF agreement that preceded each Paris Club rescheduling. The codings are done with potential oppositions to IMF lending conditions in mind.²⁵

5.2.1 Hypotheses

Our theory suggests the following hypotheses for sovereign debt negotiations:

²⁵Of the elections as referendum examples above, both Bosnia & Herzegovina and Serbia & Montenegro had to repay the portion of ex-Yugoslavian debt that belonged to them after the civil-war was over.
Table 5.1: Elections as Referendums on Rescheduling of Debt, where Economic Performance was a major issue, 1948-2005

<table>
<thead>
<tr>
<th>Borrower</th>
<th>Rescheduled Agreements With Lenders</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Belgium, Canada, Denmark, France, Germany, Italy, Japan, Netherlands, Great Britain, Sweden, Switzerland, US</td>
<td>Jan 1993</td>
</tr>
<tr>
<td>Bolivia</td>
<td>Austria, Denmark, Belgium, France, Germany, Israel, Holland, Switzerland, UK, US</td>
<td>Jan 1983</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Austria, France, Denmark, Germany, Italy, Japan, Mexico, Spain, Sweden, UK, US</td>
<td>Jan 1982</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Austria, Canada, France, Germany, Italy, Spain</td>
<td>Jan 1991</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, S. Korea, Netherlands, Spain, Sweden, Switzerland, UK, US</td>
<td>Jul 1997</td>
</tr>
<tr>
<td>Kyrgyz Republic</td>
<td>Denmark, France, Germany, Japan, Russian Federation, Turkey</td>
<td>Aug 1994</td>
</tr>
<tr>
<td>Mexico</td>
<td>Austria, Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, UK, US</td>
<td>Dec 1985</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, S. Korea, Netherlands, Norway, Russian Federation, Spain, Sweden, Switzerland, UK, US</td>
<td>Aug 1997</td>
</tr>
<tr>
<td>Jordan</td>
<td>Austria, Belgium, Denmark, France, Germany, Italy, Japan, Kuwait, Spain, Sweden, Switzerland, UK, US</td>
<td>Jan 1989</td>
</tr>
<tr>
<td>Yemen</td>
<td>Denmark, France, Germany, Italy, Japan, Netherlands, UK, US</td>
<td>Jan 1993</td>
</tr>
<tr>
<td>Senegal</td>
<td>Belgium, Canada, Denmark, France, Italy, Japan, Netherlands, Norway, Spain, Switzerland, UK, US</td>
<td>Jan 1993</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, UK, US</td>
<td>Jan 1991</td>
</tr>
<tr>
<td>Serbia &amp; Montenegro</td>
<td>Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, UK</td>
<td>Dec 2000</td>
</tr>
<tr>
<td>Ukraine</td>
<td>France, Germany, Italy, Japan, US</td>
<td>Dec 1998</td>
</tr>
<tr>
<td>Bosnia &amp; Herzegovina</td>
<td>Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Russian Federation, Spain, Sweden, Switzerland, UK, US</td>
<td>Jan 1992</td>
</tr>
</tbody>
</table>
H1(i): The more democratic the state, leaders are:
   (a) more likely to use legislative approval than referendum;
   (b) more likely to continue negotiations than legislative approval.

H1(ii): The more autocratic the state, leaders are:
   (a) less likely to use legislative approval than referendum;
   (b) less likely to continue negotiations than legislative approval;
   (c) less likely to continue negotiations than referendum.

H2(i): Among democracies, leaders of Proportional Representation electoral systems are:
   (a) more likely to use legislative approval than referendums;
   (b) more likely to continue negotiations than legislative approval.

H2(ii): Among democracies, leaders of Plurality/Majority electoral systems are:
   (a) less likely to use legislative approval than referendums;
   (b) more likely to continue negotiations than legislative approval;
   (c) less likely to continue negotiations than referendums.
**H3:** The more complex the agreement (or difficult to negotiate) leaders are:
(a) more likely to use legislative approval than referendums;
(b) more likely to continue negotiations than legislative approval;
(c) more likely to continue negotiations than referendums.

**H4:** Domestic costs of an agreement are more likely to increase resistance in the legislature and leaders are:
(a) more likely to continue negotiations than legislative approval;
(b) more likely to continue negotiations than referendums.

**H5:** National security concerns of an agreement are more likely to increase resistance in the legislature and leaders are:
(a) more likely to continue negotiations than legislative approval;
(b) less likely to continue negotiations than referendums.

The dataset prepared for Chapter V contains the leader’s choice of outcomes across 4,292 country-months (or rows of data) in total for the 77 states that borrowed from the Paris Club, between the years 1945 and 2006. With an average of rounds of negotiations per state at 12, this makes close to 922 total rounds of negotiations and 4,292 country-months within all rounds of negotiations. This dataset is considerably smaller than both the territorial disputes dataset which contains 1,710 rounds of negotiations and the foreign direct investment dataset of Chapter IV which has 3,045 rounds of negotiations. The outcome dataset for sovereign debt, consists of
2,195 country-months. All of the variables that make up the dataset along with their sources are available in Appendix C. The following section will layout two multinomial logit models testing political leader’s choices of continuing negotiations or domestic approval of negotiated agreement (legislative approval or referendum).

To test the hypotheses above, I use a multinomial logit model which compares the binary odds of one policy choice (continuing negotiations) relative to two others (elections which act as referendums to debt repayment or legislative approval). The three comparisons I look at are (a) the leader’s choice to seek legislative approval for decision to repay on time relative to referendums (going to elections over budgetary issues); (b) the leader’s choice to continue negotiations for renegotiation of the latest debt agreement relative to seeking legislative approval; and (c) the leader’s choice in continuing negotiations for renegotiation of the latest debt agreement relative to referendums (going to elections over budgetary issues). I used Stata software to estimate the coefficients of the multinomial logit model. These coefficients are used to obtain the predicted probabilities of the outcomes, see §1.4 for a detailed discussion of the multinomial logit model.

5.2.2 Empirical Models

The political crises caused by economic and security concerns of the electorate affects the leader’s choices in repayment decisions. Features of any debt deal made with Paris Club lenders impose costs on the electorate. The empirical model thus builds upon the Referendum Game of Chapter 2. The domestic institutional variables to be tested are democracy and autocracy in Model 1. The electoral systems variables are proportional representation and plurality/majority as in Model 2.

The general formula of equations to be estimated for Model 1 are as follows:
Model 1:

\[ Y_{ij} = \beta_0 + \beta_1(debtbin) + \beta_2(democracy) + \beta_3(autocracy) \]
\[ + \beta_4(complexity) + \beta_5(economiccosts-imf) \]
\[ + \beta_6(securityconcerns) + \beta_7(foreignreserves) + \varepsilon, \]

where

\( Y_{ij} = \) domestic political outcome,

\( debtbin = \) debt to GDP ratio of borrower,

\( democracy = \) democratic regime,

\( autocracy = \) autocratic regime,

\( complexity = \) complexity of the agreement,

\( economiccosts-imf = \) domestic economic costs of an agreement \( X \)

no IMF meetings in the last 12 months,

\( securityconcerns = \) security concerns associated with an agreement,

\( foreignreserves = \) negative current year foreign reserves.

The control variables for this chapter are sourced in the textual analysis of the previous studies of Stasavage (2003) and Saeigh (2005). These works make serious headway in terms of influence of institutional representation and domestic oppositions to sovereign debt repayments. The two variables that I find important in their analysis included here in Models 1 and 2 are ‘no recent IMF meetings in the last twelve months’ and ‘negative current year foreign reserves’ dummy.

\( ^{26}\text{Stasavage, David, Public Debt and the Birth of the Democratic State: France and Great Britain, 1688-1789, Cambridge University Press, Political Economy of Institutions and Decisions Series, 2003: pp. 19-23 and 51 emphasize the importance of creditor interest representation in the legislatures of borrowing states. This argument is similar to our characterization of the economic and military cost concerns of any oppositions to debt agreements in the legislatures. Likewise, the difficulties of legislative approval for IMF agreements often stem from opposition to the budget cuts or wage increases by the government.} \)
(foreignreserves) which I created for this analysis. Both these papers are in agreement that IMF agreements and the valuation of the currency are important to debt repayment deals. The second model will compare the effects of electoral systems on using elections as a deciding vote on reschedulings of Paris Club debt, as approximated by IMF Agreements. The initial analysis showed that the non-existence of IMF meetings were affecting the economic opposition variables. As a result, I include an economic opposition variable economiccosts-imf here that is composed of no IMF meetings (0-1) X economic opposition (0-1). The economic opposition variable is comparable to the one in the FDI analysis of Chapter 4. The existing research suggests the likelihood of obtaining majorities in the legislature (Saeigh 2005); the representation of interests outside of left and right-wing capital (Stasavage 2002) will have an impact on the rescheduling of debt decisions of states. The second model looks at the electoral system effect and is formulated as follows:

**Model 2:**

\[
Y_{ij} = \beta_0 + \beta_1(debtbin) + \beta_2(proportionalrep) + \beta_3(plurality/majority) + \beta_4(autocracy) + \beta_5(complexity) + \beta_6(economiccosts-imf) + \beta_7(securityconcerns) + \beta_8(foreignreserves) + \varepsilon,
\]

where

- \(Y_{ij}\) = domestic political outcome,
- \(debtbin\) = debt to GDP ratio of borrower,
- \(proportionalrep\) = state with a proportional representation electoral system,
- \(plurality/majority\) = state with a plurality/majority electoral system,
autocracy = autocratic regime,
complexity = complexity of the agreement,
economiccosts-imf = domestic economic costs of an agreement X no IMF meetings in the last 12 months,
securityconcerns = security concerns associated with an agreement,
foreignreserves = dummy negative current year foreign reserves.

The dataset consists of all Paris Club borrowers between 1948 and 2005, their rescheduling dates, negotiation rounds along with political explanatory variables. I use economics indicators such as foreign reserves and time to rescheduling as controls. The supposition for the control variables of economic costs and security concerns (as features of agreements) are that the agreements contain cuts on wages are opposed by the unions, and those where the military budget is cut are opposed by the military circles.

5.3 Data Analysis and Results

The multinomial logit coefficients estimated by Stata for Model 1 and 2 are given in Tables 5.2 and 5.4, respectively. In a binary comparison (an outcome $j$ versus a baseline), the coefficient of an explanatory variable gives the expected change of the logit of outcome $j$ relative to the baseline outcome by its respective parameter estimate (in log-odd units) in response to a unit change of that variable given the other variables in the model are held constant. Even though the estimated coefficients provide the estimated directions and significance of the relationships hypothesized by the model, one can learn more by analyzing the impact of discrete changes in
explanatory variables on the predicted probabilities of certain outcomes. Thus, I also present predicted probability results in Tables 5.3 and 5.5. Both Models 1 and 2 pass the Hausman test of IIA assumption, which is simply an indication of no evidence found for the violation of the independence of irrelevant alternatives assumption.

Among regimes, autocratic leaders are more likely to continue negotiations than repay or go to elections over the issue of debt. Leaders of borrower states face this decision at their annual meetings with lending organizations, and especially in the years they have debt due. The results for the sovereign debt dataset is in line with the hypothesized relationships, most especially for democracies in legislative approval versus referendum, autocracies for continued negotiations and legislative approval, proportional representation for legislative approval over referendums, plurality/majority for legislative approval versus referendum. The predictions also pan out for the economic costs of a debt agreement for continued negotiations over referendums, negotiations over legislative approval, and for the military costs of the debt agreement on the choice of continuing negotiations when the only domestic option is legislative approval. The effects have the sign predicted and are significant with a $p < 0.001$. The encouraging performance of the empirical models demands a more detailed expose of the results.

The regime variables indicate that democracies go for legislative approval over referendums, more than autocracies with 0.417 and -0.644 log odds respectively. Similarly, autocracies are more in favor of continuing negotiations over legislative approval, where democracies give priority to legislative approval. One unit change in the autocracy variable leads to a drop in the probabilities of choosing legislative approval by -60.2%, and of referendum by -24.1%. One unit change in the democracy
Table 5.2: MNML Borrowers in Negotiations Domestic Institutional Outcomes Model 1

<table>
<thead>
<tr>
<th></th>
<th>legislative approval vs. referendum</th>
<th>continue negotiations vs. legislative approval</th>
<th>continue negotiations vs. referendum</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEBTBIN $^{†}$</td>
<td>1.800 (0.208)**</td>
<td>1.874 (0.130)**</td>
<td>3.674 (0.222)**</td>
</tr>
<tr>
<td>DEMOCRACY</td>
<td>0.417 (0.236)$^{†}$</td>
<td>-1.964 (0.132)**</td>
<td>-1.547 (0.231)**</td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td>-0.644 (0.134)**</td>
<td>1.795 (0.144)**</td>
<td>1.151 (0.175)**</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>-0.395 (0.065)**</td>
<td>-0.288 (0.071)**</td>
<td>-0.683 (0.087)**</td>
</tr>
<tr>
<td>SECURITY CONCERNS</td>
<td>-0.274 (0.149)$^{†}$</td>
<td>0.865 (0.164)**</td>
<td>0.591 (0.203)**</td>
</tr>
<tr>
<td>ECONOMIC COSTS-IMF</td>
<td>-1.260 (0.202)**</td>
<td>1.301 (0.149)**</td>
<td>0.041 (0.228)</td>
</tr>
<tr>
<td>FOREIGN RESERVES</td>
<td>-0.303 (0.122)*</td>
<td>0.839 (0.137)**</td>
<td>0.535 (0.162)**</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>2.478 (0.335)**</td>
<td>-2.875 (0.319)**</td>
<td>-0.397 (0.417)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>LR $\chi^2$(14)</th>
<th>LR $\chi^2$(14)</th>
<th>LR $\chi^2$(14)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4292</td>
<td>3460.41</td>
<td>3460.41</td>
<td>3460.41</td>
</tr>
<tr>
<td>$Prob &gt; \chi^2$</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: $^{†}$: binary variable = 1 if debt to GDP ratio of state is greater than 0.9, 0 otherwise.

No evidence has been found to reject the assumption of independence of irrelevant alternatives (IIA) by Hausman test.
Table 5.3: Challenger Concessions Model 1 - Discrete Changes in Probabilities

<table>
<thead>
<tr>
<th>Variable Value</th>
<th>Probability of Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>legislative approval</td>
</tr>
<tr>
<td>DEBTBIN</td>
<td></td>
</tr>
<tr>
<td>from: 0 (debtgdpratio&lt; 0.9)</td>
<td>0.519</td>
</tr>
<tr>
<td>to: 1 (debtgdpratio≥ 0.9)</td>
<td>0.237</td>
</tr>
<tr>
<td>% change:</td>
<td>-54.3</td>
</tr>
<tr>
<td>DEMOCRACY</td>
<td></td>
</tr>
<tr>
<td>from: 0 (not democratic)</td>
<td>0.192</td>
</tr>
<tr>
<td>to: 1 (democratic)</td>
<td>0.592</td>
</tr>
<tr>
<td>% change:</td>
<td>207.7</td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td></td>
</tr>
<tr>
<td>from: 0 (not autocratic)</td>
<td>0.645</td>
</tr>
<tr>
<td>to: 1 (autocratic)</td>
<td>0.257</td>
</tr>
<tr>
<td>% change:</td>
<td>-60.2</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td></td>
</tr>
<tr>
<td>from: 0 (less complex)</td>
<td>0.360</td>
</tr>
<tr>
<td>to: 3 (more complex)</td>
<td>0.472</td>
</tr>
<tr>
<td>% change:</td>
<td>31.0</td>
</tr>
<tr>
<td>SECURITY CONCERN</td>
<td></td>
</tr>
<tr>
<td>from: 0 (no)</td>
<td>0.534</td>
</tr>
<tr>
<td>to: 1 (yes)</td>
<td>0.340</td>
</tr>
<tr>
<td>% change:</td>
<td>-36.3</td>
</tr>
<tr>
<td>ECONOMIC COSTS-IMF</td>
<td></td>
</tr>
<tr>
<td>from: 0 (no)</td>
<td>0.605</td>
</tr>
<tr>
<td>to: 1 (yes)</td>
<td>0.295</td>
</tr>
<tr>
<td>% change:</td>
<td>-51.2</td>
</tr>
<tr>
<td>FOREIGN RESERVES</td>
<td></td>
</tr>
<tr>
<td>from: 0 (no)</td>
<td>0.514</td>
</tr>
<tr>
<td>to: 1 (yes)</td>
<td>0.326</td>
</tr>
<tr>
<td>% change:</td>
<td>-36.6</td>
</tr>
</tbody>
</table>
Table 5.4: MNML Borrowers in Negotiations Domestic Institutional Outcomes Model 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>legislative approval vs. referendum</th>
<th>continue negotiations vs. legislative approval</th>
<th>continue negotiations vs. referendum</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEBTBIN †</td>
<td>1.816 (0.205)***</td>
<td>1.888 (0.133)***</td>
<td>3.704 (0.220)***</td>
</tr>
<tr>
<td>PROPORTIONAL REP</td>
<td>0.639 (0.241)**</td>
<td>-1.958 (0.135)***</td>
<td>-1.319 (0.236)***</td>
</tr>
<tr>
<td>PLURALITY/MAJORITY</td>
<td>-0.294 (0.272)</td>
<td>-2.126 (0.230)**</td>
<td>-2.420 (0.316)**</td>
</tr>
<tr>
<td>AUTOCRACY</td>
<td>-0.608 (0.134)***</td>
<td>1.769 (0.145)**</td>
<td>1.160 (0.176)**</td>
</tr>
<tr>
<td>COMPLEXITY</td>
<td>-0.390 (0.065)***</td>
<td>-0.290 (0.072)**</td>
<td>-0.681 (0.088)***</td>
</tr>
<tr>
<td>SECURITY CONCERNS</td>
<td>-0.744 (0.180)***</td>
<td>0.873 (0.168)**</td>
<td>0.129 (0.227)</td>
</tr>
<tr>
<td>ECONOMIC COSTS-IMF</td>
<td>-1.285 (0.206)***</td>
<td>1.309 (0.149)**</td>
<td>0.025 (0.231)</td>
</tr>
<tr>
<td>FOREIGN RESERVES</td>
<td>-0.237 (0.123)†</td>
<td>0.828 (0.137)**</td>
<td>0.591 (0.163)**</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>2.786 (0.347)***</td>
<td>-2.861 (0.318)**</td>
<td>-0.075 (0.425)</td>
</tr>
</tbody>
</table>

| N                      | 4292                               | 4292                                          | 4292                                |
| LR $\chi^2(16)$        | 3489.11                            | 3489.11                                       | 3489.11                            |
| Prob > $\chi^2$        | 0                                  | 0                                              | 0                                  |

Note: † $p < 0.1$, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$, two tailed test. Standard errors are in parentheses.
No evidence has been found to reject the assumption of independence of irrelevant alternatives (IIA) by Hausman test.
† binary variable = 1 if debt to GDP ratio of state is greater than 0.9, 0 otherwise.
<table>
<thead>
<tr>
<th>Variable Value</th>
<th>Probabilities of Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>legislative approval</td>
</tr>
<tr>
<td>DEBTBIN from: 0 (debtGDPratio &lt; 0.9)</td>
<td>0.525</td>
</tr>
<tr>
<td>to: 1 (debtGDPratio ≥ 0.9)</td>
<td>0.237</td>
</tr>
<tr>
<td>% change:</td>
<td>-54.9</td>
</tr>
<tr>
<td>PROPORTIONAL REP from: 0 (not PR)</td>
<td>0.218</td>
</tr>
<tr>
<td>to: 1 (PR)</td>
<td>0.632</td>
</tr>
<tr>
<td>% change:</td>
<td>190.0</td>
</tr>
<tr>
<td>PLURALITY/MAJORITY from: 0 (not PLMAJ)</td>
<td>0.349</td>
</tr>
<tr>
<td>to: 4 (PLMAJ)</td>
<td>0.715</td>
</tr>
<tr>
<td>% change:</td>
<td>104.7</td>
</tr>
<tr>
<td>AUTOCRACY from: 0 (not autocratic)</td>
<td>0.643</td>
</tr>
<tr>
<td>to: 1 (autocratic)</td>
<td>0.260</td>
</tr>
<tr>
<td>% change:</td>
<td>-59.6</td>
</tr>
<tr>
<td>COMPLEXITY from: 0 (less complex)</td>
<td>0.361</td>
</tr>
<tr>
<td>to: 3 (more complex)</td>
<td>0.479</td>
</tr>
<tr>
<td>% change:</td>
<td>32.6</td>
</tr>
<tr>
<td>SECURITY CONCERNS from: 0 (no)</td>
<td>0.548</td>
</tr>
<tr>
<td>to: 1 (yes)</td>
<td>0.339</td>
</tr>
<tr>
<td>% change:</td>
<td>-38.2</td>
</tr>
<tr>
<td>ECONOMIC COSTS-IMF from: 0 (no)</td>
<td>0.609</td>
</tr>
<tr>
<td>to: 1 (yes)</td>
<td>0.296</td>
</tr>
<tr>
<td>% change:</td>
<td>-51.3</td>
</tr>
<tr>
<td>FOREIGN RESERVES from: 0 (no)</td>
<td>0.513</td>
</tr>
<tr>
<td>to: 1 (yes)</td>
<td>0.328</td>
</tr>
<tr>
<td>% change:</td>
<td>-36.0</td>
</tr>
</tbody>
</table>
variable, on the other hand, leads to a jump up in the probabilities of choosing legislative approval 207.7% and referendums by more 102.8%. The converse is true for the choice between negotiations and referendums, where democracy’s unit increase leads to a fall in the chance of negotiating further(-56.8%), and autocracy’s unit change means more lengthy negotiations will follow (139.8%).

These results are supportive of the first group of hypotheses related to domestic institutions. Findings indicate a general preference of democracies for seeking domestic approval over negotiating. For FDI negotiations we got results in a different direction and magnitude comparisons between democracies and autocracies. For territorial dispute tests, we obtained the similar results for all three issue areas in comparing legislative approval and referendum. Democratic behavior in negotiation versus domestic approval comparisons, of territorial disputes fall somewhere in the middle of the FDI and sovereign debt results. For Chapters 3 and 4, continuing negotiations is indicative of seeking the best solutions, and prolonged talks, whereas for Chapter 5, continuing negotiations means avoiding repayment.

Autocracies give significant results for refusing to repay (and going to elections) instead of going for domestic ratification of measures. Interpretation of the results in this way suggests the tendency of democracies to pay their debt on time, and most autocracies to avoid paying debt. It doesn’t help that most borrowing states are autocracies.27 This comparison supports why referendums may be so much more rare in FDI and sovereign debt negotiations, than territorial disputes. The comparison of legislative approval to referendum, is in favor of legislative approval for both, but is in favor of the referendum option for territorial disputes.

Complexity of the agreement (Table 5.2) for debt could be indicative of a newly

---

designed agreement to repay. This is supported by the significant and positive log odds of the leader’s choice of getting domestic approval by referendum or legislatures, instead of continuing negotiations (0.288 and 0.683). Where debt restructuring is an issue, the leader will be more likely to choose to go to elections/referendums than repay, and repay more than choose to continue negotiations. Another aspect of debt repayment is refusing to repay, which the leader, given the terms of the agreement. The results indicate a large rise in the probability of referendums at 328.8%, and an increase in the probability of seeking legislative approval at 31.0% that come with increases in complexity. These trends carry over to the results in Table 5.5 where the change in complexity from 0 to 3 yields 32.63% increase in the chance of legislative approval and a ten times of that increase in the chance of referendums.

The reason for this might be the preference of states to not pay off their debt only a few times in their debt cycle (i.e. requiring restructurings of 5-10 year agreements to repay), along with their interest. We can say that the more state-specific the debt agreements, come with an unwillingness of legislature to repay that particular term. Given that Paris Club debt agreements are often more general, and get more specific when the country is in serious trouble with regards to ability to repay, the findings makes sense. Complexity may mean uniqueness of the agreement, because of the few types of agreement terms usually used by the Paris Club. The legislature will thus be more in favor of approving the more complex agreements, and these are presented to approval by the electorate as they get more complex.  

As far as the other features of agreements: Model 1 performs well in relation to the

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28The complexity issue is less so for the IMF, especially after the financial crises of the 90s and later, when the IMF was criticized for ignoring differences among states in their dealings and chose to alter their policies to accommodate this general pattern. Part of this has been tried to be remedied by the IMF officials, who maintain that they will be doing their best to take into consideration domestic differences of borrowing states. In this sense, the statistical findings confirm and increase in chance of domestic approval when the lenders have drafted a more specific agreement for the state in question. I am assuming the states with better economic indicators will be better able to fit the general categories of lending, making their payments on time and not requiring further complexity for their debt agreements.
economic causes of opposition to sovereign debt agreements. The protest marches against the IMF and strong backlash against debt preconditions are reflected in our results. The voter’s response to heavy-duty economic demands by the lenders means the leader will prolong talks as much as possible, avoiding making repayment an issue for elections. The military cost cutting concern empirics do not fulfill all expectations as the hypothesis of 5(b) had predicted the leader would ask the electorate whether they favor non-payment. The empirical test yields a positive coefficient (0.591) indicating that the leader is 1.806 times more likely to choose continued negotiations over the approval of the agreement as a response to the cut in military costs. The leader seems to favor negotiations no matter what the domestic option is.

The economic concerns variables, win out over the security issues legislative oppositions have with debtors, in all except for this last binary comparison: continuing negotiations versus referendums. The security concerns coefficient of 0.591 (significant at $p < 0.01$) is higher than the economic costs coefficient of 0.041, which is not significant. Otherwise, the economic costs have larger coefficients than military concerns, for the comparison of negotiations and legislative approval. This means leaders faced with legislative opposition to agreements will prefer continuing to negotiate the agreement over seeking legislative approval with more odds, if the opposition is economic rather than security based.

The general sign of the economic concerns variable is more like that of the privatization/FDI results of Chapter 4. I attribute this result to the lesser influence security issues have over the leader’s choice of domestic approval versus prolonged negotiations. This can be interpreted as the eagerness of the political leader to demonstrate his/her performance before the next election. Having an economic agreement com-

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29See Tables 5.2 and 5.3.
30This is the same trend as in the FDI study of Chapter 4.
pleted may be more beneficial for the leader’s record, before the next election, than if he chose to delay the signing of a deal due to security concerns. My introduction (Chapter 1) and the referendum game (Chapter 2) explains these relationships in more detail.

I should also add that the similarities in the leader’s response to economic cost based legislative oppositions in Chapters 4 and 5 are not true for his/her responses to the the security based oppositions. The national security based legislative oppositions have more power to overturn FDI deals than sovereign debt agreements as shown in the results. This means that, the leader will be more in favor of prolonging negotiations for either type of legislative opposition in debt issues, but will be more adamant to get FDI deals accepted when the opposition is national security based. Therefore, even though oppositions to investments that cause security scares in the public get a lot of airtime in the news, they do not have as much an influence as domestic groups may have with the economic consequences of a deal.

The political incentives posed by electoral system differences are also important for the negotiation vs. legislature approval and negotiation vs. referendum comparisons. Plurality/Majority systems seem to favor leaving the matter of rescheduling over repayment up to the legislators and the electorate, see Table 5.4. The Proportional Representation results are also in the same direction, but have relatively smaller effects. As observed in Table 5.5, the chance of seeking a referendum style approval (through elections after having rejected debt repayment) and legislative approval have respective percentage increases 174.6% and 104.6% for a unit change in PLMAJ systems. In a similar fashion, the same unit increase in PR systems leads to a 190.0% increase in the probability of legislative approval, a larger percentage jump compared to 53.1% increase in the probability of choosing the referendum option. Both electoral
systems decrease the chance of continuing negotiations sharply with a unit increase. Moreover, both (electoral system) variables give results that are consistent with that of democratic regimes. The avoidance of prolonged negotiations could be attributed to lower costs of bribery for coalition formation in democracies. We observe that democracies (both proportional representation and plurality/majority systems) have less affinity for referendums than autocracies.

Tomz (2002, 2004) and Saiegh (2004) agree that the importance of sovereign debt varies across elections.\(^{31}\) Debt restructuring or repayment decisions can become key to winning elections. It is these elections that we treat as referendums in the above analysis.\(^{32}\) The Argentine default in Fernando de la Rua’s time is exemplary of cases where debt decisions had a major impact in elections. The referendum model captures this relationship between debt decisions and elections by \(\theta_1\) and \(\theta_2\). The inability of the electorate to view all debt negotiations and lack of transparency in this area means debt negotiations will have varied effects on election decisions.\(^{33}\)

The Referendum Game of Chapter 2 and the theory presented since then take as relevant not all elections, but only those where there is a visible debt decision made before the elections and the elections thus have a major impact on the voters’ evaluations of that decision. In this sense, the elections act as a referendum on that particular economic decision made by the leader. Governments are aware of the electoral imperatives when they make any type of decision, especially if taken


\(^{33}\)Saei gh (2004) mentions this in relation to the difficulties lenders have of observing the domestic decision-making developing democracies.
right before elections. Electoral incentives influence debt decisions by equating the decision of leaders to repay or refuse to repay, with a referendum on that decision. Interestingly, although this is not examined in greater detail here, proportional representation systems have a tendency for ‘snap’ elections: Elections where the coalition members or a minority coalition, and the majority opposition in the legislature have trouble agreeing on a decision made by the leader of the government. These are times when a decision to repay or not repay debt can be a deal-breaker for coalition governments trying to balance financial crisis budgets and disagreeing on whether to give precedence to domestic priorities instead of international obligations. However, this is only a more extreme example of when elections would be acting as referendums. The effect of debt repayment on elections really occurs more often than assumed, and only becomes a problem when the leader decides not to repay the amount when large payments are due.

The control variables used in this analysis are minimal in the interests of parsimony, and examine three variables of interest to the choice of negotiating versus domestic approval. The \textit{debtbin} variable which is a binary dummy variable of debt to GDP ratios of all the borrowers over all the years in the dataset that is available. The data is more consistently available after the 1950s, even for developing states who have to report these measures in order to be eligible for further lending. Measures were obtained from the IFC Annual Statistics. The effect of the debt to GDP ratios for Model 1 above are positive and significant for all comparisons. Log odds of staying in the negotiations option more positive when the domestic approval mechanism available is referendum, as opposed to when the only available domestic approval...
option is legislative approval. The unit change in this ratio is positive for negotiations (at 197.8%) and highly negative for legislative approval and referendums (at -54.3% and -92.4% respectively). Model 2 of Table 5.4 shows the somewhat larger effect $\text{debtbin}$ ratio has (1.816, 1.888 and 3.704 in log odds) across the three binary comparisons. The significance of these coefficients points to the relevance of this ratio as a control variable. A unit increase in the ratio of debt to the state’s GDP, see Table 5.5, leads to an increase in the probability of prolonging negotiations with a 197.8%, and a sharp percentage drop in chance of either choice of domestic ratification. By exponentiating the coefficients in Table 5.4, I find that a leader is 40.6 times more likely to prefer negotiations over referendums, and 6.6 times more likely to choose negotiations over legislative approval. This suggests that leaders of highly indebted states will be in favor of continuing negotiations if the only domestic option is to going to elections over the issue of non-payment.

The other two variables of interest, dummy for more than twelve months since IMF meetings, and dummy for negative annual foreign reserve entry, are also significant in terms of our results. An examination of the records of meetings through newspaper articles reveals an increased frequency of meetings and the lack of annual meetings with the IMF could be indicative of problems between the borrower state and its lenders. The Paris Club officials are highly adamant in their requests for IMF referrals for their reschedulings and any signs that meeting schedules have changed course could be problematic.\textsuperscript{35} Leaders of states will often seek additional meetings with both lending organizations when they are in need of renewing terms to existing agreements or are unable to meet obligations. This observation is reflected in my dataset through the dummy for more than twelve months since IMF meetings.

This variable is multiplied with the economic opposition variable, however, because it seems to overpower the analysis if left by itself. This allows us to account for cases where meetings have not been held and there is legislative opposition based on domestic costs ($economiccosts-imf=1$) and the cases where meetings are held and/or there is no domestic cost oppositions in the legislature ($economiccosts-imf=0$). This shows the power of IMF meetings over the leader’s response to opposition to agreements by MPs. The most noteworthy observation from unit change analysis is the huge drop in the probability of legislative approval (from 0.605 to 0.295 in Table 5.3 and from 0.609 to 0.296 in Table 5.5) and the big increase in the probability of continuing negotiations (from 0.355 to 0.637 in Table 5.3 and from 0.354 to 0.639 in Table 5.5) as $economiccosts-imf$ is increased from 0 to 1. This implies the tendency of the leader to continue negotiations in the presence of domestic economic concerns and no IMF meetings within the last twelve months.

The foreign reserves variable is included as a general indicator of the economic trends of the state and of a downturn in the addition of foreign currency into the country’s flow of assets. The MLE results (consistent in both discrete change tables) have determined that negative foreign reserve entry serves to decreases the chances of the leader preferring to seek domestic approval; and increase the probability of choosing to continue to negotiate. A negative turn in foreign currency increases the probability of prolonging negotiations by more than 40%, and decreases the choice of either domestic approval in Tables 5.3 and 5.5. The log odds results, on the other hand, demonstrate a preference for referendums over legislative approval, with a fall in foreign reserves. Both Model 1 and Model 2 support this finding, with coefficients of -0.303 and -0.237 respectively; though both are less significant than we would like.

In the conclusion to Chapter 2, I had explained that there would be two sets of...
offers to the Paris Club (the other Negotiating Party in this case) depending on (1) where the resistance is in the bribery equilibrium, and (2) where the resistance is in the referendum equilibrium. Recall that the offers matched the level of resistance in the legislature up until the threshold when referendum or bribery was required. Carazo’s Costa Rican debt example demonstrates this more closely. The difficulties he had in the legislature were exacerbated by the increased resistance on security grounds to his agreements. The legislature was critical of Carazo’s choice to forgo repayment to the Paris Club while trying to gain favors with the U.S. government in hopes they would make up for the difference in lack of future lending by the IMF and the the Paris Club. As a result, the resistance in the legislature remained where it was, without a new agreement. None of his offers to the negotiating party (NP) were accepted; NP is IMF/Paris Club in this case. This meant, Carazo could only seek to bribe the legislature, or go for referendum, to get the agreement passed. At this time, Costa Rica was a democratic state with a Proportional Representation system. The empirical hypothesis says the leader would want to choose either type of domestic approval over prolonging negotiations, but will also choose legislative approval over going to referendum (election) over the issue. In the case of Carazo, we see that he goes to referendum instead of the legislature. This I attribute to the national security and economic based oppositions to his agreements from the legislature. Even though Costa Rica was a Proportional Representation democracy, the fact that there were both economic and security based oppositions to his rule may have forced him into referendum.

5.4 Conclusion

With that, the results of the analysis are as follows:
For **Model 1**, we do not reject: H1i(a), H1ii(a), H4(a), H4(b), H5(a); and can reject H1i(b), H1ii(c), H1ii(b), H3(a), H3(b), H3(c), H5(b).

For **Model 2**, we do not reject: H2i(a), H2ii(a), H2ii(c), H4(a), H4(b), H5(a); and can reject H2i(b), H2ii(b), H3(a), H3(b), H3(c), H5(b).

Our overall results support the three hypotheses regarding electoral systems, economic costs and security concerns. The results are not as supportive for the regime variable predictions and complexity. The analysis here uses new data and contributes the following to the discussion in sovereign debt negotiations: (1) it introduces some of the domestic political causes of the relevance of Paris Club negotiations to elections; (2) it examines the domestic processes behind legislative rejection of Paris Club rescheduling agreements; and (3) it underscores the leader’s electoral incentives for deciding on a domestic ratification mechanism for sovereign debt repayment decisions.
CHAPTER VI

Conclusion

This study set out to theoretically and empirically analyze what referendums can do for a leader’s reelection prospects and contribute to the course of international negotiations. Assuming that the leader and electorate switch the roles of principal and agent in the process of referendum inquiries, I obtained five main hypotheses relating to the use of referendums. The empirical results support the theoretical framework set out by the Referendum Game of Chapter 2. The results support the notion that costs of referendums, costs of bribery in the legislature and the degree to which the international issue pertains to the next elections determine whether the leader will choose to utilize the referendum option.

In this study, the leader is assumed to be a utility maximizing office holder seeking re-election, based on the successful signing of an international agreement. The game models how the leader decides on what to propose to the other negotiating party (NP) and the action for ratification of the agreement (if it is accepted by the other NP). An important finding of the game is that it is in the interest of the leader to satisfy the legislature’s requirements for the negotiated agreement, as long as, the resistance at the legislature is moderate. Whenever the legislative resistance reaches extremes however, the leader seeks to resolve the legislative block by using
referendums or bribery in the legislature. The game formalizes these processes, and presents referendum action by the leader as a rational response at an equilibrium. The game is based on cases of a series of referendums in the areas of territorial disputes, foreign investment and sovereign debt agreements of the recent past.

Of the six case-studies examined, four had democratic regimes and proportional representation (PR) electoral systems. Of these four: Konrad Adenauer had a successful referendum on the Saar; Luis Alberto Lacalle carried out a failed referendum on the privatization of oil; Raul Alfonsin forced a successful referendum on the Beagle Channel; and Rodrigo Carazo Odio was ousted with a failed election after difficulties signing a new debt agreement. The first two had domestic economic cost concerns leading the opposition to the referendums, while the last two had security concerns associated with the agreement seizing the resistance in the legislature. Only one of each type of legislative resistance cases met with an unanticipated (by the leader carrying out the referendum) ‘no’ in the ballot box. As rarely as referendums do occur, this is a fitting analogy to real world cases where the only two probable outcomes occur (yes/no), with very close percentages at the ballot box.

In these four cases of democratic proportional representation systems, the leader’s choices can be explained in terms of the variations in four parameters of the game: $m_2$, $p_\omega$ and $p_L$.\(^1\) The costs of bribery of the legislature ($c$) was indeed too high for all four cases of referendum. As such, Adenauer’s expectations that the electorate would be for a union with Germany, because of the existence of ethnic co-nationals and post-war economic boom in Germany, is supported by both the model and the empirical results. Lacalle’s expectations of strong relevance of privatization reversals to the election ($\theta_1$ and $\theta_2$) and the resulting high $m_2$ (or loss of electoral reputation

\(^1\) $p$: probability of the leader being reelected in the coming election, $\omega$: utility of holding office for the leader, so $p_\omega$ is the utility the leader is expected to obtain from the coming election; $p_L$: probability of electorate being in favor of the agreement; $m_2$: reputational cost of no as an outcome of a referendum to the leader (in units of utility).
that would accompany a ‘no’ result) caused him to lose the following elections. Conversely, in Alfonsin’s referendum, his anticipation of the positive effects of Papal mediation and the value of last offers was right on. This made his attempt to obtain electoral support for his peace agreement successful yielding a ‘yes’ result. Carazo’s case was not so fortunate. He chose to go to elections after his refusal to pay, miscalculating the high $m_2$, and with a poor understanding of $p_L$ and $p_\omega$. He should have continued to negotiate with the IMF and got himself out of the debt hole.

Empirical findings of the three chapters confirm most of the arguments put forth by the referendum game. The first major result is that democracies have mixed responses to referendums across the three issue areas. For territorial disputes, democratic leaders prefer referendums to legislative approvals, but choose legislative approvals before referendums in foreign direct investment and sovereign debt. On the other hand, democracies prefer prolonged negotiations to legislative approval for territorial disputes and foreign direct investment. This is not in the same direction as the preference of legislative approval over continuing negotiations result for sovereign debt. The most important finding with regards to democracies across the chapters is the willingness of democracies to negotiate to obtain the best agreements, except on sovereign debt. In sovereign debt, democratic leaders seek legislative approvals, then wait until elections, and lastly choose to continue negotiations. These findings talk to the negotiating power of lending organizations like the Paris Club, which borrowing state leaders also recognize. Leaders of borrowing states will thus seek to justify non-repayments with their own legislatures and electorates, before communicating their intentions to international organizations like the Paris Club or IMF. Both referendums and legislative approval are the preferred options for democratic leaders.

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$\theta_1$: increase in the probability of the leader being reelected after a referendum with an outcome yes; $\theta_2$: decrease in the probability of the leader being reelected after a referendum with an outcome no.

Table 2.5 has more detail on changes in $x_r$ and $x_{ref}$ with respect to these parameters of the model.
except when negotiating on territorial conflict. The results in Table VI summarize the findings of the multinomial logit analysis of the three chapters.

Secondly, autocracies also behave consistent with our hypotheses. There is evidence that autocracies will choose referendums over domestic legislative approval, over continuing to negotiate for territorial disputes and foreign direct investment. This result emphasizes the lack of reverence to domestic approvals, and imply that bribery is more costly than referendums in these regimes. The avoidance of autocratic leaders of prolonged negotiations does not hold for sovereign debt negotiations. Economic issues with negotiated agreements from elites or legislature-like approval bodies will prompt autocracies to want to seek legislative approval or referendums before continuing negotiations for territorial disputes. This can be attributed to the ease of getting referendum or election results leaders want in autocratic states, often by way of elections that are unfair with results obtained by intimidation or fear. Autocratic leaders are going to avoid negotiating as much as possible, except when dealing with sovereign debt lenders. This is also supportive of what we would think of as autocratic privatizations or opening the country up to foreign direct investment; many of the deals are chosen by the autocratic leader who plans to gain by way kickbacks from the deals with the multinational corporations of their choice. This is not to say that democracies are not prone to the same corrupt behavior in privatizations. Yet, the difficulty of passing privatization deals through the legislatures is evidenced in the favoring of prolonged negotiations by democratic leaders.

The third main finding of the empirical test comes from the features of agreements. The characterization of the two types of legislative oppositions to legislative ratification is an interesting aspect of this study. The direction of the log odds coefficients are as predicted. The legislative oppositions to new agreements predominantly come
from security concerns in Chapters 3 (Territorial Disputes) and 4 (Foreign Direct Investment). Economic costs dominate other concerns for legislative oppositions of Chapter 5 (Sovereign Debt). There are conclusions to be drawn from the findings. For instance, the results show that both economic and security type oppositions in the legislature make leaders prolong negotiations in sovereign debt. There is a consistent preference for continuing negotiations, no matter what type of opposition there is in the legislature. Only economic oppositions consistently lead to continued negotiations for foreign direct investment. If the opposition to the agreement is national security based, then leaders seek domestic approval before proceeding.

The fourth major result to come out of the empirical testing is the preeminence of referendums and legislative approval for the more complex agreements. Comparisons of choice of legislative approval against referendums yield negative log odds for all three issue areas of negotiations. This means political leaders prefer to take the more complex agreements to referendums. As one of the three features of agreements, complexity is conducive to use of referendums. These findings go against the idea that complexity of agreements is the reason for not preferring referendums. Complexity seems to favor all kinds of domestic ratification, except for privatization/investment deals, where it leads to prolonged negotiations. I interpret this to be a result of the international legal advantage caused by the sovereignty of a state, over a firm or multinational corporation that it is negotiating with.

The Referendum Game says that referendums will occur if the leader has something to gain by the results. The electoral objective of the leader is what prompts him/her to seek referendums in the first place. Complexity of agreements increases chances that the electorate will not be in favor of an agreement they do not understand. If the outcome of the referendum is not going to support the signing of a new
### Table 6.1: Referendum Decision Results by Explanatory Variable and Issue Area.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Territorial Dispute</th>
<th>Foreign Direct Investment</th>
<th>Sovereign Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>legislative approval vs. referendum</td>
<td>continue negotiations vs. legislative approval</td>
<td>continue negotiations vs. referendum</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEMOCRACY (H1)</td>
<td>+(W)</td>
<td>+(S)</td>
<td>+(W)</td>
</tr>
<tr>
<td>AUTOCRACY (H1)</td>
<td>-(S)</td>
<td>-(S)</td>
<td>-(S)</td>
</tr>
<tr>
<td>PROPORTIONAL REP (H2)</td>
<td>+(S)</td>
<td>+(W)</td>
<td>+(W)</td>
</tr>
<tr>
<td>PLURALITY/MAJORITY (H2)</td>
<td>-(S)</td>
<td>+(S)</td>
<td>-(S)</td>
</tr>
<tr>
<td>COMPLEXITY OF AGREEMENT (H3)</td>
<td>+(W)</td>
<td>+(W)</td>
<td>+(W)</td>
</tr>
<tr>
<td>ECONOMIC COSTS (H4)</td>
<td>NA</td>
<td>+(W)</td>
<td>+(S)</td>
</tr>
<tr>
<td>SECURITY CONCERNS (H5)</td>
<td>NA</td>
<td>+(S)</td>
<td>-(S)</td>
</tr>
</tbody>
</table>

Note: A positive sign (+) indicates that in the statistical tests the estimated coefficients should be > 0; a negative sign (-) indicates that in the statistical tests the estimated coefficients should be < 0; “NA” indicates that there is no hypothesis to be tested; “S” indicates support for the hypothesis; “W” indicates no support for the hypothesis.
agreement, then the leader will not have a strong incentive to hold a referendum. Therefore, even though we empirically observe that the leaders will take the issues to a referendum, we find the electorate’s $p_L$ (probability that the electorate will be in favor of the agreement) may not be as the leader expected. If the electorate’s type is UFE or ‘unfriendly’ to the agreement, the leader will have less of a reason to find out what they think.

The goal of using the electorate to convince the legislature, does not exist for those cases where the electorate is of type UFE (unless the leader does not want the agreement to pass). The empirical hypotheses here assume that the more complex the agreement, the greater the chance that the electorate will be of the type UFE. Yet for leaders who are not able to use bribery in the legislature, going for a referendum may be the only option, even if there is a chance of losing ratification for the agreement. The leader seeking reelection knows a referendum will work just as well as a legislative ratification of the agreement. Recall our example of Lacalle and the privatization question of 1992. The president took the gamble of a referendum when the odds were stacked against him. The privatization reforms were too complex for a leftist movement that was sweeping whole Latin America in early 90s. The resurgence of the left at that time was based on the simple argument that energy costs would increase if the privatization/FDI agreements were to pass.

These two results highlight cases where the leader may have no choice left, but to take the agreement to a referendum. For instance, if bribery costs ($c$) are too high and the punishment to a no vote in referendum ($m_2$) is low, the leader may seek referendums first. Examples of this include debt agreements where new funds are conditioned on passing of negotiated agreements, and territorial agreements where

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4See §2.5.1 for explanations of offers made at the different equilibria.
Table 6.2: Referendum Use Results by Issue Area & Explanatory Variables.

<table>
<thead>
<tr>
<th>Issue Area</th>
<th>Democracies vs. Autocracies</th>
<th>Proportional Representation vs. Plurality/Majority</th>
<th>Complexity vs. Economic Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territorial Disputes</td>
<td>DEMS $\succ$ AUTS</td>
<td>PLMAJ $\succ$ PR*</td>
<td>more complex $\succ$ less complex</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>AUTS $\succ$ DEMS</td>
<td>PR $\succ$ PLMAJ</td>
<td>more complex $\succ$ less complex</td>
</tr>
<tr>
<td>Sovereign Debt</td>
<td>AUTS $\succ$ DEMS</td>
<td>PLMAJ $\succ$ PLMAJ</td>
<td>more complex $\succ$ less complex</td>
</tr>
</tbody>
</table>

Note: * INSIGNIFICANT RESULT for PR
mediated terms may be the last offer made by the negotiators. Office-seeking leaders, wanting to demonstrate performance before the next elections can then be open to referendums. These results support our theory of how domestic democratic institutions work through electoral incentives to determine leader actions in international relations. The empirical findings also explain why referendums are so rarely used. The behavior of leaders in territorial disputes are consistent with the leader doing nothing for cases where both \( m_2 \) and \( c \) are too high. The behavior of leaders are also related to the expected reelection prospects \( (pω) \), which may be so low as to prompt the leader to ride out the existing odds of reelection. This is the case for some sovereign debt cases, where elections serve as referendums on the demonstrated performance of the leader.

The fifth major claim that can be made is that the statistical findings for domestic institutions are generally supportive of the theory of referendums. Costs of bribery and costs of referendum become relevant to the leader’s choice when resistance in the legislature is greater than the offers made \( (r > x) \) to the other NP. These costs and the relevance of the decisions to the next elections, also varies with the electoral systems. Proportional Representation (PR) systems tend to choose legislative approval over referendums, for resolution of territorial conflicts and sovereign debt agreements (where some elections serve as referendums), and referendums over legislative approval for ratification of foreign investment deals. Electoral systems of Plurality/Majority (PLMAJ) make leaders more in favor of referendums over legislative approval for territorial disputes and sovereign debt deals (where some elections serve as referendums), and legislative approvals over referendums for foreign direct investment agreements. These results are in full agreement with what the literature has shown so far with regards to electoral systems. FDI research is the only one
out of the three that has found consistent evidence for PR and choice of FDI policy. Territorial disputes and sovereign debt research has not had overly impressive results with regards to electoral systems effects.

Referendums are also a strong choice over continuing negotiations for PLMAJ electoral systems, dealing with territorial dispute peace agreements and sovereign lending agreements. Leaders making FDI agreements prefer to continue negotiating, if the only domestic option is to go to a referendum. One can think of this as cases where the legislature is not in favor of the privatization or investment deal, and the leader can only go for a referendum to get his/her agreement approved. In those cases, leaders will choose to continue negotiations. Lacalle is an example of a leader that did not continue negotiations, but chose to wait until the election to resolve the issue. The empirical models obtain mixed results for performance across the issues. The case studies support these findings. Lacalle and Carazo who were both dealing with international economic agreements had as much difficulty completing their agreements in accordance with electoral goals as Alfonsin and Adenauer had in dealing with international territorial agreements. All three datasets give satisfactory answers for the economic or security concerns associated with negotiated agreements expressed in the legislature.

Secondly, the magnitude of coefficients of proportional representation leader behavior against plurality/majority leader behavior are consistent across territorial disputes and FDI. PR systems are going to make leaders go for legislative approval instead of referendums when they can; they do this more than PLMAJ systems do. PR electoral systems allow leaders to seek referendums instead of prolonging negotiations for all three issue-areas, more than PLMAJ systems. PR electoral system leaders are going to be more in favor of referendums, when economic issues
are negotiated, as opposed to territorial conflict. Thus, these results speak strongly for differences in electoral systems and referendum use by leaders in these electoral systems.

Moreover, these results support our notion of the purpose of referendums as an electoral institution. These include providing electoral input into issues where the leader and the opposition have serious differences of opinion. The role of resistance of the legislature for bringing about bribery or referendum is key to interpreting these findings. This makes up the core assumption of our Referendum Game. Perhaps the single most significant result to come out of the analysis is that democracies are not so keen on dismissing referendums (provided, like elections, they are free and fair). Democratic leaders are aware of the benefits referendums provide in the face of legislative gridlock and as a last resort of political urgency. According to the quantitative results, we can only reject 10/24 of the hypotheses for territorial disputes, 9/24 hypotheses for foreign direct investment negotiations, and 13/24 of the hypotheses for sovereign debt dealings. The results are 58.3% in the hypothesized direction for territorial disputes, more than 62.5% in the hypothesized direction for foreign direct investment; and more than 45.8% in the hypothesized direction for sovereign debt.\(^5\)

Individually, the empirical results did not provide the sign(s) expected by the theory for the leader’s response to legislative resistance to the COMPLEXITY of agreements. However, the complexity of FDI agreements in the choice between negotiations and domestic approval has the opposite sign to the predicted relationship. The reason for this prediction was twofold. Firstly, complexity increases legislative resistance, because number of issues increase, and it becomes difficult to agree on

\(^5\)There are three binary comparison of odds, or tests of each hypothesis per empirical chapter.
a majority support in the legislature (increasing $r$ in the Referendum Game). Secondly, complexity of an agreement may lead to unfriendly electorates, where referendums would be more likely to yield a ‘no’ response (decreasing $p_L$ in the Referendum Game). These two effects work in opposite directions, the former leading to an avoidance of legislative approvals, and the latter leading to legislative approvals or continued negotiations. The empirical results support the idea that complex agreements will go to referendums over legislative approval and over continued negotiations. The leader’s preference for both legislative approval and referendums in FDI’s economic opposition variable may be an indication that electorates can be used to support the performance-based electoral incentives of leaders as the Referendum Game of Chapter 2 predicts.

Two of the more interesting results were the following:

- the leader’s response to legislative resistance caused by SECURITY concerns in territorial agreements and foreign direct investments;

- the leader’s response to legislative resistance caused by ECONOMIC concerns in sovereign debt agreements.

Both the formal model and the case-studies indicate that either of these factors could be dominating legislative debates at the time of domestic approval of these agreements. The dominance of security issues for investment and territorial dispute negotiations (both versus legislative approval and referendum when compared to the choice of continuing negotiations) is another common pattern of legislative oppositions to controversial privatization/FDI deals. The security issue dominance in investment negotiations may go against our understanding of investment negotiations having a predominantly economic tone. However, even this result is justified when we consider
that all of our foreign direct investment/privatization cases come from ‘strategic’ industries. The importance of security concerns to FDI deals is supportive of what we know is true about oppositions to foreign ownership of state enterprises. Typically, the opponents to privatization are going to be actively campaigning against ownership by foreigners. This result captures the effects of legislative opposition, and the calls for referendums that we are used to seeing for those controversial privatization decisions. The impact of lender preconditions against increases in wages and the IMF belt-tightening measures is in the expected direction in the case of sovereign debt. We know that the models make no claims beyond the dominance of one or the other on the domestic approval side of negotiations. Therefore, although surprising, these results do not contradict our models.

In terms of the overall results, we see that in table VI Autocracies have greater log odds of being in a referendum choice than in a legislative approval choice in FDI and Sovereign Debt. Whereas, it turns out to be the case that, democracies have higher odds of choosing referendums than autocracies in Territorial Disputes. In terms of electoral systems, PR systems have lower log odds of being chosen in the Territorial Disputes and Sovereign Debt, and higher log odds of being chosen in Foreign Direct Investment. In complexity, we see that the results of all three issue areas suggest the complexity leads to higher log odds of referendum. And finally, in terms of the types of legislative opposition, leaders face greater costs based on security in Territorial Disputes and FDI, than in Sovereign Debt where economic reasons are more often the case for legislative opposition to a negotiated agreement. There are several implications that can be drawn from these results.

The strength of the respective findings reveals additional patterns in the results

6Note that the PR findings for Territorial Disputes is insignificant.
of the data analysis. Firstly, the regime findings indicate that democracies are more inclined to use referendums for disputes on territory, and less inclined to do so for investment and debt issues. This is in line with the controversial nature of these referendums, as legislatures of democracies tend to take more convincing in their dispute negotiations, than autocracies where the legislature is not as effective. We also note that many authoritarian states have reversed their FDI agreements with Multi-national Corporations using referendums. For instance, both Chavez and Morales have broken existing FDI agreements using referendums. This is reflected in the data. Next, the finding of PLMAJ’s use of referendums with higher log odds than PR for territory and debt. This finding suggests there is still room for theorizing here. Although the question of which domestic group is strengthened by the use of referendums seem consistent with the empirical findings for FDI, there has been less published work on the implications of electoral systems for territorial disputes and sovereign debt findings. Though, there have been strong arguments made for various ways they affect sovereign debt the last few years. Thirdly, complexity results reveal that referendums may be the solution to difficulties of agreeing in the legislature. The multitude of issues in negotiated agreements may lead to greater number of disagreements, leading to problems in getting legislative approval. This result shows that there may be benefits to solving these difficulties. Finally, security is more dominant for the Territorial Dispute and FDI, though the security implications of territory is more obvious than investment. The importance of legislative opposition based on security concerns of an agreement are the case for FDI, because of the ‘strategic’ nature of the industries which made up the dataset for investment.


\[\text{See Saiegh 2007, Tomz 2003}\]
cases.

The rarity of international referendums has previously prevented international relations scholars from studying them more extensively. This study overcomes that obstacle by emphasizing the domestic political aspects of referendums, which then prompt leaders to use them to solve the difficulties they have with international negotiations. This dissertation recognizes the leader’s need to find out the type of the electorate on their views regarding particular agreements. It then applies this framework onto what we know statistically about what happens after each negotiation round between negotiating parties. Future studies using these datasets will look at (1) empirical testing of the relationships between domestic institutions and the levels of offers given to the other NP, (2) the strategy of making offers to the other NP using this domestic set up, and (3) using domestic institutional information from both sides of a negotiation to determine NP’s responses.
APPENDIX A

Cases

A.1 Territorial Dispute Cases

Note: The cases denoted by asterisk (*) are cases with dual challengers as per Huth and Allee (2002).

Africa

1. Benin - Niger (1960 - 1965)*
5. Ghana - France/Ivory Coast (1959 - 1966)
10. Liberia - France (1919 - 1958)
17. Morocco - France/Mauritania (1957 -1970)
19. Niger - Benin (1960 - 1964)*
22. Somalia - France (1960 - 1977)
23. Togo - Ghana (1960 - 2000)*

Americas
1. Argentina - Britain (1919 - 2000)
2. Argentina - Chile (1919 - 1998)
3. Argentina - Uruguay (1919 - 1973)
4. Bolivia - Chile (1919 - 2000)
15. Netherlands/Suriname - Britain/Guyana (1928 - 2000)
17. Panama - US (1923 - 1977)
18. Uruguay - Argentina (1919 - 1973)*

Asia

1. Afghanistan - Pakistan (1947 - 2000)
2. Afghanistan - USSR (1919 - 1946)
5. Cambodia - Thailand (1954 - 1962)
9. China - Britain/India (1919 - 1962)
15. China - Outer Mongolia (1946 - 1962)
17. China - Portugal (1919 - 1975)
22. India - China (1963 - 2000)
23. India - Pakistan/Bangladesh (1947 - 2000)
24. India - Pakistan (1947 - 1948)
25. India - Pakistan (1947 - 1968)*
26. India - Pakistan (1947 - 1968)*
27. India - Portugal (1947 - 1961)
31. Malaysia - China (1979 - 2000)
33. N. Korea - S. Korea (1948 - 2000)
35. Pakistan - India (1947 - 1968)*
36. Pakistan - India (1947 - 2000)
37. Pakistan/Bangladesh - India (1947 - 2000)
38. Portugal - India (1962 - 1974)
41. Portugal - Indonesia (1975 - 1999)
42. S. Korea - Japan (1951 - 2000)

Europe
1. Austria - Italy (1945 - 1946)
2. Britain - France (1919 - 1953)*
11. France - Britain (1919 - 1953)*
12. France - Italy (1945 - 1946)
17. Ireland - Britain (1922 - 1998)
18. Italy - Yugoslavia (1945 - 1975)*
20. Netherlands - Belgium (1922 - 1959)
22. Romania - Hungary (1945 - 1947)
27. Spain - Britain (1919 - 2000)
29. W. Germany - E. Germany (1955 - 1972)
30. W. Germany - France (1955 - 1959)
32. W. Germany - Netherlands (1955 - 1960)
33. Yugoslavia - Greece (1945 - 1946)
34. Yugoslavia - Italy (1945 - 1975)*
35. Turkey - Greece (1996 - 2000)

**Middle East**

2. Britain/Iraq - Najd/Saudi Arabia (1922 - 1981)*
5. Britain/UAE - Saudi Arabia (1934 - 1964)
6. Egypt - Britain (1922 - 1956)
8. Egypt - Britain (1922 - 1954)
9. Egypt - Israel (1948 - 1988)*
11. Iran - Britain (1919 - 1970)
12. Iran - Britain (1919 - 1971)
13. Iran - Britain/Iraq (1920 - 1975)
15. Iran - USSR (1919 - 1957)*
17. Iraq - Iran (1979 - 2000)
18. Israel - Egypt (1949 - 1967)*
19. Israel - Jordan (1949 - 1967)*
20. Israel - Syria (1949 - 1967)*
22. Libya - France/Chad (1954 - 1972)
23. Mauritania - Spain (1960 - 1975)
24. Morocco - France/Algeria (1956 - 1972)
27. N. Yemen - Britain/S.Yemen (1919 - 1990)
32. Saudi Arabia - Britain/Kuwait (1920 - 2000)
33. Saudi Arabia - Britain/Jordan (1922 - 1965)*
34. Saudi Arabia - Britain/Oman (1934 - 1990)*
35. Saudi Arabia - Britain (1949 - 1968)
36. Saudi Arabia - Iran (1949 - 1968)*
38. USSR - Iran (1919 - 1957)*
39. USSR - Turkey (1945 - 1953)
40. S. Yemen/Yemen - Oman (1981 - 1992)*
41. Syria - Israel (1948 - 2000)*
42. Tunisia - France (1956 - 1962)
43. Tunisia - France/Algeria (1959 - 1970)
44. UAE - Iran (1971 - 2000)
45. UAE - Oman (1971 - 1993)

Dropped because dispute ended before/within 1945:
1. Ethiopia/Italy - Britain/Kenya (1919 - 1943)
2. Ethiopia/Italy - Britain/Sudan (1919 - 1943)
3. Ethiopia - Britain (1924 - 1936)
4. Argentina - Paraguay (1919 - 1945)*
5. Paraguay - Argentina (1919 - 1945)*
6. Denmark - Germany (1919 - 1920)
7. France - Germany (1922 - 1936)
8. Germany - France (1922 - 1936)
9. Poland - Germany (1938 - 1939)
10. Soviet Union/Russia - Romania (1941 - 1944)

**Dropped because of Missing Data:**
2. Turkey - Britain (1955 - 1959)
3. Britain/Kuwait - Saudi Arabia (1922 - 1965)*
4. Britain - Saudi Arabia (1949 - 1958)*
7. Saudi Arabia - Britain/UAE (1934 - 1974)*

**A.2 Foreign Direct Investment Cases**

**Africa**
1. Algeria - Sonatrach [Energy - 6/96 - 2/06]
2. Angola - Diamang (Companhia de Diamentes de Angola) [Mining - 11/75 - 12/86]
5. Botswana - Air Botswana [Transportation - 9/66 - 10/05]
7. Ghana - Ashanti Goldfields Corp (AGC) [Mining - 1/79 - 8/95]
8. Ghana - GPHA (Ghana Ports & Harbors Authority) [Transportation - 1/79 - 8/95]
9. Guinea - ACG (Alumina Company of Guinea) [Mining - 7/94 - 11/05]
11. Egypt - Telekom Egypt [Post & Telecommunications - 3/98 - 12/00]
14. Lesotho - Lesotho Airways [Transportation - 10/66 - 7/98]
17. Mali - Sotelma [Post & Telecommunications - 5/97 - 2/06]
18. Mauritania - Sonelec (Electricity) [Energy - 10/99 - 7/06]
19. Mauritania - Mauritel [Post & Telecommunications - 1/06 - 4/06]
20. Mauritius - Mauritius Telecom [Post & Telecommunications - 1/06 - 4/06]
21. Morocco - Societe Nationale de Siderurgie (Sonasid Steel Mill) [Mining - 9/94 - 11/97]
22. Morocco - Societe Marocaine du l’Industrie du Raffinage (Samir) and Societe Cherifienne des Petroles (SCP) [Energy - 1/92 - 5/97]
23. Morocco - Banque Marocaine du Commerce Exterieur (BMCE) [Finance - 12/94 - 2/97]
24. Morocco - Office Nationale des Postes & Telecommunications (ONPT) [Post & Telecommunications - 4/95 - 6/99]
25. Mozambique - Sodan (Namiola Cotton Development Company) & Canam (Nampula Cotton Company) [Agriculture - 10/94 - 4/06]
26. Mozambique - TDM (Telecommunicacoes de Mocambique) [Post & Telecommunications - 10/94 - 5/06]
27. Mozambique - Cashew Industry [Agriculture - 10/94 - 12/95]
28. Niger - Societe Niegerienne des Equx (SNE) [Infrastructure - 12/92 - 9/99]
29. Nigeria - Delta Steel Company, Ajaokutas Steel Project [Mining - 10/60 - 12/06]
30. Nigeria - Nigerian National Petroleum Corp (NNPC) [Energy - 10/60 - 12/98]
31. Nigeria - Nigerian Airways [Transportation - 10/60 - 10/99]
33. South Africa - SUN AIR [Transportation - 2/90 - 4/06]
34. Tunis - Societe Nationale des Distribution des Petroles (SNDP) [Energy - 9/97 - 12/99]

**Americas**

1. Argentina - Entel [Post & Telecommunications - 8/89 - 5/90]
2. Argentina - Aerolineas Argentinas [Transportation - 8/89 - 7/06]
3. Argentina - YPF (State Oil Company) [Energy - 5/89 - 12/91]
4. Argentina - Belgrano Cargas (State Railway Cargo) [Transportation - 5/89 - 6/04]
5. Bolivia - Comibol [Mining - 5/89 - 6/04]
6. Bolivia - Lloyd Aereo Boliviano (State Air Transportation) [Transportation - 5/90 - 12/06]
7. Bolivia - Corporacion de las Fuerzas Armadas Para el Desarrallo Nacional (Cofadena) [Defense - 5/90 - 5/95]
8. Bolivia - YPFB (State Oil & Gas Company) [Energy - 2/92 - 2/06]
9. Brazil - Compania Usinas Sidergicas de Minas Gerais S.A. (Steel Company) [Mining - 5/91 - 5/99]
10. Brazil - Telebras [Post & Telecommunications - 8/91 - 5/06]
11. Brazil - Petrobras [Energy - 3/92 - 12/05]
12. Canada - Teleglobe [Post & Telecommunications - 1/87 - 5/02]
14. Canada - CN Rail [Transportation - 7/85 - 12/02]
15. Canada - Air Canada [Transportation - 6/87 - 1/06]
16. Colombia - ETB [Post & Telecommunications - 8/96 - 1/99]
22. Ecuador - Emetel [Post & Telecommunications - 7/93 - 1/98]
23. Guyana - Guyana Electricity Corporacion (GEC) [Energy - 10/92 - 6/98]
24. Guyana - Guyana Telephone and Telegraph Company [Energy - 10/92 - 1/00]
25. Mexico - Mexicana Airlines [Transportation - 11/89 - 12/06]
26. Mexico - Sidermex (Steel) [Mining - 6/88 - 12/92]
27. Mexico - Telmex [Post & Telecommunications - 9/89 - 12/02]
28. Mexico - Cananea Copper Mines [Mining - 10/89 - 10/06]
29. Honduras - Cohdetel & Hondutel [Post & Telecommunications - 5/99 - 12/00]
31. Uruguay - Ancap (Oil Monopoly) [Energy - 3/85 - 1/06]
32. Peru - Petropedro [Energy - 10/68 - 6/93]
34. Paraguay - Antelco [Post & Telecommunications - 10/99 - 3/06]
35. Panama - Tocumen International Airport [Transportation - 3/98 - 2/00]
36. Panama - Intel [Post & Telecommunications - 1/98 - 12/99]
37. Venezuela - Petrolas de Venezuela SA [Energy - 12/58 - 3/00]
38. Venezuela - Corporacion Venezolanas de Guayan [Mining - 12/58 - 4/90]
39. Venezuela - CVG (Iron & Aluminum) [Mining - 12/58 - 8/06]
40. Venezuela - Cantv & Telephone [Post & Telecommunications - 12/58 - 12/91]
41. Venezuela - Viasa (State Airline) [Transportation - 2/88 - 9/91]
42. Venezuela - PdVSA (Venezuelan Oil Fields) [Energy - 12/58 - 10/06]

Asia
1. Armenia - Land [Agriculture - 9/91 - 2/06]
3. Bangladesh - BJMC (Bangladesh Jute Mills Corp) [Mining - 4/72 - 3/95]
5. Bangladesh - Bangladesh Telephone & Telegraph Board [Post & Telecommunications - 4/72 - 2/89]
7. Georgia - Ports [Transportation - 4/91 - 11/98]
8. Georgia - Gas Network [Energy - 4/91 - 1/01]
9. Cambodia - State Rubber Industry [Agriculture - 12/94 - 2/06]
11. China - China Telecom, China Sinocom [Post & Telecommunications - 8/01 - 12/06]
12. China - China Steel [Mining - 10/96 - 2/06]
13. Indonesia - PT Krakatau Steel [Mining - 10/99 - 10/96 - 6/98]
14. Indonesia - PT Telekomunikasi Indonesia [Post & Telecommunications - 10/99 - ]
15. Indonesia - PT Cemen Gresik [Infrastructure - 10/99 - 4/95]
17. India - Telecom Regulatory Authority of India (TRA) [Post & Telecommunications - 1/50 - 9/01]
18. India - Air India & Indian Airlines [Transportation - 1/50 - 1/94]
20. Malaysia - Syarikat Telekom Malaysia (STM) [Post & Telecommunications - 8/57 - 2/97]
22. Malaysia - Malaysian Airlines [Transportation - 8/57 - 10/00]
23. New Zealand - Air New Zealand [Transportation - 8/80 - 12/91]
24. New Zealand - Telecom Corp [Post & Telecommunications - 1/80 - 12/90]
27. Pakistan - Pakistan Telekom Corp (PTC) [Post & Telecommunications - 3/49 - 8/94 - 12/95]
28. Pakistan - Oil & Gas Development Corp (OGDC) [Energy - 3/49 - 8/94]
30. Philippines - PNOC (Philippine National Oil Company) [Energy - 7/50 - 2/06]
31. Singapore - Singapore Airlines [Transportation - 7/50 - 11/95]
32. Singapore - Singapore Telecom [Post & Telecommunications - 7/50 - 11/98]
33. Singapore - Defense Production Company [Infrastructure - 11/99 - 12/06]
34. Singapore - Singapore Power (SP) [Energy - 10/95 - 3/96]
36. Sri Lanka - 22 Regional Plantation Companies [Agriculture - 10/93 - 2/06]
39. Taiwan - Taiwan Power Corporation [Energy - 10/93 - 2/06]
40. Taiwan - CSBC (PORT) [Transportation - 12/92 - 12/06]
41. Thailand - PTTEP (Petroleum Authority of Thailand and Production) [Energy - 9/92 - 1/00]
42. Thailand - EGAT (Electric Generating Authority of Thailand) [Energy - 9/92 - 9/94]
43. Thailand - Thai Airways International Ltd. [Transportation - 9/92 - 4/00]
44. Thailand - TOT (Telephone Organization of Thailand) [Post & Telecommunications - 9/92 - 4/00]
46. Vietnam - Railways [Transportation - 1/95 - 12/96]

Europe
1. Albania - Albtelecom [Post & Telecommunications - 9/92 - 7/06]
2. Albania - KESH (Power Utility) [Energy - 9/92 - 6/05]
3. Austria - OeMV (State Oil Company) [Energy - 6.87 - 7/06]
4. Austria - EAG (electricity) [Energy - 7/99 - 7/06]
5. Austria - Voest-Alpine (Steel & Engineering) [Mining - 1/88 - 7/06]
7. Belarus - Beltransgaz (Gas Transportation) [Energy - 9/98 - 2/06]
8. Belgium - RTT into BELTUG and BELGACOM [Post & Telecommunications - 1/84 - 2/94]
9. Belgium - ASLK/CGER, Societe generale de Belgique, NMKN-SNCI

10. Belgium - Sabena [Transportation - 9/44 - 2/87]

11. Bulgaria - Balkan Air [Transportation - 8/91 - 2/06]

12. Bulgaria - Petrol AD [Energy - 7/93 - 1/05]

13. Bulgaria - Navibulgar [Transportation - 12/93 - 5/06]


15. Cyprus - Cyprus Airways [Transportation - 5/92 - 2/06]


18. Czechoslovakia - CSA [Transportation - 4/97 - 2/06]


20. Czech Republic - Czech Energy Works (CEZ) [Energy - 4/92 - 5/00]

21. Czech Republic - Czech Radio Communication (CRC) & Czech Television (CZ) [Post & Telecommunications - 4/92 - 9/00]

22. Denmark - Teledenmark [Post & Telecommunications - 12/94 - 4/02]


24. Denmark - Copenhagen International Airport, 2/7 of SAS [Transportation - 3/92 - 12/02]


26. Greece - Olympics Airways [Transportation - 12/55 - 12/92]

27. Greece - DEPA [Energy - 12/44 - 11/07]

29. Hungary - Hungarian (Magyar) State Airlines [Transportation - 1/48 - 4/91]
31. Iceland - Karahnjukar Hydropower Project [Energy 2/02 - ?]
32. Italy - STET/Telecom Italia [Post & Telecommunications - 1/48 - 94 - 97]
33. Italy - Alitalia [Transportation - 1/48 - 89 - 98]
34. Italy - ENEL [Energy - 1/48 - 12/99]
35. Italy - ENI [Energy - 1/48 - 12/95]
37. Latvia - Latvenergo Electricity Utility [Energy - 7/00 - 9/02]
38. Poland - Roads & Polish State Railways [Transportation - 5/89 - 3/03 - 2/06]
40. Portugal - Galp Energia [Energy - 1/91 - 8/06]
41. Portugal - EDP (Electricidade de Portugal and other power plants) [Energy - 5/97 - 8/06]
42. Russian Federation - State Farms/Land [Agriculture - 1/92 - 5/94]
44. Russian Federation - Moscow City Tel [Post & Telecommunication - 6/12/99]
45. Russian Federation - Sidanko [Defense - 1/92 - 6/95]
46. Slovak Republic - Reconstruction of Bratislava Airport [Transportation - 2/94 - 2/06]
47. Slovak Republic - Slovak Telecom [Post & Telecommunications - 1/96 - 2/06]
49. Sweden - SAS (Scandinavian Airline System) [Transportation - 12/98 - 9/01]
50. Sweden - LKAB [Mining - 2/92 - 9/02]
51. Sweden - Vattenfall (hydroelectric) [Energy - 2/92 - 2/05]
52. Sweden - Celsius Industries [Defense - 2/92 - 2/05]
53. Turkey - Teletas [Post & Telecommunications - 4/88 - 12/93]
54. Turkey - Bergama Gold Mine [Mining - 3/97 - 10/00]
55. Turkey - Tупхра́рх (TUPRAS) [Energy - 7/90 - 2/06]
56. Turkey - Turk Telecom [Post & Telecommunications - 1/95 - 3/06]
57. Turkey - Turkish Aircraft Industry Corporation [Transportation - 12/88 - 9/99]
58. United Kingdom - British Telekom [Post & Telecommunications - 5/84 - 12/90]
60. United Kingdom - British Rail [Transportation - 10/84 - 2/06]
61. United Kingdom - British Airways [Transportation - 10/84 - 2/06]
62. United Kingdom - British Coal [Mining - 10/84 - 2/06]
63. United Kingdom - British Steel [Mining - 10/84 - 2/06]
64. Ukraine - Ukricchflot (River Shipping) [Transportation - 5/93 - 2/05]

Middle East
1. Iran - 9 Petrochemical Plants [Energy - 5/91 - 6/06]
2. Iran - Arak Petrochemical Complex [Energy - 2/92 - 2/06]
3. Iran - National Copper Industries Of Iran (NCII) [Mining - 5/98 - 5/00]
4. Iraq - Iraqi Airways [Transportation - 12/88 - 2/06]
5. Israel - EL AL [Transportation - 5/48 - 4/89]
7. Israel - IMI (Israel Military Industries) [Infrastructure - 5/48 - 10/96]
10. Jordan - The Telecommunications CORP (TCC) [Post & Telecommunications -
11. Kuwait - KAC [Transportation - 5/92 - 2/06]
12. Kuwait - 77 Petrol Station (OF KNPC) [Energy - 5/92 - 2/06]
13. Lebanon - Liban Telecom (OGERO) [Post & Telecommunications - 2/94 - 2/06]
14. Lebanon - Electricite Du Liban (EdL) [Energy - 5/00 - 2/06]
15. UAE - Taweelah Power & Desalinization Complex [Energy - 9/96 - 12/98]
16. UAE - Gulf Air [Transportation - 9/95 - 2/06]
17. Qatar - Qatar Airways [Transportation - 8/95 - 2/06]

Dropped because of Missing Data:
1. Austria - Girozentrale (Second Largest Bank) [Mining - 10/87 - 7/06]
2. Austria - Verbundgeselshaft) [Energy - 5/87 - 7/06]
3. Bangladesh - Bangladesh Railways [Transportation - 4/72 - 7/03 or 05]
4. Belgium - Distrigaz [Energy - 8/87 - 2/00]
5. Chile - Codelco (Copper) [Mining -]
7. Denmark - Denmark State Agricultural Farms [Agriculture - ? - ?]
8. Georgia - 2 Hydroelectric & 1 Thermal Electricity [Energy - 4/91 - 5/05]
9. Ghana - GCDO (Ghana Consolidated Diamonds Ltd.) [Mining - 1/79 - 10/99]
10. Ghana - GWCL (Ghana Water Company) [Mining - 1/79 - 9/01]
11. Guyana - Linden Mining Enterprises Ltd. & Barbice Mining Company (Bermine) [Mining - 10/92 - 4/98]
12. Honduras - Cohdefor (State Forestry) [Agriculture - 1/84 - 12/90]
14. Indonesia - PT Indonesian Satellite Corporation [Post & Telecommunications -]
10/99 - ?
15. Iran - Sangan, Golgohar and Ghadormalu (iron ore) Mines [Mining - 5/90 - 10/06]
18. Israel - Jerusalem Economic Corp (JEC) [Finance - 5/48 - 9/89]
20. Liberia - Liberia Electricity Corp [Energy - 5/83 - 1/06]
23. Malaysia - National Electricity Board (NEB) [Energy - 8/57 - 1/90]
24. Madagascar - Hasyma (Cotton Company) [Agriculture - 11/92 - ]
25. Malawi - Sugar Corp of Malawi (Sucoma) [Agriculture - 5/94 - ]
28. Niger - Sonied (Niger Petroleum Company) [Energy - 12/92 - 12/06]
30. Peru - Cerro Verde Copper Mine [Mining - 10/68 - 8/93]
31. Paraguay - Paraguayan Iron & Steel Corp (Cosipar) & Paraguayan Steel Inc. (Acepar) [Mining - 1/95 - 11/97]
32. Poland - Polish State Farm [Agriculture - 5/89 - 2/06]


34. Russian Federation - Severao - Ostokzoloto [Mining - 1/92 - 6/95]

35. Russian Federation - Rostneft, Transneft, Soyuzneft [Energy - 1/92 - 6/12/99]


37. South Africa - Iscor (Iron & Steel) [Mining - 2/90 - ]

38. South Africa - SAT (SA Transport Services) [Transportation - 2/90 - ]


40. Sweden - Nordbanken [Finance - 1/92 - 1/00]

41. Taiwan - ADIC (Defense Industry) [Energy - 12/92 - 6/98]

42. Trinidad & Tobago - Caroni Sugar Company [Agriculture - 3/87 - 9/06]

43. Vietnam - Land [Agriculture - 1/86 - 8/06]

A.3 Sovereign Debt Cases

Africa

1. Algeria (6/94 - 7/95)
2. Angola (7/89 - )
3. Benin (6/89 - 3/03)
4. Burkina Faso (3/91 - 6/02)
5. Burundi (3/04 - )
6. Cameroon (5/89 - 1/01)
8. Chad (10/89 - 6/01)
9. Congo (6/86 - 12/04)
10. Congo, DR (6/76 - 11/03)
11. Cote D'Ivoire (5/84 - 4/02)
12. Djibouti (5/00 - )
13. Egypt (5/87 - 5/91)
14. Ethiopia (12/92 - 5/04)
15. Gabon (1/87 - 6/04)
16. Gambia (9/86 - 1/03)
17. Ghana (4/96 - 7/04)
18. Guinea-Bissau (10/87 - 1/01)
19. Kenya (1/94 - 1/04)
20. Liberia (12/80 - 12/84)
22. Malawi (9/82 -1/01)
23. Mali (10/88 - 3/03)
24. Mauritania (4/85 - 7/02)
25. Morocco (10/83 - 2/92)
26. Mozambique (10/84 - 11/01)
27. Niger (11/83 - 5/04)
28. Nigeria (12/86 - 12/00)
29. Rwanda (7/98 - 5/05)
30. Senegal (10/81 - 6/04)
31. Sierra Leone (9/77 - 7/02)
32. Somalia (3/85 - 7/87)
33. Sudan (11/79 - 5/84)
34. Tanzania, United Republic of (9/86 - 1/02)
35. Togo (6/79 - 2/95)
36. Uganda (11/81 - 9/00)
37. Zambia (5/83 - 5/05)

**Americas**

1. Argentina (5/56 - 6/92)
2. Bolivia (7/86 - 7/01)
3. Brazil (5/61 - 2/92)
4. Chile (2/65 - 3/87)
5. Costa Rica (1/93 - 6/93)
6. Dominican Republic (5/85 - 4/04)
7. Ecuador (7/83 - 6/03)
8. El Salvador (9/90 - )
9. Equatorial Guinea (7/85 - 12/94)
10. Guatemala (4/86 - 5/01)
11. Guyana (5/89 - 1/04)
12. Haiti (5/95 - )
13. Honduras (9/90 - 5/05)
14. Jamaica (6/84 - 1/93)
15. Mexico (5/89 - 6/93)
17. Panama (9/85 - 11/90)
18. Peru (9/68 - 7/96)
19. Trinidad & Tobago (1/89 - 4/90)
Asia
1. Cambodia (1/72 - 1/95)
2. Indonesia (12/66 - 4/02)
3. Kyrgyzstan (3/02 - 3/05)
4. Pakistan (5/72 - 12/01)
5. Philippines (12/84 - 7/94)
6. Vietnam (12/93 - )

Europe
1. Albania (12/93 - 1/00)
2. Bosnia & Herzegovina (5/84 - 6/00)
4. Croatia (5/84 - 3/95)
5. Macedonia, FYR (5/84 - 11/00)
6. Poland (4/81 - 4/91)
7. Romania (7/82 - 5/83)
9. Serbia and Montenegro (5/84 - 11/01)
10. Slovenia 5/84 - 7/88)
11. Ukraine (7/01 - )

Middle East
1. Iraq (11/04 - )
2. Jordan (7/89 - 7/02)
3. Turkey (5/78 - 7/80)
4. Yemen (9/96 - 6/01)
APPENDIX B

The Referendum Game

This Appendix presents the formal treatment of the parts/proofs that are omitted in the analysis of the Referendum Game introduced in Chapter 2. The organization of the chapter is as follows. I derive the functions $g_r(x)$, $g_{bri}(x)$, $g_{ref}(x)$, $g_{dn}(x)$, and discuss their shapes and important properties in §B.1. §B.2 is dedicated to the analysis of the dominance relationship between L’s actions for ratification in case of $x < r$. In §B.3, I derive some important properties of $A_1$, $A_2$ and $A_3$. The equality relationships between the functions $g_r(x)$, $g_{bri}(x)$ and $g_{ref}(x)$ are discussed in §B.4. Finally, I conclude with the formal proofs of L’s actions at the equilibrium in §B.5.

B.1 Analysis of $g_r(x)$, $g_{dn}(x)$, $g_{bri}(x)$ and $g_{ref}(x)$

The sketches of the expected utility functions $g_r(x)$, $g_{bri}(x)$, $g_{ref}(x)$ and $g_{dn}(x)$ are given in Figure 2.3. I start with the analysis of $g_r(x)$. From (2.13),

$$g_r(x) = -x^2 + x(1 - c + A_1) + p\omega + c - A_1.$$  

The first and the second derivatives of the function given above are

$$g'_r(x) = -2x + 1 - c + A_1$$

and

$$g''_r(x) = -2,$$
respectively. I conclude \( g_r(x) \) is concave because the second order derivative is negative. This implies that the value of \( x \) that maximizes \( g_r(x) \) is the one that satisfies the first order condition \( g'_r(x) = 0 \), which implies that \(-2x + 1 - c + A_1 = 0\). Let \( x_r \) maximize the expected utility of L when \( x \geq r \). Hence,

\[
g'_r(x_r) = 0
\]

\[
-2x_r + 1 - c + A_1 = 0
\]

\[
x_r = \frac{1 - c + A_1}{2}.
\]

(B.1)

Substituting (B.1) into \( g_r(x) \) gives the maximum utility L obtains by offering \( x_r \)

\[
g_r(x_r) = -\left(\frac{1 - c + A_1}{2}\right)^2 + \frac{(1 - c + A_1)}{2} + p\omega + c - A_1
\]

\[
= \frac{(1 - c + A_1)^2}{4} + \frac{(1 - c + A_1)^2}{2} + p\omega + c - A_1
\]

\[
= \frac{(1 - c + A_1)^2}{4} + c - A_1 + p\omega
\]

\[
= \frac{(1 - (c - A_1))^2}{4} + c - A_1 + p\omega
\]

\[
= 1 - 2(c - A_1) + (c - A_1)^2 + \frac{4(c - A_1)}{4} + p\omega
\]

\[
= \frac{1 + 2(c - A_1) + (c - A_1)^2}{4} + p\omega
\]

\[
= \frac{(1 + c - A_1)^2}{4} + p\omega
\]

\[
= \left(\frac{1 + c - A_1}{2}\right)^2 + p\omega.
\]

For the derivation of \( g_{dn}(x) \), I write the expected utility function of a leader who proposes \( x < r \) and chooses to do nothing for the ratification:

\[
g_{dn}(x) = \Pr\{\text{NP accepts } x\}E[u_L((k = 0, b = 0))|x < r]
\]

\[
+ \Pr\{\text{NP rejects } x\}(p\omega), \quad (B.2)
\]

where
\[ E[u_L((k = 0, b = 0))|x < r] \]

\[ = E[u_L((k = 0, b = 0))|x < r, E \text{ is type FE}] \Pr\{E \text{ is type FE}\} + E[u_L((k = 0, b = 0))|x < r, E \text{ is type UFE}] \Pr\{E \text{ is type UFE}\} \]

\[ = (p_\omega)p_L + (p_\omega)(1 - p_L) \]

\[ = p_\omega. \]  \hfill (B.3)  

Substituting (2.6), (2.7) and (B.3) into (B.2) leads to

\[ g_{\text{dna}}(x) = (1 - x)(p_\omega) + x(p_\omega) \]

\[ = p_\omega. \]  \hfill (B.4)  

Recall that \( g_{\text{br}}(x) \) is the expected utility function of L if \( x < r \) and L decides to \\
\textit{bribe}. In this case,

\[ g_{\text{br}}(x) = \Pr\{\text{NP accepts } x\}E[u_L((k = 0, b = 1))|x < r] \]

\[ + \Pr\{\text{NP rejects } x\}(p_\omega), \]  \hfill (B.5)  

where

\[ E[u_L((k = 0, b = 1))|x < r] \]

\[ = E[u_L((k = 0, b = 1))|x < r, E \text{ is type FE}] \Pr\{E \text{ is type FE}\} + E[u_L((k = 0, b = 1))|x < r, E \text{ is type UFE}] \Pr\{E \text{ is type UFE}\} \]

\[ = \left( x - c + (1 + \theta_1)p_\omega \right)p_L \]

\[ + \left( x - c + (1 - \theta_2)p_\omega \right)(1 - p_L) \]

\[ = \left( x - c + p_\omega + \theta_1p_\omega \right)p_L \]

\[ + \left( x - c + p_\omega - \theta_2p_\omega \right)(1 - p_L) \]
\[ g_{bri}(x) = (1-x)(x - A_1 + p\omega) + x(p\omega) \]
\[ = x - A_1 + p\omega - x^2 + xA_1 - xp\omega + xp\omega \]
\[ = -x^2 + xA_1 + x - A_1 + p\omega \]
\[ = -x^2 + x(1 + A_1) - A_1 + p\omega. \]  

(B.8)

The last equality above follows from the substitution of \( A_1 \) in (2.8). Next, I substitute (2.6), (2.7) and (B.7) into (B.5), and rearrange the terms:

The first and the second derivatives of \( g_{bri}(x) \) are

\[ g_{bri}'(x) = -2x + 1 + A_1 \]

and

\[ g_{bri}''(x) = -2, \]

respectively. Due to the fact that second order derivative is negative, \( g_{bri}(x) \) is concave. Hence, the first order condition, \( g_{bri}'(x) = 0 \), gives \( x_{bri} \) that maximizes the expected utility of \( L \).

\[ g_{bri}'(x_{bri}) = 0 \]
\[ -2x_{bri} + 1 + A_1 = 0 \]
\[ x_{bri} = \frac{1 + A_1}{2}. \]  

(B.9)
Substituting (B.9) into (B.8) gives the maximum utility \( L \) obtains by offering \( x_{\text{bri}} \):

\[
g_{\text{bri}}(x_{\text{bri}}) = - \left( \frac{1 + A_1}{2} \right)^2 + \left( \frac{1 + A_1}{2} \right) (1 + A_1) - A_1 + p\omega
\]

\[
= - \left( \frac{1 + A_1}{2} \right)^2 + \left( \frac{1 + A_1}{2} \right)^2 - A_1 + p\omega
\]

\[
= \frac{(1 + A_1)^2}{4} - A_1 + p\omega
\]

\[
= \frac{1 + 2A_1 + A_1^2}{4} + A_1 + p\omega
\]

\[
= \frac{1 - 2A_1 + A_1^2}{4} + p\omega
\]

\[
= \left( \frac{1 - A_1}{2} \right)^2 + p\omega.
\]

Similarly,

\[
g_{\text{ref}}(x) = \Pr\{\text{NP accepts } x\} \mathbb{E}[u_L((k = 1)) | x < r] + \Pr\{\text{NP rejects } x\}(p\omega),
\]

(B.10)

where

\[
\mathbb{E}[u_L(k = 1) | x < r]
\]

\[
= \mathbb{E}[u_L((k = 1)) | x < r, E \text{ is type FE}] \Pr\{E \text{ is type FE}\}
\]

\[
+ \mathbb{E}[u_L((k = 1)) | x < r, E \text{ is type UFE}] \Pr\{E \text{ is type UFE}\}
\]

\[
= (x - R + (1 + \theta_1)p\omega) p_L + (-m_2 - R + p\omega) (1 - p_L)
\]

\[
= \left( p_L x - p_L R + p_L (1 + \theta_1)p\omega \right)
\]

\[
+ \left( - (1 - p_L)m_2 - (1 - p_L)R + (1 - p_L)p\omega \right)
\]

\[
= p_L x - p_L R + p_L p\omega + p_L \theta_1 p\omega - m_2 + p_L m_2 - R + p_L R + p\omega - p_L p\omega
\]

\[
= p_L x + p_L \theta_1 p\omega - m_2 + p_L m_2 - R + p\omega
\]
\[ p_\omega + p_L x - \left( R + m_2 - p_L m_2 - p_L \theta_1 p_\omega \right) \]
\[ = p_\omega + p_L x - \left( R + (1 - p_L) m_2 - p_L \theta_1 p_\omega \right) \]
\[ = p_\omega + p_L x - \frac{p_L}{p_L} \left( R + (1 - p_L) m_2 - p_L \theta_1 p_\omega \right) \]
\[ = p_\omega + p_L x - p_L \left( \frac{R}{p_L} + \frac{1 - p_L}{p_L} m_2 - \theta_1 p_\omega \right) \] \quad (B.11)
\[ = p_\omega + p_L x - p_L A_2 \]
\[ = p_L (x - A_2) + p_\omega. \quad (B.12) \]

The second equality follows from the substitution of the payoffs in Figure 2.2 into the first equality. The ninth equality is the result of substituting \( A_2 \) in (2.8) into the expression in the parenthesis. Further substitution of (2.6), (2.7) and (B.12) into (B.10) gives

\[ g_{ref}(x) = (1 - x)(p_L(x - A_2) + p_\omega) + x(p_\omega) \]
\[ = p_L x - p_L A_2 + p_\omega - p_L x^2 + p_L A_2 x - xp_\omega + xp_\omega \]
\[ = -p_L x^2 + p_L x(1 + A_2) - p_L A_2 + p_\omega. \quad (B.13) \]

Taking the derivatives of \( g_{ref}(x) \) leads to

\[ g_{ref}'(x) = -2p_L x + p_L(1 + A_2) \]

and

\[ g_{ref}''(x) = -2p_L. \]

The second order derivative being negative implies the concavity of \( g_{ref}(x) \). Thus,
the first order condition gives the optimal offer of L:

\[ g'_{ref}(x_{ref}) = 0 \]
\[ -2p_L x_{ref} + p_L (1 + A_2) = 0 \]
\[ -2p_L x_{ref} = -p_L (1 + A_2) \]
\[ x_{ref} = \frac{(1 + A_2)}{2}. \] (B.14)

I substitute (B.14) into (B.13) in order to derive the maximum utility L obtains by offering \( x_{ref} \):

\[
g_{ref}(x_{ref}) = -p_L \left( \frac{1 + A_2}{2} \right)^2 + p_L \left( \frac{1 + A_2}{2} \right) (1 + A_2) - p_L A_2 + p\omega
\]
\[
= -p_L \left( \frac{1 + A_2}{4} \right)^2 + p_L \left( \frac{1 + A_2}{2} \right)^2 - p_L A_2 + p\omega
\]
\[
= p_L \left( \frac{(1 + A_2)^2}{4} - A_2 \right) + p\omega
\]
\[
= p_L \left( \frac{1 + 2A_2 + A_2^2}{4} - A_2 \right) + p\omega
\]
\[
= p_L \left( \frac{1 - 2A_2 + A_2^2}{4} \right) + p\omega
\]
\[
= p_L \left( \frac{1 - A_2}{2} \right)^2 + p\omega
\]

which concludes this subsection.

B.2 Dominance Relationships if \( x < r \)

In this subsection, I analyze the dominance relationships between ratification actions of L under the condition that he/she decides to offer \( x \) that is less than the resistance at the legislature. I determine the conditions when one action dominates
another. Action \((k = 0, b = 0)\) strictly dominates\(^1 (k = 0, b = 1)\) if \(g_{dn}(x)\) is greater than or equal to \(g_{br}(x)\). Instead of the simplified expressions for the expected utility functions, I use (B.2) and (B.5) for comparison:

\[
Pr\{\text{NP accepts } x\} \mathbb{E}[u_L((k = 0, b = 0))|x < r] + Pr\{\text{NP rejects } x\}(p\omega) \\
\geq \\
Pr\{\text{NP accepts } x\} \mathbb{E}[u_L((k = 0, b = 1))|x < r] + Pr\{\text{NP rejects } x\}(p\omega).
\]

The inequality above reduces to

\[
\mathbb{E}[u_L((k = 0, b = 0))|x < r] \geq \mathbb{E}[u_L((k = 0, b = 1))|x < r] \\
p\omega \geq x - c + p\omega \left(1 + p_L\theta_1 - (1 - p_L)\theta_2\right) \\
p\omega + c - p\omega \left(1 + p_L\theta_1 - (1 - p_L)\theta_2\right) \geq x \\
(c - p\omega \left(p_L\theta_1 - (1 - p_L)\theta_2\right) \geq x,
\]

where the second inequality follows from the substitution of (B.6). The definition of \(A_1\) follows from the inequality above. The threshold for \(x\) equal or below which \((k = 0, b = 0)\) strictly dominates \((k = 0, b = 1)\) is defined as \(A_1\).

Similarly, if \(g_{dn}(x)\) is greater than or equal to \(g_{ref}(x)\), then \((k = 0, b = 0)\) strictly dominates \((k = 1)\):

\[
Pr\{\text{NP accepts } x\} \mathbb{E}[u_L((k = 0, b = 0))|x < r] + Pr\{\text{NP rejects } x\}(p\omega) \\
\geq \\
Pr\{\text{NP accepts } x\} \mathbb{E}[u_L((k = 1))|x < r] + Pr\{\text{NP rejects } x\}(p\omega),
\]

\(^1\)refer to the assumption in the main text
which reduces to

\[
\mathbb{E}\left[u_L((k = 0, b = 0)) | x < r\right] \geq \mathbb{E}\left[u_L((k = 1)) | x < r\right]
\]

\[
p\omega \geq p\omega + p_Lx
\]

\[
-p_L \left(\frac{R}{p_L} + \frac{1 - p_Lm_2}{p_L} - \theta_1p\omega\right)
\]

\[
p\omega - p\omega + p_L \left(\frac{R}{p_L} + \frac{1 - p_Lm_2}{p_L} - \theta_1p\omega\right) \geq p_Lx
\]

\[
\frac{R}{p_L} + \frac{1 - p_Lm_2}{p_L} - \theta_1p\omega \geq x,
\]

where the second inequality follows from the substitution of (B.11). I define left hand side of the inequality above as \(A_2\), which is a threshold for \(x\) that determines the dominance relationship between \((k = 0, b = 0)\) and \((k = 1)\). If \(x > A_2\) then \((k = 1)\) strictly dominates \((k = 0, b = 1)\); otherwise, \(x \leq A_2\), action \((k = 1)\) is strictly dominated by \((k = 0, b = 1)\).

Next, I identify the condition on \(x\) leading to \((k = 0, b = 1)\) dominating \((k = 1)\). Following the same line of thought, if (B.5) is greater than or equal to (B.10), then \((k = 0, b = 1)\) strictly dominates \((k = 1)\):

\[
\Pr\{\text{NP accepts } x\} \mathbb{E}\left[u_L((k = 0, b = 1)) | x < r\right] + \Pr\{\text{NP rejects } x\}(p\omega)
\]

\[
\geq \Pr\{\text{NP accepts } x\} \mathbb{E}\left[u_L((k = 1)) | x < r\right] + \Pr\{\text{NP rejects } x\}(p\omega),
\]

which reduces to

\[
\mathbb{E}\left[u_L((k = 0, b = 1)) | x < r\right] \geq \mathbb{E}\left[u_L((k = 1)) | x < r\right]
\]

\[
x - c + p\omega \left(1 + p_L\theta_1 - (1 - p_L)\theta_2\right) \geq p\omega + p_Lx
\]

\[
-p_L \left(\frac{R}{p_L} + \frac{1 - p_Lm_2}{p_L} - \theta_1p\omega\right)
\]
where the second inequality follows from the substitution of (B.6) and (B.11). The right hand side of the inequality is the threshold for the dominance relationship between actions \((k = 0, b = 1)\) and \((k = 1)\) and I define it as \(A_3\). If \(x \geq A_3\) then \((k = 0, b = 1)\) strictly dominates \((k = 1)\). Otherwise, \((k = 1)\) dominates \((k = 0, b = 1)\).

The conditions for all the pairwise dominance relationships between the actions are summarized in Table 2.3.5.

### B.3 Relationship between \(A_1, A_2\) and \(A_3\)

In this subsection, I show some important relationships between \(A_1, A_2\) and \(A_3\), which are heavily used in the analysis of the game. First, I show that \(A_1\) can be written as a function of \(p_L, A_2\) and \(A_3\):

\[
A_1 = p_L A_2 + (1 - p_L) A_3. \tag{B.16}
\]

In order to prove the claim, I substitute \(A_2\) and \(A_3\) into the right hand side of (B.16) and rearrange the terms, which reduces the expression to \(A_1\):

\[
p_L A_2 + (1 - p_L) A_3 = p_L \left( \frac{R}{p_L} + \frac{1 - p_L}{p_L} m_2 - \theta_1 p \omega \right) + (1 - p_L) \left( \frac{c - R}{1 - p_L} + \theta_2 p \omega - m_2 \right)
\]
\[
= R + (1 - p_L)m_2 - p_L\theta_1 p_\omega \\
+ \left(c - R + (1 - p_L)\theta_2 p_\omega - (1 - p_L)m_2 \right) \\
= c - p_\omega (p_L\theta_1 - (1 - p_L)\theta_2) \\
= A_1.
\]

This is a very important observation because it simply states that \(A_1\) is between \(A_2\) and \(A_3\) in terms of value. To be more precise, the following properties hold for \(A_1, A_2\) and \(A_3\):

(i) if \(A_1 \geq A_2\) then \(A_1 \leq A_3\),

(ii) if \(A_1 \geq A_3\) then \(A_1 \leq A_2\).

For part (i), assume that \(A_1 \geq A_2\) and \(A_1 > A_3\). Multiply both sides of \(A_1 \geq A_2\) by \(p_L\) and both sides of \(A_1 > A_3\) by \(1 - p_L\), which leads to

\[
p_L A_1 \geq p_L A_2 \\
(1 - p_L)A_1 > (1 - p_L)A_3.
\]

Adding both inequalities results in

\[
p_L A_1 + (1 - p_L)A_1 > p_L A_2 + (1 - p_L)A_3 \\
A_1 > p_L A_2 + (1 - p_L)A_3.
\]

The right-hand-side of the equality is equal to \(A_1\) due to (B.16), which is a contradiction. Hence, if \(A_1 \geq A_2\) then \(A_1 \leq A_3\). Following the same line of thought, part (ii) can also be shown to be true.

B.4 Relationship between \(g_r(x)\), \(g_{br}(x)\) and \(g_{ref}(x)\)

This subsection is dedicated to the analysis of the equality relationships between the expected utility functions \(g_r(x)\), \(g_{br}(x)\) and \(g_{ref}(x)\). Recall that \(0 < A_i < 1\)
for $i = 1, 2, 3$, see (2.15). Consider $g_r(x)$ and $g_{bri}(x)$. In order to identify the segments when one function is larger than the other, I determine the shape of function $g_r(x) - g_{bri}(x)$. From (2.13) and (B.8), $g_r(x) - g_{bri}(x)$ is

$$
g_r(x) - g_{bri}(x) = \left(- x^2 + x(1 - c + A_1) + p \omega + c - A_1\right) - \left(- x^2 + x(1 + A_1) - A_1 + p \omega\right) = -xc(x) + c = (1 - x)c \geq 0.
$$

When $x = 0$, $g_r(0) - g_{bri}(0) = c$. As $x$ increases, the function decreases reaching zero when $x = 1$, see Figure B.1. Hence, I conclude

$$
g_r(x) \geq g_{bri}(x) \text{ for any } x \in [0, 1]. \quad \text{(B.17)}
$$

Next, I consider the function $g_r(x) - g_{ref}(x)$:

$$
g_r(x) - g_{ref}(x) = \left(- x^2 + x(1 - c + A_1) + p \omega + c - A_1\right) - \left(- p_L x^2 + p_L x(1 + A_2) - p_L A_2 + p \omega\right) = -(1 - p_L) x^2 + (1 - c + A_1 - p_L - p_L A_2) x + (c - A_1 + p_L A_2) = -(1 - p_L) x^2 + (1 - p_L - (c - A_1 + p_L A_2)) x + (c - A_1 + p_L A_2), \quad \text{(B.18)}
$$

where the first equality follows from the substitution of (2.13) and (B.13). The first and second derivatives of $g_r(x) - g_{ref}(x)$ are

$$
\frac{\partial (g_r(x) - g_{ref}(x))}{\partial x} = -2(1 - p_L)x + (1 - p_L - (c - A_1 + p_L A_2))
$$
and
\[
\frac{\partial^2 (g_r(x) - g_{ref}(x))}{\partial x^2} = -2(1 - p_L) \leq 0,
\]
The second derivative being negative shows that \(g_r(x) - g_{ref}(x)\) is concave. Equating the first derivative to zero and solving for \(x\) gives the maximum value of \(g_r(x) - g_{ref}(x)\).
\[
\frac{\partial (g_r(x) - g_{ref}(x))}{\partial x} = 0
\]
\[-2(1 - p_L)x + (1 - p_L - (c - A_1 + p_L A_2)) = 0
\]
\[-2(1 - p_L)x = -(1 - p_L - (c - A_1 + p_L A_2))
\]
\[2(1 - p_L)x = 1 - p_L - c + A_1 - p_L A_2
\]
\[2(1 - p_L)x = 1 - p_L - c + p_L A_2 + (1 - p_L) A_3 - p_L A_2
\]
\[2(1 - p_L)x = (1 - p_L)(1 + A_3) - c
\]
\[2x = 1 + A_3 - \frac{c}{1 - p_L}
\]
\[x = \frac{1}{2} \left(1 + A_3 - \frac{c}{1 - p_L}\right),
\]
where the fifth equality follows from substituting \(p_L A_2 + (1 - p_L) A_3\) into \(A_1\), see (B.16).

Next, I factorize the expression in (B.18) for the purpose of finding the points where \(g_r(x) - g_{ref}(x)\) cuts the x-axis. These points satisfy \(g_r(x) - g_{ref}(x) = 0\). First, I equate (B.18) to zero,
\[-(1 - p_L)x^2 + (1 - p_L - (c - A_1 + p_L A_2))x + (c - A_1 + p_L A_2) = 0.
\]
Dividing both sides of the equality by \(-(1 - p_L)\) leads to

\[
x^2 - \frac{1 - p_L - (c - A_1 + p_L A_2)}{1 - p_L} x - \frac{c - A_1 + p_L A_2}{1 - p_L} = 0
\]

\[
x^2 - \left(1 - \frac{c - A_1 + p_L A_2}{1 - p_L}\right) x - \frac{c - A_1 + p_L A_2}{1 - p_L} = 0.
\]

Note that \(\frac{c - A_1 + p_L A_2}{1 - p_L}\) is both in the term multiplied by \(x\) and in the scalar part of the equation above. Therefore, the expression above can be factorized as

\[
\left(x + \frac{c - A_1 + p_L A_2}{1 - p_L}\right) (x - 1) = 0.
\]

The solution for the equation above is \(x = 1\) or \(x = -\frac{c - A_1 + p_L A_2}{1 - p_L}\). Hence, it can be concluded that \(x = 1\) or \(x = \frac{A_1 - c - p_L A_2}{1 - p_L}\) are the two points that \(g_r(x) - g_{ref}(x)\) intersect the \(x\)-axis. Substituting \(p_L A_2 + (1 - p_L) A_3\) into \(A_1\) in the second point gives

\[
\frac{A_1 - c - p_L A_2}{1 - p_L} = \frac{p_L A_2 + (1 - p_L) A_3 - c - p_L A_2}{1 - p_L}
\]

\[
= \frac{(1 - p_L) A_3 - c}{1 - p_L}
\]

\[
= A_3 - \frac{c}{1 - p_L}.
\]

The shape of \(g_r(x) - g_{ref}(x)\) is as follows (see Figure B.1): the function increases until it becomes zero at \(A_3 - \frac{c}{1 - p_L}\), continues increasing until \(x = \frac{1}{2} + \frac{1}{2} \left( A_3 - \frac{c}{1 - p_L} \right)\), then it starts decreasing and becomes zero at 1. Therefore,

\[
g_r(x) \geq g_{ref}(x) \quad \text{if} \quad A_3 - \frac{c}{1 - p_L} \leq x \leq 1 \quad \text{(B.19)}
\]

and

\[
g_r(x) < g_{ref}(x) \quad \text{if} \quad x < A_3 - \frac{c}{1 - p_L} \quad \text{or} \quad x > 1. \quad \text{(B.20)}
\]
Finally, I consider \( g_{br_i}(x) - g_{ref}(x) \). Substitute (B.8) and (B.13):

\[
g_{br_i}(x) - g_{ref}(x) = \left( -x^2 + x(1 + A_1) - A_1 + p\omega \right) - \left( -p_Lx^2 + p_Lx(1 + A_2) - p_LA_2 + p\omega \right)
= -(1 - p_L)x^2 + [(1 + A_1) - p_L(1 + A_2)]x + (p_LA_2 - A_1)
= -(1 - p_L)x^2 + [1 - p_L + (A_1 - p_LA_2)]x - (A_1 - p_LA_2).
\]

From (B.16), \( A_1 - p_LA_2 = (1 - p_L)A_3 \). Substituting this relationship into the right hand side of the equation above leads to

\[
g_{br_i}(x) - g_{ref}(x)
= -(1 - p_L)x^2 + [(1 - p_L) + (1 - p_L)A_3]x - (1 - p_L)A_3
= -(1 - p_L)x^2 + (1 - p_L)(1 + A_3)x - (1 - p_L)A_3.
\]  \hspace{1cm} \text{ (B.21)}

The first and the second derivatives are

\[
\frac{\partial (g_{br_i}(x) - g_{ref}(x))}{\partial x} = -2(1 - p_L)x + (1 - p_L)(1 + A_3)
\]
and

\[
\frac{\partial^2 (g_{br_i}(x) - g_{ref}(x))}{\partial x^2} = -2(1 - p_L) \leq 0.
\]

The second derivative being non-positive implies that \( g_{br_i}(x) - g_{ref}(x) \) is concave. Hence, \( \frac{\partial (g_{br_i}(x) - g_{ref}(x))}{\partial x} = 0 \) gives the \( x \) value that maximizes \( g_{br_i}(x) - g_{ref}(x) \):

\[
-2(1 - p_L)x + (1 - p_L)(1 + A_3) = 0
\]

\[
-2(1 - p_L)x = -(1 - p_L)(1 + A_3)
\]

\[
x = \frac{(1 - p_L)(1 + A_3)}{2(1 - p_L)}
\]

\[
x = \frac{1 + A_3}{2}.
\]
Next, I show the values of \( x \) at which \( g_{bri}(x) \) and \( g_{ref}(x) \) intersect, i.e., when \( g_{bri}(x) - g_{ref}(x) = 0 \) holds. From (B.21)

\[
-(1-p_L)x^2 + (1-p_L)(1+A_3)x - (1-p_L)A_3 = 0 \\
x^2 - (1+A_3)x + A_3 = 0 \\
(x-1)(x-A_3) = 0,
\]

where the second equality follows from dividing both sides by \(- (1-p_L)\). The equality above simply says that \( g_{bri}(x) - g_{ref}(x) \) intersects the \( x \) axis at \( A_3 \) and 1. The shape of \( g_{bri}(x) - g_{ref}(x) \) is as follows: the function increases and intersects the \( x \) axis at \( A_3 \), continues increasing until \( \frac{1+A_3}{2} \) where it reaches its maximum, then starts decreasing, intersecting the \( x \) axis at 1, keeps decreasing there after. The shape implies that (see Figure B.1)

\[
g_{bri}(x) \geq g_{ref}(x) \quad \text{if} \quad A_3 \leq x \leq 1 \tag{B.22}
\]

and

\[
g_{ref}(x) > g_{bri}(x) \quad \text{if} \quad x < A_3 \quad \text{or} \quad x > 1. \tag{B.23}
\]

### B.5 Determining \((x^*, a_L^*)\)

In this section, I derive L’s actions at the equilibrium. Two cases based on the values of \( A_1, A_2 \) and \( A_3 \) are treated in two separate subsections: (i) \( A_3 \leq A_1 \leq A_2 \), (ii) \( A_2 \leq A_1 \leq A_3 \).
Figure B.1: An Illustration of Functions (a) $g_r(x) - g_{ref}(x)$, (b) $g_{bri}(x) - g_{ref}(x)$, (c) $g_r(x) - g_{bri}(x)$. 
B.5.1 Case (i): $A_3 \leq A_1 \leq A_2$

Recall that $x_r > 0$, see (2.18). Given the condition $A_3 \leq A_1$,

\[
\begin{align*}
A_3 & \leq A_1 \leq 1 \\
A_3 + A_3 & \leq A_1 + A_1 \leq A_1 + 1 \\
2A_3 & \leq 2A_1 \leq A_1 + 1 \\
A_3 & \leq A_1 \leq \frac{A_1 + 1}{2} = x_{bri}.
\end{align*}
\]

Similarly, since $A_3 \leq A_2$,

\[
\begin{align*}
A_3 & \leq A_2 \leq 1 \\
A_3 + A_3 & \leq A_2 + A_2 \leq A_2 + 1 \\
2A_3 & \leq 2A_2 \leq A_2 + 1 \\
A_3 & \leq A_2 \leq \frac{A_2 + 1}{2} = x_{ref}.
\end{align*}
\]

It can be concluded that $A_3 \leq x_{bri} \leq x_{ref}$.

Depending on $r$, $L$ selects $x^*$ and $a^*_L$ differently. Next, I divide $[0, 1]$ into three segments and analyze each segment based on $r$ being in that segment. Figure B.2 depicts the arguments used for each segment.

**Segment I: $r \in [0, x_r]$**

By (B.17), it is known that $g_r(x) \geq g_{bri}(x)$ for any $x \in [0, 1]$, see Figure B.1. The assumption (2.16) and (B.19) implies that $g_r(x) \geq g_{ref}(x)$ for any $x \in [0, 1]$. Hence, it can be concluded that for any given $x \in [0, 1]$, $g_r(x) \geq g_{bri}(x)$ and $g_r(x) \geq g_{ref}(x)$ holds. It has already been derived that $g_r(x)$ is maximized at $x_r = \frac{1-c+A_1}{2}$, see Figure 2.3 and Table 2.1. Hence, if $r \leq x_r$ then $x^* = x_r$. The action that corresponds to the function $g_r(x)$ is ($k = 0, b = 0$), so $L$ chooses to send the agreement to the legislature for ratification.
Segment II: \( r \in (x_r, x_{bri}] \)

Given the condition \( A_1 \leq A_2, x_{bri} = \frac{1 + A_1}{2} \leq x_{ref} = \frac{1 + A_2}{2} \). Hence, both \( g_{bri}(x) \) and \( g_{ref}(x) \) increase in the region \((x_r, x_{bri}]\), see Figure 2.3. Although \( g_r(x) \) decreases, \( g_r(x) \geq g_{ref}(x) \) and \( g_r(x) \geq g_{bri}(x) \). Since \( g_r(x) \) is decreasing, the maximum \( L \) can obtain is \( g_r(r) \) by setting \( x^* = r \). If \( L \) decides to offer an agreement that is less than \( r \) \((x < r)\) and select the bribery option or the referendum option, then \( L \) gets \( g_{bri}(x) \) or \( g_{ref}(x) \). Note that

\[
\begin{align*}
g_r(r) & \geq g_{bri}(r) \geq g_{bri}(x) \text{ for all } x \in [0, r), \\
g_r(r) & \geq g_{ref}(r) \geq g_{ref}(x) \text{ for all } x \in [0, r).
\end{align*}
\]

Therefore, \( L \) plays \( x^* = r \) and \( a^*_L = (k = 0, b = 0) \).

Segment III: \( r \in (x_{bri}, 1] \)

Note that \( x_{bri} = \frac{1 + A_1}{2} > A_3 \), so \( g_{bri}(x) \geq g_{ref}(x) \) due to (B.22), see also Figure B.1. In this segment, both \( g_r(x) \) and \( g_{bri}(x) \) decrease. On the one hand, \( L \) may set \( x^* = r \) and obtain an expected utility of \( g_r(r) \). On the other hand, \( L \) may offer \( x < r \) and play bribery \((k = 0, b = 1)\) or referendum \((k = 1)\). Note that

\[
g_{bri}(x_{bri}) = \left( \frac{1 - A_1}{2} \right)^2 + p\omega \geq p_L \left( \frac{1 - A_2}{2} \right)^2 + p\omega = g_{ref}(x_{ref}),
\]

which follows from \( A_2 \geq A_1 \). Hence, if \( L \) decides to offer an agreement less than \( r \), then \( L \) sets \( x \) to \( x_{bri} \) and plays \((k = 0, b = 1)\).

Let \( \bar{x} \) be the point at which \( g_r(\bar{x}) = g_{bri}(x_{bri}) \) in the region \((x_{bri}, 1]\). In other words, \( \bar{x} \) is the point in \((x_{bri}, 1]\) that the value of the function \( g_r(x) \) is equal to the maximum
expected value L may obtain by bribery option. Next, I derive an expression for \( \bar{x} \):

\[
g_r(\bar{x}) = g_{bri}(x_{bri})
\]

\[
-x^2 + \bar{x}(1 - c + A_1) + p\omega + c - A_1 = \left( \frac{1 - A_1}{2} \right)^2 + p\omega
\]

\[
-x^2 + \bar{x}(1 - c + A_1) + c - A_1 - \left( \frac{1 - A_1}{2} \right)^2 = 0.
\]

Recall that \( x_r = \frac{1 - c + A_1}{2} \), so \( 1 - c + A_1 = 2x_r \) and \( c - A_1 = 1 - 2x_r \). Substituting this into the equation above leads to

\[
-x^2 + 2x_r\bar{x} + 1 - 2x_r - \left( \frac{1 - A_1}{2} \right)^2 = 0
\]

\[
\bar{x}^2 - 2x_r\bar{x} - \left( 1 - 2x_r - \left( \frac{1 - A_1}{2} \right)^2 \right) = 0.
\]

The solution for the equation above\(^2\) is

\[
\bar{x} = \frac{2x_r \pm \sqrt{(-2x_r)^2 - 4(1 - (1 - 2x_r - (1 - A_1)^2))}}{2}
\]

\[
= \frac{2x_r \pm \sqrt{4x_r^2 + 4 \left( 1 - 2x_r - \left( \frac{1 - A_1}{2} \right)^2 \right)}}{2}
\]

\[
= \frac{2x_r \pm \sqrt{4 \left( x_r^2 + 1 - 2x_r - \left( \frac{1 - A_1}{2} \right)^2 \right)}}{2}
\]

\[
= \frac{2x_r \pm 2\sqrt{(1 - x_r)^2 - \left( \frac{1 - A_1}{2} \right)^2}}{2}
\]

\[
= x_r \pm \sqrt{(1 - x_r)^2 - \left( \frac{1 - A_1}{2} \right)^2}.
\]

\(^2\)The roots of a quadratic equation in the form \( ax^2 + bx + c = 0 \) are \( \frac{-b \pm \sqrt{\Delta}}{2a} \) where \( \Delta = b^2 - 4ac \).
Note that the term in the square root is nonnegative,

\[
(1 - x_r)^2 - \left(\frac{1 - A_1}{2}\right)^2 = \left(1 - \frac{1 - c + A_1}{2}\right)^2 - \left(\frac{1}{2}\right)^2
\]

\[
= \left(\frac{2 - (1 - c + A_1)}{2}\right)^2 - \left(\frac{1}{2}\right)^2
\]

\[
= \left(\frac{1 + c - A_1}{2}\right)^2 - \left(\frac{1}{2}\right)^2
\]

\[
= \left[\left(\frac{1 + c - A_1}{2}\right)^2 + p\omega\right] - \left[\left(\frac{1}{2}\right)^2 + p\omega\right]
\]

\[
= g_r(x_r) - g_{bri}(x_{bri})
\]

\[
\geq 0,
\]

where the fourth equality follows from the substitution of \(g_r(x_r)\) and \(g_{ref}(x_{ref})\), see Table 2.1. Therefore, \(\bar{x}\) value in the region \((x_{bri}, 1]\) is

\[
x_r + \sqrt{(1 - x_r)^2 - \left(\frac{1 - A_1}{2}\right)^2}.
\]

(B.24)

On the one hand, \(g_r(x) \geq g_{bri}(x_{bri})\) for any \(x \in (x_{bri}, \bar{x}]\), where \(\bar{x}\) is defined in (B.26). The following follows immediately:

\[
g_r(r) \geq g_{bri}(x_{bri}) \quad \text{for all } r \in (x_{bri}, \bar{x}].
\]

Therefore, if \(x_{bri} < r \leq \bar{x}\), then \(L\) sets \(x^* = r\) and plays \((k = 0, b = 0)\). Combining this with the result of segment II, \(L\) plays \(x^* = r\) and \(a^*_L = (k = 0, b = 0)\) if \(r \in (x_r, \bar{x}]\).

On the other hand, in the region \((\bar{x}, 1]\), \(g_{bri}(x_{bri}) > g_r(x)\), so \(L\) bribes the legislature, \(a^*_L = (k = 0, b = 1)\), and plays \(x^* = x_{bri} = \frac{1 + A_1}{2}\).

The results so far can be summarized as follows. The following actions constitute

\[\text{3The term in the square root in the expression for } \bar{x} \text{ is equal to the difference in the possible maximum utilities }\]
\(L\) may obtain by actions \((x \geq r, (k = 0, b = 0))\) and \((x < r, (k = 0, b = 1))\).
an equilibrium:

\[
(x^*, a^*_L) = \begin{cases} 
(x_r = \frac{1-c+A}{2}, (k = 0, b = 0)) & \text{if } r \leq x_r \\
(r, (k = 0, b = 0)) & \text{if } x_r < r \leq \bar{x} \\
(x_{bri} = \frac{1+A}{2}, (k = 0, b = 1)) & \text{if } \bar{x} < r \leq 1 
\end{cases}
\]  

(B.25)

where

\[
\bar{x} = x_r + \sqrt{(1-x_r)^2 - \left(\frac{1-A}{2}\right)^2}.
\]

B.5.2 Case (ii): \(A_2 \leq A_1 \leq A_3\)

This case is analyzed under three conditions: (a) \(x_{ref} \geq A_3\); (b) \(x_{ref} < A_3\) and \(g_{bri}(x_{bri}) \geq g_{ref}(x_{ref})\); (c) \(x_{ref} < A_3\) and \(g_{bri}(x_{bri}) < g_{ref}(x_{ref})\). I analyze this case under each condition separately.

(a) The given condition \(x_{ref} \geq A_3\) allows me to conclude that \(g_{bri}(x_{bri}) \geq g_{ref}(x_{ref})\).

Recall that \(g_{bri}(x) \geq g_{ref}(x)\) in \([A_3, 1]\), see Figure B.1 and (B.22). In other words, for any offer between \(A_3\) and 1, bribery option yields more utility to the leader than the referendum option. Since \(x_{ref} \geq A_3\), the maximum utility of the bribery option, \(g_{bri}(x_{bri})\), should be greater than or equal to the maximum utility that is achievable under the referendum option, \(g_{ref}(x_{ref})\).

The main line of thought used in the derivation of the equilibrium in Case (i) in §B.5.1 is also applicable for this case. If the resistance is in the region \([0, x_r]\) then L can achieve the maximum possible utility he/she can get by offering \(x_r\) and doing nothing, i.e., \(x^* = x_r\) and \(a^*_L = (k = 0, b = 0)\). As pictured in Figure B.2,

\[
g_r(r) \geq g_{bri}(x_{bri}) \geq g_{ref}(x_{ref}),
\]
in the region \( r \in [x_r, \bar{x}] \), so the leader is better off compared to the bribery or the referendum option by making an offer satisfying the minimum requirements dictated by the legislature \((r)\). Hence, \( x^* = r \) and \( a^*_L = (k = 0, b = 0) \). For \( r \in (\bar{x}, 1] \), offering \( x_{bri} \) and bribing the legislature for ratification brings more utility, so \( x^* = x_{ref} \) and \( a^*_L = (k = 0, b = 1) \).

The equilibrium described is given in (B.27).

(b) The condition \( x_{ref} < A_3 \) causes a deviation from the picture in Figure B.2. Recall that \( g_{bri}(x) \geq g_{ref}(x) \) for \( x \in [A_3, 1] \). The point \( g_{ref}(x) \) reaches its maximum at a point on the left of \( A_3 \), i.e., \( x_{ref} < A_3 \). Hence, there is a possibility that \( g_{bri}(x_{bri}) < g_{ref}(x_{ref}) \). Depending on whether \( g_{bri}(x_{bri}) \geq g_{ref}(x_{ref}) \) or \( g_{bri}(x_{bri}) < g_{ref}(x_{ref}) \), the equilibrium switches. If \( g_{bri}(x_{bri}) \geq g_{ref}(x_{ref}) \), the line of argument used in (a) above also holds. This equilibrium corresponds to the one in (B.27).

(c) As in Case (i) in §B.5.1, I analyze this case by dividing \([0, 1]\) into three segments and analyzing each segment based on \( r \) being in that segment. Figure B.3 depicts the arguments used for each segment.

**Segment I: \( r \in [0, x_r] \)**

The function \( g_r(x) \) is maximized at \( x_r = \frac{1-c+A_1}{2} \) and \( g_r(x_r) \) is the maximum possible utility that \( L \) may obtain, see Figure 2.3 and Table 2.1. From (2.18), \( x_r > 0 \). Hence, if \( r \in [0, x_r] \), \( L \) plays \( x^* = x_r \) and \( a^*_L = (k = 0, b = 0) \), and gets the utility \( g_r(x_r) \).

**Segment II: \( r \in (x_r, x_{ref}] \)**

Given the condition \( A_2 \leq A_1 \), \( x_{bri} = \frac{1+A_1}{2} \geq x_{ref} = \frac{1+A_2}{2} \). Hence, both \( g_{bri}(x) \) and \( g_{ref}(x) \) increase in the region \((x_r, x_{ref}]\), see Figure B.3. Although \( g_r(x) \)
decreases, \( g_r(x) \geq g_{ref}(x) \) and \( g_r(x) \geq g_{bri}(x) \), which follows from (B.17), and (2.16) and (B.19), respectively. Since \( g_r(x) \) is decreasing, if L chooses to make an offer no less than the resistance \( (x \geq r) \), then he/she should offer \( r \) and obtain a utility of \( g_r(r) \). If L decides to offer an agreement that is less than the resistance \( (x < r) \) and select the bribery or the referendum option, then L gets \( g_{bri}(x) \) or \( g_{ref}(x) \). Due to the fact that both \( g_{ref}(x) \) and \( g_{bri}(x) \) increase in this segment,

\[
g_{bri}(r) \geq g_{bri}(x) \quad \text{for all } x \in [0, r),
g_{ref}(r) \geq g_{ref}(x) \quad \text{for all } x \in [0, r).
\]

for any \( r \in (x_r, x_{ref}] \). Further, \( g_r(r) \geq g_{bri}(r) \) and \( g_r(r) \geq g_{ref}(r) \). Therefore, L plays \( x^* = r \) and \( a^*_L = (k = 0, b = 0) \).

**Segment III:** \( r \in (x_{ref}, 1] \)

In this segment, if L decides to make an offer less than the resistance \( (x < r) \), then he/she should pick the referendum option for ratification because \( g_{bri}(x_{bri}) < g_{ref}(x_{ref}) \).

Let \( \hat{x} \) be the point at which \( g_r(\hat{x}) = g_{ref}(x_{ref}) \) in the region \( (x_{ref}, 1] \). In other words, \( \hat{x} \) is a point at which the value of the function \( g_r(x) \) is equal to the maximum expected value L may obtain by the referendum option. The expression \( \hat{x} \) is derived as follows:

\[
g_r(\hat{x}) = g_{bri}(x_{bri})
\]

\[
-\hat{x}^2 + \hat{x}(1 - c + A_1) + p\omega + c - A_1 = p_L \left( \frac{1 - A_2}{2} \right)^2 + p\omega
\]

\[
-\hat{x}^2 + \hat{x}(1 - c + A_1) + c - A_1 - p_L \left( \frac{1 - A_2}{2} \right)^2 = 0.
\]

Recall that \( x_r = \frac{1-c+A_1}{2} \), so \( 1 - c + A_1 = 2x_r \) and \( c - A_1 = 1 - 2x_r \). Substituting
this into the equation above leads to

\[-\hat{x}^2 + 2x_r\hat{x} + 1 - 2x_r - p_L \left(\frac{1 - A_2}{2}\right)^2 = 0\]

\[\hat{x}^2 - 2x_r\hat{x} - \left(1 - 2x_r - p_L \left(\frac{1 - A_2}{2}\right)^2\right) = 0.\]

The solution for the equation above is

\[\hat{x} = \frac{2x_r \pm \sqrt{(-2x_r)^2 - 4(1 - 2x_r - p_L \left(\frac{1 - A_2}{2}\right)^2)}}{2}\]

\[= \frac{2x_r \pm \sqrt{4x_r^2 + 4 \left(1 - 2x_r - p_L \left(\frac{1 - A_2}{2}\right)^2\right)}}{2}\]

\[= \frac{2x_r \pm \sqrt{4 \left(x_r^2 + 1 - 2x_r - p_L \left(\frac{1 - A_2}{2}\right)^2\right)}}{2}\]

\[= \frac{2x_r \pm 2\sqrt{1 - 2x_r + x_r^2 - p_L \left(\frac{1 - A_2}{2}\right)^2}}{2}\]

\[= \frac{2x_r \pm 2\sqrt{(1 - x_r)^2 - p_L \left(\frac{1 - A_2}{2}\right)^2}}{2}\]

\[= x_r \pm \sqrt{(1 - x_r)^2 - p_L \left(\frac{1 - A_2}{2}\right)^2}.\]

Note that the term in the square root is the difference in the maximum utility
L obtains by playing \((x \geq r, (k = 0, b = 0))\) and \((x < r, (k = 0, b = 1))\), so it is nonnegative.
\[(1 - x_r)^2 - p_L \left( \frac{1 - A_2}{2} \right)^2 = \left( 1 - \frac{1}{2} (1 - c + A_1) \right)^2 - p_L \left( \frac{1 - A_2}{2} \right)^2\]
\[= \left( 2 - \frac{1 - c + A_1}{2} \right)^2 - p_L \left( \frac{1 - A_2}{2} \right)^2\]
\[= \left( \frac{1 + c - A_1}{2} \right)^2 - p_L \left( \frac{1 - A_2}{2} \right)^2\]
\[= \left[ \left( \frac{1 + c - A_1}{2} \right)^2 + p_o \right] - \left[ p_L \left( \frac{1 - A_2}{2} \right)^2 + p_o \right]\]
\[= g_r(x_r) - g_{ref}(x_{ref}).\]

Thus, \( \hat{x} \) value in the region \((x_{ref}, 1]\) is

\[\hat{x} = x_r + \sqrt{(1 - x_r)^2 - p_L \left( \frac{1 - A_2}{2} \right)^2}. \quad (B.26)\]

On the one hand

\[g_r(r) \geq g_{ref}(x_{ref}) \text{ for all } r \in (x_{ref}, \hat{x}].\]

Hence, if \( x_{ref} < r \leq \hat{x} \), then \( L \) sets \( x^* = r \) and plays \((k = 0, b = 0)\). Combining this with the result of segment II, \( L \) plays \( x^* = r \) and \( a^*_L = (k = 0, b = 0) \) if \( r \in (x_r, \hat{x}] \).

On the other hand, in the region \((\hat{x}, 1]\), \( g_{ref}(x_{ref}) > g_r(x) \), so \( L \) holds a referendum \( a^*_L = (k = 1) \), and plays \( x^* = x_{ref} = \frac{1 + A_2}{2} \).

The results for this case are summarized as follows. Provided that \( A_2 \leq A_1 \leq A_3 \), \( x_{ref} < A_3 \) and \( g_{bri}(x_{bri}) < g_{ref}(x_{ref}) \), the following actions constitute an
equilibrium:

\[
(x^*, a^*_L) = \begin{cases} 
(x_r = \frac{1-c+A_1}{2}, (k = 0, b = 0)) & \text{if } r \leq x_r \\
(r, (k = 0, b = 0)) & \text{if } x_r < r \leq \hat{x} \\
(x_{ref} = \frac{1+A_2}{2}, (k = 0, b = 1)) & \text{if } \hat{x} < r < 1,
\end{cases}
\]  

(B.27)

where

\[
\tilde{x} = x_r + \sqrt{(1-x_r)^2 - p_L \left(\frac{1-A_2}{2}\right)^2}.
\]
Figure B.2: An Illustration of the Expected Cost Functions in case of $A_3 \leq A_1 \leq A_2$.

Figure B.3: An Illustration of the Expected Cost Functions in case of $A_2 \leq A_1 \leq A_3$, $x_{ref} < A_3$ and $g_{bri}(x_{bri}) < g_{ref}(x_{ref})$. 
APPENDIX C

Codebooks

C.1 Territorial Disputes

Explanatory Variables:

Country: Challenger state that is going to be negotiating with the Paris Club.

Month: Month of events.

Year: Year of events.

Date of Negotiation: Date for start of negotiations.

Type of Negotiation: Variable indicating whether the negotiations are for repayment, rescheduling or new debt.

Legislative Support for challenger government: Variable indicating majority support in parliament or the more important legislative house. Include the variables allupp1, alllow1, leadup1, leadlow1, nparty1, mingovc1, mingovp1, maj-
govc1, mingovp1, majgovc1, majgovp1 from Huth and Allee (2003).

**Duration in months of negotiations:** Total length in months of that round of negotiations.

**Beginning Date:** Start date of that round of negotiations.

**End Date:** Ending date of that round of negotiations.

**Electoral System DEM (dem states):** Categorical variable indicating whether the state has a Majoritarian or PR system.

**Electoral System NONDEM (nondem states):** Categorical variable indicating whether the state excludes the opposition from government’s formal decision-making, or includes the opposition in government’s formal decision-making.

**Method of Approval:** Ordinal variable specifying whether the measures were passed through via Legislative approval, Legislative amendments, referendum/interest groups, not (1-4).

**PLMAJ:** dummy variable for democratic states (dem=1) & electoral system qualifies as plurality or majoritarian (Source: IDEA).

**PR:** dummy variable for democratic states (dem=1) & electoral system qualifies as proportional representation (Source: IDEA).
**Net Dem Score of actor:** Democracy minus the Autocracy score for the state. (Source: POLITY data)

**Net Dem Score of target:** Democracy minus the Autocracy score for the state. (Source: POLITY data)

**Time since last election in challenger:** Variable indicating number of months since last election. Include the variables electnt1 and ele12m1 from Huth and Allee (2003).

**Time since last election in target:** Variable indicating number of months since last election.

**International Variables:**

**Military Balance:** (milcap, milbin) Include the variables milratio, expratio, trpratio, sptraprat, milmaj, miladv, lgmiladv, pa1ndunc from Huth and Allee (2003). They are dyadic variables that specify the balance between the militaries of the two states; milbin is binary version of the military capabilities ratio (1 if challenger’s capabilities are greater than 0.5 in ratio to that of the target, 0 if less than 0.5). This is also the constraint variable.

**Strategic Value of Territory:** Dummy variable for the strategic value of the disputed territory to the challenger (0-1).

**Economic Value of Territory:** Dummy variable for the economic value of the
dispute territory to the challenger (0-1).

**Common Security Interests:** Include the variables alliance, biatall, odi, multiall, comopp, odiopp, comadv2, comadv5 from Huth and Allee (2003). They are dyadic variables that specify whether the two states had common security interests. (Source: MID and Alliances dataset from EuGene).

**Target involvement in other military dispute:** Dummy variable for the involvement of the state in another dispute at the same time as this one (0-1). (Source: MID dataset from EuGene).

**Challenger involvement in other military dispute:** Dummy variable for the involvement of the state in another dispute at the same time as this one. (Source: MID dataset from EuGene).

**Existence of Stalemate in the last 2 years, 5 years, 10 years:** Dummy variable for the existence of successful agreements signed within the last 2, 5 and 10 years. This variable measures the existence of an agreement between 24 months, 60, and 120 months prior.

**Issues-at-stake variable:** defined respectively for ethnic, strategic and economic valued territory ethvalue/strvalue/ecovalue.

(Source: Huth (1996))
C.2 Foreign Direct Investment

Explanatory Variables:

Country: State negotiating for privatization.

Month: Month of events.

Year: Year of events.

Date of Negotiation: Date for start of negotiations.

Type of Sale: Variable indicating whether the negotiations are for privatization, auction or floats.

Duration in months of negotiations: Total length in months of that round of negotiations.

Beginning Date: Start date of that round of negotiations.

End Date: Ending date of that round of negotiations.

Percentage of Foreign Ownership 1 (percentownf1): Specifies the foreign ownership profile for the privatized entity.
**Percentage of Foreign Ownership 2** (percentownf2): Specifies the foreign ownership profile for the privatized entity, if there is a secondary state involved in the deal.

**Dema:** Democracy Score for Privatizing State. (Source: Polity III)

**Auta:** Autocracy Score for Privatizing State. (Source: Polity III)

**Netdema:** Net Democracy Score for Privatizing State.

**Netdemb:** Net Democracy Score for Buyer State.

**PLMAJ:** dummy variable for democratic states (dem=1) & electoral system qualifies as plurality or majoritarian. (Source: IDEA)

**PR:** dummy variable for democratic states (dem=1) & electoral system qualifies as proportional representation. (Source: IDEA)

**Sinceleaderelecta:** Number of Months since General Elections.

**Sinceleaderelectb:** Number of Months since General Elections.

**Sincelecta:** Number of Months since last Legislative Elections.

**Sincelectb:** Number of Months since last Legislative Elections.
**Signimf**: Does an agreement with the IMF exist? (Y =1/ N=0)

**Monthssinceimf**: Number of Months since IMF agreement was signed.

**Capital Account Balance**: Measuring the flow of capital in and out of the country via receipts minus payments for international transactions. (Source: IFC Statistics 78b2d, 78bcd, 78 bbd).

**Government Consumption**: Variable specifying how much G contributes to the macroeconomic well-being of the state in question. Spending by the government indicates how much the government contributes to the GDP.

**Economic Growth**: Variable for percentage of GDP growth per year. (Source: World Development Indicators CD-ROM 2005)

**Fdientry**: (Source: IFC Statistics)

**Fdiexit**: (Source: IFC Statistics)

**Netfdi**: Total FDI inflows of foreign capital minus Total FDI outflows of domestic capital. (Source: IFC Statistics)

**Econgrowth**: Variable for percentage of GDP growth per year (Source: World Development Indicators CD-ROM 2005).
**Humancap:** Nominal variable indicating quality of human capital (0-3) ranges from poor to highly skilled as specified by Barro and Lee used by Mankiw, Romer and Weil (Source: World Development Indicators CD-ROM 2005).

**Inflowctrl:** Dichotomous Variable measuring openness of the state to foreign investment ranging from almost closed to open (0-3). If the state is privatizing then obviously there is openness in the state this variable is to capture level of openness (ie. is there privatization in more than one industry/region?). (Source: Brune, Garrett, Guisinger 2003 variation on the FDI Openness Indicator by Quinn).

International Variables:

**Strategic Value of Industry:** Dummy variable for the strategic value of the disputed territory to the privatizing state (0-1).

**Social Value of Industry:** Dummy variable for the economic value of the dispute territory to the privatizing state (0-1).

**Colonyb1:** Was the Privatizing state a colony of the main Buyer State?

**Colonyb2:** Was the Privatizing state a colony of the second main Buyer State?

**Meanegrowth2:** (Source: World Development Indicators CD-ROM 2005)

**Meanegrowth5:** (Source: World Development Indicators CD-ROM 2005)
**Meanegrowth10:** (Source: World Development Indicators CD-ROM 2005)

**FDI inflows:** Reconstructed from Jensen (2006).

**Openness Index:** Reconstructed from Dennis Quinn (1997).

**BITexistb1:** Is there a bilateral investment treaty with the first buyer state? (Y/N)

**BITexistb2:** Is there a bilateral investment treaty with the second buyer state? (Y/N)

**Decolonyrs:** Number of Years since Decolonization.

**Ladum:** Latin America Dummy.

**Depend:** Is the state dependent on the industry for its economy?

**ICSID:** Does the state have a case at the ICSID?

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**C.3 Sovereign Debt**

Explanatory Variables:
Country: Debtor state in question.

Month: Month of event.

Year: Year of event.

Date of Treatment: The date of signing of agreement with the Paris Club.

Type of Treatment: The treatments put forth for each individual case of debt via consensus by all the creditors. Most of the treatments fall under the following treatment terms Classic (standard), Houston (for middle income states), Naples (for poor states) and Cologne (improved terms for poor states).

Status of Treatment: The status is defined as active or fully paid. Coded as a binary variable (0-1).

Amount Treated: The total amount that the government is lent with that particular agreement.

Duration in months of negotiations: Total duration in months of that round of negotiations.

Beginning Date: Date for start of negotiations.

End Date: Date for end of negotiations.
PLMAJ: dummy variable for democratic states (dem=1) & electoral system qualifies as plurality or majoritarian (Source: IDEA).

PR: dummy variable for democratic states (dem=1) & electoral system qualifies as proportional representation (Source: IDEA).

Dema: Democracy Score for Borrower State. (Source: Polity)

Auta: Autocracy Score for Borrower State. (Source: Polity)

Netdema: Net Democracy Score for Borrower State

Time since last election in challenger: Variable indicating number of months since last election.

Time since last election in target: Variable indicating number of months since last election.

Signed with IMF?: Indicator variable for whether or not the state has a valid agreement with the IMF (dummy 0-1, for an agreement within the last 3 years).

Monthssinceimf: Number of Months since IMF agreement was signed.

Capital Account Balance: Measuring the flow of capital in and out of the country via receipts minus payments for international
Budget Deficit: Excess of expenditure over income, what the government spends beyond its allocated budget for fiscal year; net borrowing plus net decrease in govt cash, deposits, securities. (Source: IFC Statistics 80, 81, 81z, 82, 83)

Foreign Reserves: Ratio of international reserves to total debt. (Source: IFC Statistics 1d, 88b)

Debt Service: How much of the debt the country has been able to pay or service. (Source: IFC Statistics 84a, 85a, 88a, 88b)

Investment: The total amount of investment coming into the country. (Source: World Development Indicators CD-Rom 2005)

Current Account Deficit/GDP: This ratio measures the quantity of investment financed by borrowing from abroad and is negatively related to rescheduling probabilities. (Source: IFC Statistics 78 ald, 78 7aad, 78 abd)

Rate of Inflation / 10, /100, /1000: Percentage of increase in prices. (Source: World Development Indicators CD-Rom 2005)

Successful Agreements 2 years ago, 5 years ago, 10 years ago: Dummy variable for the existence of successful agreements signed within the last 2, 5 and 10 transactions. (Source: IFC Statistics 78b2d, 78bcd, 78 bbd).
years. This variable measures the existence of an agreement between 24 months, 60, and 120 months prior.

**Democratic Norms Variables:** Control variable for the existence of democratic norms coded as a dummy for netdem score over 6 for the past 20 years. (Source: EuGene)
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