

The Origins of Institutional Crises  
in Latin America:  
A Unified Strategic Model and Test

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## **Abstract**

Institutional instability and inter-branch crises pose a fundamental challenge to democracies in Latin America and the developing world more generally. Combining a standard game theoretic model of crisis bargaining with a unique dataset on the executive, legislative, and judicial branches in eighteen Latin American countries from 1995 to 2005, this article develops a strategic explanation of the origins of inter-branch crises. Descriptive and multivariate analyses support the view that institutional crises in Latin America increase in stakes and expectations of success and decrease as institutional legitimacy rises. The paper also casts doubt on a host of alternative hypotheses, including: the age of democracy, income, and political ideology.

Institutional instability plagues the developing world. This is especially true of Latin America. From the closure of legislatures in Peru and Venezuela, to the sacking of presidents in Bolivia and Ecuador, to attacks on judicial independence in Argentina and Nicaragua, contemporary Latin American history is rife with examples of institutional conflict, crisis, and collapse. That most of these assaults are now carried out by civilian politicians rather than generals offers only partial consolation: institutional instability short-circuits elections, undermines faith in existing institutions, and threatens investor confidence and economic growth.

Scholars have long observed that political crises in the region are rooted in divided or non-majoritarian governments, which are produced by the unfortunate combination of presidentialism and multipartism (Mainwaring 1993; O'Donnell 1994; Valenzuela 2004). Yet, certainly not all non-majoritarian situations in Latin America lead to inter-branch crises: Alberto Fujimori and Hugo Chávez dissolved legislatures in which they lacked clear majorities, but most Latin American presidents without congressional control have not. Nearly every Argentine president has gotten rid of judges appointed by the previous administration, but no Chilean president has. More generally, then, what accounts for variation in the emergence of institutional instability? Why in some countries are political actors able to cooperate and compromise, but not in others? Why do ordinary inter-branch conflicts escalate into crises at some moments in a country's history, but not others?

With the noteworthy exception of recent important contributions by Hochstetler (2006) and Pérez-Liñan (2005; 2007) on the dynamics of presidential impeachment, systematic answers to these questions have been in short supply. Experts hint at a variety of possible causes of institutional instability ranging from cultural values and attitudes to economic crisis and institutional design, but a unified theory of how inter-branch crises emerge (or fail to) has

remained elusive.

The purpose of this article is to provide one. My approach uses a standard game theoretic model of crisis bargaining, borrowed from the literature on international relations, that maps the costs and benefits underlying political actors' decisions along the path to institutional crisis. Treating the emergence of inter-branch crisis as a series of strategic interdependent choices allows me to synthesize several intuitions about the institutional, historical, and cultural triggers of institutional instability.

First, consistent with existing theories of institutional design (Linz 1994; Shugart and Carey 1992; Przeworski 1991; Weingast 1997), the model stresses the importance of the stakes of political conflict. Second, it considers how elites' beliefs and expectations about the likelihood of a successful transgression shape their propensity to escalate inter-branch crisis. Third, inspired by the idea that legitimacy serves to insulate institutions (Weingast 1997) it takes into account how public attitudes about institutions affect the calculi of inter-branch elites. Taken together, the approach argues that inter-branch crises increase in stakes and expectations of success and decrease as institutional legitimacy rises.

To examine the validity of the strategic account, the article draws on a unique cross-sectional time-series dataset constructed by the author covering eighteen Latin American countries from 1995 to 2005. These data provide the first comprehensive picture for any part of the world of the frequency and types of inter-branch crises across all three major branches of government: the executive, legislature, and judiciary. To test the theoretical model, I employ Signorino's (1999) method for estimating statistical strategic models. Because the methodology enables one to incorporate explicitly into the estimation stage the interdependence of decision-making, it is particularly appropriate for testing the main propositions derived from the basic strate-

gic model developed here.

The article proceeds as follows. In the next section, I develop a strategic theory of inter-branch crisis. Next, I derive a statistical model designed to explore its key propositions. Sections three and four lay out the empirical evidence. Descriptive patterns together with multivariate analysis provide strong support for the strategic account and cast some doubt on a number of competing explanations including the age of democracy, economic conditions, and the ideology of presidents. Based on these findings, Section five charts a course for future research.

## **A Strategic Theory of Inter-Branch Crisis**

In developing a general model of inter-branch crisis, I seek to explain situations in which one or more branches of government issues an explicit threat or carries out an attack against another branch of government. Conceptually, such conflicts can be distinguished from “normal” inter-branch disputes in that they involve clashes over fundamental powers or survival as opposed to policy. As with any game theoretic modeling endeavor, the focus is on delineating the general dynamics of inter-dependent decision-making, and not on highlighting the particular details of any one instance. The tradeoff imposed by this approach is that one loses the richness that comes from inductive research, but gains the ability to generate hypotheses that are independent from the observed outcomes, though still rooted in the empirical world.

To develop a model of inter-branch crisis, I employ a modified version of a simple two-player game theoretic model commonly used to analyze international conflicts (Bueno de Mesquita and Lalman 1992). Using war as a theoretical analogue makes sense for a number of reasons. Similar to international conflicts, empirically most institutional crises quite naturally fit into the simple sequential structure of decision-making. As in the international

arena, there is considerable evidence that institutional actors in the domestic realm weigh the costs and benefits of various strategies. The course of action they ultimately choose to take is also conditioned by how they expect other branches to react.

Of course, there are limits to the comparison between inter-branch crises and international conflict. Impeachments are not wars. Branches do not seek territory from one another. The costs of battle in a dispute between judges and a president are less tangible, and (usually) less bloody, than in a war between nations. Yet, the wager here is that the fundamental structure of inter-branch conflict is sufficiently similar to that of international warfare to warrant borrowing the basic theoretical framework of analysis.

Indeed, like war, inter-branch crises are puzzling precisely because they appear to be *ex post* inefficient. From the perspective of standard separation of powers theory (Epstein and Knight 1998; Ferejohn and Weingast 1992), for example, we should rarely observe sanctions against one branch being carried out against another. Branches of government facing threats should simply adjust their behavior *ex ante* to avoid sanctions *ex post*. Yet, as in the international arena, conflicts between institutional actors in Latin America often do escalate into full-scale crises. Why?

Figure 1 provides a simple sequence of binary choices made by two branches, which I label as the Aggressor branch and the Target branch.

[Figure 1 about here.]

In the first node of the game, illustrated in Figure 1, the Aggressor decides whether to issue a threat against the Target. Typical threats against another branch range from calls to reduce its powers, to threats of impeachment, to the abolition of the other branch entirely. If the Aggressor does not issue a threat, then the game ends with the status quo (SQ) upheld.

Should the Aggressor issue a threat, then it is up to the Target to decide how to respond. In the second stage of the game a Target can, for example, step aside gracefully, give up its powers willingly, or reduce its own jurisdiction without a fight. In such cases, the outcome will be SQR (status quo revise). Conversely, the Target may refuse to be cowed, instead issuing counter-threats against the Aggressor.

If the Target branch chooses confrontation over compliance, the game then proceeds to a third and final stage in which the Aggressor must decide whether to drop the original threat, leading to the outcome BD (back down), or carry out its threat. In the latter case, the result is either CW or CL (conflict win or conflict lose), in which the Aggressor succeeds against the Target with some probability,  $p$ .

Following standard practice, payoffs are set to  $(0, 0)$  for the status quo outcome. If a threat is waged and the Target complies, the Aggressor and Target each receive  $(W_A, -W_T)$ , in which  $W$  denotes the stakes of the political conflict. Thus, for example, a president successfully dissolving the legislature gains a benefit by increasing control over a potential check on his power. Conversely, legislators who are removed lose the benefits associated with their office.

If instead the Target refuses to comply and the Aggressor decides to back down, each branch earns  $(-r_A, r_T)$ , where  $r > 0$ . Similar to the international relations literature (Fearon 1994), here I use  $r$  to denote the audience costs that the Aggressor suffers for initiating a threat against a branch and failing to carry it out. That audience costs are also of considerable concern to politicians embroiled in inter-branch crises is suggested by the strong connection between public protest and presidential impeachment (Hochstetler 2006; Perez-Linan 2007).

Payoffs for the final two outcomes of the game are determined by which

branch ultimately wins the conflict. If the Aggressor prevails, the payoffs are  $(W_A - M_A)$  for the Aggressor and  $(-W_T - M_T)$  for the Target; if the Target wins, the payoffs are reversed.  $M$  captures the costs that each branch pays for engaging in inter-branch conflict. Here I conceptualize  $M$  as a legitimacy cost for both actors, which each suffer depending on the degree of legitimacy enjoyed by the opposing branch. A textbook example is the cost that Franklin Delano Roosevelt would have suffered had he carried out his court-packing plan (Caldeira 1987). Given the notorious lack of public support for institutions in Latin America, it remains to be seen just how much a constraint this parameter plays.

Assuming that each branch knows each others' payoffs and that each branch knows that the other branch knows its payoffs and so forth, there are three outcomes that can be sustained in equilibrium: SQ, SQR, and Fight.

**Proposition 1** *Status Quo Outcome.* SQ will occur whenever Aggressors have the following preference ordering:  $SQR > SQ > BD > CW > CL$ . Under complete and perfect information, Targets know that Aggressors will ultimately back down to avoid conflict. As a result, both Targets and Aggressors realize that Targets cannot credibly commit to compliance. Because fighting is not a credible threat, Aggressors simply refrain from issuing threats and SQ prevails, despite the fact that SQR is the Aggressor's first best outcome. As such, the logic of this outcome nicely parallels the status quo scenario in Przeworski's (1991) classic liberalization game.

The status quo, however, can also occur if the Aggressor instead prefers conflict to backing down. Specifically, the Aggressor will choose the status quo as long as  $p < (W + M - r)/2W$  and  $W > 2M$ . The logic follows a classic general deterrence model. It hinges on the shared belief that Aggressors prefer fighting to backing down, but fear that they will fail in their efforts. Thus, issuing a threat initially makes little sense.

**Proposition 2** *Status Quo Revise Outcome.* The next proposition follows from the first. Specifically, as long as  $p > 2W - M/2M$  and  $M > 0$ , Targets will be compelled to comply rather than fight. Under this scenario, Aggressors thus obtain their first best outcome. Note that in the special case where the Aggressor's success is certain ( $p = 1$ ), SQR will be the only equilibrium outcome in the game as long as the Aggressor both prefers conflict to backing down (*i.e.* a  $SQR > SQ > CW > BD > CL$ ) and fighting is costly for Targets ( $M > 0$ ).

**Proposition 3** *Fight Outcome.* Whether inter-branch fighting ensues depends on the relative values of  $p, M, W$ , and  $r$ . Starting at the last node of the game, Aggressors thus choose to fight as long as  $p > (W + M - r)/2W$ . Moving to the next node, Targets, in turn, choose not to comply as long as  $p < (2W - M)/2W$ . Finally, at the initial node of the game, Aggressors consequently issue a threat if  $p > (W + M)/2W$ . Assuming that the value of the status quo is sufficiently high relative to the costs of fighting (*i.e.*  $W > 2M$ ), conflict will thus result as long as  $p$  lies in-between the respective thresholds for both branches.

[Figure 2 about here.]

Figure 2 shows comparative statics for stakes,  $W$ , and legitimacy costs,  $M$ , in terms of the probability,  $P$ , of the Aggressor succeeding at the Fight stage. Increasing  $W$  lowers the respective thresholds for the Aggressor and Target and expands the region in which fighting occurs. Conversely, increasing  $M$  increases the thresholds and shrinks the area in which fighting occurs. Meanwhile, holding  $M$  and  $W$  constant, raising  $P$  increases the attractiveness of fighting for Aggressor and decreases it for Targets.

Taken together, the strategic approach suggests the following testable implications:

*Implication 1: Stakes.* All else equal, the higher the stakes, the more likely a fight occurs compared to the status quo and status quo revise outcomes.

*Implication 2: Legitimacy Costs.* All else equal, the higher the legitimacy costs, the less likely a fight occurs compared to the status quo and status quo revise outcomes.

*Implication 3: Beliefs and Expectations.* All else equal, the higher the probability the Aggressor will win, the more likely an Aggressor is to fight versus stay with the status quo and the less likely a Target is to fight versus comply.

## **Specifying the Strategic Statistical Model**

To explore empirically the implications of a strategic model of institutional instability, I employ a statistical method based on Signorino (1999). In contrast to more traditional methods of estimation, such as logit and probit, this method allows the analyst to capture explicitly the interdependence of decision-making implied by the strategic theoretical framework. Failing to account for such interdependence in the estimation stage is the equivalent of introducing omitted variable bias and can lead to substantively incorrect inferences (Signorino and Yilmaz 2003). The method used here explicitly models the sequence and endogeneity of actors' choices through a recursive system of equations derived from the original theoretical model. Thus, the theoretical and statistical models are effectively unified (Signorino and Tarar 2006).

In addition, the method also enables one to take into account relationships between the dependent variable and regressors that are non-monotonic

or conditionally monotonic (*Ibid.*2006: 590). For example, consider the hypothesis that higher stakes lead to a greater probability of fighting. The foregoing theory gives us a general expectation of the relationship, but we do not necessarily know *ex ante* the specific shape that the relationship will take under various conditions. Using a strategic statistical methodology allows us one to assess whether increasing the stakes from a low to medium level may have a greater effect on the propensity to fight than increasing the level of the stakes from medium to high. Thus, it allows for a nuanced understanding of the data that can enrich our understanding of the complexities of the strategic interaction.

To develop a strategic statistical model, the first step is to express choice probabilities for each action based on utilities used in the original strategic game. For example, the Aggressor’s utility for the SQR is simply re-written as  $UA * (SQR) = UA(SQR) + \varepsilon_{A \sim R}$ , where  $UA * (SQR)$  is the unobserved “true” utility,  $UA(SQR)$  is the observed utility, and  $\varepsilon_{A \sim R}$  captures agent error at the Target’s decision node. Introducing uncertainty into the utilities through an error term thus transforms actors’ choices in the original theoretical model into choices that can be estimated with standard maximum likelihood techniques (see Signorino 1999 for details).

[Figure 3 about here.]

Along these lines, Figure 3 shows the statistical specification of each of the actors’ utilities. For ease of presentation, Fight has been collapsed into a single outcome. At a terminal node, such as Fight, the player simply receives the indirect utility,  $UA(Fight) + \varepsilon_{AF}$ . At nodes further up the game tree, such as Back Down, players’ utilities are determined by their utility for each choice taken divided by the sum of all possible choices taken further down the game tree.

This leads to the following set of strategic choice probabilities for the actions Fight, Resist, and Threaten, respectively:

$$Fight = \frac{e^{[p(W-M)+(1-p)(-W-M)]}}{e^{[p(W-M)+(1-p)(-W-M)]} + e^{-r}} + \varepsilon_{AF} \quad (1)$$

$$Resist = \frac{e^{[q_6[(p)(-W-M)+(1-p)(W-M)]+(1-q_6)(r)]}}{e^{[q_6[(p)(-W-M)+(1-p)(W-M)]+(1-q_6)(r)]} + e^{-W}} + \varepsilon_{TR} \quad (2)$$

$$Threaten = \frac{e^{q_3(W)+q_4[q_5(-r)]+q_4[(1-q_5)][(p(W-M)(1-p)(-W-M)]}}{1 + e^{q_3(W)+q_4[q_5(-r)]+q_4[(1-q_5)][(p(W-M)+(1-p)(-W-M)]}} + \varepsilon_{AT} \quad (3)$$

Notice that the choice probabilities for each action are fully consistent with the sequence of moves expressed in the extensive form game. As in the logic of backwards induction, estimating the probability that the Aggressor decides to stick with the status quo versus threaten another branch incorporates the Aggressors' utilities at every subsequent choice node in the game.

## DATA

### The Measurement of Institutional Crisis

To study inter-branch conflict and crisis, I constructed the *Institutional Crisis in Latin America* (ICLA) Dataset. I used the *Latin American Weekly Report* to identify all events that met the following criteria: one or more branches of government issued a threat or carried out an attack against another branch or branches. Substantively, these included explicit threats, attempts, or the actual removal of political actor(s) and/or threats, attempts, or the actual reduction of another branches' powers. Equally important from

a theoretical standpoint are instances in which threats or crises do *not* occur. Therefore, I subsequently incorporated status quo outcomes or “non-cases” based on each country/year/institutional dyad in which stability prevailed. The ICLA Dataset contains a total of 1,211 cases and covers eighteen Latin American countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela) over a period of eleven years (1995-2005). Within the dataset, there are a total of 118 instances of institutional instability.<sup>1</sup>

To capture the evolution and outcome of each instance of institutional conflict the ICLA Dataset contains the following information: 1) the start and end dates of the conflict, 2) the identity of Aggressor branch (executive, legislative, judicial), 3) the identity of the Target branch (executive, legislative, judicial), 4) the particular type of threat issued,<sup>2</sup> 5) the Target’s response,<sup>3</sup> 6) the Aggressor’s response (backs down or carries out the threat), and the final outcome (*SQ* revise, Aggressor backs down, Aggressor fights and wins conflict, Aggressor fights and loses conflict). Taken together, these data provide a wealth of information that can be used to uncover patterns of institutional instability across the major branches of government in Latin America.

[Table 1 about here.]

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<sup>1</sup>Note that the relative frequency of conflicts to non-conflicts (approximately 13%) in the dataset is purely a function of the unit of analysis, which is the ordered dyad conflict per year per country, chosen for non-cases. This serves the practical purpose of retaining a considerable amount of information about the specific conflicts (e.g. which branches were involved and who won and lost) while enabling me to incorporate a series of explanatory variables (discussed below) from (mostly) annual data.

<sup>2</sup>The types of threats or attacks include: impeachment, investigation, prosecution, immunity stripping, self-resignation, forced resignation, challenge to rule-making authority, rule around via plebiscite, rule around via constituent assembly, non-compliance, rebellion, alter size or composition, alter term length, alter jurisdiction, suspend, dismiss, or dissolve, involve 3rd parties, prevent running for office, assassination.

<sup>3</sup>The specific types of responses include: resign, exile, dissolve, cooperate/negotiate, verbally resist, refusal to comply, boycott, seek 3rd party intervention, counter-attack (impeach, dissolve, reduce power, investigate).

To give a flavor for the selection and coding rules, Table 1 provides examples of inter-branch strife that have occurred in the region by the recorded outcome of the conflict. Leaving aside the “non-cases,” distinguishing case outcomes depends primarily on how the targeted branch responds and whether the attack is successful. Consider a few leading cases involving attacks against courts. In Argentina in 2001, for example, then-interim President Eduardo Duhalde was notoriously forced to back off from impeaching the Supreme Court. By contrast, in 2003 and 2004, President Kirchner’s threats to impeach several of these same justices led to their resignations. In Ecuador, the President successfully removed the Supreme Court in 1997, but only after a protracted battle against the Chief Justice. Thus, I code the outcome of the first case as Back Down, the second as Status Quo Revise, and the third as Aggressor Win.

Likewise, in cases involving presidential impeachment what helps to distinguish the outcomes is the reaction of the president and the success of the attempt. In some cases, such as Paraguay in 1998, the threat of impeachment was sufficient to get the president to resign. Thus, the case is coded as Status Quo Revise. By contrast, legislatures were forced to back down from threats against executives in Ecuador (1999) and Nicaragua (2001). In Colombia (1996) the legislature tried to get rid of then-President Ernesto Samper and failed. In Ecuador, by contrast, the legislature notoriously succeeded in impeaching Abdalá Bucaram on grounds of mental incapacity.

In one of the most infamous recent attacks against a legislature, Venezuelan President Hugo Chávez dissolved the Congress in 1999. I code this as *Status Quo Revise* rather than Aggressor Win because the legislature was relatively compliant throughout the process. In contrast, in Chile and Paraguay presidents issued threats against Congress, but were forced eventually to back down. In 1998, the Chilean President, Eduardo Frei, retreated

from attempts to abolish the authoritarian enclave of designated senators. In the same year, Paraguay's president, Juan Carlos Wasmosy, backed down from threatening to stage an autogolpe.

### **Trends of Inter-Branch Crises in Latin America**

Figure 4 shows the distribution of inter-branch crises by country.

[Figure 4 about here.]

In accordance with the recent literature on advances and setbacks to democracy in the region (*e.g.* see Hagopian and Mainwaring 2005), countries heading the list in terms of the total number of inter-branch threats or attacks are also some of Latin America's most distressed democracies: Ecuador, Venezuela, Paraguay, Bolivia, and Argentina. Likewise, the countries with the fewest inter-branch conflicts include many of the region's success stories: Uruguay, Costa Rica, and, most recently, Mexico. However, note that Chile, often considered one of the areas strongest and most stable democracies, falls squarely in the middle of conflict frequency distribution. Meanwhile, some of the most troubled Central American democracies (*e.g.* Honduras, El Salvador, and Guatemala) appear to have some of the lowest total numbers of inter-branch conflicts.<sup>4</sup> Still, the overall picture of inter-branch strife generally mirrors expert opinion about variation in the quality of democracy across the region and thus lends validity to the data.

The pattern of institutional instability across countries shown in Figure 4 also casts some doubt on the assumption that older and wealthier democracies are automatically more insulated from institutional instability. Although one of the most established democracies, Costa Rica, falls at the low end of

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<sup>4</sup>One possible reason could be that the *Latin American Weekly Reports* systematically under-report stories about smaller countries. The fact that Nicaragua has a relatively high number of conflicts, however, casts doubt on this as a possible explanation.

the conflict spectrum, other similarly long-lived democracies, such as Colombia and Venezuela, have witnessed relatively high levels of institutional conflict over the last decade. Conversely, Mexico has only been a competitive democracy since 2000, but has experienced considerably less institutional strife than most of the third wave democracies.<sup>5</sup>

Nor does it seem that wealthier democracies necessarily face fewer institutional conflicts than their poorer neighbors. Argentina and Bolivia experienced roughly the same amount of conflict from 1995-2005, but Argentina (with a mean GDP per capita income of roughly \$11,000) is nearly five times richer than Bolivia. Among the most impoverished countries in the region (those with per capita GDP < \$5,000), institutional instability was widespread in a little more than half of the cases (Bolivia, Ecuador, Nicaragua, Peru), but relatively rare in the rest (El Salvador, Guatemala, Honduras).

In addition to providing aggregate level information about trends in institutional crises in Latin America, the data offer the first systematic picture of how branches fare overall and how each branch fares specifically. Consistent with the strategic approach outlined above, it is reassuring to note that backing down is the least common outcome, occurring in only 24% of all inter-branch conflicts. Fully 42% of inter-branch conflicts in Latin America result in the Target branch immediately complying with the Aggressor's threat. The Fight outcome, which comprises the remaining 34% of the cases, is evenly split between the Aggressor and Target winning.

Turning to each branch's record, the data reveal that executives are less likely than legislatures to act as the Aggressor and most likely to be the object of attacks. Legislatures initiate conflicts 54% of the time, while presidents

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<sup>5</sup>The Pearson correlation coefficient between democratic age and institutional instability is negative, -.02 and not statistically significant. All descriptive statistical analysis was conducted using STATA 9.0

do so in 30% of the cases. Conversely, presidents are targeted in 43% of all instances, while legislatures are threatened or attacked in only 31% of the time. These findings accord well with the view that under most Latin American constitutions legislatures simply tend to have more institutional mechanisms at their disposal (e.g. impeachment) for launching threats and attacks against other branches (Pérez-Liñan 2005).

Interestingly, however, when legislatures act as Aggressors they are slightly less likely than the other branches to get the most preferred outcome, SQR. In instances where legislatures launch threats, they succeed in gaining the other branch's compliance in only 38% of the cases and are forced to back down 25% of time. Though, once a full blown battle is underway, legislatures are about as likely to win (20%) as to lose (17%). Executive success is also varied. Compared to legislatures, presidents manage to bully their opponents into achieving SQR 43% of the time. But, they are also forced to back down much more frequently, about 25% of the time. That said, once an institutional battle ensues, they are twice as likely as legislatures to prevail.

By contrast, courts are involved in fewer instances of inter-branch crisis than either of the elected branches. Courts are the object of aggression in 26% of the cases, and issue threats in only 16% the cases. As Aggressors, however, courts tend to fare better than the other two branches at every stage of the game. Whenever courts go on the attack, they convince other branches to comply fully 47% of the time. Moreover, in situations where compliance does not immediately occur, courts win institutional battles 33% of the time. In the classic vein of having neither purse nor sword, it would seem that courts are more careful at choosing institutional battles.

## Explanatory Variables

The following independent variables are constructed for the purposes of testing the main propositions contained in the strategic model of inter-branch crisis. Devising a common measure of stakes is particularly challenging. The variable, *CONGRESS*, inverts Alemán and Tsebelis’s (2005) scale of legislative powers enjoyed by presidents in Latin America and ranges from 1 in Ecuador, which has the least powerful congress to 16 in Mexico, which has the most powerful congress. The variable, *JUDICIARY*, is based on Navia and Ríos-Figueroa’s (2005) scale of judicial power, which ranges from 1 in countries where judicial review is concrete, centralized, and a posteriori, to 4 in countries where judicial review is abstract, centralized, and a priori. Although neither of these measures are ideal (*i.e.*, strictly speaking, increasing the legislature power may reduce the stakes of the presidency, but may increase the stakes of the legislature) taken together, they tap into the well known logic that institutional designs that divide or fragment political power tend to lower the stakes of political conflict across the board (Przeworski 1991; Weingast 1997).

To examine whether attacking relatively popular branches is a deterrent to crisis, I proxy the legitimacy costs of conflict ( $M$ ) by incorporating measures of institutional confidence using public opinion survey data from the *Latinobarómetro* (1995-2005). The variable *T\_Confidence* is based on the combined total percentage of respondents in a given country in a given year who declared they had “a lot” or “some” confidence in the executive, legislature, judiciary, respectively. The aggregate score is then matched to the particular branch targeted in each observation in the dataset and represents the legitimacy cost born by the Aggressor branch for fighting. *A\_Confidence* is similarly constructed for the Aggressor branch and captures the legitimacy cost born by Targets for challenging. Note that despite the popular view that

Latin American institutions are universally distrusted, confidence measures vary dramatically across countries, institutions, and time. For the executive branch the scores range from 7% in Argentina and Paraguay to high of 73% in Uruguay. The number of respondents who have confidence in their judiciary ranges from a mere 7% in Ecuador to 57% in Costa Rica, while confidence in congress ranges from just 6% in Ecuador and El Salvador up to 58% in Uruguay.

To capture each branch's expectations about the likelihood of winning an institutional battle, I construct the variable *A\_Experience* based on the outcome histories contained in the dataset. This measure is calculated as follows: I take the total number of conflicts won by each branch in each country (*i.e.* Status Quo Revise outcomes and Win Fight outcomes) minus the total number of conflicts lost by that branch (*i.e.* Back Down outcomes and Lose Fight outcomes) and match it to the particular Aggressor branch for each observation. Positive scores reflect a positive probability of the Aggressor succeeding, negative scores reflect the opposite, while a score of zero is essentially equivalent to 50-50 odds. To help reduce problems of endogeneity, only Aggressor branches that score 2 or greater are coded as 1, the remainder are coded as 0.

The measure, *Audience\_Cost*, is based on whether the Aggressor branch is elected or not and serves to operationalize the parameter for audience cost. Although the measure is crude, it taps into the logic that democratically-elected actors are more likely than non-elected actors to be sensitive to the costs of backing down (cf Fearon 1994). Including it in the estimation also allows me to control partially for specific branch effects.

The remaining variables allow me to explore other factors potentially affecting the likelihood of institutional instability. Here I consider three sets of controls in particular. First, as noted above, a widespread contention in the

Latin American literature is that divided government tends to increase the perils of presidentialism (*e.g.* Linz 1994; Mainwaring 1993; Mainwaring and Shugart 1997, but also see Cheibub 2002). Although this logic has mainly been applied to study regime instability, including the measure, *MAJORITY*, which is based on the percentage of seats in the lower house controlled by the president’s party, enables me to assess the effects of divided government on inter-branch crisis.<sup>6</sup> Second, recent scholarship on executive-legislative relations in Latin America suggests that the ideological location of the president’s party also contributes to inter-branch conflict (Negretto 2006). To account for this possibility, I include the measure, *IDEOLOGY*, which is based on a scale ranging from 0 for centrist presidential parties to 1 for center-right and center-left presidential parties to 2 for right and left presidential parties.<sup>7</sup> Finally, to control for the fact that adverse economic conditions may increase the likelihood of institutional strife, I include measures of the level of economic development, *GDP*, and of economic crisis, *GDP\_Change*.<sup>8</sup>

## Multivariate Analysis and Empirical Results

Following Carter (2007), to estimate the statistical model I normalize an outcome for each actor to zero for each player’s initial information set (or decision node). Thus, SQ is set to zero for the Aggressor, and SQR is set to zero for the Target. From a substantive standpoint, SQ and SQR thus serve as the baselines for interpreting the coefficients for the Aggressor and Target, respectively.

[Table 2 about here.]

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<sup>6</sup>All electoral data were gathered using the Election Results Archive available on-line from the Center on Democratic Performance at Binghamton University, <http://www.binghamton.edu/cdp/era/index.html>

<sup>7</sup>Data on presidential party ideology was gathered from the following sources: Coppedge 1997; Alemán and Tsebelis 2005.

<sup>8</sup>Economic data are based on the Penn World Tables.

Unlike standard regression tables, all of the columns in Table 2 are estimated simultaneously as part of a single unified model and reflect the estimated utility functions of the two players over various outcomes.<sup>9</sup> For our purpose, the most interesting results are in the second column, which displays the estimates for the Aggressor’s utility for fighting,  $U_A(Fight)$ , and the sixth column, which reflects the Target’s utility for fighting,  $U_T(Fight)$ .

10

Each and every one of the coefficients associated with the strategic account that are estimated for the Aggressor (column 2) branch perform as expected. Both of the coefficients for stakes, *CONGRESS* and *JUDICIARY*, are negative and statistically significant at the level of .05 level or greater. This result nicely extends to the post-authoritarian era the view that concentrating institutional power in presidents increases political instability and institutional discord. Also in accordance with the strategic approach, the negative sign on the coefficient, *T\_Confidence*, provides the first systematic evidence that I know of for the claim that the legitimacy of the Target branch acts as a deterrent to potential Aggressors. Likewise, the positive coefficient, *A\_Experience*, supports the intuitively attractive proposition that the greater the chances are of the Aggressor succeeding, the more likely it is to launch an attack.

By contrast, among the control variables, only the coefficient for economic downturn, *GDP\_Change*, performs as expected. Neither of the coefficients for *GDP* or *IDEOLOGY* are statistically significant. And, in sharp contrast to the view that divided government necessarily translates into political instability, the coefficient, *MAJORITY*, is both positive and statistically significant.

[Figure 5 about here.]

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<sup>9</sup>The strategic model was estimated in R and checked with Monte Carlo experiments.

<sup>10</sup>Note that the sign of the coefficients (not shown) for the two players is flipped for each of the actor’s utilities for backing down.

Graphs provide additional insight into the strategic interaction between branches under varying conditions. Holding all other variables at their mean, Figure 5 plots the Aggressor's utility for fighting against the Aggressor's probability of success at different levels of stakes (high, mean, and low). The utility for the fighting always increases with the prospect of success, but the graph reveals that the effects vary considerably according to the *level* of stakes. The differences in y-intercepts show, for instance, that fighting is always more likely when stakes are at their highest and least likely when stakes are low. Moreover, Aggressors' expectations about success have a much bigger impact when stakes are low to moderate, increasing the utility by some 60 percentage points. The implication is that when stakes are extremely high, political actors' expectations about winning are relatively less important to their decision to launch an attack.

[Figure 6 about here.]

Figure 6, in turn, shows the relative impact of decreasing stakes on the Aggressor's utility for fighting given different levels of Target legitimacy, holding all other variables at their mean. In accord with the theoretical story, the prospects for fighting are greatest (roughly 85%) when Target's both lack legitimacy and when stakes are at their highest. Conversely, the chances of fighting are almost nil when stakes are low and Target legitimacy is high. Interestingly, however, comparing the slopes of the lines suggests that changing the stakes of the game have much less of an impact on the likelihood of institutional attacks when potential Targets are viewed broadly as legitimate. In other words, even if increasing stakes causes political actors to downplay the importance of succeeding, it seems they remain sensitive to the potential costs imposed by the public.

Turning to the Target's utility for fighting versus complying (Table 2 column 6), the results are, admittedly, more mixed. On the one hand, the

coefficient for the probability of Aggressor success is negative, as expected, and statistically significant at a level greater than .05. This both confirms the expectations of the theoretical model and helps extend to other branches the claim that presidents who face credible threats are more likely to step aside (*e.g.* Perez in Venezuela) than those who do not (*e.g.* Samper in Colombia) (Pérez-Liñan's 2007). On the other hand, the coefficients, *CONGRESS* and *T\_Confidence* are insignificant; and *JUDICIARY* is significant, but in the wrong direction.

[Figure 7 about here.]

Here again graphing gives us a more nuanced picture and helps clarify these results. Figure 7 takes the two main significant coefficients from column 6, *A\_Experience* and *JUDICIARY* and plots them according to the Target's utility for complying versus fighting. This reveals the crux of the matter: stakes have the opposite effect on Target compliance depending on the Aggressor's prospects for success. When stakes are high, the Target behaves just as expected: the probability of compliance increases as the Aggressor is more likely to win. When stakes are low to medium, however, the situation is reversed: that is, Target's appear slightly more likely to fight when Aggressors are most likely to win. This latter finding is indeed puzzling, particularly in light of the results for Aggressors, but the fact that the relationship works as expected under high stakes is reassuring.

## Directions for Future Research

In this article, I have used a standard strategic model of crisis to provide a unified theory and test of the origins and trajectory of inter-branch crises in Latin America. Several findings emerge from this analysis. The first is that the likelihood of inter-branch crisis is affected by the stakes of the political

game. The second is that there is an inverse relationship between the level of public support for an institution and political actors' initial decision to attack it. The third is that a branch's expectations about the likelihood of success affects its willingness to challenge other branches. Taken together, these findings echo diverse strands in the literature and integrate them into a general theoretic framework that can be applied to Latin America and beyond.

The progress that we have made in developing an endogenous account of inter-branch crisis, in turn, raises a series of new questions and challenges. Empirically, future research will want to focus on whether other measures of key concepts yield similar results. For example, do other types of institutional arrangements that ostensibly lower the political stakes, such as de-centralization and privatization, also have the same dampening effect on institutional crisis? Likewise, can alternative measures of audience costs, say the level of public protests directed against particular institutions, increase the costs that political actors face in failing to follow through with institutional attacks? The approach taken here establishes a clear set of theoretical expectations that can be used to guide the collection of new empirical data.

An important question left entirely unaddressed by the foregoing analysis is how relaxing the unitary actor assumption affects the results. Although such an assumption serves as a useful baseline, because of well established difficulties of preference aggregation, it quickly becomes problematic in explaining adequately the behavior of congress or courts. Although a full treatment of this cannot be undertaken here, at least two possibilities exist for addressing this issue in the future. On the one hand, following Pérez-Liñan's (2007) excellent work on legislative votes for impeachment, one can move to study crisis-oriented decisions at the individual level. The main challenge here, again, is empirical: roll call data is only available for some countries in

Latin America; individual level data on judicial decisions is rarer still.

The other possibility is to continue to borrow from the formal crisis bargaining literature, which has increasingly begun to move away from the unitary actor assumption (for an overview of this literature see Powell 2002). For example, Schultz's (2001) work suggests that when decisions depend on multiple actors with diverse preferences it becomes much harder to pose credible threats. Applying this to inter-branch crises, perhaps congress and courts should be less likely than the executive to launch attacks? That this appears borne out only for courts suggests a potentially interesting puzzle.

Another intriguing avenue for future theoretical work hinges on the fact that crises tend to repeat in particular countries and institutions — think Ecuadorian presidents or Argentine judges. Similar to the idea of a “coup trap,” (Londregan and Poole 1990) it seems countries become mired in an institutional instability trap. As suggested above, one plausible reason is that experiences with success independently inform actors' beliefs about future success. Yet, it may also be that institutional crises lower institutional legitimacy thus paving the way for more crises. This suggests the need to move beyond a simple single-shot game to a repeated game setting that captures the dynamics by which different outcomes affect payoffs in subsequent rounds.

Last but not least, the dataset paves the way for a far more rigorous analysis of the consequences of institutional instability than heretofore possible. As noted above, most scholars of Latin America have widely scorned institutional instability, treating it as part and parcel of the problems of democratic consolidation. Yet, it may be that it is precisely the recourse to mechanisms of last resort, such as impeachment, that allows democratic regimes in presidential systems to survive (Pérez-Liñan 2005). Exploring in a systematic fashion how such institutional crises affect democratic stability

and economic development are now possible with the data at hand.

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Figure 1: Inter-Branch Crisis Game

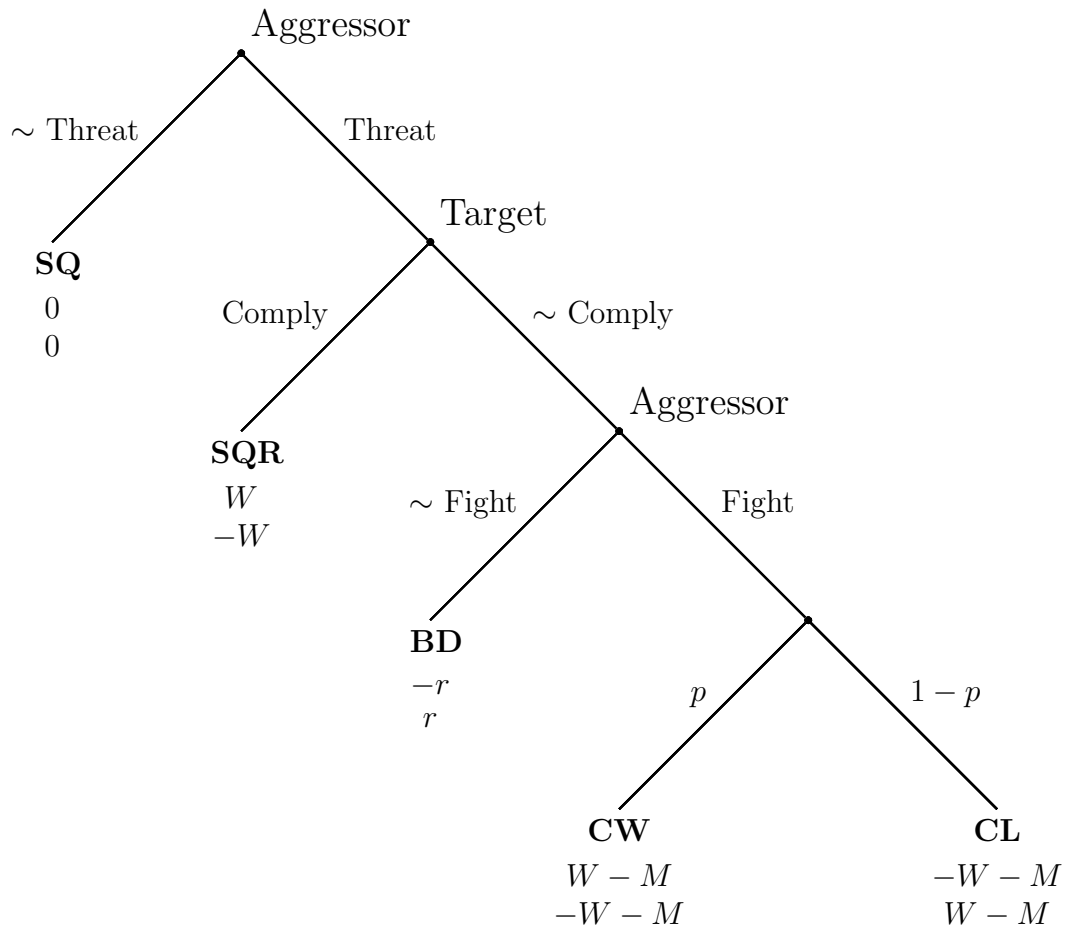


Figure 2: Comparative Statics from Inter-Branch Crisis Game

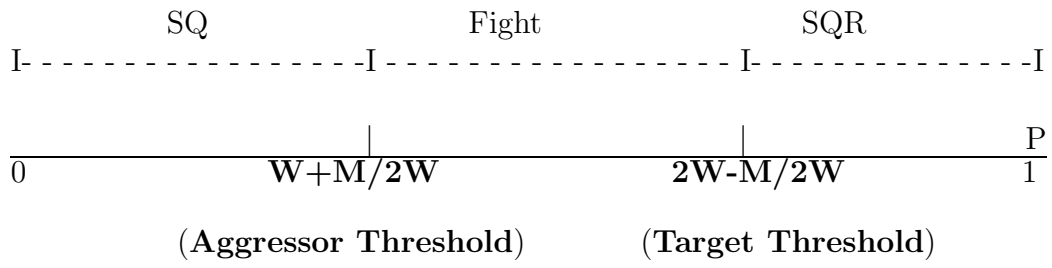


Figure 3: The Strategic Model with Uncertainty Incorporated into Utilities

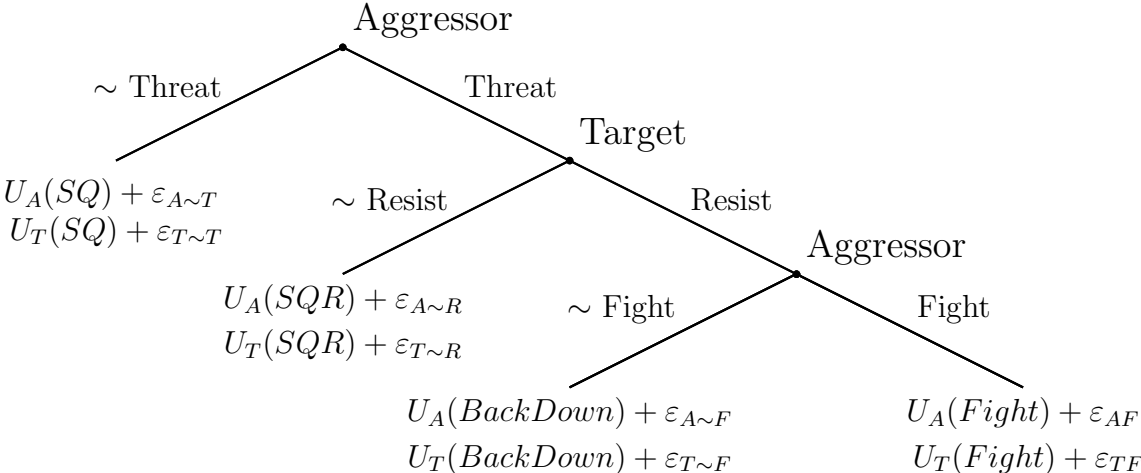
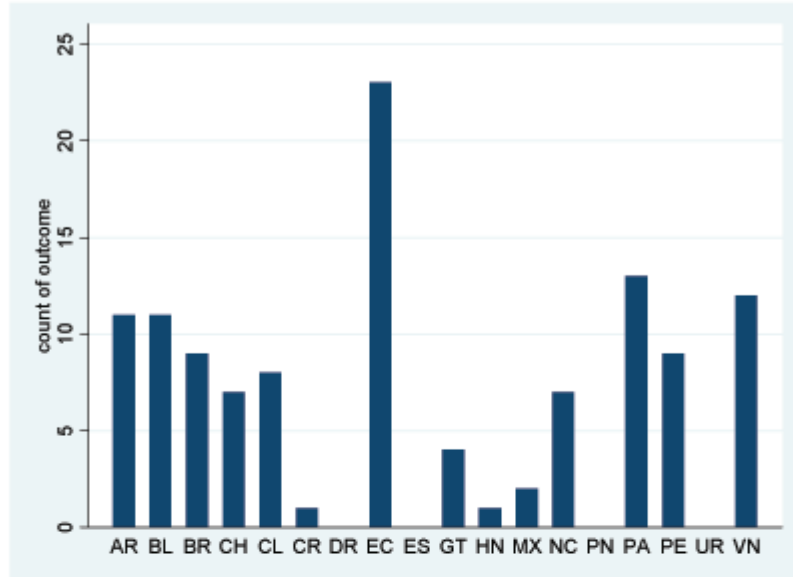
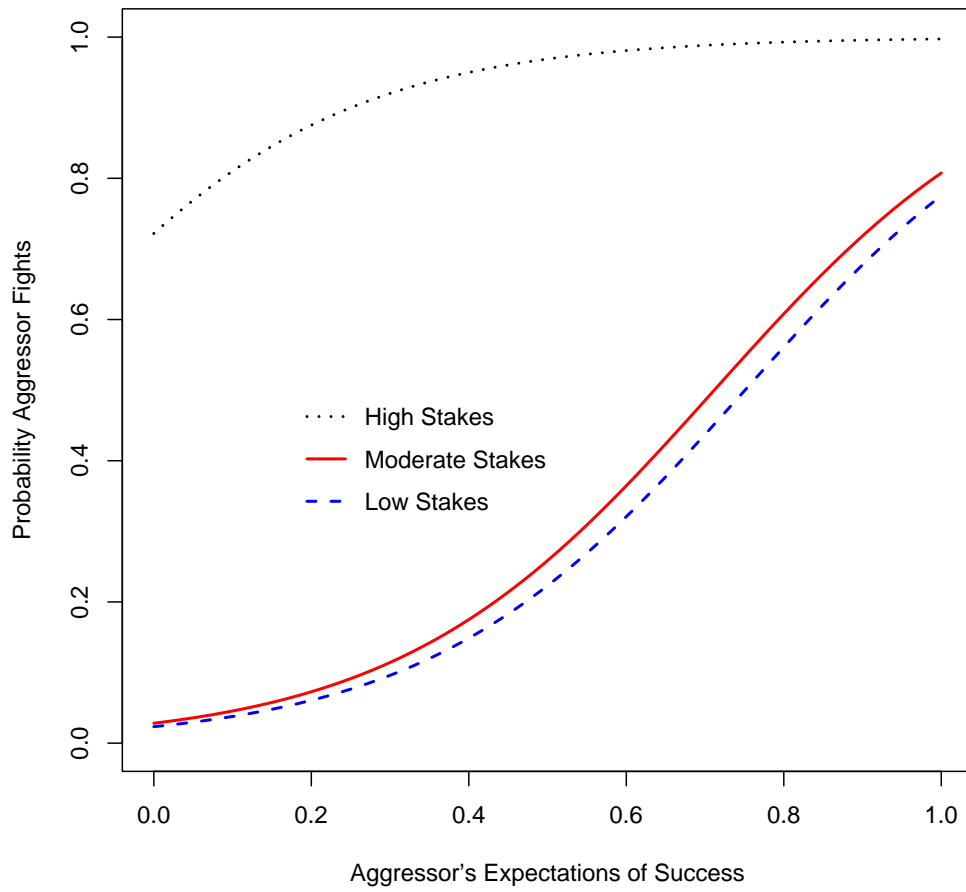


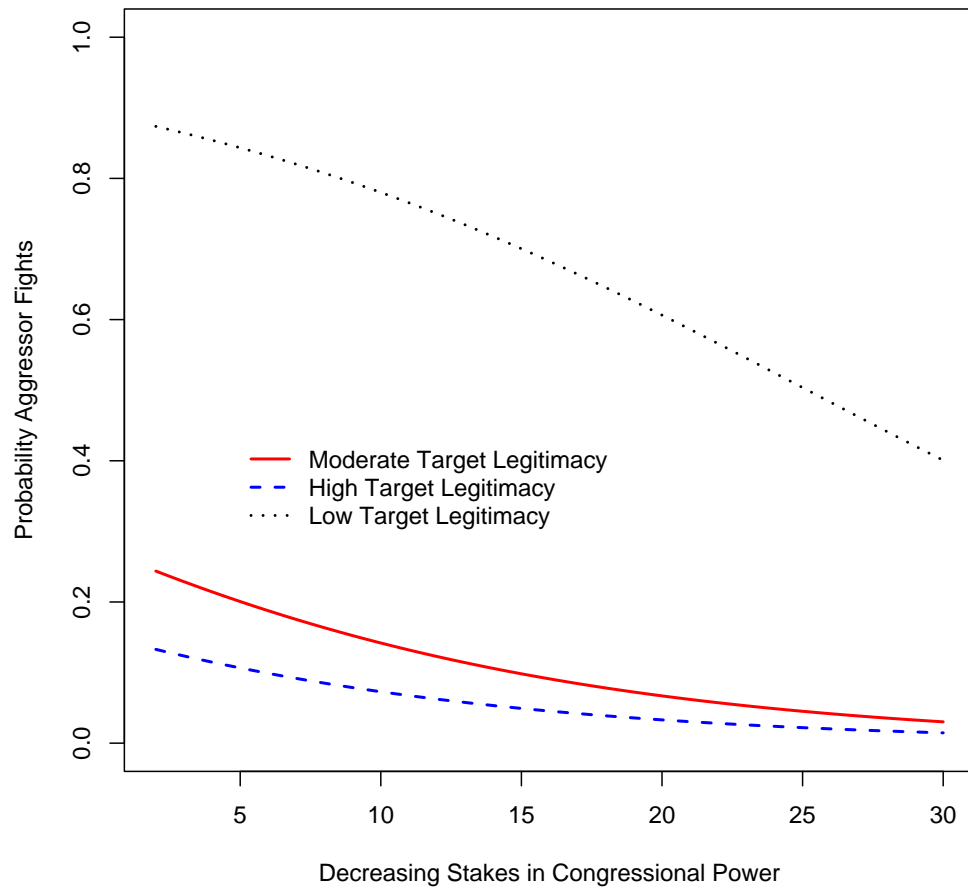
Figure 4: Number of Institutional Crises in Latin America by Country



**Figure 5: Probability Aggressor Fights As Expectations of Success Increases**



**Figure 6: Probability Aggressor Branch Fights As Stakes Decrease**



**Figure 7: Probability Target Branch Complies As P Increases**

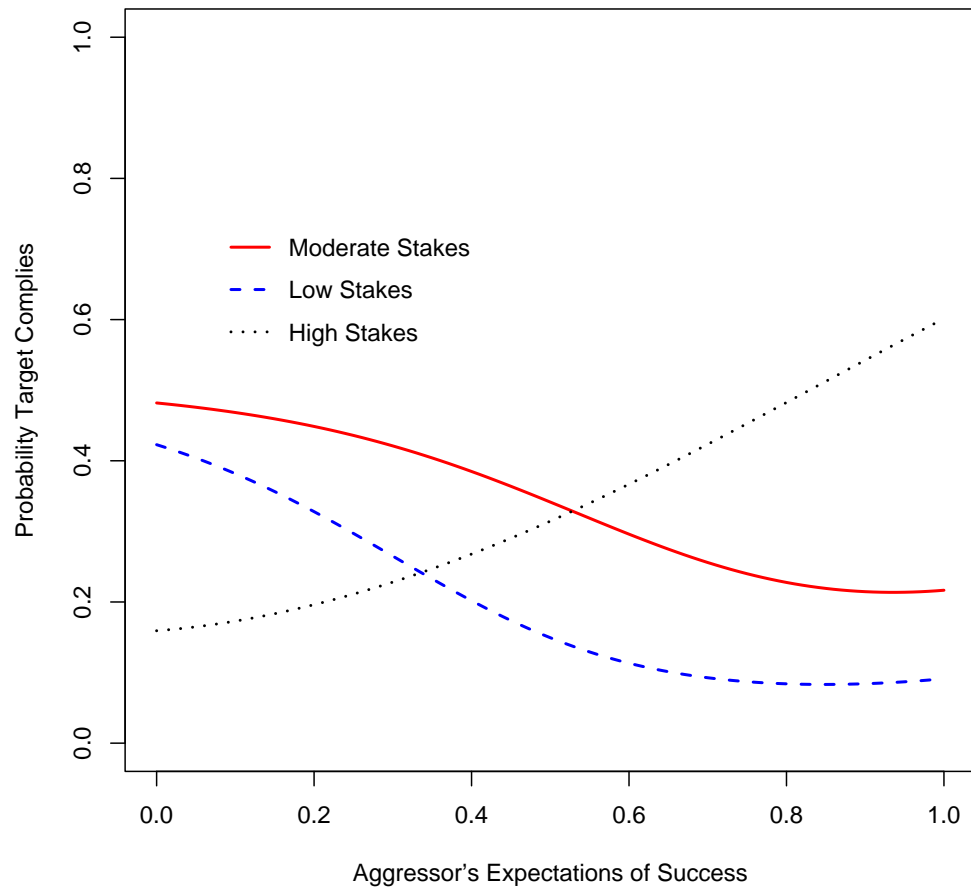


Table 1: Selected Examples by Target and Crisis Outcome

<b>Target</b>	<b>Outcome*</b>	<b>Example</b>
Court	BD	Argentine President, Eduardo Duhalde, backs down from impeaching Supreme Court justices (2001)
Court	SQR	Argentine Supreme Court Chief Justice resigns under threat of impeachment (2003-4)
Court	CW	Ecuadorian President, Abdalá Bucaram, succeeds in a battle to remove Supreme Court Justices (1997)
President	SQR	Paraguayan President, Raúl Cubas, resigns under threat of impeachment (1998)
President	BD	Ecuadorian Congress drops threat to impeach President Jamil Mahuad (1999)
President	BD	Nicaraguan legislature backs down from threats to impeach President Enrique Bolaños (2001)
President	CL	Legislature's attempts to impeach Colombian President, Ernesto Samper, fail (1996)
President	CW	Ecuadorian legislature succeeds in impeaching President Abdalá Bucaram for mental incapacity (1997)
Legislature	BD	Paraguay president, Juan Carlos Wasmosy, backs down from threat of autogolpe (1998)
Legislature	BD	Chilean president, Eduardo Frei, backs down from proposal to abolish designated senators (1998)
Legislature	SQR	Venezuelan President Hugo Chávez dissolves the legislature (1999)

\*BD=Back Down; SQR=Status Quo Revise; CW=Aggressor Wins Conflict; CL=Aggressor Loses Conflict

Table 2: Strategic Logit Regression Results

	$U_A(Fight)$	$U_A(BD)$	$U_A(SQR)$	$U_T(BD)$	$U_T(Fight)$
Constant		<b>-4.47</b> (.88)	<b>-3.61</b> (1.03)	-.03 (.47)	
A_Experience	<b>4.97</b> (1.09)				<b>-2.41</b> (1.04)
Congress	<b>-.08</b> (.04)				.08 (.06)
Judiciary	<b>-.30</b> (.08)				<b>.21</b> (.09)
T_ Confidence	<b>-7.47</b> (2.71)				
A_ Confidence					1.1 (2.45)
AUDIENCE_Cost		<b>2.32</b> (1.06)			
MAJORITY	<b>1.43</b> (.69)				-.26 (.66)
IDEOLOGY	-21 (.45)				.08 (.32)
GDP	.01 (.01)				.00 (.01)
GDP_Change	<b>-.18</b> (.09)				<b>.14</b> (.07)

Standard errors are shown below parameter estimates. N=799.

Bold indicates significance at the .05 level or greater.