# Supporter of Stability or Agent of Agitation?

## The Effect of US Foreign Policy on Coups in Latin America, 1960—1993

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## Abstract

Recent hard-line diplomatic stances from the US, such as President Bush's "axis of evil" statement, underscore the need to examine how foreign policy positions might impact domestic conditions in other states. This paper examines how a variety of foreign policy decisions from the US affect the stability of governments in Latin America. Recent quantitative analyses examining coups in the region have identified several domestic characteristics that affect the probability of a coup attempt, while a plethora of qualitative literature has examined the role the US has played in fomenting or preventing coups across the region. This paper links these two literatures by providing a generalizable theory to explain how US policies affect the decision to stage a coup, and quantitative empirical analyses to examine these patterns. I argue that cooperative signals from the US to Latin American states decrease the probability of coup attempts within the state because they depress coup plotters' predicted probability of success, while hostile signals have the opposite effect. This theory is tested using events data, militarized hostilities, and aid transfers to capture signals sent from the US to nineteen Latin American states from 1960 to 1993. Empirical evidence supports the notion that interstate relations involving the US indeed have an important impact on the likelihood of coups in the region, which provides important implications for scholars studying fledgling democracies, and policy-makers seeking to better understand the impact of a variety of foreign policy options.

Under review at the *Journal of Peace Research*

On November 3, 1970, Chile's Salvador Allende became the first democratically elected Marxist head of state in the history of Latin America. Fearing a spread of Left-leaning leadership across the continent, Kissinger and Nixon quickly led a complex and concentrated effort to oust Allende from power. The resulting three-pronged plan (known as "Project FUBELT") called for supplying anti-Allende politicians and media with covert funds, building alliances with military officers, applying diplomatic pressure, and working to deny Chile international financial assistance (Kornbluh 1999). In more graphic terms, recently released CIA documents confirm that Nixon ordered the Central Intelligence Agency to "make the economy scream" in order to unseat the democratically-elected president (CIA, 1970). After three years of intense pressure, the Allende government was overthrown in a coup in September 1973, bringing General Pinochet to power and leading to a bloody 17 year dictatorship. This case is perhaps the best-known example of US efforts to replace governments in Latin America. Indeed, a large body of research explains both covert and overt US policies meant to destabilize many other governments in the region by fomenting coup d'états.[1] The purpose of this paper is to further probe the effects of these policies.

In the latter half of the past century, over 150 coups were attempted in Latin America (Moreno, Lewis-Beck and Amoureux 2004). With the recent spread of democracy throughout the region, however, many scholars have come to think of coups as a relic of history, and coup research has waned. Even if coups are becoming less frequent, scholars such as Valenzuela (2004:5) explain that researchers should place special emphasis on the turbulent regime changes

[1] *Coup d'état* is defined following Moreno, Lewis-Beck and Amoureux (2004), who characterize a coup as "violence (or its threat) against the state, with the aim of illegally removing the sitting government." The overthrow of Haitian President Aristide (2004) is a classic example of a coup in which the military overthrew the government with strong support from a tiny civilian elite. A coup may also be in the form of an *autogolpe* (self-coup), in which the sitting president seizes power from the legislature and dominates the opposition (e.g., President Fujimori's actions in Peru during the 1990s).

of the 1960-1970s to better understand how future coups may come about. A stronger factor motivating the study of coups is that they are as alive today as ever. Figure 1 displays the number of failed, successful, and total coup attempts in Latin America during the period under study. While coups seem to have passed their heyday, the rebound in the late-1990s indicates that they are still far from irrelevant. Current events in Latin America seem to support this notion, ranging from Chavez's recent efforts to consolidate power in Venezuela to the forced resignation of Ecuadorian President Gutiérrez in 2005.

[Figure 1 here]

There is also little sign that the US has terminated its efforts to influence Latin American politics, as recent hostile interchanges between the Bush administration and Hugo Chavez demonstrate. Chavez has recently blamed the US attempting to foment a coup in Venezuela: "I know I am condemned…I'm sure in Washington they are planning my death…If they manage to kill me there will only be one person in this world to blame: the president of the United States" (Markey 2005). The surprising rise of other Left-leaning leaders, such as Kirchener in Argentina, Vázquez in Uruguay, and Morales in Bolivia, reflects the same basis for the United States' Cold War efforts to foment coups in the region. Thus, it appears that coups have a bright future in Latin America, and we can expect the US to continue to play a key role in these events. For scholars, a better understanding of how coups come about is likely to have serious implications for future study of fledgling democracies because coups can quickly derail the process of democratic consolidation. While many coups simply replace one corrupt government with another, many replace legitimately elected governments with harsh military dictatorships and widespread violations of human rights. Important policy implications can also be culled

from this line of research by focusing on US foreign policy as a potential causal mechanism that affects the likelihood of coups.

## THE QUALITATIVE/QUANTITATIVE DIVIDE

A primary factor motivating this study is the need to fill two important gaps between the qualitative and quantitative literatures on coups. First, the volume of cross-national empirical research on coups is rather thin. A flurry of research in the 1960s represents the first work we have on the subject. These analyses focus on geographic size, poverty, election periods, contagion, and the economy (Fossum 1967), motives and opportunities (Finer 1962), and modernization (Needler 1966). A more recent body of work came with the introduction of new methods and improved data in the early 1990s. Londregan and Poole (1990) examine the effect of a number of economic variables, including income per capita, income growth, and past history of coups. Belkin and Schofer (2003) extend Londregan and Poole's model by developing a "coup risk" index by combining variables for the strength of civil society, legitimacy of the regime, and the influence of recent coups. More recently, scholars such as Hakim (2003) and Valenzuela (2004) have examined the potential for coups in recently democratized states in Latin America by focusing on leadership and political parties. Other scholars focus on similar variables outside of Latin America (Agyeman-Duah, 1990; Kposowa and Jenkins, 1993). Surprisingly, though, few of these studies allow international actors to play a role in either the theory or empirical findings.

In contrast to the quantitative literature, qualitative studies have long recognized the unique and powerful role the US plays in both inciting and preventing coups in Latin America. This work includes rich detail of US efforts to overthrow both dictators and democratically-elected regimes (LaFeber 1993), and analyses of recently de-classified documents uncovering

covert operations during the Cold War era (Kornbluh 1999). The volume of work discussing the US involvement in the coup to overthrow Allende alone is impressive, not to mention the entire shelves of books discussing dozens of other well-known coups in the region.[2] Though this body of work certainly provides scholars with abundant information to study specific coups, it lacks the type of rigorous quantitative analysis needed to confirm whether the authors' conclusions hold across time and space.

Taken together, these two literatures provide a unique opportunity to enhance our knowledge of how US policies affect regime stability. The recent quantitative work on coups provides a strong foundation for further systematic studies attempting to identify generalizable patterns, while the qualitative literature provides ample evidence to suggest that external actors should play an important role in our discussion of coups. My purpose here is to extend each body of work by asking the following questions: What role has the US played in inciting coups across Latin America, or in promoting stability in countries that might otherwise have experienced a coup?

## A FRAMEWORK FOR ANALYSIS

Staging a coup is both an extremely risky and potentially profitable venture. The decision to stage a coup depends on many factors, such as the ability to recruit followers and the potential post-coup benefits. We can make the discussion more straight-forward by boiling the basic decision to stage a coup down to two factors: (1) the predicted benefits of staging a successful coup, and (2) the predicted probability of staging a successful coup.[3] These two

[2] An adequate review of this voluminous literature is impossible due to space constraints. See Zimmermann (1983) for an excellent (albeit dated) review of the literature considering the effect of outside actors, particularly the US, on coups in Latin America.

[3] These factors are largely analogous to those presented elsewhere. For example, Sutter (2000) focuses on these components in his model to explain the decision to stage a coup. In the civil war literature, the same factors appear in Grossman's (1999) model of rebellions, and in models of civil war from Regan (2002) and Thyne (2006). In

factors are broken down in Table 1 with the first factor (predicted benefits) on the Y axis and the second factor (predicted probability of success) on the X axis.

[Table 1 here]

Based on this framework, we should expect the likelihood of coups to increase whenever the probability of success increases (right on the X axis) or the benefits of staging the coup increases (upward on the Y axis). Looking more closely at the Y axis, we see that the benefits of staging a successful coup depend on coup plotters' analyses of the current situation compared to the predicted situation following a successful coup. This decision is captured in large part on factors already covered in the literature. For instance, Fossum (1967), Londregan and Poole (1990), and Belkin and Schofer (2003) show that poverty leads to a higher probability of coups because coup plotters who are in an impoverished situation predict large improvement in their future situation compared to those who already enjoy a higher standard of living. While it is quite possible that poverty does not directly affect the coup plotters, who are often among the elite, it likely makes gaining popular support among the people both before and after the coup much easier (Lichbach, 1995). The qualitative literature on coups in the region supports this contention. The political chaos and widespread poverty in Peru, for example, gave President Alberto Fujimori ample support to successfully seize power in the form of an *autogolpe* (self-coup) in 1992 (Levitt, 2006: 104). Because the structural factors influencing coup benefits (the Y axis) have already been covered in large part by the literature, the remainder of this paper focuses on the coup plotters' expectations for staging a successful coup (the X axis).

Belkin and Schofer (2003: 596) indirectly examine a coup plotter's predicted probability of success by focusing on governmental coup-proofing strategies, such as paying off potential

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reality, these are the main components considered by most scholars attempting to understand the onset of conflict in a rational context.

challengers or dividing armies into rival forces. Another key factor that might affect the probability of success that has not been developed in the literature is the effect of signals sent from external actors. Gartzke (2003: 1) defines signals as "actions or statements that potentially allow an actor to infer something about unobservable, but salient, properties of another actor." At this point, "signals" can simply be thought of as a term for any relations between states, ranging from a full-scale military attack to a meeting between leaders. Signals may be important for coups because they indicate support for either political change (if hostile) or the continuation of the government (if supportive). Both types of signals should have nontrivial implications for those considering a coup attempt. The following section develops a two-part theory to better understand these implications.

## FOREIGN SIGNALS AND COUP RISK

While many countries have likely played a role in affecting coups in Latin America, the historical dominance of the US in the region make it reasonable to focus exclusively on signals sent from the US. Beginning with the Monroe Doctrine (1823), the US made clear its intent to keep European powers out of the region. This policy was reinforced in 1904 with the "Roosevelt Corollary," which provided justification for direct US involvement based on Roosevelt's view that the US had a "moral mandate" to enforce proper behavior among Latin American states. This evidence suggests that the US has played a unique role regarding the security of Latin American states (Petras 2002).

Relations between the US and Latin American states can have two effects on the probability of a coup. First, case evidence shows that the US has played a key role in inciting coups by sending forces and supplies to coup plotters, which serve as hostile signals that increase their predicted probability of successfully overthrowing the government. For example, after

being democratically elected to power in 1950, President Jacobo Árbenz Guzmán began working on reforms to combat the widespread poverty and inequality in Guatemala. This included the Agrarian Reform Act, which allowed the government to expropriate land owned by the US-based United Fruit Company. The proposed reforms immediately drew the ire of the CIA, who feared a potential Communist takeover in the country. Officials outside of the CIA, including those in the State Department, also feared Árbenz's left-leaning policies, particularly after the United Fruit Company began lobbying officials to intervene on their behalf. These fears culminated in the State Department's approval of "Operation PBFORTUNE" in September 1952, which authorized the CIA to use economic, paramilitary, psychological and diplomatic actions to destabilize the leader and put anti-communist elements in power. Such activities included cutting trade patterns vital to Guatemala's economic stability, distributing anti-government propaganda via radio signals, and training anti-communist forces to overthrow the regime. The efforts culminated in a coup attempt by the CIA-supported Colonel Carlos Castillo in June 1954. Though Castillo faced early challenges, the leadership in the Guatemalan army refused to follow Árbenz's orders, forcing him to resign ten days after the takeover began (Aybar de Soto 1978; Cullather 1999). Though the CIA took pride in its efforts, the so-called "success" prompted thirty year of brutal dictatorship in the country.

This case provides evidence of how hostile signals sent from the US towards governments in Latin America can promote coups. The extensive hostile signals sent from the US to the Árbenz government clearly indicated that even Castillo's meager force could successfully attain and sustain power with US support. More generally, hostile signals channeled from the US should increase a coup plotter's predicted probability of staging a successful coup (right on the X axis) because they give the plotters an advantage over the

government in solidifying power once the coup is attempted, and deplete the resources available to the government to deter coup attempts by blocking foreign aid or international investment.

While the examples certainly support the discussion to this point, it is unlikely that lumping all hostile foreign policy signals into one group will provide satisfactory findings for either scholars or policy-makers. What is needed is a more detailed understanding of how variations in hostile signals might affect the likelihood of coups in the region. One way that we can break down signals is by considering the factors that would be most important to a coup plotter. Namely, a leader must be convinced that the interstate signals are credible before taking the risky decision to stage a coup. If a signal lacks credibility, then the signal is likely dismissed as noise, and the status quo should go unchanged. Scholars in the international relations literature have long-considered the credibility of signals, generally concluding that credibility is derived from the costs incurred in sending the signal (e.g., Powell 1990; Fearon 1997; Morrow 1999). Examples of costly hostile signals include mobilizing troops or imposing sanctions, while cheap hostile signals would include verbal criticisms of the government or withdrawing a high-level diplomat. Because the former type of signals come with real costs to the signaler, they are likely to be viewed as credible signals of support for a coup plotter. Cheap signals should have less of an impact because the plotter is likely to be uncertain about the true likelihood of support if a coup were attempted.

We should also consider how these same signals might affect the decisions of the current leader. As signals become increasingly costly, they also become increasingly transparent. Thus, while hostile signals should embolden coup plotters, the government should react to the same information by increasing their commitment to coup-proofing strategies. Fortunately, Belkin and Schofer (2003) provide an excellent discussion of coup-proofing strategies, along with indicators

to operationalize such strategies empirically. We can conclude theoretically that, when taking into account the government's response to external signals, we should expect costly hostile signals to have the largest impact on increasing the probability that a coup is attempted. Empirically, we simply need to control for these strategies when analyzing how signals sent from the US affect the likelihood of coups in Latin America. The expectations regarding hostile signals lead to the first hypothesis:

*H1: Hostile signals sent from the US to a Latin American state should increase the probability of a coup. The impact of the signals should increase as the costs of the signals increase.*

Supportive signals should depress a coup plotter's predicted probability of staging a successful coup because he would likely face external resistance if one were attempted. In 1944, for example, dictator Martinez of El Salvador was ousted by a revolution. Five months later, the interim government was overthrown in a coup led by the dictator's former chief of police. Given Zimmermann's (1983) suggestion that prior coups are an excellent indicator of future coups, we should expect a high probability of another coup occurring in the country within a short period of time. However, the US government recognized the new dictator as the head of state shortly following the coup. This decision sent an important signal to anyone considering another coup to oust the new leader—the US would likely to assist the new government in the event of an attempted coup, and be hostile to anyone who may overthrow the government in the future. In a similar manner, the Reagan administration provided military aid to the Montt regime after it seized power in Guatemala in 1982. This provided the government with the tools necessary to repress the population, which thereby decreased any coup plotter's predicted probability of staging a successful coup. Even if coup leaders could be initially successful in overthrowing the

government, they would likely face harsh external resistance to their rule from the US, making it unlikely that a coup attempt would happen in the first place.

These examples support the notion that supportive signals from the US should increase the government's ability to deter coup challenges, and decrease a coup plotter's predicted probability of staging a successful coup (left on the X axis). We should again consider how the costs of the signal affect its credibility. Costly signals of support from the US, including formal alliance ties, increased levels of trade, and financial assistance, should have the largest effect in suppressing coup attempts. Though cheap supportive signals, such as the visitation of a high-level diplomat, should help solidify the government's hold on power, they should have less of an impact on warding off coup attempts than costly signals because it is more difficult for the coup plotters to clearly understand the level of support that the US intends to provide for the government.

The logic of this argument closely parallels arguments made in the deterrence literature, particularly those who address a state's ability to influence threats made to its protégé (extended deterrence). Early work suggested that defenders have been unsuccessful overall in deterring challenges to their protégés (Lebow 1981), and that allied states frequently failed to come to each other's aid (Sabrosky 1980). Several scholars have attempted to explain these counter-intuitive findings by focusing on the strength or credibility of the third party prior to the onset of the dispute. Smith (1995) argues that potential attackers develop rational expectations about the reliability of a target's alliance partner. Once these expectations are developed, attackers will only threaten states that have alliance ties when they think the defender is unreliable. In the case of immediate deterrence, a defender can signal reliability through costly behavior, such as mobilizing troops, when an attack of their protégé seems likely (Leng 1993; Huth 1988). In the

case of general deterrence, a defender might establish long-term commitments with their protégés, such as establishing formal alliances or economic ties (Huth and Russett 1984; Huth 1988). These costly signals tell the potential attacker that its target will likely have support if attacked, which makes it unlikely that an attack will happen in the first place (Fearon 1994; Danilovic 2001). In a similar manner, it becomes increasingly unlikely that coup plotters will make the risky decision to attempt a coup as the credibility of support for the current government increases. This expectation leads to the second hypothesis:

*H2: Supportive signals sent from the US to a Latin American state should decrease the probability of a coup. The impact of the signals should increase as the costs of the signals increase.*

While the theory presented here provides clear expectations regarding the effect of US signals on coups, a scholar well-versed in Latin American history could likely think of several examples of US signals that did not produce the desired effect. The Bay of Pigs invasion (1961), for instance, is a clear example of a costly hostile signal that did not result in the successful overthrow of the Castro regime. The following provides a systematic analysis of the effect of US signals that goes beyond the few selected cases that have traditionally dominated the qualitative literature on coups in Latin America.

## TESTING THE THEORY

According to my theory, we should expect supportive signals sent from the US to Latin American states to decrease the likelihood of a coup attempt, while hostile signals should have the opposite effect. The impact of the signal should increase as the signal becomes increasingly costly. In order to test these expectations, I analyze data for nineteen countries in Latin America

from 1960—2000.[4] The years are selected based on data available for the dependent and independent variables.

*Dependent variable: Attempted coups*

The empirical literature examining coups in Latin America generally define coups as some form of assault on the central state apparatus. For this paper, both the definition and data for the attempted coups come from Moreno, Lewis-Beck and Amoureux (2004) who define a coups as "violence (or its threat) against the state, with the aim of illegally removing the sitting government."[5] These authors relied on the Keesing's Contemporary Archives to code the number of coups attempted in each country-year. These data include 176 attempted coups in the region during the period under study (around 18% of observations).

A few notes should be made about the dependent variable used in this paper versus those used in other empirical tests of coups. First, Moreno, Lewis-Beck and Amoureux (2004) drew upon the work of several leading scholars (e.g., Jackman 1978; O'Kane 1983; Dean 1970) to provide a comprehensive discussion of both coup perpetrators and the targets of coups. The perpetrators are most often the military (83%), but may also include civilian elites (11%) or popular uprisings (6%).[6] Though this approach is comprehensive, it risks conflating coups attempts with other anti-regime activity, such as the onset of a civil war or riotous demonstrations. This problem can be dealt in one of two ways. One could expand the theory to include a more comprehensive list of anti-government activity. I avoid this approach because events such as riots, coups and civil wars have too many distinct characteristics to be considered

[4] Descriptive statistics for the independent variables, as well as all subsequent analyses mentioned in the footnotes, can be found online at: [insert web appendix address here].
[5] The analyses were also run using Belkin and Shofer's (2003) dataset on coups. Results for the primary independent variables were substantively identical to those presented here.
[6] Coups carried out by the military correlate .93 with coups more broadly defined, allowing the two to be used interchangeably. The empirical analyses take the broad definition.

as the same theoretical concept. The other option is to control for low level anti-government activities (e.g., riots) and high levels of anti-government activities (e.g., civil wars) in the empirical model, which helps assure that the dependent variable is truly capturing coup attempts. This is the approach taken here.

Second, the dependent variable captures the onset of a coup attempt, regardless of the coup's outcome (success or failure). This is an important distinction from other coup definitions because the process driving a coup's success may be quite different than those driving its initial attempt. Analogous distinctions have been made in the interstate and civil war literatures, which have resulted in important advancements on our understanding of the mechanisms that are related to both the onset and outcome of conflicts (e.g., Clark and Reed 2003). While the international community's reaction to a coup is likely to have an important impact on the coup's success, my theory focuses only on the coup attempt, leaving future research to address coup outcomes. Future research should likewise avoid conflating coup attempts with successful coups to avoid selection problems with choosing only the latter.

*Independent variable: US signals*

The theory argues that signals sent from the US should have a significant impact on the probability of a coup attempt. This impact should vary depending on the costliness of the signal. A valid measure must capture both the orientation of the signal (hostile or supportive) and the costliness of the signal. An ideal measure would directly measure these signals by examining policy documents to calculate the financial, political and military support from each administration to each Latin American state during the period under consideration. Even if we had unlimited resources, such a measure would be nearly impossible to generate for a number of reasons. Most importantly, many of the signals sent in support of regime change are clandestine.

Much of the information we have on US activities towards the Allende government during the 1970s, for example, has only recently been released to the public. There are likely mountains of evidence that have been destroyed or remain classified. Given these limitations, the best way to capture US signals in a large-N manner is to develop a proxy to capture all signals—both covert and overt. This can be done by coding overt signals sent from the US to each Latin American state as reported in major newspapers from each time period. The effect of covert signals will be captured in this measure if we can safely assume that clandestine signals are positively correlated with overt signals. This seems like a reasonable assumption. The current administration is clear in its aversion toward the Chávez government, for example. If the US is currently sending secret signals to actors in Venezuela, it is likely that the efforts are meant to destabilize, rather than bolster the current regime. This is not to say that the US *never* sends overt signals of support while secretly attempting to undermine a government (and vise versa). The US overtly denounced Pinochet's coup in Chile, for example, while secretly sending support for the new government. It simply assumes that overt and covert signals will most often be aligned. The dominance of the anti-communist movement driving the US foreign policy agenda during much of this time period lends support to this assumption. During the Cold War, US leaders easily maintained domestic support for supporting authoritarian regimes in Latin America to block to the spread of Leftist ideologies, which gave them little reason to hide their attempts to undermine Leftist governments or support ruthless leaders. Thus, the overt signals we see in the papers today act as a reasonable proxy for secret signals that we may learn of tomorrow. If not, the contrast between overt and covert signals should work against finding a significant effect.

US signals are captured using events data from the Conflict and Peace Data Bank (COPDAB), which covers events from 1948 to 1978, and the World Events Interaction Survey

(WEIS), which codes events from 1966 to 1992 (Azar 1980; McClelland 1978). These datasets code events from a variety of newspapers into nominal categories, which are then weighted by the orientation (supportive/hostile) and intensity of the signal.[7] Examples of these events in the year preceding the Allende coup are presented in Table 2. As we can see, COPDAB codes the signal's initiator (init) and the target (target), along with the general activity, a short description (area), and the intensity of the interaction on a weighted scale. For example, the first event (01/01/72) reports an agreement to hold future talks to delimit a fishing border. This is a moderately supportive signal, and is given a +10 on the conflict/cooperation scale. On the hostile side, we see several events in which the US denied allegations by the Chilean government of attempting to foment a coup (e.g., 12/09/72). These moderately hostile signals are coded -6. Likewise, on 02/17/72, WEIS reports that the US disapproved of Chile's plan to default on foreign debts, which is a moderately hostile signal (-2.2). On the supportive side, the final WEIS event (12/21/1972) records a meeting between US and Chilean officials, which represents a supportive signal (+1.0).

Beyond clarifying the measure, this brief snapshot helps reassure us of the validity of this measure because, taken together, the events accurately reflect both the overt and covert policies of the US during this period. Declassified documents suggest that the US was indeed attempting to foment a coup in Chile at this time (Kornbluh 1999). A memo dated 10/16/1970, for instance, relates Kissinger's orders to a CIA station chief in Santiago:

> "It is firm and continuing policy that Allende be overthrown by a coup…We are to continue to generate maximum pressure toward this end utilizing every appropriate resource. It is important that these actions be implemented

[7] Weights for the COPDAB dataset come from the original project. Weights for WEIS come from Goldstein (1992).

clandestinely and securely so that the [US government] and American hand be well hidden."[8]

While the CIA was successful in its primary goal, the events shown in Table 2 suggest that the Chilean government suspected its efforts during Allende's tenure in power. We should expect other governments to be as watchful of US meddling, and vocal if they suspect such activities. The events reported by WEIS and COPDAB certainly understate what we now know to be a very direct and aggressive policy. While understating clandestine activities is perhaps a systematic drawback with the measure, the watering down these events should help avoid Type I error by understating the empirical results.

Using the COPDAB and WEIS datasets, I created a measure of daily dyadic events received by all states in Latin America from the US from 1948 through 1992. A few issues arise when combining the datasets into one measure. The first is that the periods overlap between 1966 through 1978. Reuveny and Kang (1996) explain that the two datasets can be spliced by regressing WEIS on COPDAB, and then using the constant and coefficients to rescale COPDAB into the lower WEIS values. I followed this technique to create a single value in the overlapping years. Given that the dependent variables and the other independent variables are coded yearly, I collapsed the events data into a single yearly value: mean conflict/cooperation. Using the values from Table 2, for example, Chile received a single score for the average level of conflict/cooperation received from the US (-.239).[9] We should see a negative and significant coefficient for this variable to support the hypotheses.

Though the measure developed thus far should provide a reasonably valid indicator to capture US signals, there a handful of potential problems deserve discussion. First, combining

[8] See http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB8/nsaebb8.htm for the full text version of this memo.
[9] This measure is nearly identical to that used by Thyne (2006) to examine the effect of signals on the likelihood of civil war onset, though the signaler here is limited only to the US.

all signals into a single yearly value may hide potentially meaningful variations that happen throughout the year. However, given that the other variables (e.g., GDP per capita) are available only on a yearly basis, this seems like the best approach to avoid including hundreds of measures in the model that would remain constant in each year. It also avoids including hundreds of missing data points in the dataset in which no signal was sent in the month or day under question. This aggregation may actually be preferable given that coup plotters are likely to consider the general orientation of the US towards the current government in their predictions for future support, rather than jumping the gun on a rash statement from a US official. Taken alone, for example, the hostile disapproval of Chile defaulting on loans recorded by COPDAB on 02/17/1972 may carry little weight in the minds of coup plotters, especially given the supportive signals surrounding this event. The general trend of hostile signals sent throughout the year, however, provides a credible signal of US disapproval of the Allende government, and likely future support if a coup were attempted. Second, one might notice that many of the signals seem to have very little to do with supporting or preventing a coup. We should recall, however, that this measure is simply a proxy for the general level of support or hostilities sent from the US. Nevertheless, we can help assure the robustness of the results by examining other measures of signals.

For hostile signals, I include a variable that captures the highest level of *militarized hostility* directed from the US to each state in the region in each country-year. This ordinal variable ranges from 0 (no hostility) to 5 (full-scale war) (Ghosn, Palmer and Bremer 2004).[10] In addition to providing another proxy to capture hostile signals, including this variable in the same

[10] Alternative analyses were run using (1) a dummy variable for years in which the US applied *sanctions* on each state (Hufbauer, Schott and Elliott 1990), and (2) a dummy variable capturing country/years in which the US directed any level of militarized dispute (MID) at the state (Jones, Bremer and Singer 1996). Both variables show the expected results, though the sanction variable was insignificant ($p<.216$).

model as the original signaling variable also helps isolate signals from situations in which the US is playing a direct role in helping overthrow the government, such as the invasion of US forces to remove Panamanian President Noriega from power in 1989. We should expect to see a positive and significant coefficient for this variable to support the first hypothesis. On the supportive side, I examine the level of *US aid* (military and economic) sent from the US in the form of loans or grants in each country-year (Greenbook 2007).[11] The variable for aid should be negative and significant to support the second hypothesis.

*Control variables*

Following Belkin and Schofer (2003), I include several variables in the model to capture the structural characteristics of coup risk in the state. The first captures the legitimacy of the regime using the *Polity* index (Marshall and Jaggers 2000). We should expected democratically-elected leaders to be more popular among the people, dampening the likelihood that a group could stage a successful coup. This variable ranges from -10 (most authoritarian) to +10 (most democratic). Likewise, I include a dummy variable indicating whether there was a coup in the preceding year (*Past coup*). Coming to power via a coup is clearly anti-democratic, and leaders who recently came to power from a coup are likely to face a subsequent challenge. Finally, *military regime* is a dummy variable coded 1 for military or combined military-civilian regimes, and 0 for civilian regimes. We might expect military regimes to be more susceptible to coups because they lack the legitimacy and popular support of democratically-elected regimes, and they may be internally weak compared to other regime types (Geddes 1999). Taken together, these measures capture coup-proofing strategies by the government, which is important when we consider potential strategic interactions between the government and the coup-plotters. Because

[11] Alternative measures for supportive signals include Signorino and Ritter's (1999) regionally-weighted S score and Barbieri's (2002) levels of dyadic trade. Each of these alternative variables yield results similar to those presented in Table 3 (negative and insignificant).

the information from the signals is available to both the government and the coup-plotters, we might expect the government to react to hostile signals by bolstering their grip on power. They might do this by cancelling/rigging elections, becoming more militant, or seizing power in the form of an *autogolpe*. These reactions should be captured by these three variables, helping isolate the effects of US signals on the coup plotters' decisions.

The third and fourth control variables are meant to isolate coups from other forms of anti-regime activity. *Instability* is an annual count of strikes, riots, assassinations, revolutionary action, purges, antigovernment protests, and acts of guerrilla warfare (Banks 2001). *Civil war* is a dummy variable accounting for higher levels of protest activity (Gleditsch et al. 2002). Previous quantitative studies have found poverty to be an important cause of coups (Finer 1962; Londregan and Poole 1990). I include a variable for GDP per capita (logged) in the model (Gleditsch 2002). The change in the economy over time might also have an important impact on the likelihood of coups. A drastic drop in state wealth might trigger a coup, for instance, while growing wealth should engender more support for the current regime even if the overall level is low. Thus, I include a variable for the percent *change in GDP/capita* from time year to year. These variables help hold the "benefits of staging a successful coup" constant, allowing me to test the X axis in Table 1 in accordance with the theory.

*Methods*

The dependent variable is a count of the number of attempted coups in each country-year.[12] Using OLS on such a variable can result in inconsistent, inefficient, and biased parameter estimates (Long 1997). Thus, the analyses are run using negative binomial regression. Poisson regression is the most obvious alternative to negative binomial regression. However, the Poisson

[12] I also examined the data using logistic regression after converting the count dependent variable to dummy variable. Results using this method are consistent with those presented in Table 3. The negative binomial model is preferable because it avoids the loss of information.

model assumes that the conditional mean of the dependent variable is equal to the conditional variance. Negative binomial regression allows the conditional variance to exceed the conditional mean by including a dispersion parameter to capture the unobserved heterogeneity within the observations. The dispersion parameter *alpha* is significantly different from zero in each of the models in Table 3, which suggests that negative binomial is the preferable method for these data. Autocorrelation is a potential problem with time-series cross-sectional data. This issue is dealt with by including a measure for *past coups* in the model, which is the one-year lag of the dependent variable. This variable also captures potentially relevant but omitted structural variables in the analyses (Beck and Katz 1995). Heteroskedasticity can also be a problem with panel data. Thus, the estimations are performed using robust standard errors clustered by country (Williams 2000). Finally, endogeneity may be an issue if a coup attempt elicits hostile signals from the US. If this is true, a positive and significant coefficient might pick up the US' reaction to a coup, rather than the US signals causing the coup. The measures for wealth might suffer from the same problem if the coup leads to a drop in economic output. To avoid this problem, I use a one-year lag of each of the independent variables.

## ANALYSIS OF RESULTS

My theory suggests that signals sent from the US should significantly affect the probability of a coup attempt. This expectation is tested in Table 3. The first model examines the "US signals" measure constructed from the COPDAB and WEIS datasets. As expected, this variable is negative and significant, which suggests that the likelihood of a coup attempt decreases as signals from the US become more supportive, and increases as they become more hostile. Because this measure captures both the orientation and costliness of the signals, the findings provide initial support for both hypotheses.

[Table 3 here]

Beyond statistical significance, we can gauge the impact of the independent variables by calculating each variable's marginal effect on the dependent variable when holding all other variables constant at their means for continuous variables, and the mode for dichotomous variables. The *Clarify* program was used to estimated predicted values for the significant variables in Table 3 based on these settings (King, Tomz and Wittenberg, 2000; Tomz, Wittenberg and King, 2003). The results for these calculations are presented graphically in Figure 2. In this figure, each significant independent variable is plotted with the probability of 1+ coup attempt on the Y axis, and the entire range of each independent variable on the X axis.

[Figure 2 here]

As we can see, the variable used to capture signals sent from the US has a moderate effect on the likelihood of coups in Latin America (Figure 2a). When these signals are as costly and hostile as possible, the likelihood of a state having at least one coup attempt is .262. This value drops to .082 when the signals are as costly and supportive as possible, which represents a 69% decrease in the likelihood of a coup attempt. Thus, we can conclude not only that the effect of US signals on the likelihood of attempted coups is significant, but also that the effect is also important in substantive terms. A potential critique of this finding is that the signaling variable could have a negative coefficient because the results are being driven by either positive or negative events alone, or by events at the extreme ends of the scale. The effect of US signals in Figure 2a seems abate slightly as the signals become more supportive, suggesting that we should probe the data further to ensure robust support for each hypothesis.

The hypotheses are examined further in Models 2-5 with the variables for "US hostility" and "US aid." The variable for US hostility is positive and significant, which lends further

support to H1. In Figure 2b, we see that this variable exerts a great deal of leverage on the dependent variable. The likelihood of a state having at least one coup attempt increases 179% when the US hostility level is moved from its minimum to maximum value (.137 to .382). In contrast, we see that the variable for US aid fails to attain statistical significance. This suggests that while hostile signals from the US are apt to incite a coup, supportive signals do little to suppress the likelihood of a coup. This notion is examined more thoroughly in Models 4 and 5. In Model 4, I isolate the potential coup-proofing effect for supportive signals by recoding the US signals variable from Model 1 to equal zero for both neutral and hostile signals ("Positive signals"). Contrary to the second hypothesis, this variable yields an insignificant coefficient. I reverse the coding in Model 5 by recoding neutral and supportive signals as zero to isolate the "negative signals." This variable yields the expected result: a negative and significant coefficient.[13] Altogether, these analyses suggest strong support for the first hypothesis—hostile signals sent from the US have an important effect in instigating coup attempts in Latin America. However, we find little support for the second hypothesis—supportive signals do very little to prevent coup attempts.

Moving to the control variables, we generally see results supporting the theoretical expectations. Though the "Polity" variable is insignificant, we see the expected positive and significant sign for "past coups" (Figure 2c) and "military regimes" (Figure 2d). Substantively, we should expect states to be 75.5% more likely to experience a coup when the military controls the government (.139 to .244). The variable for past coup shows a similar effect, though the substantive effect is much larger. A move from the minimum to maximum value for past coups yields a 361% increase in the likelihood of a state experiencing at least one coup (.125 to .577).

[13] Using Belkin and Shofer's (2003) dataset, the entire continuum of US signals (Model 1) is insignificant ($p<.181$), while the variable limited to negative signals (Model 5) is significant and in the predicted direction. This further supports the unique importance of hostile signals.

Taken together, these results suggest that the average level of democracy at the institutional level carries little weight, while the qualitative characteristics of the regime and its means of coming to power have important impacts on the legitimacy of the government, and its related risk of being challenged by a coup.

The next set of control variables, "instability" and "civil war," isolate coups from other forms of anti-regime activity. The instability measure is positive and significant, suggesting that coup plotters foresee a greater likelihood of staging a successful coup when the people show displeasure with the government through strikes, protests, or riots. Substantively, coup attempts are 378% more likely when the instability measure is allowed to vary from its minimum to maximum value (.123 to .588, Figure 2e). We see the opposite effect for the civil war variable, which is negative in all models and significant in models 3-5 (Figure 2f). This result is unsurprising because coups and civil conflicts have a related goal: overthrow of the government. Coup plotters should be less likely to risk the punishment from a failed coup attempt if the people are already challenging the government violently. The military might also be called into action to defeat the insurgency, rallying behind their leader to protect their jobs.

Finally, higher aggregate levels of wealth are found to have the expected negative effect on the likelihood of coup attempts in all models, though the coefficient for "GDP/capita" is significant in Model 1 only. In contrast, the variable capturing dynamic changes in state economic productivity, "Ch. GDP/cap," shows that the likelihood of a coup attempt drops dramatically (around 94.6%) as the variable is adjusted from its minimum to maximum value (.629 to .034, Figure 2g). Taken together, these results suggest that the overall level of economic wealth matters less for coup plotters than changes over time.

## SUMMARY, CONCLUSIONS AND IMPLICATIONS

The purpose of this paper was to examine how relations between the US and its Latin American neighbors might affect the probability of a coup within Latin American states. A handful of scholars have provided evidence showing that relations between with the US have an important impact on coups in the region. However, few have articulated a generalizable theory to explain this effect, nor has anyone provided evidence of this claim in a large N systematic manner. This paper attempted to fill this gap by arguing that US signals affect coup plotters' calculations about their likelihood of staging a successful coup. Signals in support of the government should confound efforts to stage a successful coup, while hostile signals should work in the opposite manner. This theory was tested using the COPDAB and WEIS events datasets to capture the orientation and costliness of US signals. Two alternative measures, US hostility level and US aid, were also examined to assure the robustness of the results. The empirical test showed that hostile signals significantly increase the likelihood of a coup attempt, while supportive signals have little stabilizing (coop-proofing) power.

These conclusions have important implications for both researchers and policy-makers. Comparativists generally consider a role for external actors on the process of democratic transitions and democratic consolidation, for example, but few provide explicit tests of these factors. This paper extends the theoretical work on this subject, and provides clear empirical evidence that external actors indeed have an important influence on these processes. Of course, international relations (IR) scholars are used to examining foreign policy decisions. However, this paper considers the effect that these decisions have on the internal stability of other states, which is often disregarded in the IR literature. This paper also makes an important empirical contribution to the IR literature. While most scholars examine the impact of high-level (costly)

foreign policy signals (e.g., trade, sanctions and militarized disputes), this paper considers both these signals and less costly signals that are captured in the COPDAB and WEIS events datasets (e.g., verbal rhetoric and other seemingly mundane diplomatic maneuvers). The less costly signals are found to be important for the likelihood of coup attempts even when controlling for more costly measures, which suggests that future researchers should consider the entire range of the cheap/costly continuum to help capture variations in the credibility of signals.

A note should also be made about the potential limitations due to the decision to focus exclusively on the US as a signaler and Latin American states as targets. On the negative side, it is possible that the uniqueness of US dominance over Latin American states places limits on the extent to which we can generalize the empirical findings outside the region. This may be true, though there is ample evidence that other global powers, such as the Soviet Union, have played an equally proactive role in attempting to destabilize foreign governments. It is also possible that the qualitative literature used to build the theory is unique to Latin America. An analysis of case studies on coups in Africa, for instance, might uncover much different mechanisms at work, or find that external actors play a very minor role in the decisions of coup plotters. On the positive side, limiting the discussion to the Americas provides ample opportunity for future studies seeking to discover similar processes. One might examine neighboring states, other global powers, or international organizations as potential signalers. Given the widespread incidence of coups in other regions, Africa in particular, researchers could do well moving outside the region. At the very least, this paper provides an empirically-supported theoretical framework to pursue these analyses.

This paper also provides important implications for policy-makers in both Latin America and the US. For the former, this study has shown the importance of avoiding hostile exchanges

with the US. For example, Venezuelan President Chavez's strong opposition to Bush's war on terror may be popular with the majority of the voters, although recent US efforts to undermine Chavez's leadership will likely provide future evidence that this was an unwise move for the leader. Moves to garner US support, such as El Salvador's support of US-led efforts in Iraq, are more likely to help ensure the stability of President Saca's government. Regarding US foreign policy, leaders should expect their signals of support for current governments in Latin American to do very little to help prevent coups. Remaining neutral or ignoring these states is likely the best policy to help ensure their continued democratic consolidation. This advice may be particularly true when we consider the general unpopularity of US leaders internationally. Though their purpose may be to support a current government, statements of support or visitations from high-ranking US officials may do more to draw a backlash against the government than help solidify its power. On the hostile side, these results show that even seemingly innocuous low-level hostile signals, such as statements of condemnation, have important implications for the stability of foreign governments. A responsible foreign policy should recognize the potency of seemingly innocuous policies for generating instability in other states.

Figure 1. Frequency of Failed, Successful, and Total Coup Attempts in Latin America, 1950-2000

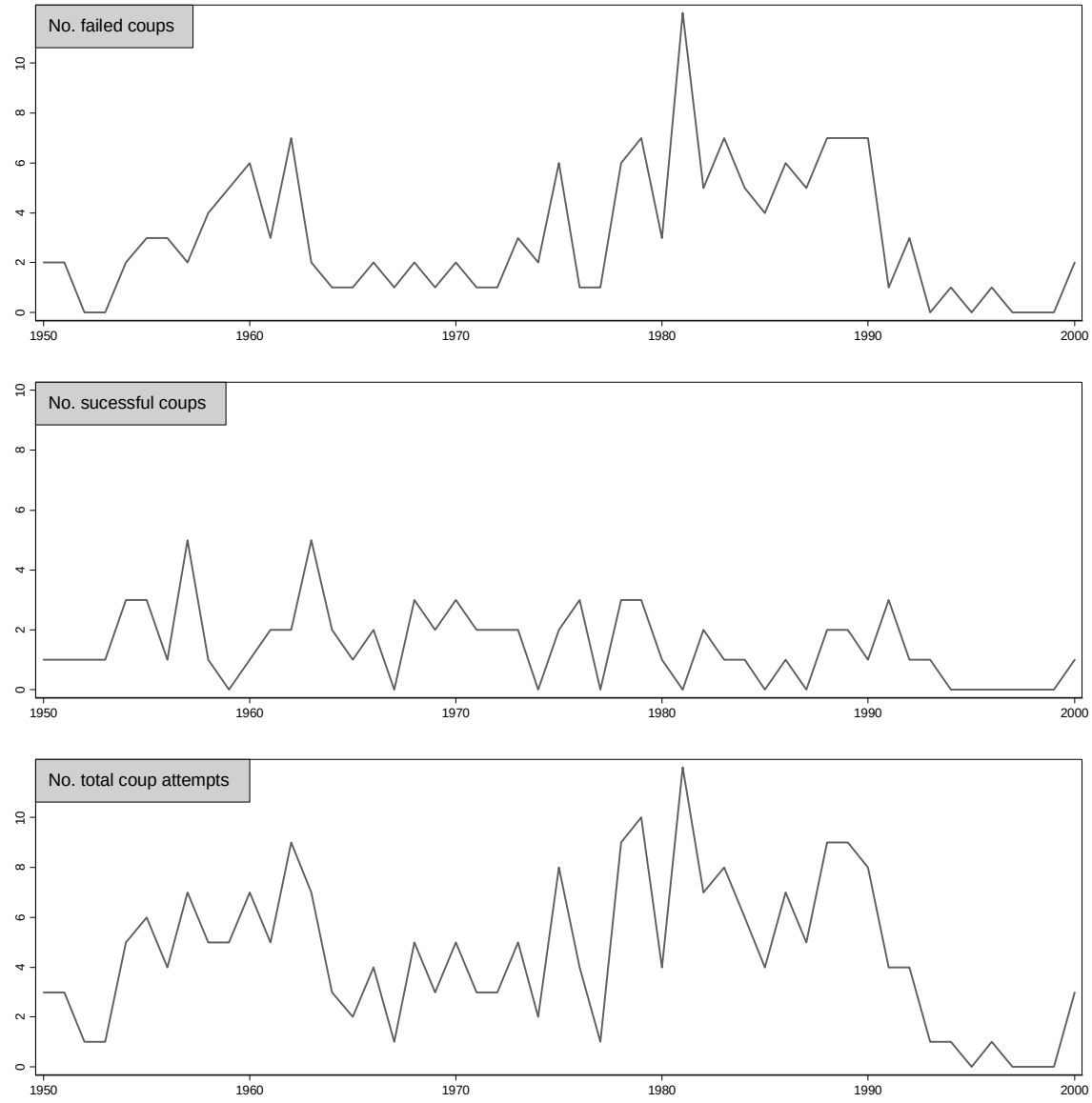


Table 1. Decision-Making Factors for Staging a Coup

| | | Probability of staging a successful coup | |
|---|---|---|---|
| | | *Low* | *High* |
| Benefit of staging a successful coup (improvement from pre-coup status quo) | *High* | •Potential gain: high<br>•Coup-proofing strategies: strong<br>•US signals: supportive<br>•Prediction: moderate probability of coup attempts | •Potential gain: high<br>•Coup-proofing strategies: weak<br>•US signals: hostile<br>•Prediction: high probability of coup attempts |
| | *Low* | •Potential gain: low<br>•Coup-proofing strategies: strong<br>•US signals: supportive<br>•Prediction: low probability of coup attempts | •Potential gain: low<br>•Coup-proofing strategies: weak<br>•US signals: hostile<br>•Prediction: moderate probability of coup attempts |

Table 2. Example of COPDAB and WEIS codes: Signals Sent from the US to Chile, 1972

COPDAB

| year | month | day | init | tar | activity | area | weight |
|---|---|---|---|---|---|---|---|
| 1972* | 1 | 1 | 2 | 155 | agree | To hold talks on fishing & 200 mile limit | 10 |
| 1972 | 1 | 12 | 2 | 155 | visit | By Congress mission on drug trafficking | 6 |
| 1972 | 1 | 26 | 2 | 155 | agree | To reschedule $300M owed by Chile government | 27 |
| 1972* | 2 | 17 | 2 | 155 | express | Disapproval over Chile defaulting on loans | -6 |
| 1972 | 4 | 12 | 2 | 155 | meet | OAS meeting in Washington | 14 |
| 1972 | 4 | 15 | 2 | 155 | deny | US is coercing Chile economically | -6 |
| 1972 | 6 | 23 | 2 | 155 | agree | Refinance Chile foreign debt by 29 US banks | 27 |
| 1972 | 10 | 17 | 2 | 155 | deny | French court barred payment for Chile at US request | -6 |
| 1972 | 12 | 5 | 2 | 155 | deny | Charge of US economic aggression against Chile | -6 |
| 1972* | 12 | 9 | 2 | 155 | deny | US military aid designed to overthrow Chile gov. | -6 |
| 1972 | 12 | 20 | 2 | 155 | discuss | Mounting bilateral problems | 6 |

WEIS

| year | month | day | init | tar | description | weight |
|---|---|---|---|---|---|---|
| 1972 | 1 | 26 | 2 | 155 | Agree to reschedule debt owed by Chile government | 6.5 |
| 1972* | 2 | 17 | 2 | 155 | Disapprove over Chile defaulting on bank loans | -2.2 |
| 1972 | 3 | 23 | 2 | 155 | State Dept. denies any move to block Allende | -1.1 |
| 1972 | 3 | 30 | 2 | 155 | CIA denies effort to foment coup against Allende | -.9 |
| 1972 | 4 | 15 | 2 | 155 | US Assnt. Sec. of State explains US position towards Chile | 0 |
| 1972 | 4 | 15 | 2 | 155 | US denies attempt to block developmental loans for Chile | -.9 |
| 1972 | 4 | 15 | 2 | 155 | Chile officials meet with US et al. to discuss debt reduction | 2.8 |
| 1972 | 4 | 20 | 2 | 155 | US joins in credit accord with Chile | 7.4 |
| 1972 | 5 | 16 | 2 | 155 | ITT denies attempting to foment a coup against Allende | -1.1 |
| 1972 | 10 | 17 | 2 | 155 | US denies influence French court to bar payment to Chile | -1.1 |
| 1972 | 12 | 5 | 2 | 155 | US denies Allende's charge of US aggression | -1.1 |
| 1972 | 12 | 7 | 2 | 155 | US denies that it is attempting to unseat the Allende gov. | -1.1 |
| 1972 | 12 | 7 | 2 | 155 | US explains policy of aiding Chilean armed forces | 0 |
| 1972 | 12 | 7 | 2 | 155 | US State Dept. accuses Allende of confusing/inaccurate policy | -2.2 |
| 1972 | 12 | 9 | 2 | 155 | US denies that military aid is designed to overthrow Chile gov. | -1.1 |
| 1972 | 12 | 9 | 2 | 155 | US seeks to reassure Chile on military aid policy | 2.8 |
| 1972 | 12 | 16 | 2 | 155 | US and Chile agree to talks the following week | 3 |
| 1972* | 12 | 21 | 2 | 155 | US and Chile meet in Washington to end rift | 1 |

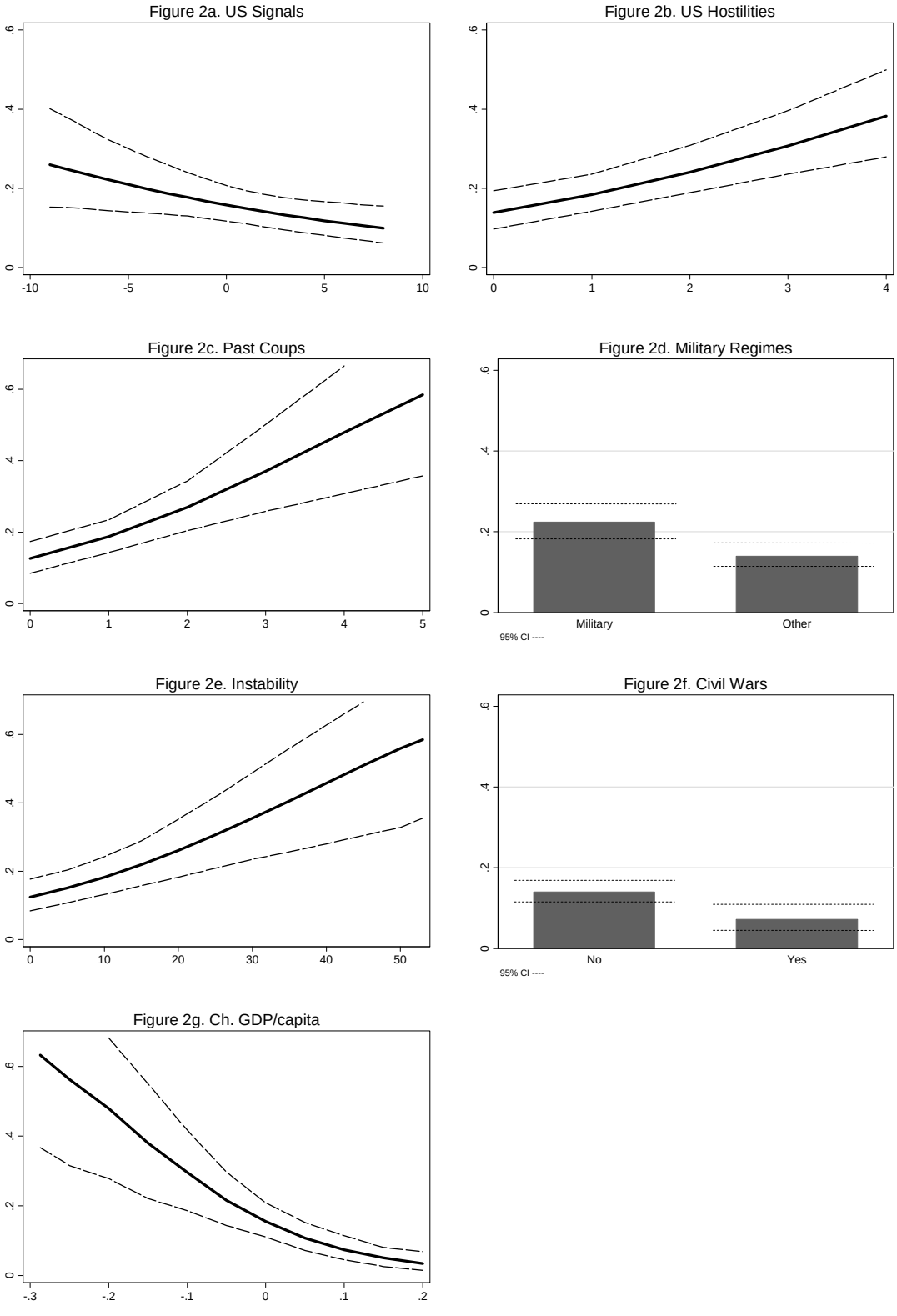
*Event mentioned as an example in the text.

Table 3. Negative Binomial Regression of Coups Attempts in Latin America, 1950—1993

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| US signals | -0.098*** | | -0.081** | | |
| | (0.031) | | (0.031) | | |
| US MID host. level | | 0.303** | 0.356*** | 0.403*** | 0.351*** |
| | | (0.127) | (0.089) | (0.091) | (0.086) |
| US aid | | 0.099 | 0.145 | 0.147 | 0.138 |
| | | (0.194) | (0.198) | (0.199) | (0.199) |
| Positive signals | | | | -0.057 | |
| | | | | (0.073) | |
| Negative signals | | | | | -0.144*** |
| | | | | | (0.035) |
| Polity | 0.011 | 0.009 | 0.012 | 0.012 | 0.012 |
| | (0.022) | (0.024) | (0.024) | (0.025) | (0.023) |
| Past coup | 0.512*** | 0.536*** | 0.484*** | 0.494*** | 0.494*** |
| | (0.126) | (0.135) | (0.127) | (0.132) | (0.127) |
| Military regime | 0.581* | 0.674** | 0.598* | 0.633* | 0.576* |
| | (0.273) | (0.282) | (0.272) | (0.281) | (0.262) |
| Instability | 0.048*** | 0.045*** | 0.047*** | 0.046*** | 0.048*** |
| | (0.013) | (0.012) | (0.012) | (0.012) | (0.012) |
| Civil war | -0.729 | -0.724 | -0.806* | -0.756* | -0.805* |
| | (0.453) | (0.463) | (0.421) | (0.431) | (0.420) |
| GDP/capita | -0.575* | -0.457 | -0.501 | -0.431 | -0.481 |
| | (0.302) | (0.351) | (0.342) | (0.347) | (0.345) |
| Ch. GDP/cap | -8.342*** | -8.271*** | -8.553*** | -8.269*** | -8.824*** |
| | (1.664) | (2.008) | (1.985) | (1.935) | (2.025) |
| LnAlpha | 0.258 | 0.371 | 0.246 | 0.285 | 0.252 |
| | (0.282) | (0.270) | (0.289) | (0.268) | (0.307) |
| Alpha | 1.294 | 1.449 | 1.279 | 1.330 | 1.286 |
| | (0.365) | (0.392) | (0.370) | (0.356) | (0.395) |
| Wald $Chi^2$ | 54.45*** | 80.73*** | 99.64*** | 102.96*** | 100.41*** |
| Observations | 591 | 614 | 576 | 576 | 576 |

Note: Robust standard errors adjusted for clustering on country in parentheses. Estimations performed using Stata 10.0. ***p<.001; **p<.01; *p<.05 (one-tailed).

Figure 2. Likelihood of Coup Attempt Based on US Signals




Note: Figures generated from Table 3, Model 3.

REFERENCES


Agyeman-Duah, Baffour (1990). Military Coups, Regime Change, and Interstate Conflict in West Africa. *Armed Forces and Society*, 16(4):547-571.

Aybar de Soto, Jose (1978). *Dependency and Intervention: The Case of Guatemala in 1954*. Westview: Boulder, CO.

Azar, Edward E. (1980). The Conflict and Peace Data Bank (COPDAB) Project. *Journal of Conflict Resolution*, 24(1):143-152.

Banks, Arthur S. (2001). Cross-national Time-series Data Archive (data set). Binghamton, NY: Computer systems Unlimited. Available: http://www.databanks.sitehosting.net/

Barbieri, Katherine (2002). *The Liberal Illusion: Does Trade Promote Peace?* Ann Arbor, MI: University of Michigan Press.

Beck, Nathaniel, and Jonathan N. Katz (1995). What to do (and not to do) with Time-series Cross-section Data. *American Political Science Review*, 89(3):634-47.

Belkin, Aaron and Evan Schofer (2003). Toward a Structural Understanding of Coup Risk. *Journal of Conflict Resolution*, 47(5):594-620.

Central Intelligence Agency (1970). "CIA, Notes on Meeting with the President on Chile." 15 September 1970.

Clark, David H., and William L. Reed (2003). A Unified Model of War Onset and Outcome. *Journal of Politics*, 65: 69-91.

Cullather, Nick (1999). *Secret History: The CIA's Classified Account of Its Operations in Guatemala, 1952-1954*. Stanford, CA: Stanford University Press.

Danilovic, Vesna (2001). Conceptual and Selection Bias Issues in Deterrence. *Journal of Conflict Resolution*, 45(1):97-125.

Dean, Warren (1970). Latin American Golpes and Economic Fluctuations, 1823-1966. *Social Science Quarterly*, June: 70-80.

Fearon, James D. (1994). Signaling versus the Balance of Power and Interests: An Empirical Test of a Crisis Bargaining Model. *Journal of Conflict Resolution*, 38: 236-69.

Fearon, James D. (1997). Signaling Foreign Policy Interests. *Journal of Conflict Resolution*, 41: 68-90.

Finer, Samuel (1962). *The Man on Horseback*. New York: Preager.

Fossum, Egil (1967). Factors Influencing the Occurrence of Military Coups D'État in Latin America. *Journal of Peace Research*, 4: 228-51.

Gartzke, Erik (2003). *Signaling and the Liberal Peace*. Manuscript, Columbia University.

Geddes, Barbara (1999). "Authoritarian Breakdown: Empirical Test of a Game Theoretic Argument." Paper prepared for presentation at the annual meeting of the American Political Science Association, Atlanta, Sept. 1999.

Ghosn, Faten, Glenn Palmer, and Stuart Bremer (2004). The MID3 Data Set, 1993–2001: Procedures, Coding Rules, and Description. *Conflict Management and Peace Science*, 21:133-154.

Gleditsch, Kristian (2002). Expanded Trade and GDP Data. *Journal of Conflict Resolution*, 46: 712-24.

Gleditsch, Nils Petter; Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg and Håvard Strand (2002). Armed Conflict 1946–2001: A New Dataset. *Journal of Peace Research*, 39: 615–637.

Goldstein, Joshua S. (1992). A Conflict-Cooperation Scale for WEIS International Events Data. *Journal of Conflict Resolution*, 36(2):369-385.

Greenbook (2007). "U.S. Overseas Loans and Grants [Greenbook]." USAID. Available: http://qesdb.usaid.gov/gbk/

Grossman, Herschel (1999). Kleptocracy and Revolutions. *Oxford Economic Papers*, 51: 267-283.

Hakim, Peter (2003). Latin America's Lost Illusions. *Journal of Democracy*, 14.

Hufbauer, Gary, Jeffrey Schott and Kimberly A. Elliott (1990). *Economic Sanctions Reconsidered: History and Current Policy*. Washington, DC: Institute for International Economics.

Huth, Paul K. (1988). *Extended Deterrence and the Prevention of War*. New Haven, CT: Yale University Press.

Huth, Paul K. and Bruce Russett (1984). What Makes Deterrence Work? Cases from 1900 to 1980. *World Politics*, 36: 496-526.

Jackman, Robert W. (1978). The Predictability of Coups d'etat: A Model with African Data. *American Political Science Review*, 72(4):1262-75.

Jones, Daniel, Stuart Bremer, and J. David Singer (1996). Militarized Interstate Disputes 1816-1992: Rationale, Coding Rules, and Empirical Patterns. *Conflict Management and Peace Science*, 15: 162-213.

King, Gary, Michael Tomz, and Jason Wittenberg (2000). Making the Most of Statistical Analyses: Improving Interpretation and Presentation. *American Journal of Political Science*, 44(2):347-61.

Kornbluh, Peter (1999). Declassifying U.S. Intervention in Chile. NACLA Report on the Americas, 32(6). Available online: http://archive.nacla.org/archivehome.aspx

Kposowa, Augustine and Craig Jenkins (1993). The Structural Sources of Military Coups in Postcolonial Africa, 1957-1984. *American Journal of Sociology*, 99(1):126-63.

LaFeber, Walter (1993). *Inevitable Revolutions: The US in Central America*. New York, NY: W. W. Norton & Company.

Lebow, Richard N. (1981). *Between Peace and War*. Baltimore, MD: Johns Hopkins University Press.

Leng, Russell J. (1993). *Interstate Crisis Bargaining Behavior, 1816-1980*. Cambridge, UK: Cambridge University Press.

Levitt, Barry S. (2006). A Desultory Defense of Democracy: OAS Resolution 1080 and the Inter-American Democratic Charter. *Latin American Politics & Society*, 48(3):93-123.

Lichbach, Mark (1995). *The Rebel's Dilemma*. Ann Arbor, MI: University of Michigan Press.

Londregan, John, and Keither Poole (1990). Poverty, the Coup Trap, and the Seizure of Executive Power. *World Politics*, 42(2):151-183.

Long, J. Scott (1997). *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks, CA: Sage.

Markey, Patrick (2005). "Venezuela's Chaves Says U.S. Plotting to Kill Him." *Reuters*, 21 Feb 2005.

Marshall, Monty G., and Keith Jaggers (2000). *Polity IV Dataset and Users' Manual: Political Regime Characteristics and Transitions, 1800-1999*. Available: <http://www.bsos.umd.edu/cidcm/polity>.

McClelland, Clarles (1978). *World Event Interaction Survey*. [Computer file]. Los Angeles, CA: University of Southern California.

Moreno, Erika, Michael Lewis-Beck and Jacque Amoureux (2004). *Ingredients for Successful Coups: Coups Behavior across Latin America, 1950-2000*. Paper prepared for

presentation at the American Political Science Association Annual Conference. Chicago, IL, September 2-5, 2004.

Morrow, James D. (1999). How could Trade Affect Conflict? *Journal of Peace Research*, 36(4):481-489.

Needler, Martin (1966). Political Development and Military Intervention in Latin America. *American Political Science Review*, 60(3):616-626.

O'Kane, Rosemary H. T. (1983). Towards an Examination of the Casuses of Coups d'Etat. *European Journal of Political Research*, 11(1):27-44.

Petras, James (1975). *The United States and Chile: Imperialism and the Overthrow of the Allende Government*. New York: Monthly Review Press.

Powell, Robert (1990). *Nuclear Deterrence Theory.* Cambridge, UK: Cambridge University Press.

Regan, Patrick (2002). Third-party Interventions and the Duration of Intrastate Conflicts. *Journal of Conflict Resolution*, 46(1):55-73.

Reuveny, Rafael and Heejoon Kang (1996). International Conflict and Cooperation: Splicing COPDAB and WEIS Series. *International Studies Quarterly*, 40(2):281-305.

Sabrosky, Alan N. (1980). "Interstate Alliances: Their Reliability and the Expansion of War." In *The Correlates of War II: Testing Some Realpolitik Models*, edited by J. David Singer, 161-198. New York: The Free Press.

Signorino, Curtis S., and Jeffrey M. Ritter (1999). Tau-b or not Tau-b: Measuring the Similarity of Foreign Policy Positions. *International Studies Quarterly*, 43: 115-44.

Smith, Alastair (1995). Alliance Formation and War. *International Studies Quarterly*, 39(4):405-425.

Sutter, Daniel (2000). A Game-Theoretic Model of the Coup D'état. *Economics and Politics*, 12(2):205-223.

Thyne, Clayton (2006). Cheap Signals with Costly Consequences: The Effect of Interstate Relations on Civil War, 1948—1992. *Journal of Conflict Resolution*, 50(6):937-961.

Tomz, Michael, Jason Wittenberg, and Gary King (2003). *CLARIFY: Software for Interpreting and Presenting Statistical Results. Version 2.1*. Stanford University, University of Wisconsin, and Harvard University. 5 Jan. 2003. Available: <http://gking.harvard.edu>.

Valenzuela, Arturo (2004). Latin American Presidencies Interrupted. *Journal of Democracy*, 15(4):5-19.

Williams, Rick L. (2000). A Note on Robust Variance Estimation for Cluster-correlated Data. *Biometrics*, 56: 645-46.

Zimmerman, Ekkart (1983). *Political violence, Crises and Revolutions: Theories and Research*. Boston: G.K. Hall & Co.

Appendix Table 1: Summary Statistics (mentioned on page 12, note 4)

| Country | Coups | Signals | Hostility | Aid | Polity | Instability | GDP/cap | Δ GDP | Military* | Civil War* |
|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | .451 | .514 | 0 | .567 | -1.66 | 7.69 | 3.56 | .009 | 34.15 | 6.0 |
| | (.856) | (1.76) | (0) | (.862) | (7.39) | (11.45) | (.320) | (.053) | | |
| Bolivia | .490 | 1.25 | 0 | 1.53 | -.976 | 3.56 | 3.04 | .011 | 39.02 | 4.0 |
| | (.784) | (2.84) | (0) | (.583) | (6.09) | (3.57) | (.280) | (.086) | | |
| Brazil | .059 | .713 | 0 | 1.20 | 1.13 | 3.46 | 3.24 | .029 | 51.22 | 0 |
| | (.238) | (2.38) | (0) | (.864) | (7.01) | (8.53) | (.472) | (.041) | | |
| Chile | .078 | .419 | .039 | 1.02 | 1.20 | 3.33 | 3.33 | .026 | 41.46 | 2.0 |
| | (.337) | (2.15) | (.280) | (.722) | (5.95) | (3.84) | (.379) | (.055) | | |
| Colombia | .216 | .940 | 0 | 1.43 | 5.46 | 5.46 | 3.17 | .021 | 0 | 2.0 |
| | (.503) | (1.57) | (0) | (.614) | (4.89) | (6.58) | (.396) | (.033) | | |
| Costa Rica | .020 | 1.10 | 0 | 1.03 | 10 | .231 | 3.26 | .030 | 0 | 0 |
| | (.140) | (1.30) | (0) | (.708) | (0) | (.627) | (.350) | (.065) | | |
| Dom. Rep. | .176 | .916 | .078 | 1.16 | -.886 | 2.43 | 3.03 | .031 | 2.44 | 2.0 |
| | (.478) | (1.72) | (.440) | (.821) | (6.54) | (2.51) | (.420) | (.052) | | |
| Ecuador | .255 | .548 | .176 | 1.17 | .267 | 1.69 | 3.10 | .017 | 24.39 | 0 |
| | (.483) | (2.36) | (.385) | (.424) | (5.02) | (1.44) | (.392) | (.044) | | |
| El Salvador | .569 | .651 | 0 | 1.24 | -.15 | 5 | 3.20 | .008 | 12.20 | 4.0 |
| | (1.10) | (1.76) | (0) | (.984) | (5.17) | (8.57) | (.287) | (.040) | | |
| Guatemala | .451 | 1.05 | .020 | 1.29 | -1.2 | 8 | 3.13 | .012 | 14.63 | 4.0 |
| | (.757) | (1.91) | (.140) | (.652) | (4.12) | (10.23) | (.333) | (.025) | | |
| Haiti | .412 | 1.13 | .216 | 1.15 | -6.91 | 3.28 | 2.65 | -.009 | 19.51 | 4.0 |
| | (.983) | (2.04) | (.879) | (.696) | (4.47) | (4.25) | (.316) | (.044) | | |
| Honduras | .157 | .762 | 0 | 1.24 | .489 | 2.08 | 2.91 | .008 | 29.27 | 0 |
| | (.418) | (2.36) | (0) | (.794) | (3.12) | (3.38) | (.310) | (.030) | | |
| Mexico | 0 | 1.31 | .020 | .843 | -4.89 | 2.97 | 3.39 | .024 | 0 | 4.0 |
| | (0) (1.03) | (.140) | (.656) | (1.46) | (3.98) | (.393) | (.036) | | | |
| Nicaragua | .353 | .507 | .471 | 1.01 | -5.25 | 2.03 | 3.11 | .003 | 14.63 | 4.0 |
| | (.890) | (2.74) | (1.10) | (.744) | (4.75) | (3.00) | (.223) | (.068) | | |
| Panama | .216 | .373 | .216 | .990 | -1.48 | 1.33 | 3.21 | .021 | 41.46 | 2.0 |
| | (.541) | (1.78) | (.808) | (.601) | (5.34) | (1.95) | (.419) | (.041) | | |
| Paraguay | .118 | .471 | 0 | .697 | -6.17 | .513 | 3.11 | .013 | 0 | 2.0 |
| | (.325) | (1.50) | (0) | (.338) | (4.79) | (1.07) | (.427) | (.038) | | |
| Peru | .176 | .452 | .118 | 1.58 | 2.02 | 3.54 | 3.25 | .011 | 32.50 | 4.0 |
| | (.434) | (2.18) | (.325) | (.526) | (5.50) | (3.65) | (.312) | (.050) | | |
| Uruguay | .039 | .617 | 0 | .400 | 3.69 | 1.72 | 3.46 | .013 | 29.27 | 2.0 |
| | (.196) | (1.95) | (0) | (.717) | &7.18) | (2.27) | (.329) | (.050) | | |
| Venezuela | .255 | .824 | 0 | .157 | 5.83 | 2.10 | 3.39 | .003 | 0 | 4.0 |
| | (.659) | (1.64) | (0) | (.884) | (4.57) | (3.91) | (.353) | (.046) | | |

*Percent of country/years coded 1

Appendix Table 2: Replication of Table 3 with Belkin and Schofer's Dependent Variable (mentioned on page 12 and 22, notes 5 and 13)

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| US signals | -0.048 | | -0.039 | | |
| | (0.051) | | (0.049) | | |
| US MID host. level | | 0.375 | 0.427* | 0.483* | 0.418* |
| | | (0.264) | (0.254) | (0.256) | (0.240) |
| US aid | | -0.171 | -0.122 | -0.122 | -0.115 |
| | | (0.171) | (0.163) | (0.161) | (0.156) |
| Positive signals | | | | 0.051 | |
| | | | | (0.062) | |
| Negative signals | | | | | -0.121* |
| | | | | | (0.053) |
| Polity | 0.044* | 0.046* | 0.048* | 0.048* | 0.048* |
| | (0.022) | (0.025) | (0.025) | (0.026) | (0.025) |
| Past coup | 0.238* | 0.255* | 0.242* | 0.254* | 0.256* |
| | (0.136) | (0.143) | (0.142) | (0.145) | (0.142) |
| Military regime | 1.979*** | 2.107*** | 2.030*** | 2.051*** | 2.004*** |
| | (0.402) | (0.397) | (0.382) | (0.391) | (0.382) |
| Instability | 0.027** | 0.028** | 0.030** | 0.028** | 0.030** |
| | (0.011) | (0.012) | (0.012) | (0.012) | (0.012) |
| Civil war | -0.914 | -0.844 | -0.878 | -0.790 | -0.889 |
| | (1.142) | (1.165) | (1.150) | (1.156) | (1.128) |
| GDP/capita | -1.507** | -1.677*** | -1.687*** | -1.583*** | -1.735*** |
| | (0.513) | (0.451) | (0.474) | (0.467) | (0.475) |
| Ch. GDP/cap | -4.588 | -4.567 | -4.734 | -4.447 | -4.970 |
| | (3.781) | (3.640) | (3.673) | (3.618) | (3.546) |
| Wald $Chi^2$ | 299.76*** | 248.31*** | 248.31*** | 357.75*** | 290.62*** |
| Observations | 591 | 614 | 576 | 576 | 576 |

Note: Robust standard errors adjusted for clustering on country in parentheses. Estimations performed using Stata 10.0. ***p<.001; **p<.01; *p<.05 (one-tailed).

Appendix Table 3: Replication of Table 3 with Alternative Independent Variables
(mentioned on pages 17-18, notes 10-11)

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Sanctions | 0.460 | | | |
| | (0.584) | | | |
| MID dummy | | 0.508* | | |
| | | (0.250) | | |
| S score | | | 0.810 | |
| | | | (1.538) | |
| Trade | | | | -<.001 |
| | | | | (0.000) |
| Polity | -0.011 | 0.010 | 0.009 | 0.011 |
| | (0.028) | (0.023) | (0.023) | (0.022) |
| Past coup | 0.618*** | 0.552*** | 0.564*** | 0.508*** |
| | (0.166) | (0.135) | (0.142) | (0.130) |
| Military regime | 0.195 | 0.660* | 0.664** | 0.548* |
| | (0.362) | (0.285) | (0.287) | (0.277) |
| Instability | 0.069** | 0.047*** | 0.046*** | 0.041*** |
| | (0.029) | (0.013) | (0.013) | (0.013) |
| Civil war | -0.593 | -0.657 | -0.685 | -1.123 |
| | (0.524) | (0.463) | (0.481) | (0.808) |
| GDP/capita | -0.952* | -0.514* | -0.475 | -0.113 |
| | (0.553) | (0.312) | (0.320) | (0.340) |
| Ch. GDP/cap | -2.893 | -7.934*** | -8.119*** | -7.830*** |
| | (2.198) | (1.680) | (1.702) | (1.676) |
| Wald $Chi^2$ | 43.52*** | 64.05*** | 58.13*** | 48.42*** |
| Observations | 310 629 | 629 | 579 | |

Note: Robust standard errors adjusted for clustering on country in parentheses. Estimations performed using Stata 10.0. ***p<.001; **p<.01; *p<.05 (one-tailed).

Appendix Table 4: Replication of Table 3 with Alternative Dependent Variable (dummy) and Logistic Regression (mentioned on pages 19, note 12)

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| US signals | -0.101* | | -0.071 | | |
| | (0.047) | | (0.047) | | |
| US MID host. level | | 0.444* | 0.663** | 0.719** | 0.647** |
| | | (0.232) | (0.269) | (0.268) | (0.259) |
| US aid | | 0.108 | 0.176 | 0.172 | 0.178 |
| | | (0.187) | (0.190) | (0.191) | (0.192) |
| Positive signals | | | | -0.007 | |
| | | | | (0.084) | |
| Negative signals | | | | | -0.163*** |
| | | | | | (0.054) |
| GDP/capita | -0.881* | -0.767* | -0.823* | -0.734* | -0.825* |
| | (0.402) | (0.449) | (0.443) | (0.445) | (0.448) |
| Ch. GDP/cap | -8.734*** | -8.144*** | -8.703*** | -8.578*** | -8.908*** |
| | (2.199) | (2.543) | (2.457) | (2.476) | (2.467) |
| Civil war | -0.839 | -0.794 | -0.942 | -0.878 | -0.956* |
| | (0.693) | (0.598) | (0.596) | (0.605) | (0.570) |
| Military regime | 0.826** | 0.945** | 0.871** | 0.892** | 0.853** |
| | (0.320) | (0.316) | (0.309) | (0.320) | (0.294) |
| Instability | 0.041** | 0.037** | 0.042** | 0.041** | 0.043** |
| | (0.017) | (0.016) | (0.017) | (0.016) | (0.016) |
| Past coup | 0.801*** | 0.795*** | 0.749*** | 0.754*** | 0.756*** |
| | (0.152) | (0.147) | (0.141) | (0.144) | (0.142) |
| Polity | 0.015 | 0.017 | 0.020 | 0.019 | 0.020 |
| | (0.027) | (0.029) | (0.029) | (0.030) | (0.028) |
| Wald $Chi^2$ | 69.55*** | 103.89*** | 132.24*** | 127.06*** | 124.91*** |
| Observations | 591 | 614 | 576 | 576 | 576 |

Note: Robust standard errors adjusted for clustering on country in parentheses. Estimations performed using Stata 10.0. ***p<.001; **p<.01; *p<.05 (one-tailed).