

# Democracy and Multilateralism: The Case of Vote Buying in the UN General Assembly

David B. Carter\*

Princeton University

Randall W. Stone

University of Rochester

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## Abstract

Democracies are more supportive of U.S. positions in the UN General Assembly than non-democracies. Is this because democracies share common perspectives, or does this pattern reflect coercion? Since 1985, U.S. law has stipulated that the State Department identify important votes and that aid disbursements reflect voting decisions. Consequently, there are three plausible explanations for the democratic voting correlation: 1) democracies share common preferences and the United States prefers to aid democracies; 2) democracies are more vulnerable than autocracies to U.S. influence attempts, and 3) democracies are subject to more credible influence attempts. To unravel these alternative explanations, we introduce a strategic statistical model that allows us to estimate voting preferences, vulnerability to influence, and credibility of linkage, which are theoretical quantities of interest that are not directly observable. The results reject the first two hypotheses: poor democracies have voting preferences that are more oppositional to U.S. positions than autocracies, and they are more willing than autocracies to take symbolic stands that may cost them foreign aid. Democracies support U.S. positions, however, because U.S. aid linkages are more credible when directed towards democratic countries. Splitting the sample into Cold War and post-Cold War segments, we find that the end of the Cold War changed the way U.S. linkage strategies treated allies and left and right-leaning governments, but the effects of democracy remained constant.

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\*Emails: [dbcarter@princeton.edu](mailto:dbcarter@princeton.edu), [randall.stone@rochester.edu](mailto:randall.stone@rochester.edu).

# 1 Introduction

The relationship between multilateralism and democracy has risen in prominence in the post-Cold War period as international organizations become increasingly influential and their members become increasingly democratic. Delegation to international authorities involves some sacrifice of national sovereignty, and observers frequently lament the resulting democratic deficits. Democratic procedures ameliorate these concerns, and almost all multilateral organizations have provisions for voting, but these formal rules are often overridden by informal procedures that reflect the influence of powerful countries (Stone, 2011). On the other hand, multilateralism is conceived as a means of restraining the exercise of hegemonic power (Lake, 2002), and is widely believed to strengthen democracy. Membership in international organizations has been credited with preventing new democracies from sliding back into authoritarianism, and with improving the quality of democratic governance (Pevehouse, 2002*a*; Pevehouse and Mansfield, 2006; Keohane, Macedo and Moravcsik, 2009). A first step towards unraveling these questions is to investigate how democracies interact with each other as they seek to govern multilateral organizations. As the leading state in the international system, does the United States cooperate with other democracies, or does it attempt to coerce them?

We use vote buying in the United Nations General Assembly as a case study. The UNGA is among the most democratic of international institutions, and the low stakes involved in its non-binding resolutions have made it a relatively polite diplomatic forum. Nevertheless, U.S. foreign policy seeks to influence the vote tallies on important UN votes, so the way in which the United States interacts with other democracies in this setting may be revealing. Since the mid-1980s, U.S. law has required the State Department to report how countries vote in the UN on issues that are regarded as important to U.S. interests, and has required USAID to use countries' voting records on these issues as a criterion for disbursing aid. Buying votes is official policy. How we interpret this, however, may depend on whose votes are being bought, and for what reasons. We start with the observation that democracies tend to support the United States on votes designated by the U.S. State Department as important to U.S. interests more frequently than autocracies. A *prima facie* case exists, therefore, for the interpretation that democracies support the United States because they share common norms and a community of interests. If this is the case, the

experience of cooperating on issues of common concern at the multinational level should reinforce those norms. There should be no tension between participation in multilateral cooperation and faithfully representing the preferences of national constituents, and multilateral governance should become increasingly legitimate as more of the participating governments become democratic.

Since the United States is in the market for votes, however, strategic interaction creates inference problems. Strategic votes reflect three motivations: government preferences, the susceptibility of particular regimes to international influence, and the credibility of the threats or promises that are used to influence votes. Rather than reflecting similar preferences, the voting behavior of democracies might indicate that they are more vulnerable to U.S. influence than autocracies, and consequently are more willing to comply with U.S. influence attempts. Alternatively, democracies might not be particularly vulnerable, but might still comply with U.S. preferences at higher rates if U.S. threats or promises are more credible when addressed to democracies. In order to unravel what this voting behavior means, it is essential to explicitly account for the strategic incentives facing voters and vote buyers.

We introduce a statistical technique that allows us simultaneously to estimate voting preferences, susceptibility to influence by the United States, and the credibility of U.S. influence attempts. We estimate a strategic statistical model in which countries decide how to vote on an issue that has been designated by the United States State Department as important to U.S. interests, and then the United States decides whether to withhold a portion of committed aid, if the country has voted against the U.S. position, or reward the aid recipient with additional aid, if the country has voted in favor of the U.S. position. Because this model captures the strategic element of voting, we are able to evaluate the effect of anticipated punishments or rewards on voting decisions. Furthermore, we are able to differentiate which regimes are most susceptible to influence and which influence attempts are most credible.

Our findings are disappointing for advocates of multilateral governance. We find that democratic countries are in fact more strongly opposed to U.S. policy preferences than non-democratic countries, so norms or a community of interests do not explain their voting behavior. Left to their own devices, democratic countries would oppose U.S. positions at higher rates than authoritarian countries. Democracies are presumably more likely to oppose the United States because they are

more sensitive to the preferences of the median voter, which generally are not favorable to U.S. foreign policy (e.g, support of Israel, the embargo of Cuba, or wars in the Middle East). This casts U.S. efforts to cajole them in an unfavorable light. Nor do democratic governments comply with U.S. wishes because they are particularly sensitive to U.S. development aid disbursements; in fact, we find that democratic governments are more willing than authoritarian governments to take symbolic stands that may cost them access to foreign aid. Again, the salience of public opinion in democracies and the narrow bases of support for authoritarian governments are persuasive explanations. Instead, we find that democracies are more likely to comply with U.S. influence attempts because they are the countries that are most frequently targeted. It is costly for the United States to punish its authoritarian allies, which generally receive aid because they are strategically important rather than because they are deserving, and often depend on aid for political survival. Conversely, it can be politically embarrassing at home to reward authoritarian countries for their votes. Consequently, U.S. policy tends to target democracies when it tries to round up support. Our results indicate that the fact that U.S. threats and rewards are more credible when they are directed at democracies accounts for the high rate of compliance with U.S. preferences by democracies.

Additional results show that the United States punishes and rewards recipients for their votes differently depending on the left-right political orientations of their governments, their levels of development, and their alliance relationships, and that these variations in credibility are key to explaining the effectiveness of U.S. influence attempts. In order to further investigate these relationships, as well as to probe the robustness of our findings about democracy, we split our data into Cold War and post-Cold War samples. We find that the end of the Cold War was a watershed in U.S. vote buying strategy in the UN, although vote buying occurred in both samples. Our findings suggest that factors relevant to U.S. competition with the Soviet Union play an important role in explaining the U.S. propensity to punish aid recipients during the Cold War, but these factors lose explanatory power in the post-Cold War era. In particular, the United States was much more willing to punish left-leaning governments and reward right-leaning governments during the Cold War, but this pattern disappeared when the Cold War came to an end. Similarly, the United States was reluctant to punish its allies during the Cold War, but became more likely to punish allies than non-allies after the Cold War. The end of the Cold War did not have substantial effects on the

coefficients for recipient countries' behavior. Furthermore, our central findings about the effects of democracy are consistent during and after the Cold War. This indicates that the strategy of coercing democracies is an enduring feature of U.S. foreign policy, rather than a consequence of the special circumstances that prevailed during the Cold War. Finally, we provide a direct test of whether our strategic choice model outperforms a non-strategic model using the same covariates, and the test result indicates that recipient voting behavior is significantly influenced by U.S. aid disbursements.

## 2 Democracy and UN Voting

Democracies support U.S. positions on issues of importance to U.S. foreign policy in the United Nations General Assembly more consistently than non-democracies. In fact, democracies support the U.S. position on important votes 41% of the time, while non-democracies only support the U.S. 29% of the time.<sup>1</sup> Does this reflect a coincidence of preferences among democratic countries, are democracies more responsive to U.S. influence attempts, or are the differences in democratic voting driven by variations in U.S. strategy? As we describe below, the political science literature is divided on the first two points, with some prominent arguments in favor of a coincidence of interests and others in favor of incentives for democratic governments to oppose U.S. positions, and with reason to believe either that democratic governments should be more or less likely to adjust their positions in response to U.S. pressure. The literature has not directly addressed how democracy should affect U.S. vote buying strategies, but it provides the building blocks for an argument that the United States should prefer to use the leverage provided by foreign aid to attempt to influence democracies. Different strands in the literature would support a wide range of empirical results, but none of these hypotheses can be tested properly without a model that can explicitly deal with all three causal pathways.

An optimistic interpretation of these patterns starts with the observation that democracies are widely believed to hold similar world views and to pursue complementary goals in foreign policy. Democracies are highly unlikely to engage in militarized interstate disputes against each other,

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<sup>1</sup>Either a difference in means test or a Chi-square test of independence easily confirms the statistical significance of this difference.

although they are not necessarily less likely to be involved in such disputes (Bennett and Stam, 2000). When these disputes do arise between democracies, it is almost always possible to settle them without escalating the level of conflict (Dixon, 1994; Huth and Allee, 2002). The pattern of peaceful conflict resolution among democracies is widely attributed to a coincidence of interests among them (Russett, 1993; Russett and Oneal, 2001*a*; Dixon, 1994). Furthermore, democracies are more likely to form alliances to support each other than to ally with non-democracies (Lai and Reiter, 2000), and are more likely to join ongoing conflicts in support of other democracies.

Patterns of democratic affinity are not limited to security affairs; democracies are also more likely to cooperate with other democracies in a wide range of economic policies. Democracies trade with each other more intensively than with non-democracies, controlling for factors such as the size of their economies and the distance between them, and they are more inclined to grant each other commercial and financial concessions that promote extensive economic exchange (Mansfield, Milner and Rosendorff, 2000; Gartzke, 2007). In turn, trade ties and the investments that are made to pursue them promote the development of interest groups that perceive common interests. Democracies sign more international treaties with other democracies than with non-democracies, which indicates broader agreement on objectives and resolution of outstanding disputes, and they share more memberships in international organizations, which indicates deeper commitment to finding multilateral solutions to a wide range of policy problems. Common membership in international organizations appears to reduce the probability that new democracies slide back into authoritarianism (Pevehouse, 2002*b*). In addition, overlapping membership in multiple international organizations has been credited with resolving disputes and facilitating cooperation (Mitchell and Hensel, 2007), and the resulting cooperation reassures democratic publics and elites that they can rely upon each other. Public opinion research consistently shows that democratic publics have more positive assessments of other democratic countries than of non-democratic ones, and in particular, the publics of democratic countries tend to hold more positive views of the United States than do those of authoritarian countries. The literature on democracy in international relations proposes a plethora of mechanisms that are hard to isolate empirically and is riddled with endogeneity problems, but many of the proposed mechanisms are consistent with the view that democracies should be expected to have preferences that are aligned with those of the United States in the UN.

On the other hand, we know empirically that U.S. positions on issues that the United States regards as important are often unpopular among democracies, especially in the developing world. A strong bloc of votes consistently supported the United States during the early decades of the United Nations' history, but by the mid-1970s the United States frequently found itself isolated, and was on the losing side of most votes. Cold War themes continued to command the allegiance of a wide range of U.S. democratic allies into the 1980s, but even the staunchest U.S. allies became increasingly critical of U.S. positions on Central America, the Middle East, South Africa, and how best to promote human rights in the Soviet bloc. Some of these disagreements were tactical and resolved themselves with the end of the Cold War, but new disagreements arose over how to deal with nuclear proliferation, terrorism and the dilemmas posed by Iraq, Iran and North Korea. Meanwhile, democracies in the developing world chafed under the Washington Consensus and became restive under a global trade regime that appeared slanted in favor of the interests of advanced economies. The legitimacy of the international institutions where the United States exercised decisive influence came under question, and this was reflected in voting in the international forum that the United States found hardest to control, the UNGA.

Furthermore, there is reason to believe that the leaders of democracies derive more benefits than autocrats from taking symbolic stands that are critical of the United States. Democratic leaders face re-selection through elections, so their tenure in office is intimately related to their popularity; this connection is more tenuous for autocrats. If the United States takes a position that is unpopular with the target country's electorate, it may be politically costly for a democratic leader to vote in support. Furthermore, leaders who face domestic criticism for being too closely aligned with the United States—for example, because they have accepted IMF tutelage of their economic policies, or have supported U.S.-led military operations—may find symbolic votes in the UNGA a welcome opportunity to deflect criticism by demonstratively following public opinion. Most autocrats, most of the time, rely on the support of a narrow coalition of elites to retain their positions, so they are largely insulated from the pressure to conform to public opinion. A selectorate theory predicts that in this context, autocrats should be more supportive of U.S. policy on average, they should be more willing to change position to accommodate U.S. preferences, and they should receive a larger share of the rewards (Bueno de Mesquita and Smith, 2009). Democratic leaders will more frequently be

opposed to the U.S. position, and may be willing to disrupt their relationships with the United States in order to take a symbolic position; autocrats, in contrast, rarely have an incentive to do so.

The literature is similarly divided about whether democracies are more or less willing than autocracies to change their positions as a result of foreign influence. Perhaps the most closely related influence strategy to the one studied here is trade sanctions, and it is a widely accepted finding in the sanctions literature that democracies are more likely than non-democracies to make concessions in response to sanctions or threats of sanctions (Hufbauer et al., 2007; McLean and Whang, 2010; Whang, 2010). Since most sanctions are initiated by the United States and most targets are developing countries, the empirical domain for these studies is quite similar. The most common theoretical explanation for this pattern is that trade sanctions affect the welfare of ordinary citizens more than that of elites, so political regimes that are responsive to citizen interests should be more vulnerable to trade sanctions than those that have narrow bases of support. Saddam Hussein's regime in Iraq is a notorious example, which resisted UN sanctions at a staggering cost to the population, and even found ways to use the sanctions to build its clientelistic network by rationing access to consumer goods. Intuitions from the sanctions experience may not carry over to foreign aid, however, because the benefits of foreign aid, particularly in authoritarian countries, accrue more to regime insiders than to the population as a whole.

On the other hand, arguments about the recalcitrance of democracies have been made in terms of audience costs, veto players, and leaders' reselection incentives. A prominent thread in the literature on international conflict argues that democratic leaders are less willing to back down in crises because they are subject to audience costs, and this has been linked to a lower incidence of these crises involving democracies, and to a higher probability that democracies prevail in crises (Fearon, 1994; Schultz, 2001; Leventoglu and Tarar, 2005; Tomz, 2007). Similarly, the literature on two-level games concludes that countries with constitutional limits to executive authority have increased bargaining power, but are more likely to fail to reach agreement under incomplete information (Putnam, 1988; Tarar, 2001). Both effects should make democracies less likely to adjust their voting strategies to accommodate U.S. pressure.

A selectorate perspective similarly has implications for which countries should be most suscep-

tible to U.S. influence attempts. On this view, democratic leaders retain their tenure by providing public goods that are enjoyed by the electorate as a whole, while autocratic leaders survive in office by providing targeted private goods to narrow coalitions of supporters (Bueno de Mesquita et al., 2003). Symbolic actions in the United Nations are a classic public good, as is foreign policy in general, because it is non-rival in consumption and non-excludable. The foreign aid that the United States ties to these voting decisions, on the other hand, represents slack resources that autocratic governments tend to use to reward their supporters and build clientelistic networks that support the incumbent. Consistent with this interpretation, recent studies have found that receipt of foreign aid significantly increases the expected tenure of autocratic leaders, but has no similar effect on the survival of democratic leaders (Bueno de Mesquita and Smith, 2010). Pandering to U.S. preferences is less costly to autocrats than to democratic leaders, because they have weaker incentives to represent the preferences of the population, and the economic support that the United States offers in return is more valuable to autocrats, so autocrats should be more willing to accommodate U.S. preferences.

The literature does not provide an expectation about whether the United States should be more or less eager to use foreign aid to reward or punish democratic recipients, but incorporating the politics of foreign aid in the United States into our account provides the building blocks for such an argument. Foreign aid is supported by a coalition that includes members of Congress with altruistic and *realpolitik* motivations, and both sets of concerns are reflected in U.S. foreign aid allocations (Poe and Meernik, 1995; Apodaca and Stohl, 1999; Demirel-Pegg and Moskowitz, 2009). Democratic voters tend to support foreign aid that is need-based, development-oriented, delivered to countries with attractive political regimes and channeled through international organizations; Republican voters generally prefer aid that is targeted to American strategic allies, that is connected to explicit foreign policy quid pro quos, and that is disbursed bilaterally (Milner and Tingley, 2010, 2011). In order to achieve these multiple objectives, Congress has developed a detailed aid appropriation process that allows members to influence foreign aid commitments, but has also delegated substantial discretion to the executive branch to manipulate aid disbursements. The executive branch can use this discretion to buy votes in the UN General Assembly, and the 1985 law authorizes it to do so. In practice, however, some deviations from appropriated levels are more

politically costly than others, and more likely to motivate Congress to reduce executive discretion in the future. In particular, it is controversial to provide foreign aid to some autocratic countries, so when the State Department searches for a country whose vote it could buy by offering a short-term infusion of foreign aid, it looks first for democracies. As a result, democracies are more likely to be given rewards when they vote in support of U.S. positions.

On the other hand, the domestic politics of U.S. foreign aid also ensures that it is costly to withhold aid that has been committed to autocratic countries. Because it is more controversial to aid autocracies, the set of autocracies that receive substantial aid commitments is limited to countries that play particularly important roles in U.S. foreign policy. Recent examples include Egypt under Mubarak and Pakistan under Musharraf; examples during the Cold War included Zaire under Mubutu and the Philippines under Marcos. Many of these regimes take public postures that are critical of U.S. foreign policy—in recent years, Pakistan and Egypt frequently voted against the United States in the UN—but they play important roles in U.S. policy in other ways, often as regional anchors of U.S. influence. In addition, foreign aid generally plays a key role in guaranteeing political stability in these fragile authoritarian states, so that withdrawing it could cost the United States a reliable regional supporter and bring a more oppositional regime to power. Under these circumstances, the credibility of U.S. threats to withdraw support over acts of symbolic defiance would be limited, and such threats are rarely made (Carter, 2011).

Three reasonable interpretations of democratic voting in the UN emerge. Democracies may vote with the United States because they share similar interests, because they are more vulnerable to U.S. influence attempts, or because they are more likely to be punished or rewarded for their votes. Disentangling the hypothesized effects requires that we simultaneously estimate sincere voting preferences, target country susceptibility to influence attempts, and the credibility of those attempts, so we turn next to this problem.

### **3 Vote Buying in the United Nations**

An extensive quantitative literature beginning in the 1960s examines voting patterns in the UN General Assembly (Alker, 1964; Russett, 1966; Keohane, 1967; Newcombe, Ross and Newcombe, 1970; Hagan, 1989; Kim and Russett, 1996; Voeten, 2000), and a smaller, related literature has

sought to identify when and how major powers use foreign aid to buy votes (Wittkopf, 1973; Rai, 1980; Kegley and Hook, 1991; Wang, 1999). However, despite the fact that it has been official U.S. policy to link aid to designated important votes since the mid-1980s, convincing quantitative evidence of this linkage remains elusive. Consensus has been hampered by mixed findings and the absence of a clearly specified model of vote buying (Rai, 1980; Kegley and Hook, 1991; Wang, 1999). Furthermore, correlations that arise can be explained in two distinct ways: UN voting may be associated with foreign aid because foreign aid is linked to votes, or voting may reflect sincere foreign policy preferences, and aid donors prefer to contribute resources to like-minded governments that have similar foreign policy objectives.

The hypothesis that UN voting affects foreign aid is plausible—at least in key votes that attract substantial attention from donors—given what we know about the political biases and determinants of aid flows. Need-based criteria play an important role in determining aid flows, as do broad political objectives such as promoting democracy and human rights, but it is well established that the political agendas of the donors are critical and shift aid away from need-based allocations (Boone, 1996; Alesina and Dollar, 2000; Collier and Dollar, 2002). Studies specifically focused on the distribution of aid have shown that aid is strongly related to the geopolitical interests and foreign policy preferences of the donors (e.g. Maizels and Nissanke (1984); Boone (1996); Cashel-Cordo and Craig (1997); Schraeder, Hook and Taylor (1998); Alesina and Dollar (2000); Alesina and Weder (2002)). Studies that compare the aid allocations of multiple donors find that the reasons for giving aid vary enormously and are heavily influenced, for example, by the donors’ colonial ties (Svensson, 1999; Alesina and Dollar, 2000; Alesina and Weder, 2002; Neumayer, 2003). If these relationships are in fact strategic, they should hold most strongly for aid from the United States, which has the most far-flung foreign policy commitments, and they should apply particularly for the set of votes that the United States State Department designates as “important votes.”

A number of studies have found associations between UN voting and U.S. foreign aid (Wittkopf, 1973; Rai, 1980; Wang, 1999). In contrast, Kegley and Hook (1991) find little evidence that the explicit linkage between UNGA voting on important issues and aid disbursements established in the 1980s has any effect on voting behavior. Most early work did not distinguish between important votes and ordinary votes, although Wittkopf (1973) defined “important” votes as those in which

the U.S. and Soviet Union disagreed, and Wang (1999) focuses on votes identified as important by the U.S. State department. Dreher, Nunnenkamp and Thiele (2008) disaggregate aid into categories and use an instrumental variable approach that addresses some of the ambiguities in the previous literature, and find evidence in favor of a vote-buying hypothesis. Using an alternative identification strategy, Kuziemko and Werker (2006) narrow the interpretation of their empirical results by focusing on temporary membership in the UN Security Council, and find that U.S. foreign aid increases significantly when a country becomes a temporary UNSC member, and drops off again after membership lapses.<sup>2</sup>

In addition, a number of studies have found associations between UN voting and aid from various donors and international institutions (Barro and Lee, 2005; Oatley and Yackee, 2004; Thacker, 1999; Stone, 2004). Indeed, one of the most robust findings about participation in IMF programs is that IMF lending is significantly shaped by the geopolitical preferences of the countries that contribute the most resources, particularly the United States. UN voting is rapidly becoming recognized as an important control variable in studies that seek to explain participation in IMF programs, and as a useful instrument for selection-controlled studies of their effects, because UN voting is presumably exogenous with respect to outcome variables such as economic growth (Steinwand and Stone, 2008). Thacker (1999) finds that increasing the similarity of a country's profile of votes in the United Nations General Assembly to those of the United States over time is associated with a higher probability of IMF lending. Barro and Lee (2005) find that IMF loans are associated with similarity to U.S. voting patterns in the UN and economic ties with the United States. Andersen, Harr and Tarp (2006) use important UNGA votes to explain the probability that a country obtains an IMF program, and Kilby (2010) uses important UNGA votes to explain the distribution of World Bank loans.

In sum, there is substantial reason to believe that vote buying occurs in the UN General Assembly, although this has not been definitively established. However, none of the existing work addresses the problem of strategic interdependence. The U.S. strategy of linking aid disbursement to voting on important issues should, if effective, induce strategic voting behavior on the part of recipients, which should make patterns more difficult for an analyst to observe. To fill this gap, we

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<sup>2</sup>Dreher, Sturm and Vreeland (2009) find a similar effect of temporary membership in the UN Security Council on World Bank loans.

employ a strategic estimator that allows us to explicitly model the effects of U.S. linkage strategies on UN voting. Furthermore, our model allows us to estimate the effects of recipient characteristics such as democracy on voting preferences, on the vulnerability of target governments to influence attempts, and on the credibility of those attempts, which allows us to isolate the three causal pathways hypothesized to explain the votes of democratic countries in favor of U.S. positions.

## 4 A Strategic Estimator for UN Voting

Previous studies of UN voting have not been unable to disentangle strategic and sincere voting because they have not explicitly modeled voting as a strategic choice. There are two important methodological issues here. First is the familiar problem of endogeneity, and the substantive concern is that UN voting may be associated with U.S. aid either because countries comply with U.S. preferences in order to obtain aid, or because countries that sympathize with U.S. positions in the UN are likely to receive aid irrespective of how they vote. Our approach deals with endogeneity by estimating equations for U.S. aid allocations and for UN voting decisions and by making identifying assumptions, as in an instrumental variables approach, but it takes advantage of the strategic structure of the model as part of the identification strategy. The second issue is strategic misspecification bias, and the substantive concern is that the relationships among preferences, voting and aid allocations may depend upon strategic calculations. In particular, we argue that the credibility of U.S. influence strategies varies systematically across countries, which affects the relationship between aid and UN voting. Estimators that fail to account for how the U.S. influence strategy induces strategic recipient behavior will be biased and inconsistent; the effect is equivalent to omitted variable bias (Signorino and Yilmaz, 2003).

Strategic effects are important because the effectiveness of U.S. influence attempts depends upon their credibility. Suppose that the United States threatens to reduce aid to a developing country if it votes against the U.S. position on an important vote, and we observe that the country defies the U.S. demand. Two inferences are possible. It may be the case that the country's leadership is highly motivated to resist U.S. policy preferences. Alternatively, the government might not be strongly opposed to the U.S. position, but the leadership might calculate that the U.S. threat is unlikely to be carried out. It is impossible to accurately estimate either government preferences

or the effectiveness of influence attempts without considering the effect of variations in credibility. Consequently, we use a strategic choice model that can capture this effect.

The structure of the statistical model we estimate is depicted in Figure 1. First, the recipient country decides whether to vote for or against the U.S. position. If the recipient votes against the United States on an important vote, the United States decides whether to punish it with significant aid reductions. If the recipient's vote coincides with the U.S. position, the United States chooses whether to reward it with a significant increase in aid flows.<sup>3</sup> The model imposes the simplest possible structure that allows for strategic voting and for threats and promises to be linked to aid flows.

In order to convert the formal model into a statistical model, we add a stochastic component to the utilities of the actors, which gives us a distribution over the four possible outcomes of the model. We characterize this disturbance as agent error, which seems appropriate to our context (Signorino, 1999, 2003). Agent error might occur in the voting stage, for example, because the UN ambassador is not informed, or not informed in a timely manner, of the preferences of the leader, or because disagreements within the government give the ambassador discretion to vote his or her own preferences. Agent error might occur at the disbursement stage because of a disagreement between the executive and legislative branches of government, because of an interagency dispute, or because of some other intervening variable that is orthogonal to UN voting, such as the recipient country's policies regarding human rights, trade or the environment.

[Figure 1 about here.]

The recipient and the United States make decisions in the game by weighing their expected utilities for each possible action. The model explicitly allows the recipient's voting decision to be affected by the anticipated alteration of aid flows by the United States. We start from the last move in the game, the United States' decision to punish, reward or do nothing in response to the recipient's vote, and move up the game tree to show the players' expected utility calculations.

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<sup>3</sup>Aid disbursements fluctuate for a variety of reasons that are not related to UN voting, so it would not be appropriate to use the difference between commitments and disbursements as a direct measure of punishments and rewards. Instead, we estimate an equation for predicted disbursements that includes current commitments, lagged disbursements and fixed effects, which has an R-squared of .99. We specify punishments and rewards as dichotomous, and we use the conservative strategy of coding a case as a punishment or reward only if it is outside the 95 percent confidence interval. The discussion of our dependent variables below provides more details.

For each vote, or observation,  $i = 1 \dots n$ , the recipient decides whether to vote for or against the U.S. position. If the recipient does not vote with the United States, the United States makes the following comparison<sup>4</sup>

$$p_{i,4} = U_{US}^*(Pun|Disagree) > U_{US}^*(\neg Pun|Disagree) \quad (1)$$

$$= U_{US}(Pun|Disagree) + \epsilon_4 > U_{US}(\neg Pun|Disagree) + \epsilon_3. \quad (2)$$

Assume the  $\epsilon$  terms are independent and identically distributed (i.i.d.) Type 1 Extreme Value, which yields

$$p_{i,4} = \frac{\exp^{U_{US}(Pun|Disagree)}}{\exp^{U_{US}(Pun|Disagree)} + \exp^{U_{US}(\neg Pun|Disagree)}} \quad (3)$$

$$p_{i,3} = 1 - p_{i,4}. \quad (4)$$

In deciding whether to reward the recipient when the recipient votes in agreement, the United States makes a similar comparison which leads to expressions almost identical to those in equations 1–4. The recipient makes its decision to vote with the U.S. position or not by calculating, with some error, its utility for voting in agreement and disagreement with the United States. The recipient's utility is a function of its preferences over outcomes and the probability that the United States will subsequently reward or punish it with aid. The comparison of the expected utilities for voting for or against the U.S. position take the following form:

$$p_{i,2} = U_R^*(Agree) > U_R^*(Disagree) \quad (5)$$

$$= U_R(Agree) + \epsilon_2 > U_R(Disagree) + \epsilon_1. \quad (6)$$

If we again assume that the  $\epsilon$  terms are i.i.d. Type 1 Extreme Value, we obtain

$$p_{i,2} = \frac{\exp^{(p_{i,6}U_R(Agree,Rew)+p_{i,5}U_R(Agree,\neg Rew))}}{\exp^{(p_{i,6}U_R(Agree,Rew)+p_{i,5}U_R(Agree,\neg Rew))} + \exp^{(p_{i,4}U_R(Disagree,Pun)+p_{i,3}U_R(Disagree,\neg Pun))}} \quad (7)$$

$$p_{i,1} = 1 - p_{i,2}. \quad (8)$$

We utilize the statistical backwards induction technique (SBI) developed by Bas, Signorino and Walker (2007).<sup>5</sup> The SBI technique is employed by separately estimating the logit equation for each possible decision in the game rather than simultaneously estimating the full system of equations.

<sup>4</sup>Note that *Pun* stands for punish, *Rew*, for reward, *Agree* for agreement with the U.S. position, and *Disagree* for disagreement with the U.S. position. The numbers on the probabilities and  $\epsilon$  terms correspond to the numbers assigned to the players' actions in figure 1.

<sup>5</sup>Also see Carrubba, Yuen and Zorn (2007) for a very similar approach.

Thus, we first estimate the United States’ utility for punishing disagreement (i.e.,  $X_{24}\beta_{24}$ ) and the United States’ utility for rewarding agreement (i.e.,  $X_{26}\beta_{26}$ ) with two logit regressions. Second, we estimate the recipient’s utilities over all possible outcomes (i.e., equation 8). The probabilities over the U.S. actions in equation 8 (i.e.,  $p_{i,3}-p_{i,6}$ ) are obtained from the two regressions that estimated the U.S. utilities.<sup>6</sup>

We take several steps to ensure that the fact that there are multiple important votes in each year is not a problem for our analysis. First, we sample by year when we calculate the bootstrapped standard errors to ensure that the standard errors are not affected by the lack of independence among votes in each year.<sup>7</sup> Second, to ensure that no bias is introduced into our results by including multiple votes in each year, we randomly sample one vote from each year for each recipient country in the sample and run our model on this reduced set of votes. This leads to a sample size that is roughly one-third the size of the overall sample, but none of the results change when we apply this procedure. Thus, including multiple votes per year does not appear to affect either our standard errors or estimated coefficients in any substantial way.

Below, we specify the utilities of the recipient and the United States with some of the same variables. Consequently, to identify the model both the recipient and the United States must have the utility normalized to zero for at least one outcome that is possible at its initial information set and affects its utility.<sup>8</sup> In addition, no regressor can be estimated in every utility. We normalize the recipient’s utility for not being punished after voting in disagreement (a sincere opposition vote with no consequences) and the U.S. utility for not rewarding the recipient following a vote in agreement (harmony) to zero. Thus, all estimated coefficients for each player in each of the remaining utilities are interpreted relative to these outcomes. Normalization of a player’s utility for one possible outcome in the strategic logit model is analogous to the standard method of identifying

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<sup>6</sup>SBI is attractive in our context because it ensures that the likelihood is concave, so our results reflect the true maximum likelihood estimate. Additionally, computational time is decreased significantly relative to simultaneous estimation of the full system of equations. The disadvantage of SBI is that the standard errors in the recipient’s estimates are biased downwards because the probabilities are treated as fixed. Following the recommendations of Bas, Signorino and Walker (2007), we correct the standard errors using the bootstrap. Although the standard errors for the U.S. utilities are not affected by this issue, we also bootstrap them to be conservative. 500 bootstrap iterations are run in each model.

<sup>7</sup>This is analogous to estimating clustered “robust” standard errors, although it often yields more conservative estimates. We also tried sampling by vote, which yields similar results.

<sup>8</sup>In this game, an initial information set for each player is the node at which it makes its first move in the game (Lewis and Schultz, 2003).

a multinomial logit model. This model effectively captures strategic voting and allows threats and promises about important UNGA votes to be linked to aid flows.

## 5 Data

We utilize data on aid flows from the United States, voting by the United States and U.S. aid recipients in the UNGA, and data on other variables of interest. The data on aid flows from the United States to potential recipients are published by the OECD Development Assistance Committee and cover 1960–2001. The data include both Official Development Assistance (ODA) and Official Assistance (OA) disbursements in millions of U.S. dollars.

We utilize the *Documenting Votes in the UN General Assembly, v2.0* data set compiled by Voeten (2005), and we focus on votes defined as important by the U.S. State Department in its annually published *Report to Congress on Voting Practices in the United Nations*.<sup>9</sup> The temporal domain starts in 1985, the year in which U.S. law first required the State Department to report how countries vote on issues that are regarded as important to U.S. interests, and ends in 2001. The United States is never absent for important votes. Votes in which the recipient country is absent are excluded.

### 5.1 Regressors

We utilize several regressors to estimate the utilities of the recipient countries and the United States over the outcomes in the model, including variables specific to the recipient country and variables that characterize the relationship the recipient has with the United States. The variables specific to the recipient are Polity IV scores, GDP per capita, and the political orientation of the executive (Keefer, 2007). Both GDP per capita and bilateral trade flows are measured in 1996 U.S. dollars to ensure comparability across the two measures and over time.<sup>10</sup> To measure the political orientation of the executive, we create two binary variables that indicate whether a recipient country’s executive was left of center and whether it was right of center, respectively. The excluded category includes

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<sup>9</sup>We thank Jun Xiang, who extended the Voeten data to include all important votes, and shared his data with us, and Christopher Kilby, who provided the data used in Kilby (2010) for comparison. We compared the two datasets and found few differences.

<sup>10</sup>Bilateral trade is measured in millions of 1996 U.S. dollars.

governments that are centrist and those whose orientations are not clear.

[Table 2 about here.]

To model bilateral relationships we include bilateral trade flows and a variable that indicates whether the recipient has an alliance with the United States (Oneal and Russett, 2005). In addition, to model specific characteristics of particular votes, we include a variable that indicates whether the United States voted “No.” “Yes” and “No” votes are qualitatively different, because UNGA proposals almost always pass, so “No” votes find the United States in the minority, and usually badly isolated. In the late 1970s, after the United States lost control of the UNGA agenda to the Group of 77, the United States began to vote “No” on most roll calls, where it had previously cast a majority of “Yes” votes. Roll calls on which the United States votes “No” tend to be embarrassing to U.S. diplomacy, so the State Department is particularly interested in identifying a few stalwart supporters to provide cover. The United States votes “No” on almost 75% of State Department-identified important votes in the sample.

## 5.2 Dependent Variables

Our dependent variables measure whether countries voted with or against the U.S. position on important votes in the UNGA and whether there were significant deviations of U.S. aid disbursements from the trend. First, we utilize voting records on important votes and create a binary variable that indicates whether the votes of the United States and recipient countries coincide on each vote of interest. Thus, if the United States and the recipient both vote “Yes” or both vote “No,” this variable equals 1, while it takes a value of 0 otherwise.<sup>11</sup>

[Table 1 about here.]

Table 1 shows the distribution of important votes across a number of issues. The table supports two conclusions. First, important votes are distributed across a diverse set of issues. Many of the important votes are specific to countries that have played a key role in U.S. foreign policy, e.g., Iraq, while others address policy areas, e.g., WMD. Second, the table shows that there is no one issue

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<sup>11</sup>We treat “Abstain” as agreement with the United States position, as the United States works hard in many cases to get countries to abstain on particularly sensitive issues. Although we think this is the right choice substantively, we also tried treating abstentions as disagreements and did not find markedly different results.

that dominates the set of important votes. Specifically, while issues related to Israel and Palestine are among the most frequent, comprising over 15% of the votes, several other issues receive a similar degree of attention. Human rights issues are the most common occurrence in the set of important votes, comprising almost 25% of the votes.

Creation of the aid disbursement variables requires care to ensure that we do not treat aid fluctuations that result from temporal trends such as inflation or exogenous factors unrelated to particular UN votes as punishments or rewards. Note that we need two dependent variables, one to indicate whether the United States punished the recipient with a significant aid reduction following conflict on an important vote, and a second to indicate whether the United States rewarded the recipient with a significant increase in disbursement following agreement. For this purpose we could have used a naive punishment variable, such as one that takes a value of 1 if aid disbursements in a given year are lower than aid commitments. However, such a measure would include numerous false positives, because aid disbursements generally lag behind commitments for a variety of reasons that are unrelated to UN voting.

We choose a conservative coding strategy to avoid imputing political motivations to random fluctuations, coding “punishments” and “rewards” only when aid disbursements fall outside the 95% confidence interval of the expected level. We estimate the predicted aid disbursement for each country in each year with a lagged dependent variable, fixed effects model. This approach has important advantages. We use the information about projected disbursements contained in aid commitments, so our variables can be interpreted as discretionary deviations by the executive branch from appropriated aid levels. In addition, our estimation procedure explicitly controls for temporal trends in disbursement, and the fixed effects control for unobserved country-level effects. For each country  $i$ , aid at time  $t$  is estimated using the following specification

$$AID_{i,t} = \beta_i + COM_{i,t}\beta_1 + AID_{i,t-1}\beta_2 + \epsilon_{i,t}. \quad (9)$$

The inclusion of more than one lag has no effect on the fit or predictions of the model, so we include only the first lag. The model explains the variation in yearly aid disbursements across recipients very well (R-squared  $> 0.99$ ), but more variance in aid disbursements remains to be explained for each recipient over time (R-squared  $\approx 0.53$ ). The bivariate correlation between actual aid disbursements and predicted aid disbursements is 0.85, which indicates that the model’s

predictions are quite accurate.

[Table 3 about here.]

We utilize the model shown in Table 3 to produce predicted aid disbursements with 95% confidence intervals for each recipient in each year. The punishment variable takes a value of one if the actual aid disbursement is below the lower bound of the 95% confidence interval, and zero otherwise, and the reward variable takes a value of 1 if the actual disbursement is greater than the upper bound of the 95% confidence interval, and zero otherwise. Our approach is scale invariant, so the construction of the dependent variable does not lead to spurious inferences, for example, that countries that receive relatively high levels of aid (e.g., Israel) are more likely to receive punishments or rewards.

The distribution of data across the four possible outcomes in the model is as expected: punishments and rewards are rare, because we have defined them conservatively. Punishment by the United States following disagreement on an important vote happens only about 3% of the time, while a decision not to punish takes place around 63% of the time. Recipients are rewarded for voting with the US 2.4% of the time, while cooperative recipients are not rewarded in 31.5% of the observations in the data. This distribution is similar to that found in other dependent variables in international relations that measure punishments (e.g., economic sanctions). The United States uses punishments and rewards selectively, even when we limit our analysis to important votes.

## 6 Results

The results of the full strategic model are presented in Table 4. The model correctly predicts over 84% of the observations, which is an improvement of 34% over predicting the modal category. All of the columns of coefficients result from the same model, and each column in the table contains the estimates for either the recipient's or the U.S. utility for a particular outcome. For example, the first column contains the estimates for the recipient's utility for being punished after voting in disagreement with the United States. As noted above, all estimated coefficients for the recipient are interpreted relative to the utility for disagreement without consequences, so the coefficients in the first column represent the cost of aid withdrawn. Similarly, all coefficients for the United States

are interpreted relative to the utility for agreement with no reward, so the coefficients in the last column represent the cost/benefit of providing rewards when recipients accommodate U.S. vote choices. We first discuss the U.S. utility for punishing and rewarding, and then discuss recipient behavior. In general, we base our discussion on the substantive effects reported in Tables 5–6 and Figures 3–4, because the estimated coefficients in Table 4 are not straightforward to interpret.

[Table 4 about here.]

## 6.1 Punishments and Rewards: U.S. Behavior

Table 5 contains the probability that the United States punishes following disagreement and rewards following agreement at various levels of the statistically significant variables. The first row of Table 5 shows the probability of punishment and reward when all variables are held at their median values, and each subsequent row alters the value of one variable to isolate its effect on the predicted probabilities. Thus, the second row shows the probability of punishment and reward when the recipient is a highly autocratic country (Polity Score=-9) and all other variables are held at their median values. Specifically, the second column of Table 5 shows the change in the probability of punishment relative to the median case (i.e., the first row), and the third column expresses this as a percentage change in probability. Columns 4-6 repeat this procedure for the probability that the United States rewards the recipient country when it votes in agreement. Thus, the second row indicates that a highly autocratic recipient is 33% less likely to be punished if it opposes the United States and 63% less likely to be rewarded if it cooperates than in the median case (Polity Score=-1). The third row indicates that a democracy (Polity Score=9) is 69% more likely to be punished when it votes against the United States and 263% more likely to be rewarded when it votes in support than the median case.

The baseline predicted probabilities in the first row of Table 5 reflect the fact that the United States uses aid-based punishments and rewards sparingly, and the fact that we have defined our reward and punishment variables conservatively. The choice of carrots or sticks depends on whether the United States votes “Yes” or “No.” In the baseline case, when the United States votes “No” because it is in the minority, the probability that the United States punishes a country that deviates from the preferred U.S. position is 0.042 when all variables are held at their median or mean, while

the probability that it rewards compliance is only 0.008. In contrast, when the United States votes in favor of a resolution, it is more likely to reward members of its coalition (.042) than chastise its opponents (.005). The different U.S. strategy reflects a basic difference in the kinds of issues on which the United States finds itself in the minority: the 26.5% of important resolutions that the United States supports are not as contentious as the 73.5% that it resists. Important votes on which the United States votes “Yes” pass by large margins; on the other hand, when the United States votes “No,” it is usually badly isolated, so there is great symbolic value to attracting some support. The United States is five times more likely to use carrots than sticks when it is trying to promote an important resolution, and eight times more likely to use sticks rather than carrots when it is isolated and trying to resist one. The distinction between “Yes” and “No” votes is one that the literature has not previously made, perhaps because it has not distinguished between punishments and rewards.

[Table 5 about here.]

The U.S. decision to use aid as an inducement depends on the recipient’s level of development and its trade relationship with the United States. Poor countries are much more likely to be punished when they oppose the U.S. position, while more developed countries are more likely to be rewarded when they offer support. This suggests that punishments are less costly to apply to weak countries, which are unable to retaliate, and the United States prefers to use positive incentives with more developed countries that are better able to resist. Trade exposure has a uniform effect of reducing the credibility of U.S. aid linkages: countries that trade substantially with the United States are less likely to be punished or rewarded for their voting behavior. This reflects the logic of vote buying: rational actors buy the cheapest set of votes to build their coalitions. Some of this effect is attributable to the effects of scale, since trade is measured in millions of dollars, and vote buying is least expensive when it is directed at small countries whose votes are most easily bought. Furthermore, trade creates interdependence, which lowers the salience of foreign aid in bilateral relations, and apparently makes the United States reluctant to tie aid to UN voting.

The results indicate that the left-right orientation of the executive also significantly affects the choice between positive incentives and sanctions. Relative to regimes with centrist executives, the United States is less likely to punish regimes with right-wing executives when they vote in

opposition and less likely to reward regimes with left-wing executives when they vote in support. Table 5 indicates that countries with right-wing executives are 50% less likely to be punished when they oppose the United States. The United States appears to be averse to punishing right-wing governments for their votes in the United Nations because right-leaning governments support policies that the United States finds beneficial on a wide range of other issues, such as economic reform. On the other hand, aid recipients with left-wing executives are 38% less likely to be rewarded by the United States when they support its position. This suggests that the United States has been reluctant to use aid policy to support left-wing governments, even when they cooperate with U.S. policy. The effect of U.S. reluctance to reward left-wing governments and to punish right-wing governments is that both face weaker incentives to comply with U.S. preferences than centrist governments. We probe this relationship further below, where we analyze subsamples of the data produced during and after the Cold War.

Our central results reveal that the United States conditions its behavior on regime type in significant ways, but not in the way the literature typically supposes. The results in Table 5 indicate that U.S. promises and threats to condition aid on UN voting are most credible for the set of democracies. The United States is reluctant to punish autocracies, perhaps because they are more dependent on aid flows to maintain power (Bueno de Mesquita et al., 2003; Bueno de Mesquita and Smith, 2010), and only receive aid in the first place if they are important to U.S. foreign policy (Schraeder, Hook and Taylor, 1998). The United States is also reluctant to reward autocracies with increased aid, perhaps because giving aid to dictators is unpopular in Congress. These findings stand in contrast to the argument of Bueno de Mesquita and Smith (2007) that aid is directed disproportionately to authoritarian countries precisely because their narrow bases of support make it less expensive to purchase policy concessions from them. If this were the case, autocracies should be most likely to be punished when they oppose the United States and rewarded when they comply; but we find that *democracies* are more likely to be punished for non-cooperation and rewarded for cooperation. It is a striking finding that the United States is less nimble in its use of aid to reward and punish autocracies, and as we discuss below, this makes them less supportive of U.S. positions. The present analysis cannot offer a direct test of alternative mechanisms to explain this finding, but our conjecture is that aid to autocracies is tied to particular, long-term policy goals such as

regional stability or military basing rights, and is provided primarily to prevent regime change. If this is the case, it could be excessively costly to use this aid to influence UN voting.

[Figure 3 about here.]

Although we cannot directly test this conjecture, the nonlinear effects of the variables allow us to probe a bit further. Figures 3(a) and 3(b) plot the effects of varying development and regime type simultaneously.<sup>12</sup> As noted above, a low level of development makes punishments more likely and rewards less likely. Figure 3(a) shows that the United States is substantially more likely to withhold aid from a relatively poor recipient than from a more highly developed recipient, and from a democracy than from an autocracy. The predicted probability is an exponential function of the sum of the covariates, so the effect of regime type is strengthened in the set of poor recipients. The slope of the curve is much steeper when countries are poor, indicating that poverty is a reason for the United States to be more reluctant to punish authoritarian countries rather than democratic ones. Relatively poor autocratic regimes have high aid dependency ratios (aid to GDP) and may be vulnerable to political instability if aid is cut off. Consequently, this finding suggests that the U.S. disinclination to punish authoritarian countries is largely attributable to concerns about political stability.

Rewards have a similar interpretation, which reflects the fact that rewards and punishments are strategic substitutes. Figure 3(b) demonstrates that democracies are more likely than autocracies to receive a reward if they cooperate by voting with the United States, and the probability that they receive a reward increases as their income increases. Again, the interaction between these effects is important. Poor countries and autocracies are unlikely to be rewarded under any circumstances, but the effect of development on the probability of being rewarded increases rapidly as countries become more democratic, and the effect of being democratic increases rapidly as countries become more developed. This suggests a political interpretation. Democratic leaders often have electoral incentives to oppose U.S. policy, and as the level of development of their countries increases, they become increasingly resistant to U.S. pressure. As a result, using negative incentives becomes less attractive, and rewards increase because they represent a substitute for sanctions.

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<sup>12</sup>Note that GDP per capita and trade were divided by 1000 and 10000 respectively to make estimation computationally easier. Thus, interpretation of the axis in all of the figures should be adjusted accordingly.

The case of Nicaragua in the early 1990's illustrates the way in which the United States uses aid disbursements to punish and reward relatively poor democracies. In 1990, Nicaragua conducted multiparty elections that were won by the conservative opposition party, led by Violeta Chamorro. Since Nicaragua was a poor democracy (Nicaragua's Polity score was 6 in 1990), we expect both punishments and rewards to be more likely than in the average country. Nicaragua's GDP per capita hovered around \$2000 in the early 1990s, which is well below the mean of \$5000 in the sample. In 1991 the Chamorro government voted in support of the United States on resolution R/46/82A, which pertained to the Middle East peace process, and was rewarded. The United States had taken note of a much more cooperative Nicaraguan government (Serafino, 1990), and subsequently released additional aid funds after observing cooperation in several areas as well as a rare instance of cooperation in the UNGA.

In the following year, the Chamorro government took a more oppositional stance relative to U.S. interests in the UNGA, voting against the U.S. position on all but one important vote. Chamorro's opposition to U.S. positions, including on votes involving Cuba, was apparently intended as part of an effort to build bridges to the Sandinista opposition. The sole exception was a resolution that the United States supported on the situation in Bosnia, which passed unanimously. In response to this lack of cooperation, the United States reversed its aid policy towards Nicaragua in 1992 and punished the Chamorro government with significant aid reductions.<sup>13</sup> The same pattern continued into 1993, with Nicaragua voting against a number of important resolutions and the United States continuing to withhold aid. Pakistan is an instructive example, because it experienced a transition to democracy and another back to autocracy within the time period we study. Pakistan was autocratic from 1984–1987 (i.e., Polity score of -4 to -7), was democratic from 1988–1998 under Benazir Bhutto and Nawaz Sharif (i.e., Polity score of 7 to 8), and reverted to autocracy after a coup led by Pervez Musharraf in 1999 (i.e., Polity score of -6). The expectation of our model is that Pakistan should be punished and rewarded more frequently while a democracy than while it was authoritarian. Figure 2 shows that this is indeed the case. The United States punished or rewarded Pakistan in only one of seven years of non-democratic government, while it punished (6 times) or

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<sup>13</sup> "Forgotten Central America," *The New York Times*, May 26, 1992: 16; Clifford Krauss, "U.S. Cooling Toward Sandinistas' Successors," *The New York Times*, September 3, 1992: 3.

rewarded (3 times) Pakistan during nine of the eleven years in which it was a democracy.<sup>14</sup>

[Figure 2 about here.]

Pakistan was a good candidate for punishment because it frequently voted against the U.S. position on important issues. Pakistan voted with the United States position only 24% of the time, well below the sample mean of 35%, so Pakistan is a good case to illustrate the effects of regime changes on U.S. aid disbursements. In the three years in which Pakistan was rewarded it voted with the United States on several important votes that pertained to the Israeli-Palestinian conflict (e.g., R/44/40A in 1988). In fact, it voted with the United States almost 35% of the time in 1988, 1991, and 1993. In contrast, during the seven years in which it was punished, it voted with the United States only 23% of the time on important votes. Several of the votes identified as important by the United States during the mid-1990s condemned nuclear testing of the kind Pakistan was conducting. For example, Pakistan voted against R/53/77G in 1997, which was one of the most popular U.S.-supported resolutions, opposed by only 8 other countries.

## 6.2 The Strategy of UN Voting: Recipient Behavior

We now turn to a discussion of recipient behavior. The model allows for voting behavior to be strategic, because voting decisions precede aid disbursements. Consequently, vote choices depend both on governments' underlying preferences and on U.S. disbursement strategies. Table 6 presents the substantive effect of each regressor on the probability that the recipient votes in opposition to the U.S. position, which can be thought of as the net effect of the regressor through the mechanisms of preferences, vulnerability and credibility. As in Table 5, the first row depicts the median case for all variables, while each subsequent row isolates the effect of changing one variable. The table indicates that democracies, more developed countries, and countries with weak trade ties to the United States are less likely to oppose the United States than autocracies, poor countries, and those with more substantial trade ties. Surprisingly, non-allies are less likely to oppose U.S. positions than are U.S. allies.<sup>15</sup> The effect of left-right partisanship is ambiguous, since the residual category

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<sup>14</sup>Note that 2001, when Pakistan received substantial aid because of the U.S. war with Afghanistan, is not coded as a reward because Pakistan's voting was uncooperative.

<sup>15</sup>The only significant coefficient involving alliances is the one for the cost to the recipient of being punished, which is higher for allies, but the predicted effects for other utilities outweigh this effect, so the net predicted effect is an

(centrists and governments with unidentified partisanship) appears to be most oppositional.

The results in Table 6 indicate that opposition to the United States is widespread on votes that it designates as important, but varies substantially depending on the U.S. position on particular issues. As we discussed above, the baseline probability that an aid recipient votes against the United States when the U.S. position is “No” is 0.88, while the probability that an aid recipient opposes a U.S. “Yes” vote is only 0.03.<sup>16</sup> The United States voted “No” on approximately three-quarters of all votes that it defined as important. When the United States votes “Yes,” it finds itself in the majority. These resolutions cover issues on which the United States takes less controversial positions and is able to craft a compromise that it is able to support. Since voting is very different on “Yes” and “No” votes, it is important to control for the U.S. position, which determines the level of recipient opposition and the U.S. propensity to punish and reward recipients.

[Table 6 about here.]

As Table 6 indicates, democracies are less likely than autocracies to oppose U.S. positions in the UNGA. We are now in a position to answer the question of why democracies are more supportive. Is this because democracies are more sympathetic to U.S. policy positions, because democracies are more vulnerable to U.S. influence attempts, or because U.S. influence attempts are more credible among the set of democracies? Our estimates indicate that democracies’ preferences are inherently more oppositional than authoritarian governments’ preferences. The coefficient of -5.63 for polity in the government’s utility for being rewarded for compliance in Table 4 indicates that as a country becomes democratic, the benefits of opposing the United States rather than complying increase. (The reference category is voting in opposition with no consequences.) This rejects the hypothesis of coincidence of preferences, and supports the argument that democracies in developing countries are more oppositional because their publics are critical of U.S. positions, and democratically elected leaders have incentives to cast symbolic votes against the United States. On the other hand, democracies are less susceptible than authoritarian governments to punishments: the coefficient of 2.75 in the first column of Table 4 indicates that the cost of punishment declines

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increase in opposition to U.S. votes. The standard errors for this prediction are very large, however, so we do not put much weight on this result.

<sup>16</sup>Since “No” is the median position of the United States, the first row represents a “No” vote with all other variables at their median.

as polity increases, holding voting behavior constant. This rejects the hypothesis that democracies are more vulnerable to U.S. influence attempts than autocracies. To the contrary, it supports the inference that autocracies are more vulnerable, because they use foreign aid as an integral part of their strategy for maintaining power. The only reason democracies are more compliant than autocracies, in spite of more oppositional preferences and lower vulnerability to sanctions, is that democracies are more likely to be punished or rewarded for their votes. This is consistent with our argument that autocracies cannot generally be punished because the aid they receive is tied to broader U.S. strategic objectives—Egypt under Mubarak was a classic example—and it is much more palatable to reward democratic countries.

[Figure 4 about here.]

This logic is reflected in a non-monotonic relationship between polity and UNGA voting. Non-monotonicity occurs in strategic models because of countervailing strategic incentives, and in this case, U.S. incentives to avoid punishing or rewarding autocracies interact with the preferences of aid recipients. The result is a non-monotonic relationship between regime type and votes against U.S. positions, which further depends on the recipient's level of development. The graphs in Figure 4 depict the relationship between wealth, regime type, and the probability of voting in opposition to the United States. Figure 4(a) depicts the case of "Yes" votes. Aid recipients generally support the U.S. position on important "Yes" votes, but relatively poor countries are increasingly likely to vote against the United States if they are not democratic. Opposition by authoritarian governments is maximized among very poor countries, which are most likely to strongly oppose U.S. preferences. However, the effect of polity is non-monotonic. Very authoritarian poor countries are highly compliant, because they have few incentives to oppose U.S. positions. Opposition increases and reaches a peak among weakly consolidated authoritarian countries (Polity Score=-4), a range in which punishments and rewards remain very unlikely. As these regimes become more democratic, however, the incentives created by the increasing probability of punishments and rewards come to overwhelm the effects of increasing opposition and decreasing vulnerability to influence, and the probability of opposing U.S. positions again declines to very low levels. This effect is due to strategic voting.

The effects of the political orientation of the government are similarly complex, and would

likewise not be adequately captured by a non-strategic model. Recall that the comparison category for aid recipients is non-compliance without punishment. The significant negative coefficient for left-leaning governments, therefore, is attributable to punishment; in contrast, when right-wing governments vote against the United States, they are unconcerned about whether they are punished. This suggests that left governments are more sensitive to the fiscal or social effects of aid reductions. On the other hand, the utility in the third column combines the effect of compliance with the effect of the reward; these effects apparently cancel each other out for left-wing governments, because there is no significant effect. Right-wing governments benefit from agreement with the United States and from being rewarded, so they enjoy a significant positive effect. For its part, the United States is averse to rewarding left-wing governments and to punishing right-wing governments for their votes in the United Nations, presumably because right-leaning governments support policies that the United States finds beneficial on a wide range of other issues, such as economic reform. The net effect of government partisanship on UN voting is a combination of these factors, and we find that both left and right governments are marginally more likely to oppose U.S. positions in the UN than moderate or unclassifiable governments, but for markedly different reasons. Left governments oppose the United States on principle in spite of the costs they bear when the United States reduces their foreign aid and the high probability that it will do so. Right governments tend to support U.S. positions, in contrast, and benefit from U.S. largesse when they do. However, when they are inclined to oppose U.S. positions, they do not face a credible threat of losing access to U.S. support.

Figures 4(c)–4(d) explore the strategic effects of rewards and punishments by illustrating how the probability of recipient opposition changes as a function of GDP per capita and trade. Figure 4(c) depicts “Yes” votes while 4(d) depicts more controversial “No” votes. Again, recipient behavior is markedly different on “No” votes than on “Yes” votes. In both cases, however, poor countries and those that have a high volume of trade with the United States are the most likely to oppose the U.S. position. Poor countries have preferences that are inherently opposed to those of the United States (Kim and Russett, 1996; Voeten, 2000). The positive coefficient in the third column of Table 4 (4.42) indicates that as countries increase in development, they come to prefer receiving U.S. rewards to voting in opposition, which implies the opposite for poor countries. As countries

become poorer, in fact, the increasing preference for opposing the United States overwhelms the fact that poor countries are more vulnerable to U.S. sanctions. The positive coefficient (9.87) in the first column indicates that the cost of aid withheld is greatest for poor countries, but they nevertheless oppose U.S. positions more frequently.

It is a counter-intuitive result that high-volume trading partners are more likely to vote against the United States. The explanation is strategic. It is not the case that U.S. trade partners are inherently more oppositional than other countries, and neither are they less vulnerable to U.S. punishments. Returning to Table 4, the coefficient in the third column (11.46) indicates that significant trade partners benefit more from being rewarded than from opposing U.S. positions. The negative coefficient (-15.86) in the first column indicates that being punished is very costly for significant trade partners. The explanation for their oppositional voting behavior, therefore, can only be that the United States is unlikely to punish or reward its major trading partners. We found above that this is the case: the United States is unlikely to punish its trading partners if they vote against it, but is also unlikely to reward them if they cooperate. We are now in a position to conclude that this outweighs the inherent sympathy and vulnerability major trading partners have towards the United States, so that the net effect of trade volume is to make them more likely to oppose U.S. positions. The substantive significance of this finding depends on the level of economic development, but trade volume has a monotonic effect that increases opposition.

### **6.3 Does Vote Buying Change with the End of the Cold War?**

Until this point we have presented results of a model that pools data from 1985 to 2001, but we now split the sample in order to ask whether the political economy of UN voting changed significantly with the end of the Cold War. The end of the Cold War might not be expected to substantially change the incentives of aid recipients, but it represented a sea change in U.S. geopolitical strategy, so it would be surprising if there were no adjustments in aid policy. Indeed, it is often argued that foreign aid became more development-oriented with the end of the Cold War. We divided our sample into Cold War (1985-91) and post-Cold War (1992-2001) subsamples to test the robustness of our results, and found several differences in the samples that shed light on the interpretation of

vote buying in the United Nations. The results are presented in Table 7.<sup>17</sup>

[Table 7 about here.]

There are no significant differences in our estimates of recipient preferences between the post-Cold War sample and the pooled model, which indicates that none of the pooled results described above were driven by peculiarities of the Cold War period. Comparing the estimates for the Cold War and post-Cold War periods, standard errors are larger in the smaller, Cold War sample, leading to fewer significant coefficients. Most of the signs of coefficients are unchanged; a few coefficients change sign as we move back to the Cold War period, but none of these is significant. These results provide reassurance about our interpretation of the pooled results above.

On the other hand, the U.S. vote-buying strategy changed in several significant ways after the Cold War. First, U.S. treatment of allies changed sharply. We saw above that the United States was slightly more likely to punish allies than non-allies in the pooled sample, although this coefficient was not significant. During the Cold War, however, the United States was significantly less willing to punish its allies, which reflected the constraints imposed by a tense global rivalry with the Soviet Union. After the end of the Cold War, by contrast, the United States became significantly more willing to punish allies than non-allies, as systemic constraints relaxed. The pooled results concealed a sharp change in U.S. policy. Similarly, the pooled results indicated that the United States was unwilling to punish substantial trading partners; in contrast, during the Cold War period, the United States was more likely to punish its trade partners than other countries, again reflecting the heightened stakes of superpower competition in the earlier era. In this case the pooled results reflected the effects of the post-Cold War era. Another sharp difference arises in the treatment of left-leaning governments. During the Cold War, the United States was much more willing to punish left-leaning governments than either right-leaning or centrist governments, but during the post-Cold War era, leftist governments were less likely to be punished for defying the United States than centrist ones. The reduced salience of left-leaning political orientation after the end of the Cold War reflected the collapse of the left as a global challenge to the capitalist economic model.

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<sup>17</sup>Note that we do not show the utilities for which only a constant is estimated in the models, e.g.,  $U_R(\neg Reward)$  in Table 4. Instead, we move this estimated coefficient into the player's utility for the opposite outcome and flip the sign, e.g.,  $U_R(Reward)$  for the constant included in  $U_R(\neg Reward)$ . This is done to make the table fit on one page.

Our central result about the role of democracy does not change with the end of the Cold War. In both the Cold War and the post-Cold War subsamples, as in the pooled model, the United States is much more likely to punish and reward democracies than autocracies. There is no statistical difference between the coefficients in the separate samples. This suggests that, although many other features of U.S. foreign policy shifted dramatically with the end of the Cold War, the relationship between U.S. foreign aid and authoritarian regimes did not. Certain authoritarian regimes lost U.S. support because the Cold War ended, but the same logic applies during the Cold War and after: autocratic regimes that receive U.S. foreign aid do so because they play key roles in U.S. foreign policy. Consequently, they cannot be punished when they defy U.S. preferences. The U.S. public is sympathetic towards democracies, so democracies receive foreign aid that is not critical to foreign policy and can be used strategically to buy votes. Furthermore, it is politically acceptable to give democracies additional aid when that becomes expedient, so it is credible to offer to increase aid as an inducement. Consequently, it is more credible for the United States to punish and reward democracies.

#### **6.4 A Direct Test of Strategic Voting**

The results we have presented provide indirect evidence that recipient countries vote strategically in anticipation of aid-based punishments and rewards. However, it is possible to directly test the proposition that the relationship between the substantive regressors and recipient voting behavior is strategic. Does recipient voting behavior really depend on subsequent U.S. aid disbursement decisions? The obvious way to assess this is to use comparative model testing methods to compare the strategic model to a non-strategic model of recipient voting behavior (Clarke, 2001, 2003). Such a test has two key implications. From a methodological perspective, a comparative model test will assess whether the strategic statistical model is the appropriate specification, given our data. From a substantive perspective, it represents a direct test of the hypothesis that recipient voting behavior depends on expected punishments and rewards.

In our case, we can rely on a simple likelihood ratio test, which is appropriate for nested models. The model presented in Table 4 assumes that the recipient conditions its vote choice on its anticipated effect on the U.S. aid disbursement decision. However, if it is the case that the

recipient’s voting decision is affected by the same covariates but is not strategic (or is unaffected by aid disbursement decisions), we do not need to condition its choice on the expected response of the United States. Furthermore, if this non-strategic model is more appropriate, the results that we attribute to strategic interaction could be spurious. In this alternative model of recipient voting behavior we include the same substantive regressors included in the recipient’s utilities above without conditioning their influence on U.S. behavior. This simpler model is nested within the strategic estimator as it is technically the same model with the assumption that  $p_3 = 0$ ,  $p_4 = 1$ ,  $p_5 = 0$ , and  $p_6 = 0$ .<sup>18</sup> As Clarke (2001, 727–728) notes, two models are nested if the “unrestricted” model can be reduced to the “restricted” model by imposing a set of linear restrictions. The restriction here states that the probability that the United States responds with a punishment or reward is irrelevant to the recipients’ vote choices. The likelihood ratio test comparing the two models rejects the null hypothesis that the restricted model performs equally well at a high level of confidence ( $p < 0.005$ ).<sup>19</sup> Thus, we conclude that the non-strategic model is indeed misspecified, as we assumed at the outset, and that a properly specified model must include strategic interaction. Substantively, this means that U.S. aid policy has a significant effect on voting in the United Nations General Assembly.

## 7 Conclusions

A simple strategic model reveals layers of interaction that lie beneath the radar of conventional regression analysis. Our analysis leads to several important substantive findings and a methodological one.

Our central finding regards the relationship between democracy and support for U.S. foreign policy. We started with the observation that democratic countries vote with the United States more

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<sup>18</sup>There are a few other possible assumptions that would lead to the restricted model. However, they all lead to an equivalent non-strategic version of the model. The linear restrictions should be written such that the strategic logit model is reduced to a single-equation logit model that includes one coefficient for each substantive regressor and a constant. In this context, this means the probabilities are all constant at 0 or 1 such that the full model reduces to a “restricted” model. The way in which this happens is not important, as they will all lead to the same result.

<sup>19</sup>The log-likelihood for the strategic version of the recipient vote choice model is -4171.45, while the log-likelihood for the restricted non-strategic model is -4220.37. Since the strategic model has 8 additional parameters, the likelihood ratio test statistic is 97.83 with 8 degrees of freedom. This indicates that the strategic model outperforms the non-strategic version, as the Chi-Square distributed test statistic of 97.83 is significant at any conventional level of statistical significance. The critical value for significance at the 0.005 level is 21.96.

often than autocratic countries on important votes. Is this because democracies have inherently aligned preferences, because democracies are more vulnerable to U.S. pressure than autocracies, or because the United States punishes and rewards democracies more frequently than autocracies? These alternative interpretations have quite different normative implications, and standard regression analysis cannot distinguish among them. On the other hand, a pay-off to using a strategic model is that it becomes possible to estimate strategic quantities that are not directly observable, and this makes it possible to sort out causal explanations that would otherwise be observationally equivalent. Our results are able to reject the first two possibilities: democracies in the developing world are in fact more critical of U.S. positions in the United Nations than autocracies, probably because they are sensitive to public opinion, and they are less vulnerable than autocracies to U.S. influence attempts, presumably because foreign aid plays a less central role in regime survival. Nevertheless, democracies comply more with U.S. voting preferences than do autocracies, because the United States is more likely carry out threats and promises to manipulate aid if the target country is a democracy. This is attributable to the credibility problems that frustrate U.S. efforts to link aid to autocratic countries with UN voting.

These findings have profound normative implications, and they can only be disheartening for students of U.S. foreign policy or of multilateral institutions. In a parliament of parliaments and dictators, it is disturbing that the United States disproportionately uses changes in aid disbursements to manipulate the voting behavior of its fellow democracies in the developing world. Further, to the degree that the legitimacy of UN decisions depends on the democratic legitimacy of its members, it is unfortunate that U.S. foreign policy systematically coerces the votes of democracies.

On the other hand, while our results indicate that U.S. policy influences countries' votes, they also point to the limits of that influence. While the important resolutions that the United States supports generally pass, these represent a small minority of important votes, and resolutions that the United States opposes almost always pass as well. In addition to democracy, our results suggest that economic development is a fault line in the General Assembly. The poorest members of the General Assembly, although they are most vulnerable to sanctions, are nevertheless the most resistant to U.S. pressure to conform. Poor countries appear to resist because they have strongly held preferences that clash with U.S. objectives. Similarly, countries that trade intensively

with the United States are highly vulnerable to U.S. influence attempts, but are nevertheless more resistant to U.S. influence. In this case, however, resistance is not due to deep-seated conflict of interest, because countries that trade with the United States tend to share U.S. preferences. Instead, countries that trade intensively vote against the United States more frequently because it is too costly for the United States to link their votes in the UN to punishments or rewards. The fact that many countries defy U.S. pressure indicates that the votes are regarded as sufficiently important to justify bearing some costs, and they therefore retain substantial informational content.

Nevertheless, an important methodological implication of our findings is to draw into question the use of UNGA voting as a straightforward index of states' preferences (Gartzke, 2005; Russett and Oneal, 2001*b*; Stone, 2004). UN voting records are a uniquely informative data source on the policy preferences of most of the world's countries on a wide range of issues, and previous scholarship has frequently treated UN voting either as a measure of preferences or as an arena for vote buying. Our innovation is to use a strategic statistical model that explicitly allows for the possibility that voting is strategic, and we find that the U.S. policy of influencing important UNGA votes with aid disbursements has important effects on the voting behavior of recipient countries. A model specification test rejects the hypothesis that voting decisions are unaffected by subsequent aid disbursement strategies with a high degree of confidence ( $p=.005$ ). This result rejects the hypothesis that UN voting on issues of political significance to major aid donors is simply a sincere expression of country preferences.

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Figure 1: The Voting-Aid Game

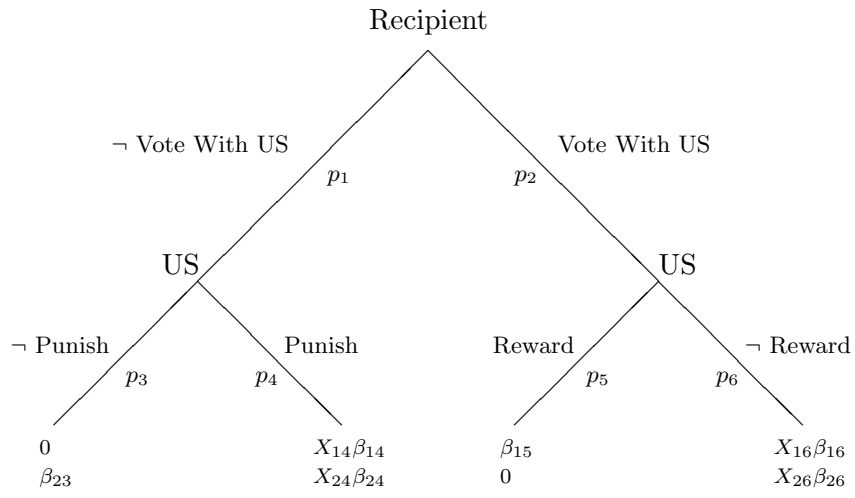


Table 1: Frequency of Important Vote Topics

Important Vote Issue	Total Number of Votes	Percentage of Total
Iraq	12	4.4%
Afghanistan	6	2.2%
Cuba	18	6.6%
Kampuchea	5	1.8%
Former Yugoslavia	11	4.0%
Weapons of Mass Destruction <sup>20</sup>	37	13.5%
Sudan	6	2.2%
Human Rights <sup>21</sup>	67	24.5%
Iran	15	5.5%
Nicaragua	6	2.2%
International Peace & Security	12	4.4%
Israel/Palestine	42	15.3%
Economic Issues	12	4.4%
Democracy/Governance	9	3.3%
Other Countries	8	2.9%
Other Issues	8	2.9%

Table 2: Descriptive Statistics for Regressors

	Minimum	Median	Mean	Maximum	Standard Deviation
Recipient Polity	-10	-1	0.19	10	6.99
Allies	0	0	0.22	1	0.41
GDP pc	281.3	3358	4793	29170	4762.37
Trade	0	318.40	3869	259500	15051.09
Left-Wing Executive	0	0	0.31	1	0.46
Right-Wing Executive	0	0	0.18	1	0.39

Table 3: Results of Predictive Model

Variable	Estimate	Standard Error
Constant	9.186	1.407
$Commitments_t$	0.387	0.007
$Aid_{t-1}$	0.332	0.010

R-Squared Within Group: 0.53  
R-Squared Between Group: 0.99  
F-test for Fixed Effects:  $P > 0.006$

Table 4: Utilities for Statistical Strategic Model

	$U_R(Punish)$	$U_R(-Reward)$	$U_R(Reward)$	$U_{U.s.}(-Punish)$	$U_{U.s.}(Punish)$	$U_{U.s.}(Reward)$
Constant	<b>110.53</b> (19.23)	<b>0.32</b> (0.06)		<b>4.94</b> (0.24)		<b>-3.20</b> (0.13)
Recipient Polity	<b>2.75</b> (0.60)		<b>-5.63</b> (1.25)		<b>0.05</b> (0.01)	<b>0.13</b> (0.01)
Allies	<b>-30.69</b> (4.90)		-2.99 (4.63)		0.19 (0.13)	-0.17 (0.14)
Recipient GDP	<b>9.87</b> (1.76)		<b>4.42</b> (0.94)		-0.09 (0.16)	<b>0.06</b> (0.01)
Trade	<b>-15.86</b> (6.03)		11.46 (6.93)		<b>-0.05</b> (0.02)	<b>-0.11</b> (0.03)
Left-Wing Executive	<b>-9.85</b> (4.55)		<b>14.76</b> (5.18)		-0.07 (0.11)	<b>-0.44</b> (0.15)
Right-Wing Executive	6.96 (10.24)		<b>68.74</b> (9.88)		<b>-0.71</b> (0.15)	-0.28 (0.16)
U.S. Votes No	<b>-109.71</b> (17.89)		<b>-6.82</b> (1.15)		<b>0.22</b> (0.02)	<b>-0.16</b> (0.01)

Bootstrapped Standard Errors in Parentheses

Number of Observations 14337

Bold Indicates Significance at the .05 Level

Log-Likelihood 6923.28

Percent Correctly Predicted: 84.9%

Modal Percent Correctly Predicted: 63.2%

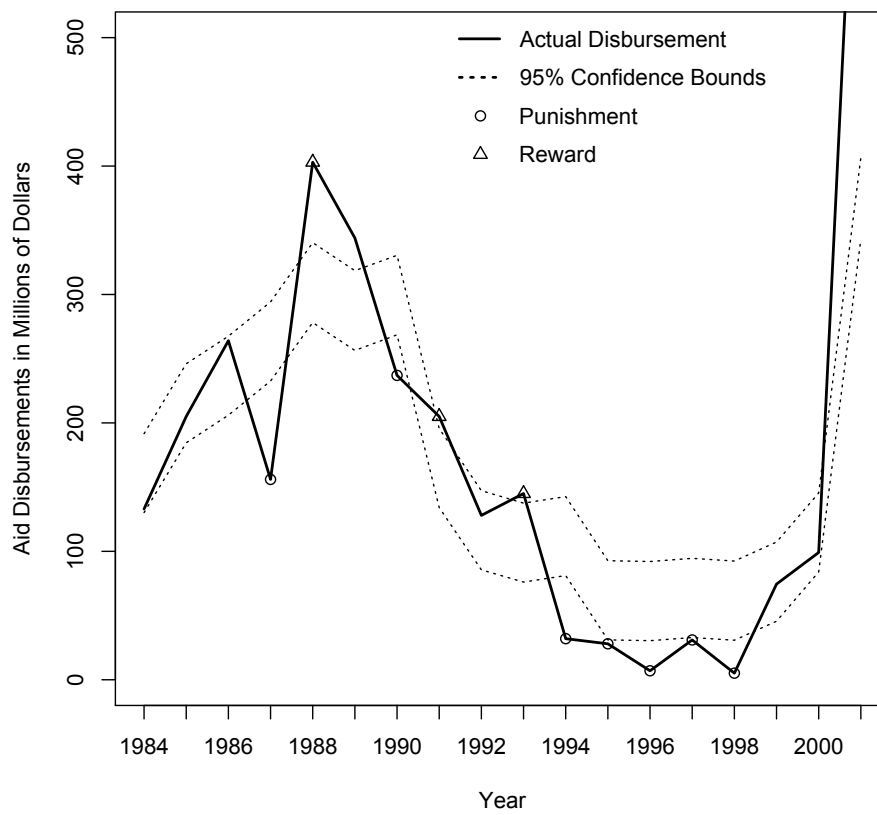
Table 5: Substantive Effects on Rewards and Punishments

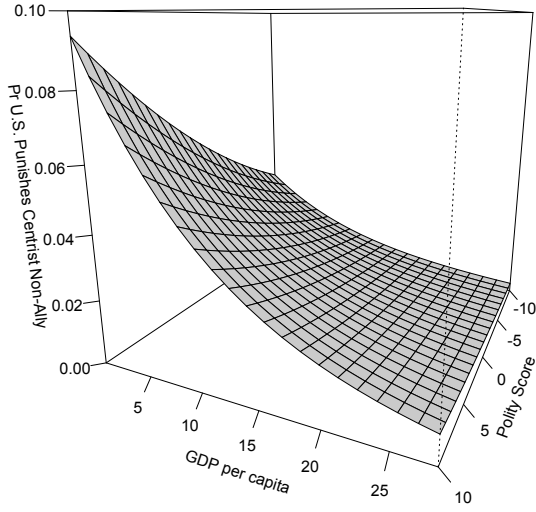
	$\Pr(Punish)$	Change in Pr	% Change in Pr	$\Pr(Reward)$	Change in Pr	% Change in Pr
Median Values	0.042	NA		0.008	NA	
Polity=-9	0.028	-0.014	-33%	0.003	-0.005	-63%
Polity=9	0.071	+0.029	+69%	0.029	+0.021	+263%
Recipient GDP=1,000	0.051	+0.009	+21%	0.007	-0.001	-13%
Recipient GDP=12,000	0.020	-0.022	-52%	0.013	+0.005	+63%
Trade=15 million	0.042	+0.000	+0%	0.008	+0.000	+0%
Trade=10 billion	0.040	-0.002	-5%	0.007	-0.001	-13%
Left-Wing	0.039	-0.003	-7%	0.005	-0.003	-38%
Right-Wing	0.021	-0.021	-50%			
Yes Vote	0.005	-0.037	-88%	0.042	+0.035	+438%

Table 6: Substantive Effects on Votes against the U.S.

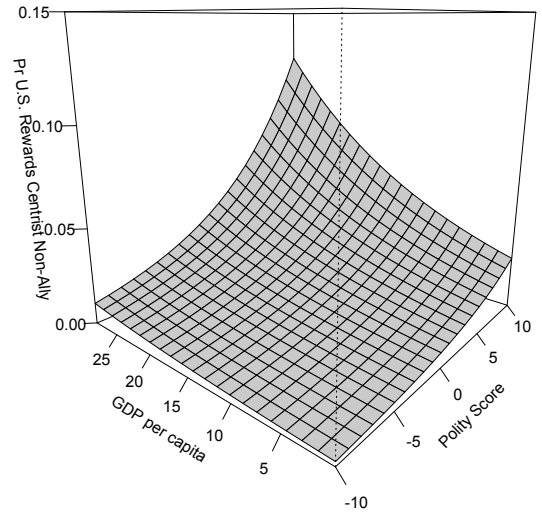
	$\Pr(\textit{Vote Against U.S.})$	Change in Pr	% Change in Pr
Median Values	0.880	NA	
Polity=-9	0.942	+0.062	+7%
Polity=9	0.821	-0.059	-7%
Alliance=1	0.960	+0.080	+9%
GDP=1,000	0.946	+0.066	+8%
GDP=12,000	0.695	-0.185	-21%
Trade=15 million	0.878	-0.002	-0%
Trade=10 billion	0.928	+0.048	+5%
Left-Wing	0.906	+0.026	+3%
Right-Wing	0.892	+0.012	+1%
Yes Vote	0.031	-0.849	-96%

Figure 2: Aid Flows to Pakistan, 1984–2001

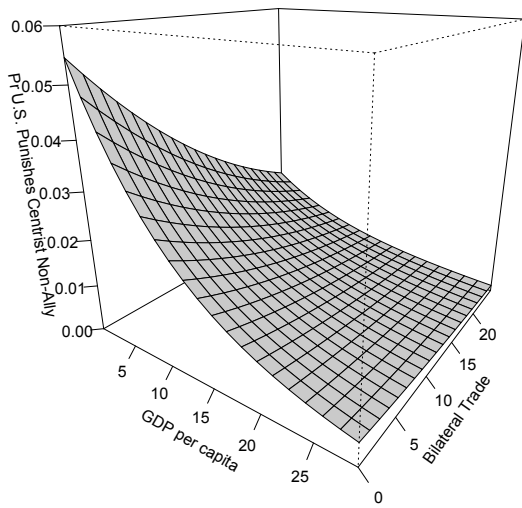




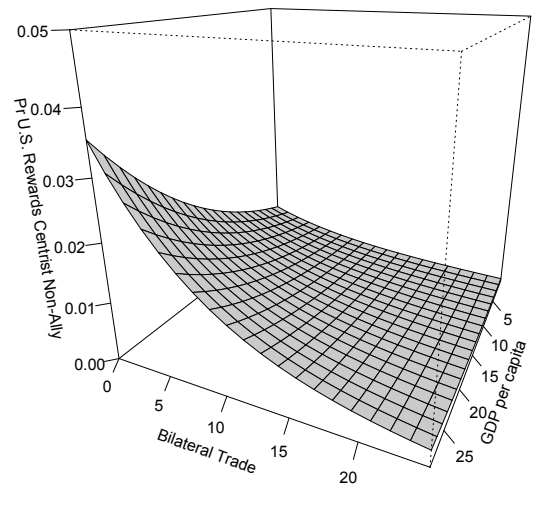
(a) Regime Type, Development, and Punishment



(b) Regime Type, Development, and Reward

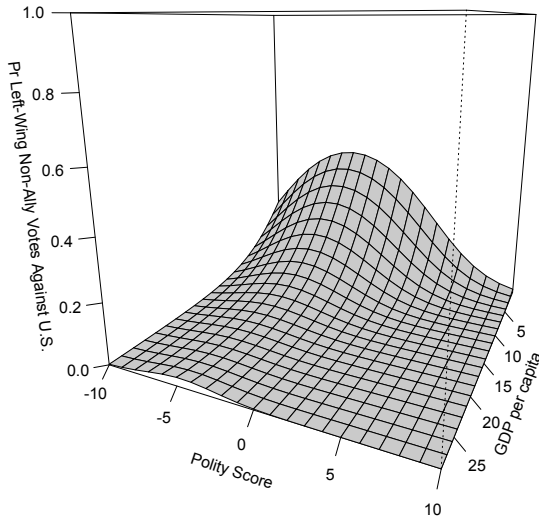


(c) Trade, Development, and Punishment

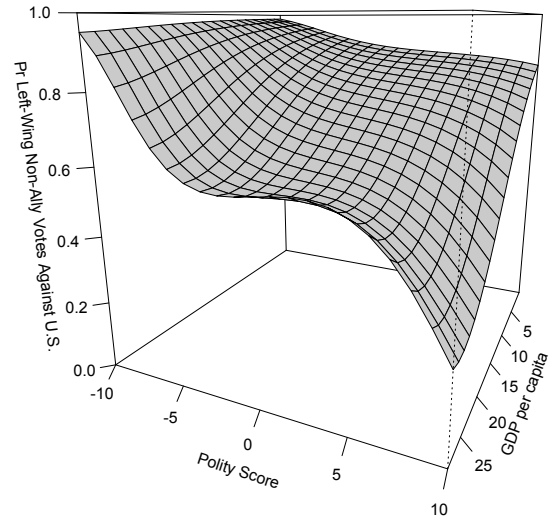


(d) Trade, Development, and Reward

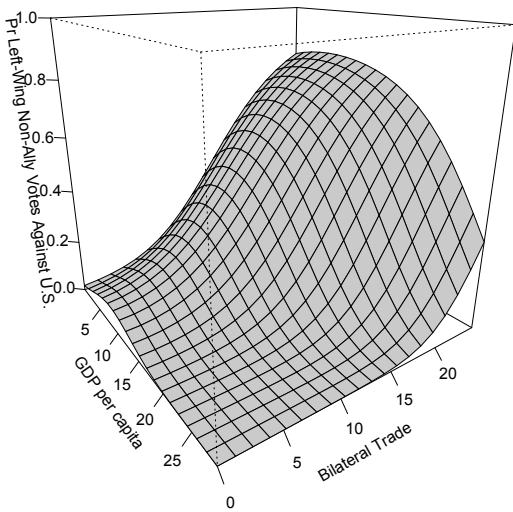
Figure 3: U.S. Behavior



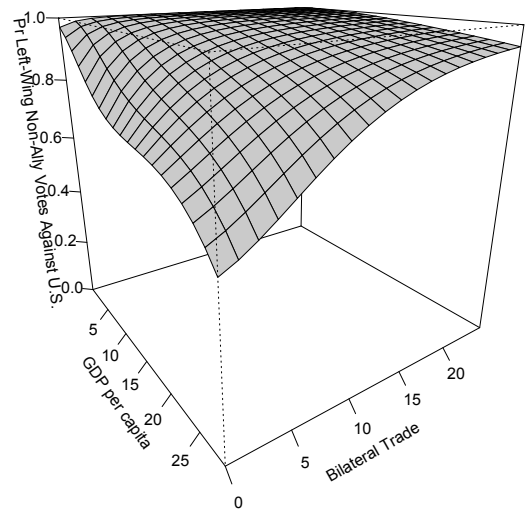
(a) Regime Type, Development, and “Yes” Votes



(b) Regime Type, Development, and “No” Votes



(c) Development, Trade, and “Yes” Votes



(d) Development, Trade, and “No” Votes

Figure 4: Recipient Voting Behavior

Table 7: Cold War and Post Cold War Effects

Variable	$U_R(Punish)$		$U_R(Reward)$		$U_{U.S.}(Punish)$		$U_{U.S.}(Reward)$		
	Cold War	Post-Cold War	Cold War	Post-Cold War	Cold War	Post-Cold War	Cold War	Post-Cold War	
Recipient Polity	-0.18 (2.06)	<b>2.85</b> (0.63)	<b>2.75</b> (0.64)	<b>-4.41</b> (0.97)	<b>-5.63</b> (1.02)	<b>0.06</b> (0.01)	<b>0.07</b> (0.01)	<b>0.16</b> (0.02)	<b>0.13</b> (0.01)
Allies	-6.40 (12.83)	<b>-33.37</b> (5.91)	<b>-30.69</b> (5.02)	-2.48 (5.47)	-2.99 (5.79)	<b>-0.66</b> (0.30)	<b>0.51</b> (0.15)	<b>-0.61</b> (0.28)	-0.13 (0.17)
Recipient GDP	<b>14.52</b> (5.67)	<b>10.26</b> (1.72)	<b>9.87</b> (1.90)	<b>3.69</b> (0.72)	<b>4.42</b> (0.79)	0.02 (0.02)	<b>-0.19</b> (0.02)	<b>0.07</b> (0.02)	<b>0.06</b> (0.01)
Trade	-50.77 (40.62)	<b>-16.59</b> (4.63)	<b>-15.86</b> (5.04)	<b>10.60</b> (0.72)	11.46 (6.39)	<b>0.19</b> (0.08)	-0.03 (0.02)	-0.10 (0.14)	<b>-0.11</b> (0.03)
Left-Wing Executive	0.27 (18.42)	<b>-10.16</b> (2.98)	<b>-9.85</b> (3.26)	<b>13.92</b> (3.58)	<b>14.76</b> (4.59)	<b>0.66</b> (0.20)	<b>-0.57</b> (0.15)	-0.27 (0.26)	<b>-0.44</b> (0.15)
Right-Wing Executive	4.87 (24.80)	9.43 (9.26)	6.96 (10.41)	<b>60.25</b> (8.31)	<b>68.74</b> (8.85)	<b>-1.49</b> (0.52)	<b>-0.52</b> (0.16)	<b>-0.14</b> (0.30)	<b>-0.44</b> (0.18)
U.S. Votes No	<b>-189.79</b> (23.81)	<b>-90.94</b> (19.49)	<b>-109.71</b> (21.39)	<b>-7.48</b> (1.23)	<b>-6.82</b> (1.25)	<b>0.18</b> (0.04)	<b>0.24</b> (0.04)	<b>-0.20</b> (0.02)	<b>-0.15</b> (0.01)
Constant	<b>195.03</b> (26.27)	<b>91.19</b> (20.46)	<b>110.53</b> (22.59)	<b>-0.59</b> (0.11)	<b>-0.32</b> (0.07)	<b>-0.51</b> (0.04)	<b>-0.48</b> (0.04)	<b>-0.27</b> (0.03)	<b>-0.32</b> (0.01)
N =	4966	9371	14337	9371	14337	4966	9371	4966	14337

Bootstrapped Standard Errors in Parentheses

Bold Indicates Significance at the .05 Level