

**Sincere or Strategic?:  
US Aid Disbursements and Voting in the United  
Nations General Assembly**

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# 1 Introduction

International organizations are the infrastructure of a system of international law. To the extent that they embody procedures that are generally accepted as legitimate and pursue principles that are believed to serve general interests, they facilitate international cooperation and resolution of conflicts. International organizations make use of democratic decision-making procedures, and they derive their legitimacy from the consent of the governed. On the other hand, in order to facilitate the buy-in of major powers, they incorporate deviations from majority rule, such as weighted voting in international financial institutions, qualified majority voting in the European Union, and norms of consensus in the World Trade Organization. Many international organizations are widely appreciated to suffer from democratic deficits because of deviations from majority rule, delegation to powerful secretariats, and weak and indirect links with voters. Nevertheless, their legitimacy is an important asset. Legitimacy is substantially what makes international organizations useful to the international system, because it facilitates states' voluntary participation.

The United Nations enjoys more legitimacy than any other international organization because its General Assembly is the closest approximation to a global parliament. Security issues are taken out of the General Assembly and dealt with by a Security Council whose voting rules privilege and protect the five victors of World War II, but other issues are dealt with in remarkably democratic fashion. Votes are taken frequently, are contested, and are public. The rules of parliamentary procedure are open. In no other IO are comparable voting records available; and if they were made available, in no other IO would the voting records be particularly revealing. As a result of its democratic and representative procedures and generally acknowledged legitimacy, the UN has become a lynchpin of the system of international governance. Numerous other institutions have been created as subordinate to the UNGA, such as the UN functional organizations, the UNDP, UNESCO, UNEP, etc.; and the independent IGOs of the UN system, including the IFIs, the IAEA, which monitors

the NPT regime, and the IPCC, which monitors global climate change, all borrow authority from the UN.

The unique role of UNGA voting poses two interesting and closely related questions. First, how legitimate is UNGA voting, in fact? Numerous authors have found that UN voting patterns are associated with bilateral international aid and with flows from multilateral institutions such as the World Bank and the IMF, which suggests that aid may be used to corrupt the process by buying votes. It is unclear, however, whether vote buying in fact occurs. As scholars of US Congress have long argued, campaign contributions may go to candidates whose positions we support without the existence of an explicit or even an implicit quid pro quo (Snyder and Groseclose, 2000). If rich countries both buy votes and give support to friendly regimes, it may be difficult to disentangle the two effects to determine how significant the effect of vote buying is in practice. Second, if vote buying does occur, how can we assess the true preferences of the voters? The literature on Congress abstracts away from the problem of strategic voting when it attempts to fix legislators' ideal points (Poole and Rosenthal, 1991). Similarly, international relations scholars have taken UNGA voting as a unique dataset revealing states' preferences over time (Gartzke, 2005; Russett and Oneal, 2001; Stone, 2004).

We introduce a statistical technique that deals with both problems. We take advantage of the fact that since the mid-1980s, US law has required the State Department to report how countries vote on issues that are regarded as important to US interests, and has required USAID to use countries' voting records on these important issues as a criterion for disbursing aid. We estimate a strategic statistical model in which countries decide how to vote on an issue that has been designated by the US State Department as important to US interests, and then the United States decides whether to withhold a portion of committed aid, if the country votes against the US position, or reward the aid recipient with additional aid, if the country votes in favor of the US position. Because this model captures the strategic element of voting, we are able to evaluate the effect of anticipated punishments or rewards

on the voting decision. We find that the US punishes and rewards recipients very differently depending on their regime type, political orientation (i.e., left-right orientation of executive), and their wealth. Additionally, we demonstrate that even amongst the small subset of UNGA votes defined as important by the US there are significant distinctions. Specifically, issues on which the US votes “no” are much more controversial than those on which it votes “yes” and thus elicit highly divergent behavior from the US and recipients.

## 2 UN Voting in International Relations

It has been widely recognized that UN voting is strongly associated with flows of foreign aid and support from multilateral donors such as the IMF and the World Bank. These correlations, however, can be explained in two distinct ways. First, it may be the case that UN voting is not intrinsically important to aid donors, but rather reflects the sincere foreign policy preferences of UN members. In that case, any relationship between UN voting and aid flows can be interpreted as evidence that aid donors prefer to contribute resources to like-minded regimes that have similar foreign policy objectives. The political implication is that UN voting is not corrupted by foreign aid flows, although perhaps only because the votes themselves are not sufficiently important to motivate aid donors. On the other hand, it may be the case that UN voting is associated with foreign aid because foreign aid is used to reward or punish countries for voting in particular ways. A similar ambiguity arises in the literature on campaign contributions in the US Congress. One set of studies assumes that votes are sincere, which is necessary, for example, if we want to use them to identify legislators’ ideal points (Poole and Rosenthal, 1991). Another literature argues that campaign contributions are made as an explicit effort to buy votes (Grossman and Helpman, 1994). A third strand of literature criticizes the vote-buying view by arguing that contributions are made to support legislators who are known to share the donors’ policy preferences-again, implying that votes are sincere rather than strategic (Snyder and Groseclose, 2000).

The hypothesis that foreign aid is conditioned on UN voting 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 US State Department designates as “important votes.”

Several 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). Several studies, following Thacker (1999), have used the similarity of a country’s profile of votes in the United Nations General

Assembly to those of the United States to measure political affinity to the United States. Thacker finds that increasing this congruence over time is associated with a higher probability of IMF lending. Barro and Lee (2005) find that IMF loans are associated with similarity to US voting patterns in the UN and economic ties with the United States. This quantitative evidence therefore supports the anecdotal evidence that numerous countries that had not met the technical criteria to qualify for IMF support received it nevertheless because they played important roles in US foreign policy. Prominent examples include Zaire and the Philippines during the Cold War, and Russia, Ukraine, Egypt, Pakistan and Turkey during the 1990s.

Most of these studies do not take an explicit position on the question whether UN voting is a measure of countries' sincere preferences or evidence of strategic compliance with the preferences of major IMF shareholders intended to smooth the way for IMF programs. An exception is Stone (2004), which explicitly argues that S-scores based on the profile of all IMF votes are appropriate measures of countries' revealed preferences because most votes are not important enough to major countries in the international system to provoke them to interfere in IMF operations:

I measure the political affinity of African countries for potential foreign patrons by using measures of the similarity of their votes in the UN General Assembly. I assume that patrons are not concerned about how African countries vote in the UN General Assembly but, rather, that these votes are unimportant enough to serve as a sincere measure of countries' foreign policy preferences (Stone, 2004, 580).

Kuziemko and Werker (2006), on the other hand, argue explicitly for vote buying, and they narrow the interpretation of their results by focusing on temporary membership in the UN Security Council. UNSC voting is much more significant than UNGA voting, so incentives to buy votes during crises are much stronger. In addition, since temporary UNSC

membership rotates and can only be held for two-year terms, it is possible to isolate the treatment effect from country fixed effects by studying changes in aid flows. The authors find that US foreign aid increases significantly when a country becomes a temporary UNSC member, and drops off again after membership lapses. Dreher and Vreeland (2008) find a similar effect of temporary membership in the UN Security Council on participation in IMF programs. These findings suggest that the well-known cases in which the United States made extensive offers of aid in order to line up support in the Security Council for its two wars with Iraq are not idiosyncratic, and in fact tell us something important about how the institution functions.

In this paper we suggest that between the most uninformative consensus votes in the General Assembly and the high-stakes maneuvering in the Security Council lies a middle ground, where major powers count votes on important issues and countries have real choices to make. In these cases, individual countries vote in ways that tell us important things both about their preferences and about the ways in which the distribution of power in the international system skews majoritarian decision-making processes. In order to assess countries' true preferences, however, we have to estimate the degree to which their voting behavior is a strategic response to monetary incentives.

Several existing studies examine the link between UNGA voting and US foreign aid flows (Rai, 1980; Kegley and Hook, 1991; Wang, 1999) Rai (1980) examines whether major powers reward and punish recipients with aid flows based on UNGA voting. However, like Kegley and Hook (1991) no distinction is made for specified important votes. Furthermore, unlike Kegley and Hook (1991) and Wang (1999) there is no explicit US policy of linkage to examine. Kegley and Hook (1991) do not find much evidence that the new linkage between UNGA voting on important issues and aid disbursements has any effect on voting behavior. However, as Wang (1999) points out, the focus of almost all prior studies was not limited to important votes. Furthermore, no existing work recognizes that the US's linkage of aid disbursement to voting on important issues should, if effective, induce strategic voting behavior on the part

of recipients. Furthermore, studies such as Hagan (1989) imply that domestic factors such as regime type and political orientation greatly influence the behavior of recipient countries. Thus, we posit a strategic model that captures both the US's policy of linking disbursements to important votes as well as how essential recipient characteristics such as regime type and the left-right political orientation of the executive affect strategies.

The relationship between aid and UN voting is critical to evaluating the legitimacy of the UN as a representative forum. It also has implications that reach far beyond the United Nations. Thus, for example, our interpretation of the association between UN voting and IMF programs takes on different interpretations depending on the degree of strategic voting that takes place in the UN. Similarly, if UN voting patterns account for variations in international conflict, it is important to know whether these patterns reflect the countries' policy preferences and world views or ties of US patronage (Russett and Oneal, 2001).

### **3 A Strategic Estimator for UN Voting**

Previous studies of UN voting have been unable to disentangle strategic and sincere voting because they have not identified a voting equation and an aid provision equation and estimated the strategic relationship between them. We are able to estimate these effects by making identification assumptions and setting a structure for the strategic interaction. 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 estimate the model, we add a stochastic component to the utilities of the actors, which gives us a distribution over the possible end nodes of the game. We characterize this disturbance as agent error, which seems particularly appropriate to our context (Signorino, 1999, 2003). The disturbance terms over actions are assumed to be independent and identically distributed Type 1 Extreme Value, which yields a model with logit probabilities as introduced by Signorino (1999). Agent error might occur in the voting stage, for example, because the voting 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 US Executive and legislative branches of government, or 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.

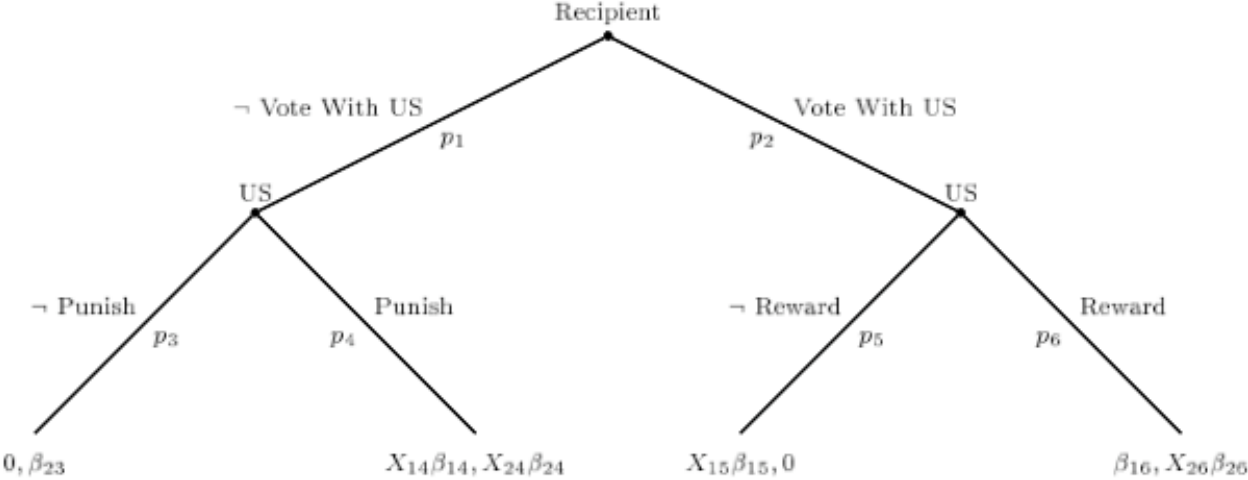


Figure 1: The Voting-Aid Game

The strategic logit model we estimate is depicted in figure 1. First, the recipient country decides whether or not to vote with the US on the given vote. If the recipient votes against the US on an important vote, the US decides whether to punish it with significant aid disbursement reductions or not. If the recipient’s vote coincides with the US position then the US can either reward the country with a significant increase in aid flows or not. In order for the model to be identified, both the recipient and the US must have the utility for at least one outcome that is possible at their initial information set and affects their utilities normalized to zero.<sup>1</sup> Also, no regressor can be estimated in every utility. We normalize both the recipient’s utility for not being punished after voting in disagreement and the US’s utility

<sup>1</sup>An initial information set is just the node at which each respective player makes its first move in the game (Lewis and Schultz, 2003).

for not rewarding the recipient following a vote in agreement to zero. Thus, for each player all estimated coefficients in all the remaining utilities are interpreted relative to these outcomes. This model effectively captures strategic voting and allows for threats and promises about important UNGA votes to be linked to aid flows.

## 4 Data

We utilize data on aid flows from the United States, voting by the US and US aid recipients in the UNGA, and data on numerous other variables of interest. The data on aid flows from the United States to potential recipients is published by the OECD and covers 1960–2001. The data includes both Official Development Assistance (ODA) and Official Assistance (OA) aid disbursements in millions of US dollars.

We utilize the *Documenting Votes in the UN General Assembly, v2.0* data set compiled by Voeten (2005). Given that we are interested whether and how US aid disbursements are used to influence voting in the UNGA we focus on votes defined as important by the US State Department in its annually published *Report to Congress on Voting Practices in the United Nations*.<sup>2</sup> The temporal domain starts in 1985, the year that US law required the State Department to report how countries vote on issues that are regarded as important to US interests, and ends in 2001.<sup>3</sup> Votes in which either the US or the recipient country is absent are excluded. For the US, such votes are excluded by virtue of never being defined by the State Department as important. We exclude absences for recipient countries because it is unlikely that the US rewards or punishes states for not showing up. Given that we posit a strategic relationship between important votes and aid we want to be extremely careful not to include unimportant or aberrant votes in our analysis.

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<sup>2</sup>We thank Jun Xiang for help in acquisition of this data.

<sup>3</sup>We chose 2001 as the final year of our analysis to ensure that changes in aid disbursement policy resulting from the start of the “war or terror” did not adversely affect our analysis.

## 4.1 Regressors

We utilize several regressors to measure the utilities of both the recipient countries and the US over the outcomes in the model. Both variables specific to the recipient country and variables that characterize the relationship the recipient has with the United States are used to estimate utilities. The variables specific to the recipient are Polity IV scores, GDP per capita and bilateral trade flows (Oneal and Russett, 2005), and the political orientation of the executive (Keefer, 2007). Both GDP per capita and bilateral trade flows are measure in 1996 US dollars to ensure comparability across the two measures and time. To measure the political orientation of the executive, we create a binary variable that indicates whether a recipient country’s executive was left of center and a second variable indicating whether it is right of center. The excluded category for these mutually exclusive variables is governments that are either centrist or whose orientation is not clear. Thus, we assume quite reasonably that if the World Bank researchers were not able to identify the political orientation of a country’s executive that it did not have strong ideological sympathies to either the left or the right.

To measure the importance and/or nature of the recipient’s relationship with the US we include a variable that indicates whether the recipient is in an alliance with the US in the given year. Lastly, we include a variable that indicates whether the US voted “No” on the relevant vote. We include this for two reasons. First, it is of interest to understand whether there is a difference between “No” and “Yes” votes for the US or the recipient. Second, in the late 1970s after the US lost control over the “group of 77” in the UNGA, the US began to vote “No” on most roll calls when it had previously voted “Yes” on the majority of them. This indicates that roll calls where the US votes “No” tend to be those that the US needs to buy off opposition. Table 1 demonstrates that the US votes “No” on almost three-fourths of State Department identified important votes.

Table 1: Distribution of US Votes

Vote	Count	Percentage
Yes	3790	26.5
No	10537	73.5

## 4.2 Dependent Variables

Three variables are utilized to create dependent variables that indicate what actions are taken by the recipient country in the UNGA on a particular vote as well as what the US did with aid disbursements in the relevant year. First, we utilize voting records on important votes and create a binary variable that indicates whether the votes of the US and recipient countries coincide on each vote of interest. Thus, if the US and the recipient both vote “Yes” or both vote “No” this variable equals 1, while it takes a value of 0 otherwise.<sup>4</sup>

Creation of the aid disbursement variables is more difficult as we need 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 US punished the recipient with a significant aid reduction following a conflict on an important vote and a second to indicate if the US rewarded the recipient with a significant increase in disbursement following agreement. An example of a “naive” punishment variable is one that takes a value of 1 if aid disbursements in a given year are less than aid commitments. However, aid disbursements generally lag behind commitments for a variety of reasons unrelated to UN voting.

We account for this by estimating the predicted aid disbursement for each country in

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<sup>4</sup>We also treat “Abstain” as agreement with the US position, as the US 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 do not find markedly different results.

each given year with a lagged fixed effects model. This approach has several significant advantages. First, we are able to estimate the likely aid disbursement for each recipient in each year explicitly taking into account temporal trends in disbursement. Additionally, given that aid commitments in a given year are undoubtedly important determinants of aid disbursements in that year we are also able to account for them. Finally, the fixed effects account for the fact that some recipient country simply receive more aid disbursements for idiosyncratic reasons. For example, we know that Egypt is a major recipient of US aid for geopolitical reasons, which our approach accounts for. For each country  $i$ , aid at time  $t$  is estimated using the following specification

$$AID_{i,t} = \beta_0 + COM_{i,t}\beta_1 + AID_{i,t-1}\beta_2 + \epsilon_{i,t}. \quad (1)$$

The inclusion of more than one lag has no effect on the fit or predictions of the model so we exclude all but one lag. Note that the model explains the variation in yearly aid disbursements across different recipients very well (i.e., R-squared > 0.99). On the other hand, more variance in aid disbursements is left to be explained for the same recipients across different years (i.e., R-squared  $\approx$  0.53).

Table 2: Results of Predictive Model

Variable	Estimate	Standard Error
Constant	9.186	1.407
<i>Commitments<sub>t</sub></i>	0.387	0.007
<i>Aid<sub>t-1</sub></i>	0.332	0.010

R-Squared Within Group: 0.532  
R-Squared Between Group: 0.993  
F-test for Fixed Effects:  $P > 0.006$

We utilize the model shown in table 2 to produce predicted aid disbursements with 95% confidence intervals for each recipient in each year. The bivariate correlation between actual

aid disbursements and predicted aid disbursements is 0.846, which indicates that the model's predictions are quite accurate. The punishment variable takes a value of one if the actual aid disbursement is less than the lower bound of the 95% confidence interval and zero otherwise. 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. This approach is nice because it is scale invariant. Importantly, this means that it is not the case that countries who receive relatively high levels of aid (e.g., Israel) are more likely to receive punishments or rewards. The distribution of the data across all possible outcomes in the model is depicted in figure 2.

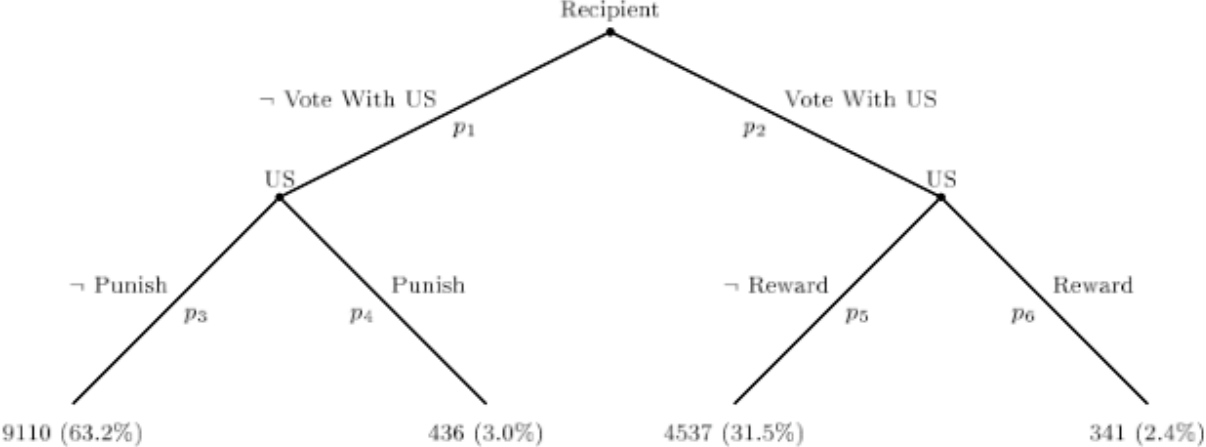


Figure 2: The Distribution of Data Across Outcomes

The distribution of data across the four possible outcomes in the model is as expected. Punishment by the US following disagreement on an important vote happens only about 3%, while a decision not to punish takes place around 63% of the time. This is a similar distribution as is found in other dependent variables in international relations that measure punishments (e.g., economic sanctions). Interestingly, the US is selectively using punishments and rewards even when we limit our examination to important votes.

## 5 Results

The results of the full strategic model are in table 3. Importantly, the model correctly predicts over 84% of the observations, which indicates that it fits the data quite well. This is a vast improvement of 34% over the modal category. Note that all of the columns of coefficients result from the same model. Each column of the table contains the estimates for either the recipient's or US's utility for a given outcome. For example, the first column contains the estimates for the recipient's utility for being punished after voting in disagreement with the US. As noted above, all estimated coefficients for the recipient are interpreted relative to the utility for not being punished following disagreement, while all coefficients for the US are interpreted relative to the utility for not rewarding agreement.

Examination of table 3 suggests several interesting relationships between regime type and both countries' utilities. For instance, relatively autocratic recipients receive lower utility for being punished after voting against the US but also do not like to vote with the US without reward. This is quite intuitive, as autocratic countries are thought to place high value on money that they can use for projects that may benefit their relatively small selectorate (Bueno de Mesquita et al., 2005). This interpretation is further strengthened by our finding for US allies. Allies, like autocracies, also get negative utility for bucking the US position and receiving punishment. Together, these results suggest that autocratic US allies should be particularly sensitive to possible punishments. Extension of this logic to the strategy of the US implies that these autocratic allies are the very recipient countries that the US will attempt to use aid disbursements as punishments against. Consistent with this observation, we find that the US has a preference for punishing autocracies (rather than democracies) and rewarding more democratic countries.

The results with regard to regime type are even more intriguing if we examine the effect of the political orientation of the government. While left-wing governments do not like to be punished, we find that being a right-wing government is not significant. On the other

hand, right-wing governments enjoy agreement with the US if they are rewarded, while we do not find significant effects for left-wing governments. This reflects the ideological predispositions of left-wing versus right-wing governments. For example, we would expect left-wing governments to dislike voting with the US on votes relevant to Israel or Cuba, while right-wing governments are much more likely to share the US's preferences on these issues. Interestingly, the US does not like to reward left-wing governments and gets higher utility from punishing and not rewarding right-wing governments. These results suggest that the US expects right-wing governments to go along with it in the absence of rewards and is keen to punish those that are uncooperative.

Given that it is not straightforward to interpret the substantive effects of the coefficients, we examine the effect each variable has on probabilities. The coefficients for the recipient country in table 3 are especially difficult to interpret since each variable has an effect both via its impact on the recipient's utility and its impact on the US's behavior. Table 4 contains the probability the US punishes following disagreement and rewards following agreement at different configurations of all statistically significant variables. The first row of table 4 shows the probability of punishment and reward when all variables are held at their median values. Each subsequent row alters the value of one variable so that we can isolate its effect on the predicted probabilities. Thus, the second row shows the probability of punishment and reward when the recipient is a relatively autocratic country (i.e., Polity Score=-9) and all other variables are still held at their median value. Specifically, the second column of table 4 shows the change in the probability of punishment relative to the median case (i.e., the first row) while the third column shows this change in probability as a percentage. Columns 4-6 repeat this for the probability the US rewards the recipient country. Thus, examination of the second row demonstrates that if the recipient is autocratic the probability it is punished is 0.014 less than in the median case (i.e., Polity Score=-1), which represents a 33% decrease in probability. Similarly, table 5 shows the effect of each regressor on the probability the recipient's vote disagrees with the US position. As in table 4, the first row depicts the median



case for all variables, while each other row isolates the effect of each individual variable.

## 5.1 Interpretation

The baseline predicted probabilities in the first row of table 4 accurately reflect the fact that the US uses aid-based punishments and rewards sparingly (i.e., figure 2). The probability the US punishes a country that deviates from its preferred position on an important vote is 0.042 when all variables are held at their median or mean. In contrast, the baseline probability that an aid recipient votes against the US in the UNGA is 0.88. This high rate of disagreement among recipients is reflective of the fact that votes in the UNGA became increasingly contrary to US interests after it lost control of the group of 77 in the mid-1970s. Thus, the US began to vote “no” on a majority of all resolutions as the chamber agenda diverged from its own preferences. Furthermore, our data demonstrates that the US also voted “no” on approximately three-fourths of all votes defined as important by the US State Department (i.e., table 1).

The results demonstrate that there is a significant distinction between important votes in which the US votes “no” and those in which it votes “yes”. Important votes on which the US votes “yes” are much less likely to be opposed by recipients than “no” votes. This suggests that the 26.5% of important resolutions that the US agrees with are not as contentious as the 73.5% it disagrees with. Table 4 demonstrates that the US is 88% more likely to punish recipients following “no” votes and is considerably less likely to reward recipients following a “no” vote. Additionally, table 5 shows that recipient behavior on “yes” and “no” votes is extremely different. Recipients vote against the US when its position is “no” with probability 0.88.<sup>5</sup> Thus, “no” votes, which constitute 73.5% of resolutions that the US defines as important, are very heavily opposed by aid recipients in the UNGA. Resolutions on which the US votes “yes” are very different as the probability of opposition by a recipient

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<sup>5</sup>Since “no” is the median position of the US, the first row represents a “no” vote with all other variables at their median.

is only 0.031. Thus, accounting for whether the US position is “yes” or “no” is essential as the level of recipient opposition and the US’s propensity to punish and reward recipients are vastly different across these two kinds of important resolutions. Given the significance of the distinction between “yes” and “no” votes, the findings of the existing literature that examines the relation between UNGA voting and US aid flows (Kegley and Hook, 1991; Wang, 1999) is drawn into question.

Being an ally of the US significantly affects recipient behavior but does not have significant influence on the US’s decision to punish or reward. Allied recipients are much more likely to vote against the US on important votes although there is no significant effect on the utility for being rewarded. Given that recipient behavior is affected by expected US behavior, it is significant to note that alliance is not significant in either of the US’s utilities. Thus, the US is not significantly more likely to reward or punish allies, although the coefficient on  $U_{US}(Punish)$  is positive. US punishments over UNGA votes, even on important issues, are less likely to be credible when dealing with allies as aid to military allies is a very important tool of policy. Thus, given that the US position is quite unpopular it is not wholly surprising that allies are less likely to agree with the US on these resolutions.

The results for political orientation in table 4 imply that the US prefers to reward recipients with centrist executives and does not like to punish right-wing executives. In fact, right-wing executives are 50% less likely to be punished by the US when they vote against its position. On the other hand, recipients with either right-wing or left-wing executives are also less likely to be rewarded, which indicates that centrists (the excluded category) are the most likely recipients to be awarded. The finding that centrists are more likely to be rewarded is consistent with the finding in table 5 that centrists are the least likely to vote against the US position. It is difficult to reward countries for cooperation that do not cooperate. The significant decrease in the probability the US punishes uncooperative right-wing governments is especially interesting because right-wing recipients are not more likely to cooperate. We suspect that the US avoids punishing right-wing executives for ideological

reasons. During and after the cold war the US has maintained hostility towards left-wing governments such as the Sandinistas in Nicaragua, while maintaining warm relations and strategic ties with right-wing governments such as the Pinochet regime in Chile.

Although the results in tables 4 and 5 usefully illustrate the effects of dichotomous variables they are not very effective at conveying the effect of relatively continuous variables such as regime type, GDP per capita, and trade. Graphs 3(a) and 3(b) show the probabilities the US punishes or rewards a recipient as a function of wealth and regime type. Graph 3(a) demonstrates that more autocratic recipients are more likely to be punished relative to democratic countries regardless of their wealth.<sup>6</sup> However, higher levels of GDP per capita are associated with increased probabilities of punishment. Graph 3(b) demonstrates that wealthier countries are also more likely to be rewarded following cooperation. Furthermore, more democratic recipients are much more likely to be rewarded. In sum, wealthier autocracies are likely targets of punishment when they vote against the US, while wealthier democracies are likely targets of reward when they agree with the US on an important vote.

The US's stated preference has long been to cooperate with democracies. For example, in dealing with Pakistan during the mid-1980s a major issue was the degree to which the Zia government was moving Pakistan towards democratization following the application of martial law in the early 1980s. Members of the US House of Representatives on the Foreign Affairs Committee stated that "the quality of our bilateral relationship has been markedly enhanced by Pakistan's return to democratic norms and... has been a major factor in helping win support for Pakistan in the United States (Schaffer, 1988)." In 1988, Pakistan changed from an autocracy (i.e., Polity Score=-4) to a democracy (i.e., Polity Score=8), voted with the US on four important resolutions, and was rewarded with a significant increase in aid disbursements. In contrast, the US punished Pakistan in 1987 for voting against its position on several important resolutions.

Graphs 3(c) and 3(d) show the relationship between a recipient's wealth and bilateral

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<sup>6</sup>The result holds regardless of the political orientation of the executive.

trade with the US and the US's propensity to punish or reward it.<sup>7</sup> Graph 3(c) demonstrates that the US is increasingly likely to utilize punishments against poorer countries that are not high volume trading partners. On the other hand, rewards are more likely to flow to a country that is poor with higher levels of trade with the US. Relatively poor countries are likely to be quite susceptible to offers of increased aid flows. Furthermore, low GDP per capita and higher levels of bilateral trade imply greater dependence on the US. The set of relatively poor countries with relatively high levels of trade with the US are precisely the countries that are likely to find increased aid flows more attractive.

The relationship between wealth, regime type, and the probability of opposition by a recipient country is depicted in graph 4(a) and graph 4(b). Table 5 demonstrates the large difference between important votes on which the US votes “yes” versus those on which it votes “no”. To demonstrate the difference between “yes” and “no” votes we produce different graphs for each relationship. Graph 4(a) depicts recipient behavior for important votes on which the US position is “yes”, while graph 4(b) depicts “no” votes. The large substantive difference between “yes” and “no” votes is immediately apparent as recipients are uniformly more likely to oppose the US position on “no” votes. Graph 4(a) shows a non-monotonic relationship between regime type, wealth, and recipient opposition. Generally, recipients are quite likely to vote with the US on important “yes” votes. However, relatively poor countries are increasingly likely to vote against the US if they are also autocratic. Non-monotonicity occurs in the relationship because the propensity for poor and relatively autocratic regimes to oppose the US tapers off for very autocratic countries.

Recipient countries are generally very likely to oppose the US on important “no” votes. However, the likelihood of opposition is consistently lower for more democratic regimes. The difference between relatively democratic and autocratic regimes increases as we examine wealthier countries. Thus, wealthy democracies are much less likely to oppose the US relative

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<sup>7</sup>Note that GDP per capita is divided by 1000 to make estimation easier while bilateral trade is divided by 10000 and is in millions of dollars.

to poorer democracies. In fact, the effect of GDP per capita is conditional on regime type in significant ways. GDP per capita does not have much substantive effect for a highly autocratic regime (i.e., Polity Score = -10), while the effect for a country that most scholars would classify as a democratic regime (i.e., Polity Score >6) is quite pronounced. Recipient behavior aids in the explanation of US behavior in terms of punishments and rewards. Recall that the US was most likely to reward relatively wealthy democracies and most likely to punish relatively wealthy autocracies. If the US's strategic use of disbursements is successful we would expect democracies to be more likely to cooperate, especially wealthy ones, which is exactly what we observe.

Graphs 5(a)–5(d) show how the probability of recipient opposition changes as a function of GDP per capita and trade. Graphs 5(a) and 5(c) depict “yes” votes while 5(b) and 5(d) depict more controversial “no” votes. The only difference between the two graphs in the first row (5(a)–5(b)) and the two in the second row (5(c)–5(d)) is that the first row depicts a left-wing non-ally while the second row depicts a right-wing ally. On “yes” votes relatively wealthy countries that do not have a high volume of trade with the US are the most likely to vote against the US. Furthermore, the political orientation of the executive and alliance do not have strong effect as there are not significant differences between 5(a) and 5(c). Recipient behavior on “no” votes is markedly different as recipient opposition is much more likely. Again, it is relatively wealthy recipients that are most likely to oppose the US position. High volume trading partners are less likely to oppose the US, although the strength of the effect is conditional on wealth and political orientation. Relatively poorer countries are more sensitive to trade levels than wealthier countries. Additionally, the effect of trade is greater in 5(d) than in graph 5(b) which indicates that the sensitivity of poorer countries to trade is greater for right-wing allies than left-wing non-allies.

## 5.2 Nicaragua

# 6 Conclusions

We find that the US policy of influencing important UNGA votes with aid disbursements has interesting effects on the behavior of recipient countries. The results of a simple strategic model indicate that US policy is an effective tool that works differently across different regimes, as well as across countries with differing relationships with the US. Accordingly, the US varies its use of rewards or punishments depending on the recipient country it is dealing with.

These findings indicate that the legitimacy of UNGA voting is questionable when the US finds the vote to be of particular importance and is facing recipients that it has some degree of influence over. Given that our evidence indicates the presence of vote buying, the use of UNGA voting as a unique dataset revealing states' preferences over time may be problematic (Gartzke, 2005; Russett and Oneal, 2001; Stone, 2004).

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Table 3: Utilities for Statistical Strategic Model

	$U_R(Punish)$	$U_R(\neg Reward)$	$U_R(Reward)$	$U_{US}(\neg Punish)$	$U_{US}(Punish)$	$U_{US}(Reward)$
Constant	<b>110.53</b> (32.55)	<b>0.32</b> (0.06)		<b>4.94</b> (0.24)		<b>-3.20</b> (0.13)
Recipient Polity	<b>2.75</b> (0.64)		<b>-5.63</b> (1.22)		<b>0.05</b> (0.01)	<b>0.13</b> (0.01)
Allies	<b>-30.69</b> (5.75)		-2.99 (10.64)		0.19 (0.13)	-0.17 (0.14)
Recipient GDP	<b>9.87</b> (1.84)		<b>4.42</b> (1.23)		-0.09 (0.16)	<b>0.06</b> (0.01)
Trade	<b>-15.86</b> (4.75)		<b>11.46</b> (5.25)		<b>-0.05</b> (0.02)	<b>-0.11</b> (0.03)
Left-Wing Executive	<b>-9.85</b> (4.50)		14.76 (12.92)		-0.07 (0.11)	<b>-0.44</b> (0.15)
Right-Wing Executive	6.96 (10.67)		<b>68.74</b> (14.57)		<b>-0.71</b> (0.15)	-0.28 (0.16)
US Votes No	<b>-109.71</b> (32.27)		<b>-6.82</b> (1.66)		<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%

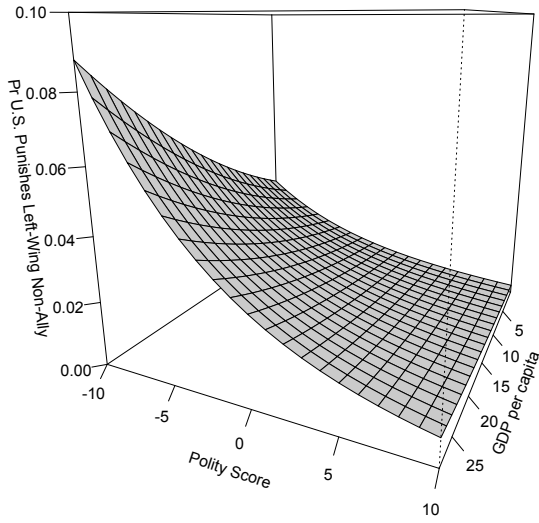
Modal Percent Correctly Predicted: 63.2%

Table 4: Change in Probability Associated With Regressors for US

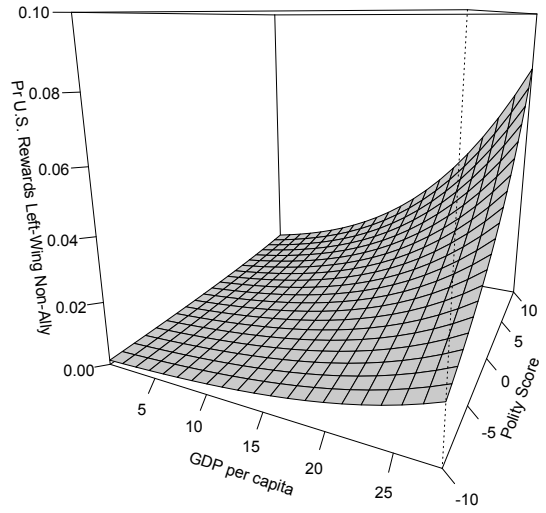
	$\Pr(Punish)$	$\Delta$ in Pr	$\Delta\%$ in Pr	$\Pr(Reward)$	$\Delta$ in Pr	$\Delta\%$ in Pr
Median Values	0.042	NA		0.008	NA	
Polity=-9	0.028	<b>-0.014</b>	-33%	0.003	<b>-0.005</b>	-63%
Polity=9	0.071	<b>+0.029</b>	+69%	0.029	<b>+0.021</b>	+263%
Recipient GDP Low				0.007	<b>-0.001</b>	-13%
Recipient GDP High				0.013	<b>+0.005</b>	+63%
Trade Low	0.042	<b>+0.000</b>	+0%	0.008	<b>+0.000</b>	+0%
Trade High	0.040	<b>-0.002</b>	-5%	0.007	<b>-0.001</b>	-13%
Left-Wing				0.005	<b>-0.003</b>	-38%
Right-Wing	0.021	<b>-0.021</b>	-50%	0.006	<b>-0.002</b>	-25%
Yes Vote	0.005	<b>-0.037</b>	-88%	0.042	<b>+0.035</b>	+438%

Table 5: Factors that Affect the Recipient's Propensity to Disagree

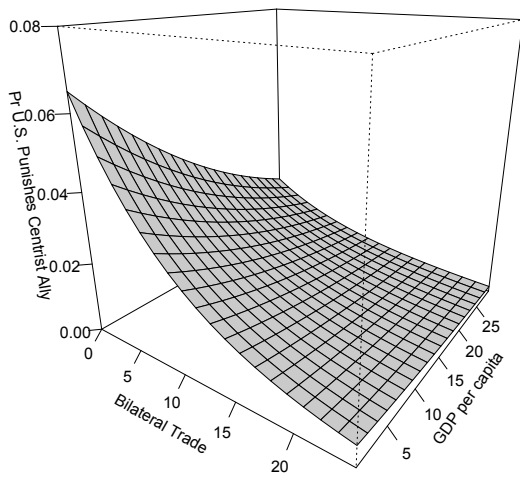
	$\Pr(\textit{VoteAgainstUS})$	$\Delta$ in Pr	$\Delta\%$ in Pr
Median Values	0.880	NA	
Polity=-9	0.942	+0.062	+7%
Polity=9	0.821	-0.059	-7%
Alliance=1	0.960	+0.080	+9%
GDP Low	0.946	+0.066	+8%
GDP High	0.695	-0.185	-21%
Trade Low	0.878	-0.002	-0%
Trade High	0.928	+0.048	+5%
Left-Wing	0.906	+0.026	+3%
Right-Wing	0.892	+0.012	+1%
Yes Vote	0.031	-0.849	-96%



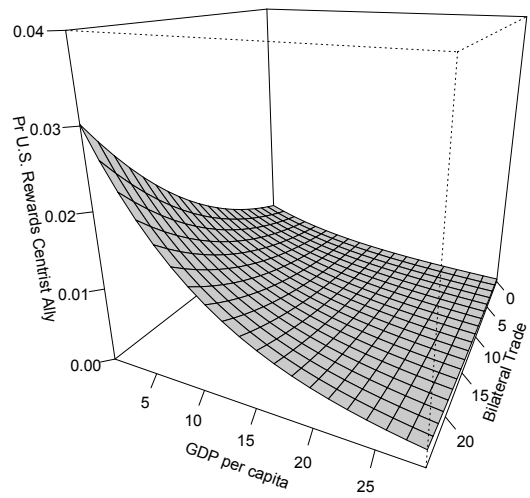
(a) Regime Type, Wealth, and Punishment



(b) Regime Type, Wealth, and Reward

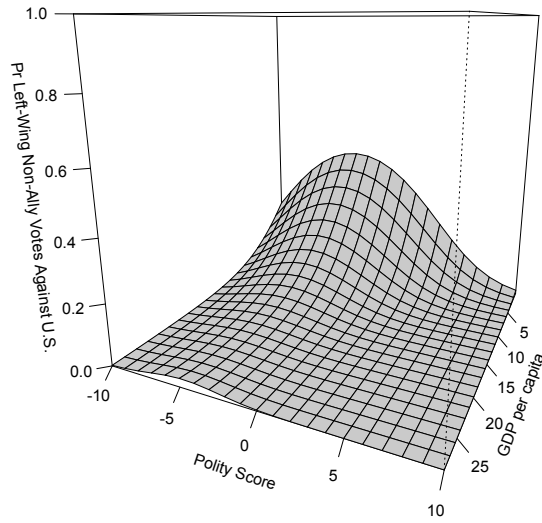


(c) Regime Type, Wealth, and Punishment

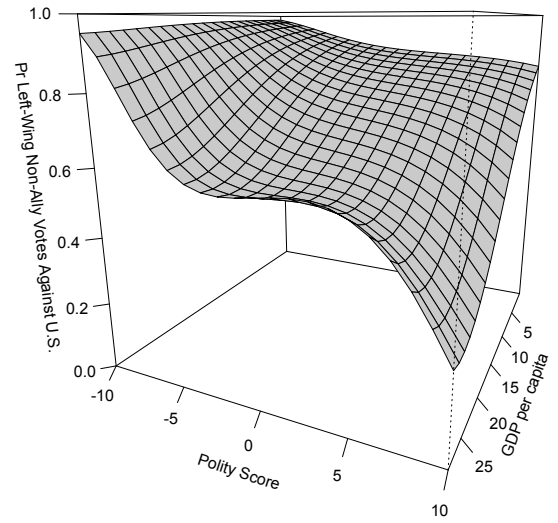


(d) Regime Type, Wealth, and Reward

Figure 3: US Behavior

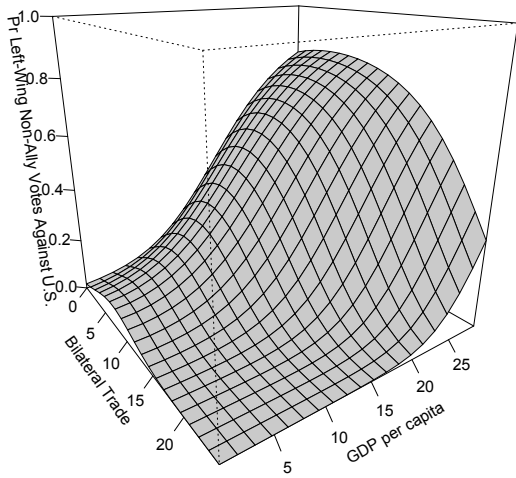


(a) Regime Type, Wealth, and "Yes" Votes

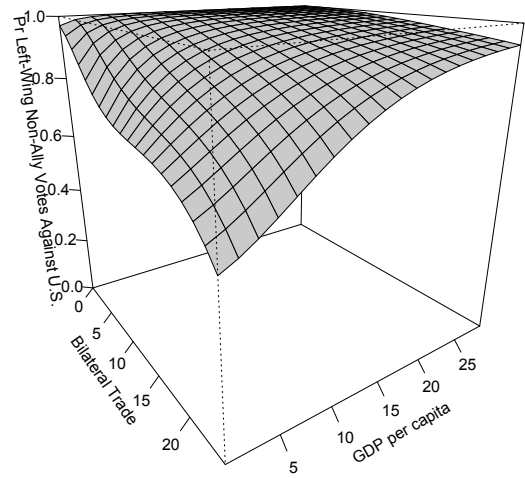


(b) Regime Type, Wealth, and "No" Votes

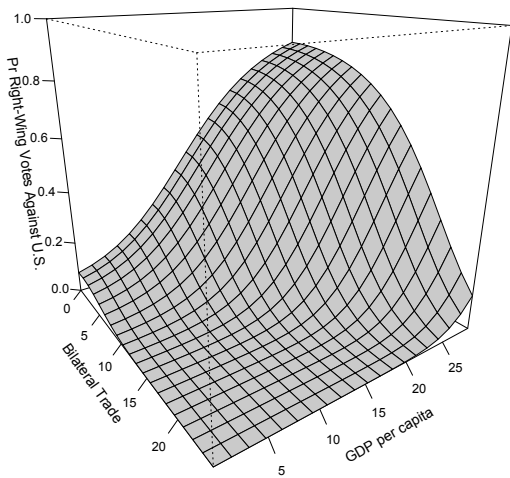
Figure 4: Recipient Opposition



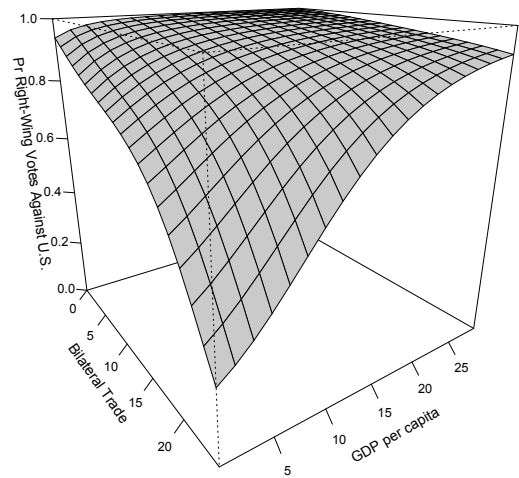
(a) Wealth, Trade, and "Yes" Votes



(b) Wealth, Trade, and "No" Votes



(c) Wealth, Trade, and "Yes" Votes



(d) Wealth, Trade, and "No" Votes

Figure 5: Wealth, Trade, and Recipient Behavior