# **Vote-Buying by the United States in the United Nations**

## **RESEARCH NOTE**

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Scholars find a clear link between a state's election to a rotating membership on the United Nations Security Council (UNSC) and increased receipt of foreign aid, especially that provided by the United States. Most researchers view this finding as evidence of Washington's attempts to buy the votes of rotating members of the UNSC. If this is the case then it raises serious concerns about the legitimacy of UNSC decisions. However, while current statistical tests show an association between US foreign aid and holding one of the rotating seats on the UNSC, they do not establish the underlying causal mechanism. We seek to do so by generating theoretically motivated hypotheses about the relationship between relative voting congruence with the United States and the receipt of US foreign aid. Leveraging natural variation from the rotating structure of nonpermanent UNSC members, we uncover a causal relationship consistent with the claim that the United States uses foreign aid to procure support for its positions on the UNSC.

#### Introduction

On December 21, 2017, US President Donald Trump threatened to withhold aid from countries that voted to reject American recognition of Jerusalem as the capital of Israel (see Landler 2017). A number of foreign diplomats condemned Trump's threat, but was he simply "saying the quiet parts loud"? Scholars have demonstrated that, at least with respect to the United Nations Security Council (UNSC), nonpermanent members systematically receive greater financial assistance during their tenure (Kuziemko and Werker 2006; Vreeland and Dreher 2014). Consistent with expectations about the strategic character of foreign aid (Alesina and Dollar 2000), states with a vested interest in the outcome of Security Council resolutions, primarily the United States, contribute a great deal of this financial aid. Many of these studies also argue that this relationship reflects attempts to buy influence on the Security Council. This raises significant questions about the legitimacy of UNSC resolutions. However, the evidence these studies present in support of this more explosive claim remains, by their authors' own admission, ambiguous.

We develop a research design and measurement strategies that allow us to determine more definitively whether

the United States distributes foreign aid in a manner consistent with vote-buying. We look to the theoretical literature on vote-buying to distill testable predictions about the optimal (that is, most cost-effective) distribution of payments for an entity seeking to buy influence in a deliberative body such as the UNSC. Specifically, the theory predicts that payments from the United States increase as the propensity of a state to vote against the United States rises, until the desired level of support is reached. We obtain causal identification by leveraging natural variation in relative voting congruence with the United States provided by the staggered rotation of nonpermanent members on and off of the Security Council. We find a significant and robust relationship between relative propensity to vote against the United States and the relative receipt of US economic and military aid for those states we predict the United States will target to secure the necessary votes for passage of a resolution. Further, our evidence suggests that the deployment of aid does not extend to attempts to secure unanimity-that is, to those members whose voting is least congruent with the United States and whose votes are not strictly necessary for passage.

Finding that the United States directs foreign aid in a manner so consistent with the predictions of vote-buying provides the strongest evidence to date that US outlays of foreign aid to temporary UNSC members represent attempts to gain influence over UNSC decisions. This confirms the claims of earlier work while simultaneously providing support for vote-buying theory's predictions in a new context.

### The United Nations Security Council and Foreign Aid

The UNSC is the principal United Nations (UN) apparatus charged with the maintenance of international peace and security. If the Security Council identifies a threat to global peace or an act of aggression, it determines what measures are necessary—up to and including the use of military

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force—to create or restore peace. Under the Charter of the United Nations, the UNSC has the authority to enact binding resolutions and require that all members of the UN carry out its decisions. The Security Council thus enjoys substantial power on questions of great importance in both the international and domestic political arenas.<sup>1</sup>

Since 1965, the Security Council has consisted of fifteen member states. Of these, five of the member states—the United States, the United Kingdom, France, Russia, and China—remain permanently on the UNSC, each having the power to veto any substantive resolution brought before the council. In addition, the ten nonpermanent members hold their seats on a rotating basis. Each temporary member serves a staggered two-year term, starting on January 1 and elected during the previous year. Elections to the Security Council occur by geographical region. While some argue that states regularly seek out and campaign for a position on the Security Council (Malone 2000), often a fairly strict norm of rotation governs selection,<sup>2</sup> and scholars have found few consistent political or economic predictors of election to the UNSC (Bueno de Mesquita and Smith 2010).

Recent studies convincingly demonstrate that UN member nations elected to the UNSC receive a bump in foreign aid and financial assistance during their rotating membership. A nonpermanent member of the council experiences an 8 percent increase in development aid from the United Nations (Kuziemko and Werker 2006, 907). Aid from major powers similarly spikes when countries rotate onto the UNSC (Vreeland and Dreher 2014). The number of World Bank projects a country receives increases by roughly 10 percent when the state is a temporary member of the UNSC (Dreher, Sturm, and Vreeland 2009a, 11). Additionally, temporary UNSC members are more likely to receive International Monetary Fund (IMF) loans and face fewer conditions on said loans while on the UNSC than when they have rotated off the council (Dreher, Sturm, and Vreeland 2009b).

The direct and indirect roles of the United States in much of this increased assistance has led scholars to ask whether the United States provides foreign aid to temporary members of the UNSC in an attempt to buy votes. Vote-buying in this context refers to the offer of a payment that is in some way contingent on vote choice (Nichter 2008). The United States, as the predominant security actor in world politics, has a sustained interest in many UNSC decisions. Support from the UN can ease the burden of US action both militarily and financially. Further, since important security questions regarding any threats to international peace come before the UNSC, the Security Council acts as a signal of the legitimacy of any international security action (Hurd 2002). Legitimacy is important both internationally (Claude 1966; Karlsson-Vinkhuyzen and Vihma 2009) and domestically (Finnemore and Sikkink 1998; Fang 2008), where UNSC decisions impact the level of domestic support for US military action (Chapman and Reiter 2004; Grieco, Gelpi, Reifler, et al. 2011).

Voeten (2001) suggests that the United States uses its considerable might to influence Security Council decisions, while Dreher, Nunnenkamp, and Thiele (2008); Hwang, Sanford, and Lee (2015); and Carter and Stone (2015) present evidence that the United States impacts certain UN General Assembly votes successfully through both threats and enticements regarding aid. Kuziemko and Werker (2006, 918) find that a nonpermanent member of the Security Council experiences a 59 percent increase in total aid from the United States during its two-year term, with larger increases in years the authors classify as important. Vreeland and Dreher (2014) most forcefully make the case that the United States buys influence on the Security Council. In this study, the authors examine the disbursement of foreign aid to UNSC members from a number of countries and international organizations. They offer compelling qualitative evidence that the practice of buying votes on the UNSC is common, at times even explicit. In one such instance, the United States cut all of its \$70 million in aid to Yemen because of a "no" vote on the resolution authorizing Operation Desert Storm (Vreeland and Dreher 2014, 67–69). While they find that neither allies nor enemies drive the result of increased bilateral aid from the United States for UNSC members, they are unable to demonstrate that such countries receive significantly less additional aid from the United States than "swing voters" (Vreeland and Dreher 2014, 175-81).

In explaining the mixed support for their thesis, Vreeland and Dreher remark on a number of difficulties in carrying out the analysis, noting at the outset that it "demands a lot from the data" (Vreeland and Dreher 2014, 175). They concede that their measures of political affinity may be too blunt, suggesting the hypothesis itself may not have been sufficiently detailed to support rigorous testing (Vreeland and Dreher 2014, 176). Further, in Vreeland and Dreher's analysis, as well as the analysis from Kuziemko and Werker (2006) on which it is based, the authors limit themselves to variation in the states elected to the UNSC, rather than exploiting the additional variation created by the rotating on and off of half of the council during each state's term.

Prior work has mustered substantial quantitative and qualitative evidence that the allocation of aid constitutes votebuying. Yet, the authors of these studies recognize the limitations of their analyses and helpfully highlight these issues for those conducting future investigations. Following their cues, in the following section, we isolate findings from the theoretical literature on vote-buying, consider the testable implications for this theory in the context of the UNSC, and develop a considerably sharper hypothesis about the pattern of bilateral aid we would expect the United States to display if it is, in fact, buying votes on the UNSC.

#### **Predictions from Vote-Buying Theories**

We consider not the buying of specific votes or outcomes when investigating vote-buying within the UNSC, but rather affinity. Because of the timing between foreign aid appropriations and individual votes on the UN Security Council, states are likely unable to redirect aid quickly to reflect the outcome of a single vote and unwilling to undertake such a large bureaucratic effort outside of extreme circumstances. Reactions as swift and pointed as the US response to Yemen in the early 1990s constitute rare events, even if the underlying tendency is present. Instead, states set up flows of foreign aid to temporary members to ensure a pattern of aligned voting during their time on the Security Council. It is instructive to ask how the United States would most costeffectively allocate this aid to members of the UNSC to procure support. Accordingly, we turn to the theoretical literature on vote-buying in legislatures, which takes as its motivation the question of how to cost-effectively trade payments for votes.

<sup>&</sup>lt;sup>1</sup>In 2017, the UNSC passed resolutions relating to refugee crises in Africa, the ongoing conflict in the Middle East, and threat of terrorism. Consistent with its mandate, emerging or escalating crises and threats to international security largely drive the agenda.

<sup>&</sup>lt;sup>2</sup>Politicking to become a member of the UNSC, to the extent that it exists, likewise occurs regionally (Vreeland and Dreher 2014).

Models of both single (Snyder 1991) and competing (Dekel, Jackson, and Wolinsky 2009) vote-buyers in legislatures generate the same prediction regarding the deployment of aid in a deliberative body. These theories take as their premise a vote-buyer lacking sufficient support for a proposal she prefers to the status quo. In both the competitive and noncompetitive setting, if the vote-buyer purchases any votes at all, she will begin with the member that requires the smallest payment to change her vote; she will proceed to buy the votes of increasingly costly members until her proposal has the required level of support, with the relative price paid increasing in the member's disagreement.<sup>3</sup>

Applied to US deployment of foreign aid across members of the UNSC, these theories predict payments will increase as the initial propensity to vote against the United States rises. Of course, no vote-buyer wishes to purchase more support than necessary. Passage of UNSC resolutions requires nine affirmative votes out of the fifteen members, with no vetoes from permanent members. Historically, Russia and/or China often abstain on an individual resolution, thus requiring up to six votes from rotating members. If the United States seeks only a minimal winning coalition, it would procure the six least costly votes. UN scholars, however, emphasize the empirical regularity of unanimity on the Security Council as well as the role of consensus in bestowing legitimacy (Dryzek and Niemeyer 2006). If the United States desires unanimity, we would predict that aid increases as propensity to vote against the United States increases across all ten nonpermanent members. We test both of these possibilities below.

#### **Research Design**

Examining the relationship between the propensity to vote against the United States and foreign aid received presents both design and measurement hurdles. Specifically, we must construct a measure of propensity to vote against the United States that is not reflective of Security Council behavior potentially related to US aid, isolate exogenous variation in a state's relative propensity to vote against the United States, and account for confounding patterns potentially present in cross-sectional data. We begin by clarifying our explanatory variable of interest, which we construct from an estimate of states' propensities to vote against the United States. We then specify our identification strategy, which exploits the staggered rotating structure of the nonpermanent members of the UNSC, along with fixed effects. Finally, we discuss the outcome measures of interest and controls.

We argue that evidence supportive of vote-buying would entail increases in US foreign aid as propensity to vote against the United States increases, and thus the aid necessary to change a state's vote increases. An assumption underlying this prediction is that the lower a state's propensity to vote alongside the United States on the Security Council, the more aid necessary to change its vote, all else equal. In vote-buying theories, we may simply order members of the deliberative body by the size of the payment they would require to change their vote. In the real world, we must take ideological misalignment as a proxy for the costliness of a member's vote. Propensity to vote opposite the buyer need not be related one-to-one with the costliness of the vote, only correlated, to serve as a proxy for costliness, and thus we take propensity to vote against the United States as our quantity of interest.<sup>4</sup>

To obtain a measure of a state's propensity to vote against the United States, we must first construct a measure of foreign policy similarity with the United States for each nation. We generate a yearly estimate of the probability that a state votes the same way as the United States using voting in the General Assembly (UNGA) (Voeten, Strezhnev, and Bailey 2009). Scholars have regarded voting patterns in the UNGA as evidence of the similarity of strategic interests between states both historically (Alker 1964; Dixon 1981) and more recently (Kim and Russett 1996; Voeten 2004), particularly when studying the provision of aid (Alesina and Dollar 2000; Vreeland and Dreher 2014). Importantly, although there is some evidence of vote-buying in the UNGA, there is mixed evidence in regards to the conditions under which states can be bought (Lai and Morey 2006; Carter and Stone 2015), and few votes appear to be affected (Wang 1999). Further, despite strategic selection at play in the agenda setting of the UNGA, states can nevertheless demonstrate a wide variety of preferences on the issues considered in the body. In 2016 alone, the UN drafted and voted on resolutions regarding refugees from Georgia, violations of international law on human rights in Syria, and entrepreneurship for sustainable development (United Nations 2017).

We employ UNGA voting from the session before a member's term on the UNSC to measure states' propensity to vote against the United States, fixed as the state's propensity to vote against the United States for the two years of its membership on the UNSC. The decision to use and hold constant a measure of states' relative agreement with the United States from before their UNSC terms begin serves three purposes. First, realizing that vote-buying in the UNSC may affect voting in the UNGA, this approach isolates the UNGAbased measure from vote-buying that may be occurring on the UNSC, while still approximating a state's inclination to vote with the United States. Second, while a state's voting inclinations may not be entirely fixed on a year-to-year basis, there is evidence that voting within the UN is relatively stable (Holcombe and Sobel 1996). Further, in each model we control for systematic factors that may dramatically alter a state's voting inclinations during its time on the council, such as government turnover, which would call into question the assumption of a fixed inclination to vote with the United States. Finally, the use of a fixed score is fundamental to our identification strategy. We ultimately wish to use a relative measure of states' propensity to disagree with the United States, and a change in a rotating member's relative propensity within its UNSC term that results from its own actions would raise concerns that the state's relative propensity to vote with the United States is endogenous to its receipt of foreign aid.

The estimate itself follows the approach of Fowler and Hall (2016).<sup>5</sup> Specifically, for each year in our sample and across all pairs of states and UNGA resolutions on which the United States cast a "no" or "yes" vote, we formulate a variable taking the value of 0 if the state voted the same way as the United States, 1 if the state voted in opposition to

<sup>&</sup>lt;sup>3</sup>These theories do not model endogenous agenda formation in the context of vote-buying, but it would only alter the frequency—not the pattern—of votebuying. Further, while a state may exaggerate the amount it requires to change its vote in accordance with US preferences, it could only do so in as far as the United States could not buy the next most costly state as a substitute. A utility-maximizing state would not forgo a price at or above the value it places on a sincere vote. The literature has not explored these market dynamics in full, and it is beyond the scope of this article, but the predictions isolated here nonetheless represent a partial equilibrium.

<sup>&</sup>lt;sup>4</sup>To the extent that a state's propensity to vote against the United States is an imperfect gauge of the aid a state requires to change its vote, the measure would introduce noise into the analysis. We discuss one way to reduce such noise in our robustness checks.

<sup>&</sup>lt;sup>5</sup>A summary of the construction of this variable may be found in Appendix A.

the United States, and 0.5 if the state abstained. We regress this variable on state fixed effects, suppressing the constant. The estimated state fixed effects for each year serve as our measure of each state's propensity to vote against the United States.

Using each state's individual estimates, we calculate a rotating member's relative propensity to vote against the United States by dividing it by the sum of all rotating members' propensities to vote against the United States in that year. We call this a rotating member's *contribution to disagreement* as it represents a state's share of the overall propensity of all rotating members to disagree with the United States on votes in a given year. This captures how unlikely a state is to vote alongside the United States without enticement, relative to the other temporary members on the UNSC.

Examining vote-buying in this context requires a careful identification strategy. The staggered rotation structure of the UNSC provides a unique source of exogenous variation in relative propensity to vote against the United States. Each rotating member serves its entire term with four other rotating members and serves each half of its term with a different, additional set of five temporary members. Having held fixed each state's propensity to vote against the United States for its two-year UNSC term, a member's contribution to disagreement will shift within its term only from this replacement of five of the temporary members from year to year.<sup>6</sup>

Employing only this source of variation in relative propensity to vote against the United States constitutes a fairly conservative test. First, we have only one such rotation to exploit for each member (i.e., we only get one shot to observe a change in relative propensity to vote against the United States). Second, the new member will be from the same region of the world as the state it replaces, and if there is greater correlation in the ideologies of successive members from the same region than across regions, dramatic changes to the ideological landscape of the UNSC would be unlikely. Empirically, just 20 percent of the variance in the contribution-to-disagreement measure is variation from within each state's term.

Simply performing a cross state analysis would risk confounding evidence of vote-buying with other systematic patterns between states' voting tendencies and the amount of aid they receive. For instance, if poorer states vote in opposition to the United States, then their higher receipt of aid would inflate evidence of vote-buying. With the addition of state-specific effects and year dummy variables, as well as our battery of controls, we leverage within-state changes in propensity to vote against the United States to examine the relationship between propensity to vote against the United States and aid across states.<sup>7</sup>

As stated, we look for evidence of vote-buying in the form of proportional changes in aid. If the United States buys a given country's vote in both years, we assume it must pay the same amount, since the state's absolute opposition to the United States has not changed. Rather than a change in the absolute amount a country receives, we seek to uncover the overall pattern of payments, and this emerges from examining relative payments across years. Specifically, our design will uncover evidence that relative payments increase as relative disagreement with the United States increases,

Table 1. State characteristics for the example

State ID	PVAUS	Amount required to change vote (\$)
1	1/4	4
2	1/3	5
3	1/2	6

Table 2. Rotating council membership for example 1

Year	State ID	Contribution to disagreement	Share of aid given
1	1	3/7	4/9
1	2	4/7	5/9
2	2	2/5	5/11
2	3	3/5	6/11

conditional on payments being made. The example below illustrates this premise and our identification strategy.

**Illustration** Consider the set of three states listed in Table 1 in ascending order of their propensity to vote against the United States (*PVAUS*). We assign dollar amounts that the states require to change their vote, correlated with the PVAUS. This minimal working example serves to illustrate how we recover the underlying correlation between a state's propensity to vote against the United States and the amount of aid it receives by comparing relative changes in explanatory and outcome variables. Though not as straightforward as examining levels of disagreement and aid received, this approach is necessary for causal identification.

Consider council membership as described in Table 2. Suppose that in year one, states 1 and 2 are on the council, and in year two, state 1 is replaced by state 3. From the United States' perspective, state 3's vote is costlier than state 1's. State 2 thus becomes relatively less expensive from year one to year two. The cost of state 2's vote is reflected in absolute levels, but also in the relative shares, the latter of which change by way of exogenous variation in the council membership. When state 2's contribution to disagreement falls in year two, its share of the aid given to members of the council falls as well.

The United States may not seek unanimity, and as such, states may move in and out of the set of cheapest votes required for passage of resolutions on the council (e.g., the fifth to the seventh cheapest vote). If vote-buying dies off for those countries most averse to the positions of the United States, the nonmonotonicity will hinder the observation of any vote-buying that occurs. To allow for this possibility, we conduct analyses both of the full sample and those states whose vote would be the cheapest votes to buy, yet necessary for passage of resolutions. Indeed, this minimal-winning coalition variant of the vote-buying hypotheses constitutes a more refined version of Vreeland and Dreher's (2014) prediction that the United States would not reward its closest friends nor its most strident foes, but rather those potentially persuadable countries that are moderately opposed to US positions. Evidence that the pattern of payments reflects vote-buying over the six members most likely to vote with the United States-but not all members-would be evidence both of vote-buying and that the United States seeks only a minimal winning coalition.

#### Data

As our dependent variable, we distinguish between flows of both military and economic aid. Military and economic aid are both fungible from the perspective of the recipient

<sup>&</sup>lt;sup>6</sup>Shifts in a state's voting inclinations therefore do not threaten the identification strategy as they are not systematically related to the countries rotating on and off during a member's term.

<sup>&</sup>lt;sup>7</sup>This also helps mitigate the noise introduced by the imperfect correlation of a state's propensity to vote against the United States and the payment it would require to change its vote.

(Pack and Pack 1993; Khilji and Zampelli 1994; Feyzioglu, Swaroop, and Zhu 1998), but from the perspective of the donor they may be quite different. From the perspective of the US government, it may be more palatable politically to give economic aid to ideologically distant states. However, the evidence also demonstrates that, as an instrument of national security, military assistance is more clearly under the purview of the executive (Milner and Tingley 2010). In examining both forms of aid, we can consider such crosscutting implications.

In some cases, a state may receive neither military nor economic aid during both years of a term on the UNSC, which indicates its lack of necessity for aid, its unwillingness to be bought, or the United States' unwillingness to provide it aid. Examinations of the states receiving no aid of any sort during their UNSC term confirms that they are precisely those states most or least inclined to vote with the United States, as well as wealthier states. This specific sort of targeting and exclusion provides us with a censored dependent variable (Berthelemy and Tichit 2004). As such, we follow the suggestion in the literature in using a Tobit model, which estimates the endogenous selection of aid and therefore allows us to model the data-generating process that accounts for the presence of zeroes.<sup>8</sup>

Because of the left skew of the data and the long, sparsely populated right tail, we log-transform the US foreign aid data. Outliers have proven to be a problem in foreign aid data (Burnside and Dollar 2000; Kaya, Kaya, and Gunter 2012, 235) and economic data more generally (Choi 2009). We show the distribution of the data before and after this transformation in Appendix B. The transformation dramatically reduces the number of outliers in the data. Given the presence of a substantial number of zeroes in the aid data, we use the inverse hyperbolic sine function (IHS), which is a less *ad hoc* approach to retaining zeroes when taking logs than adding one to each observation (Burbidge, Magee, and Robb 1988).<sup>9</sup> Using logged data allows us to analyze proportional changes in aid, which aligns with our focus on relative changes in a state's disagreement with the United States.

The congressional budgeting process for fiscal year t occurs throughout the first two-thirds of the previous calendar year, where fiscal year t runs from October of calendar year t - 1 through September of calendar year t. The UNSC usually convenes during the latter quarter of calendar years (i.e., the first quarter of fiscal years). Congress would budget in the first part of calendar year t - 1 the aid to be distributed for UNSC votes taken at the start of fiscal year t. Hence, we match foreign aid from fiscal year t - 1.

We estimate each model with and without a number of control variables. While these factors should not threaten our ability to draw causal inferences given our design, each factor may influence the willingness of the United States to grant aid for reasons other than vote-buying, and thus we include these variables to reduce residual noise. First, aid from the United States might vary according to where the foreign government falls along the political spectrum, and thus we

control for each state's Polity score (Marshall and Jaggers 2001). Government turnover in the rotating member state may also influence the level of aid that the United States delivers. To measure domestic political changes, we use the Change in Source of Leader Support (CHISOLS) data set (Mattes, Leeds, and Matsumura 2016), which records whether or not a new leader's ascent to power occurs alongside a change in the underlying base of domestic support. The occurrence of a military conflict between a rotating member and the United States may also curtail the amount of aid the Untied States is willing to send. We therefore control for the onset of a militarized interstate dispute (MID) with the United States for each year using the Correlates of War (COW) Militarized Interstate Disputes dataset (Jones, Bremer, and Singer 1996). If a potential recipient forms an alliance with the United States, the terms of the agreement may lead to a higher baseline propensity for aid. We consider whether a rotating member has a defensive or offensive alliance with the United States during a given year using the Alliance Treaty Obligations and Provisions (ATOP) dataset (Leeds, Ritter, Mitchell, et al. 2002). This variable estimates only for the full sample, as there are no states that join or leave a US alliance during their UNSC term that are within the six closest member states. Lastly, we control for whether the rotating member is in its first or second year on the UN Security Council, since previous scholars demonstrate that the benefits of UNSC membership are strongest in the second year (Dreher et al. 2009a, 14).

#### Results

We begin with a descriptive overview, demonstrating how many of the states in our sample display changes in the share of aid they receive that aligns with our theoretical predictions based on the change they experienced in contribution to disagreement. Tables dividing our entire sample into those whose contribution to disagreement decreased and increased appear in Appendix Section C. Two-thirds of the sample demonstrates behavior consistent with theory, as summarized below.

For nonpermanent UNSC member states whose contribution to disagreement decreases from the first to the second year of their term, vote-buying theory predicts that they receive a relatively lower share of payments made to UNSC rotating members or that, having been relatively more expensive than other votes, they received zero in the first (and possibly second) year of their term. In our sample, seventy states become relatively less expensive. With respect to military aid, twenty-three receive relatively more assistance in their second year, and twenty-two receive no assistance in their second year, meaning 64 percent of the sample comports with theory. With respect to economic aid, twenty-four receive relatively more assistance in their second year, and eighteen receive no assistance in their second year, constituting 60 percent of the sample that receives payments following the predictions of vote-buying theory.

For nonpermanent UNSC member states whose contribution to disagreement increases from the first to the second year of their term, vote-buying theory predicts that they receive a relatively higher share of payments made to UNSC rotating members or that, having become too expensive relative to other votes, they receive zero in the second (and possibly first) year of their term. In our sample, 125 states become relatively more expensive. With respect to military aid, fifty-one receive relatively more assistance in their second year, and thirty-five receive no assistance in their second year, meaning just less than 70 percent of the sample

<sup>&</sup>lt;sup>8</sup>Tobit models have the drawback of not being consistent under fixed effects (Honore 1992). Berthelemy and Tichit (2004) account for this by performing Tobit analysis using random effects. However, Greene (2004) has demonstrated that the incidental parameters problem for Tobit models is not particularly grave, as the coefficients are not biased and the standard errors are only minimally biased even with a relatively short panel, particularly when compared to a random-effects model in which the unit-specific effects correlate with the independent variables in the model.

<sup>&</sup>lt;sup>9</sup>Letting y denote aid, the inverse hyperbolic sine of y is defined as  $\ln(y + \sqrt{(y^2 + 1)})$ .

comports with theory. With respect to economic aid, fiftyfive receive relatively more assistance in their second year, and twenty-five receive no assistance in their second year, such that 64 percent of the sample receives payments that follow the predictions of vote-buying theory.

Turning to our regression analysis, if vote-buying occurs, theory suggests that the relationship between propensity to vote against the United States and US aid will manifest itself over at least the six states contributing least to the UNSC's propensity to vote against the United States. If the relationship holds over the entire UNSC, a desire for unanimity would lead to the persuasion of all rotating members rather than just those necessary for passage of a US-supported resolution. Accordingly, after examining the six states whose propensity to vote with the United States is highest, we extend the analysis to all rotating members. Our analysis covers the years 1966–2006,<sup>10</sup> with our unit of analysis as the state-year. For analyses of just the six states most likely to vote with the United States in a given year, we accordingly lose 40 percent of our observations. This leaves us with nearly 240 observations for these regressions and roughly four hundred observations for regressions including all UNSC rotating members.

Tables 3 and 4 present our main results. Columns 1 and 2 include only the members with the six lowest propensities to vote against the United States in a given year ("Rank  $\leq$ 6")-those most easily bought. We observe a statistically and substantively significant positive relationship between contribution to disagreement and both military and economic aid received. Of the members most amenable to voting with the United States that constitute a near-minimal winning coalition, those relatively more prone to vote against the United States receive a higher proportion of the US military and economic assistance budget doled out to UNSC members. A shift in contribution to disagreement equal to one standard deviation of the within-group variance (0.009)results in a 77.68 percent change in military aid and an 82.56 percent change in economic aid. For the median state (receiving \$558,953 in military aid), a 77.68 percent increase in military aid amounts to a \$434,194 increase in military aid. Meanwhile, for the median state (a state receiving \$24,900,000 in economic aid), an 82.56 percent increase in economic aid amounts to a \$20,557,440 increase in economic aid. These are substantial dollar amounts, particularly since much of this aid goes to lower and lower-middle income countries. It should be noted, however, that these estimates include states whose receipt of aid goes from zero to some strictly positive quantity. The estimates reduce somewhat in size when restricting the sample to only those states always receiving aid, though the patterns of statistical significance remain.

Columns 3 and 4 include all rotating members. Contribution to disagreement does not predict the outlay of military or economic aid in the full sample. This suggests that the United States may be unwilling to provide assistance to those states that display the least affinity toward it. Thus, evidence that UNSC decisions are often unanimous does not result from vote-buying, but rather a combination of the true voting preferences of states and seeing little value in going against the majority.<sup>11</sup>

In Appendix D, we present robustness checks, placebo tests, and extensions of our baseline analyses. First, our results are not highly sensitive to allowing for slightly more than the six states least likely to vote against the United States using military aid, but they are when examining economic aid. This result is somewhat surprising in light of the belief that delivering military aid to a highly disparate state would be more costly for the leader. This could potentially reflect uncertainty over individual votes. Further, the effect weakens but remains significant for both military and economic aid if we examine only the five closest states, suggesting that the United States may indeed seek to account for the possibility of an abstention by Russia or China, though not in every instance. Tables 7 and 8 present these findings.

Propensity to disagree with the United States is, of course, a proxy for how amenable a state would be to selling its vote to the United States. Other factors that may influence how expensive it is to buy a state's vote include its economic health. As such, in Tables 9 and 10, we measure US aid as a percentage of a state's gross domestic product (GDP) as our dependent variable. The pattern in the baseline results holds in these models, demonstrating that our results are not an artifact of other factors behind the cost of a country's vote besides its likelihood to vote with the United States.

As a placebo test in Tables 11 and 12, we match aid from year t + 2 to explanatory variables from year t. Our identification holds only for within-term changes in relative disagreement with the United States, so the aid distributed after a state's UNSC term is unrelated to our predictions. This is instead a test for false positives, and the null results provide evidence that our main results are neither spurious nor do they arise from some factor outside the UNSC rotation. This test therefore serves a different purpose than the Kuziemko and Werker (2006) test that finds that aid returns essentially to the preelection baseline when states exit the council. While some tests regarding economic aid display statistical significance, the estimates are in the opposite direction of what vote-buying theory would predict and implausibly large. Not finding evidence in favor of vote-buying in this context allays concerns that our results are unrelated to the proposed mechanism.

We also consider the possibility that the strategic nature of aid has changed over time. In particular, the foreign aid literature has suggested aid has become less geopolitical and more specifically conditional since the end of the Cold War (Dunning 2004; Bermeo 2011; Dietrich and Wright 2014). We therefore examine the allocation of military aid in the Cold War period and the post-Cold War period. Tables 13 and 14 present these findings. We find consistent and similar effects for the Cold War period. Although we see the effect trends in the same direction for the six closest states, we do not find significant results for the post-Cold War period. This finding is consistent with the previous literature. However, the post-Cold War models reduce our sample by nearly two-thirds. Since we leverage only a small amount of variation to guard against possible problems of endogeneity, this is a substantial decrease, as the standard errors for the model demonstrate. Thus, it is difficult to fully evaluate whether this result occurs due to post-Cold War dynamics or a lack of sufficient data. Further following this literature, we find some evidence of disparate results when separately examining democratic and nondemocratic states in Tables

<sup>&</sup>lt;sup>10</sup> This is the period in which the UNSC had ten nonpermanent members and for which we have data for all of our control variables.

<sup>&</sup>lt;sup>11</sup> The counterintuitive finding of a positive and significant coefficient for a military dispute with the United States in column 2 of the military assistance regressions results from a single observation: Panama in 1976. In this dispute, a Panamanian gunboat held two US vessels in response to illegal fishing. This was

a minor altercation in a time of significant diplomatic negotiations regarding future control over and defense of the Panama Canal, for which the United States increased its aid to Panama. Our results are robust to the exclusion of this variable, though it is theoretically important to include, and the variable only achieves significance in this single regression.

Table 3. Analyses of the effect	of contribution to disagreement with the	he United States on militar	v aid received from the United States
/	8		

	$\begin{aligned} Rank &\leq 6 \\ (1) \end{aligned}$	$\begin{aligned} Rank &\leq 6 \\ (2) \end{aligned}$	All Nonpermanent members (3)	All Nonpermanent members (4)
Contribution to disagreement	71.292***	86.313***	23.639	36.746
0	(22.143)	(18.250)	(38.007)	(44.999)
Ruling coalition shift		-2.573***		-0.002
0		(0.936)		(0.866)
Polity score		-0.292		0.043
		(0.321)		(0.075)
MID with United States		0.699		3.148*
		(4.735)		(1.611)
Second year		0.494		-1.503***
		(0.343)		(0.447)
Alliance with United States				1.423*
				(0.774)
Constant	2.504	-0.932	-12.617***	$-14.488^{***}$
	(5.833)	(7.543)	(3.969)	(3.140)
Fixed effects	Yes	Yes	Yes	Yes
Ν	239	237	395	384

Notes: (1) Robust standard errors appear in parentheses below the estimated coefficients of all models. (2) Statistical significance: \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01.

Table 4. Analyses of the effect of contribution to disagreement with the United States on economic aid received from the United States

	$Rank \leq 6$	$Rank \leq 6$	All Nonpermanent members	All Nonpermanent members
	(1)	(2)	(3)	(4)
Contribution to disagreement	93.472***	91.736***	-1.342	-6.752
C C	(29.054)	(30.533)	(17.780)	(20.643)
Ruling coalition shift		0.126		0.483
-		(2.278)		(0.653)
Polity score		-0.090 ***		-0.124
		(0.030)		(0.141)
MID with United States		-2.151		$-1.444^{**}$
		(2.520)		(0.679)
Second year		-3.176 ***		$-1.455^{***}$
		(0.286)		(0.194)
Alliance with Untied States				0.271
				(0.378)
Constant	-21.187 ***	-33.964 ***	15.930***	13.463***
	(6.066)	(6.799)	(2.017)	(2.785)
Fixed effects	Yes	Yes	Yes	Yes
Ν	239	237	395	384

Notes: (1) Robust standard errors appear in parentheses below the estimated coefficients of all models. (2) Statistical significance: \*p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

15 and 16. The United States appears to be more willing to use foreign aid to buy votes on the UNSC from nondemocratic states.

Closely following the predictions of vote-buying theory, we find substantial evidence that the United States uses foreign aid to buy votes from rotating members on the UNSC. While the effects we uncover are large, we note that they are similar to effects reported in the related analyses of Kuziemko and Werker (2006) and Vreeland and Dreher (2014), while overcoming some of the limitations in this previous work.

#### Discussion

We substantiate the claim that the United States directs aid toward rotating members of the Security Council in an effort to influence their voting behavior. We present causally identified evidence that the allocation of military and economic aid from the United States to UNSC members reflects a core prediction of vote-buying theory. We observe a statistically and substantively significant positive relationship between a rotating member's relative propensity to vote against the United States and military and economic aid received from the United States in procurement of a minimal winning coalition. We see little evidence that the United States disperses aid to persuade the rest of the UNSC rotating members in service of procuring unanimity.

Our findings also provide evidence that patterns of political behavior present in domestic politics operate at the level of international institutions. Future scholarly work might examine the role the other permanent members play in vote-buying on the UNSC. This is especially interesting in light of the increasing role of China as an economic power and emerging donor of foreign aid (Woods 2008; Flores-Macias and Kreps 2013; Bader 2015) and as a global counterweight to the United States, as well as President Donald Trump's proposed cuts to the foreign aid budget. Furthermore, our methodology should prove useful in efforts to analyze whether other forms of international aid, such as IMF loans and World Bank development aid, constitute attempts at vote-buying.

The effect identified above entails substantial sums of money. The finding that a state's receipt of bilateral aid from the United States may increase by more than 75 percent relative to what it may have otherwise expected reflects a substantial shock to that state's resources.<sup>12</sup> Yet, this is potentially the most trivial of the ways in which we may gauge the role of vote-buying. Perhaps most importantly, these findings call into question how we should view UNSC decisions.

Collective legitimization is one of the major political functions of the United Nations (Claude 1966) and specifically the UNSC. Security Council decisions often dictate the global system's political approval or disapproval regarding the policies and actions of states. However, while approval by the UNSC confers legitimacy on the actions of states in both the international (Hurd 2002) and domestic arenas (Chapman and Reiter 2004), if the United States buys votes on the UNSC, this casts doubt on the status of the UN as an independent actor capable of exercising collective authority for the international community. Evidence of votebuying undermines the success of multilateral governance more generally, as this form of multilateralism does not reflect multilateral decision-making.<sup>13</sup>

While scholars note the minimal voting power of temporary members (O'Neill 1996), we find that these members willingly sell what little power they have to the dominant states in the system. This supports the contention that institutionalized bargaining between states reinforces and perhaps defines the hierarchical structure of the international system (Mattern and Zarakol 2016; Zarakol 2017). This is particularly alarming evidence in light of the finding that, despite this increased foreign assistance, the rotating members on the UNSC have lower levels of economic growth and democracy following their time on the Security Council (Bueno de Mesquita and Smith 2010). While their vote may make UNSC member states temporally important for the legitimacy of international action, their influence generally evaporates once they step down from the UNSC; they are unable to leverage their vote toward improving the health of their nation.

#### **Supplementary Information**

Supplementary information (the online appendix and replication files) is available at http://d-alexander.com, https://bryanandrewrooney.wordpress.com and at the *International Studies Quarterly* data archive.

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 $<sup>^{12}\</sup>mbox{This}$  increase persists above and beyond the increase due to serving on the UNSC.

<sup>&</sup>lt;sup>13</sup> Indeed, even in the UNSC's most recent strong rebuke of US foreign policy, its refusal to support the US invasion of Iraq, it was the permanent members of the UNSC, rather than the rotating members, that prevented a resolution backing the use of military force.

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