A Theory of Vote Buying at the United Nations General Assembly: Lobbying, Conteractive Lobbying, and Strategic Allocation of American Foreign Aid

Eunbin Chung*

Byungwon Woo†

September 30, 2012

Abstract

In this paper, we propose a theory of vote buying at the United Nations General Assembly (UNGA) by the United States. While there is a growing empirical literature showing the correlation between positive economic incentives, such as multilateral and bilateral foreign aid, and voting behaviors at the UNGA, theoretical underpinnings for the shown correlation remains underdeveloped, especially in the case of bilateral foreign aid. Rather, existing arguments put forth that a donor (i.e. the United States) rewards those who vote with it, while punishes those who vote against it. The implication of this argument is that foreign aid only reinforces those who already vote with it hence does not buy votes. We propose an alternative argument of strategic bilateral aid allocation. We contend that the United States has incentives to provide aid to recipient countries who do *not* support their position a priori. This is the case when we assume that the United States is the only one who tries to buy votes at the UNGA. In comparison, when there is another country with comparable power and opposing interests trying to buy votes in the UNGA, as we can assume was the case in the Cold War, there is an incentive for the United States to provide aid even to those who support its position a priori, in order to counteract the vote-buying of the opposing country. We empirically show that the United States systematically provides more bilateral foreign aid to countries who hold unfavorable position to the U.S. in the post Cold War era, but no such systematic pattern holds during the Cold War era.

*Ph.D. Candidate, Department of Political Science, The Ohio State University, eunbinc@gmail.com

†Assistant Professor, Department of Political Science, Oakland University, woo@oakland.edu https://sites.google.com/site/byungwonwoo/

1 Introduction

States, especially powerful ones, use various economic incentives in order to achieve their foreign policy objectives. States persuade, cajole, or coerce other states to behave according to their wishes and negative and positive economic incentives seem to be the most cost-effective and popular means. Economic means are perceived as less costly than military actions and as more effective than diplomatic rhetoric. All too familiar examples in recent days include trade and financial sanctions imposed on Iran and food and economic aid promised to North Korea for nuclear non-proliferation.

Students of international political economy and foreign policy have long been interested in exploring how effective various economic incentives are in achieving foreign policy objectives. Now well established scholarship in economic sanctions is one resulting collective achievement. Largely thanks to to the reputable datasets put together by Hafbauer et al. (2007) (Economic Sanctions Dataset) and by Morgan et al. (2009) (Threat and Imposition of Economic Sanctions), the sanctions literature has identified various causes and consequences of economic sanctions and has started tackling new questions. The insights generated from academic community feed back to policy community to provide clear policy relevant guidance.

Political studies on positive economic incentives, most notably provision of bilateral and multilateral foreign aid, have been slower in development, in comparison. And there is no comparable comprehensive dataset on politics of foreign aid. We believe that this is because of the implicit nature of foreign policy objectives in provision of foreign aid. That is, except for few cases, you do not explicitly link your political objectives to provision of bilateral and multilateral foreign aid, nor publicly announce them. Instead, the political motivations of foreign aid provision are often covert. Given this constraint, recent studies have started to indirectly examine the political motivations of foreign aid and their effects. Emerging studies of foreign aid explore the linkage between bilateral, multilateral foreign aid and the United Nations General Assembly (UNGA) voting behavior of aid recipient countries. Many have since reported that there is some correlation between bilateral and multilateral foreign aid and UNGA voting similarity, but there still exists variation of the reported

relationship, depending on the measures one utilizes, the methods one employs, and the types of aid one focuses on.

In this paper, we focus on bilateral foreign aid of the United States to explore the relationship between foreign aid and UNGA voting. Specifically, does UNGA voting affect aid allocation decisions of the United States, and if so, how? There are several reasons for choosing American bilateral foreign aid to study the relationship between aid and UNGA voting. First, the United States, as the sole remaining superpower in the post Cold War era, is known for its political use of foreign aid (Alesina & Dollar 2000). Larger European countries allocate foreign aid politically, only to the extent to favor former colonies. Second, we think that there are important differences between bilateral and multilateral foreign aid, the latter of which has provides consistent findings and some theoretical grounds. In comparison, few theoretical arguments are proposed with regard to the relationship between bilateral foreign aid and UNGA voting and to the extent that it is studied, insights are borrowed from the studies examining the relationship between multilateral aid and UNGA voting. We believe that multilateral and bilateral foreign aid allocation exhibit different political dynamics and thus one cannot simply borrow insights from one and apply them to another.

In order to answer the research question, we develop theoretical arguments on how the United States would allocate its aid to achieve foreign policy objectives and buy votes in the UNGA. Recognizing that annual bilateral foreign aid the U.S. can disburse is limited, we argue that the United States has an incentive to allocate its aid more to the countries who do not support their position a priori and has less incentive to provide aid to those who already support its position. In addition, we argue that the dynamics will be different when there are two competing actors who try to buy votes in the UNGA. When there are two actors with opposing interests trying to buy support in the UNGA — the likely case during the Cold War when the United States and the Soviet Union tried to buy support —, then there is an incentive for one actor to provide economic aid even to those who support the one's position a priori, in order to counteract the vote buying effort of the opposing actor. We derive hypotheses from the theoretical reasoning, then test them on the OECD

dataset of foreign aid. We find a clear difference in the aid allocation decision of the United States between the Cold War era and the post Cold War era. We show that the United States increases foreign aid to those who are moving away from its own position and to those who stood against American position in the previous year in the post Cold War era. There is no such systematic tendency in aid allocation during the Cold War.

There are several innovations in this paper. First, we propose an alternative theoretical argument of strategic aid allocation for vote buying at the UNGA. Departing from the intuitive prediction that the U.S. would reward those who vote with it and punish those who vote against it, we theorize how strategic vote buying would shape the relationship between the UNGA voting behavior and foreign aid allocation. Second, based on the theoretical argument, we provide different predictions on the relationship during and after the Cold War. We provide theoretical ground on why we should expect different dynamics in foreign aid allocation decisions between during and after the Cold War. Third, we use underutilized error correction models to empirically test the hypotheses. Error correction models are suitable models to test the dynamic hypotheses like the ones posed in this paper. Fourth, we use various measures to capture foreign aid and report consistent findings.

The rest of the paper is organized as follows. We review the existing literature on the relationship between bilateral and multilateral foreign aid and UNGA voting, in which we locate the present research. We then offer the theoretical argument, adopting insights from the legislative lobbying literature in American politics and applying them to UNGA voting. We derive predictions and proceed to test them on the OECD dataset on foreign aid. The paper ends with a discussion of implications and expansion of the main findings in the future research.

2 Literature Review

The relationship between foreign aid allocation and UNGA voting pattern is reciprocal: foreign aid disbursement might change a recipient country's voting behavior at the UNGA; in turn, voting

behavior at the UNGA of a potential recipient country might influence a chance and amount of receiving aid from donors. Thus the literature has developed along these two lines. First, one focuses on how bilateral and multilateral aid influences voting behavior at the UNGA. Second, the other focuses on how voting behavior at the UNGA affects aid allocation of donor countries. In this section, we provide a brief survey of existing studies on the relationship between foreign aid and UNGA voting.

2.1 Foreign Aid on UNGA Voting

A few studies have attempted to examine the influence of foreign aid allocation on the UNGA voting pattern. They tend to agree that foreign aid often buys votes at the UNGA, but there also exists considerable disagreement on the conditions under which aid buys votes at the UNGA. Lai and Morey (Lai & Morey 2006) argue that the effect of U.S. foreign aid on UNGA voting is conditional on a recipient country's regime type. They argue that the effect is positive and significant for non-democracies because non-democracies can use foreign aid discretionally and can change their voting behavior to match donor's preferences when foreign aid is offered. Interestingly, they find that democracies vote against the U.S. more often when they receive more military and economic aid from the U.S. Wang (Wang 1999), only focusing on voting patterns on "important votes" at the UNGA designated by the U.S. State Department, finds that U.S. aid increase coincides with rising voting congruence with the U.S. Similarly, Dreher, Nunnenkamp, and Thiele (2008) find that American bilateral foreign aid buys votes in the UNGA, more strongly so if aid categories are grants or general budget support. In comparison, earlier studies find that there is no discernible correlation between U.S. foreign aid and UNGA voting pattern (Rai 1980, Kegley & Hook 1991). Most recently, Dreher and Sturm (2012) examine the effect of multilateral foreign aid on UNGA voting patter. They find that the World Bank projects and non-concessional loans tend to increase a recipient country's voting congruency with G7 countries. In particular, they find that the World Bank's non-concessional loans increase a country's voting congruency with the United States.

2.2 UNGA Voting on Multilateral Lending

One of the consistent findings in the empirical literature on the relationship between UNGA voting and aid emerges from the studies of the International Monetary Fund. Studies have repeatedly found that one of the most consistent predictors of IMF lending is how a borrowing country votes at the UNGA. Studies agree that when a country votes with the U.S. or votes more in line with the U.S. than a previous year, the country is more likely to receive an IMF program. Thacker (1999) finds that those countries becoming friendlier to the U.S. are more likely to receive an IMF loan than others. Andersen, Harr, and Tarp (2006) confirm the tendency. These studies generally consider the U.S. as a principal of the IMF that uses IMF loans to reward those who change their voting pattern to coincide more with the U.S. Expanding the core insight, more recent studies have examined the effect of UNGA voting on the terms of IMF program, IMF conditionality (Dreher & Jensen 2007), and the effect of the UN Security Council membership and voting on an IMF program (Dreher, Sturm & Vreeland N.d., Dreher & Vreeland N.d.). Virtually all these studies agree that when a country votes with the U.S., it receives favorable treatment from the IMF.

2.3 Bilateral Aid Allocation Decision

Many studies of foreign aid allocation find that foreign aid disbursement decisions are not only based on economic needs of recipient countries, but also driven by domestic politics of both a donor and a recipient country and international politics. Building on the idea of institutional soundness of a recipient country as an important factor to make foreign aid more effective (Burnside & Dollar 2000), studies have examined whether institutional soundness of a recipient country is an important condition for aid allocation. Dollar and Levin (2006) find that in the 1980s, countries with worse institutions received more aid, but that the trend is reversed in the 2000s when countries with more sound institutions are rewarded with more aid. Nunnenkamp and Thiele (2006) depart from the findings of Dollar and Levin (2006) and conclude that few donor countries clearly prefer recipient countries with promising institutional conditions.

Outside of domestic institutional conditions of a recipient country, scholars also have focused

on effects of various political variables including former colonial ties, changing strategic environment, and voting with donor countries (Maizels & Nissanke 1984, Alesina & Dollar 2000, Berthelemy 2006, Fleck & Kilby 2006, Bueno de Mesquita & Smith 2009, Fleck & Kilby 2010, Cater & Stone N.d.). While there is consistent finding with regard to former colonies (Alesina & Dollar 2000, Berthelemy 2006), there exists considerable disagreement on the effect of UNGA voting alignment on foreign aid allocation. For instance, Alesina and Dollar (2000) report that the U.S. is more likely to reward those who vote more in line with her, dubbed as "UN Friend." Fleck and Kilby (Fleck & Kilby 2006) show that while receiving foreign aid is indeed positively correlated with how a country votes at the UNGA, the actual allocation amount is not. They report that allocation of U.S. bilateral aid holds a negative yet statistically not significant relationship with how a recipient country voted at the UNGA. In contrast, Bueno de Mesquita and Smith (2009) report "the United States is likely to give more to nations aligned against it than are other OECD nations."

Surveying existing studies reveals some interesting points. First, there is substantial disagreement among the studies of the relationship between the UNGA voting and bilateral foreign aid. This difference looks stark, especially given that there exists considerable agreement on the relationship between multilateral foreign aid and UNGA voting pattern. Given this difference, there must be some important difference in multilateral and bilateral aid allocation decisions. This would suggest that we cannot merely borrow the insights from multilateral aid allocation decision and apply them to bilateral aid decision. To our minds, in addition to the fact that multiple countries make decisions of multilateral aid allocation, there are a few potential reasons for the divergence between the effects of UNGA voting on multilateral and bilateral aid allocation. First, there is an important political cost involved in IMF and World Bank loans as they carry conditionality. And because of this, only the countries who are willing to accept the political cost of conditionality by the International Financial Institutions will be the potential targets of multilateral aid as an incentive by a donor countries. Thus, not all countries in need of foreign aid are willing to accept multilateral foreign aid; aid packages should be mutually agreed upon. Bilateral foreign aid, on the

other hand, can more easily tailored by a donor country and does not need to carry conditionality. Thus, bilateral foreign aid is more likely to be used strategically. The second key difference is that bilateral aid allocation is more severely constrained by resources, hence there is incentive to use bilateral aid more strategically than merely rewarding and punishing recipient countries based on their prior voting behavior. Yet, no such serious strategic dynamics in bilateral foreign aid allocation have been explored. In the next section, we provide a theoretical argument on how vote buying incentives of a donor country should shape its bilateral aid allocation decisions.

3 A Theory of Vote Buying

If the United States can provide bilateral foreign aid to some countries in order to buy votes at the UNGA, who should the U.S. target to maximize the benefits? Departing from the conventional wisdom that the U.S. rewards those who already vote with it by providing positive economic incentives, we consider the strategic calculus of the U.S. We note that if the U.S. rewards those who already vote with it, it only maintains the status quo and does not necessarily buy votes. Given that the United States has limited resources it can allocate, then to whom should it provide more aid?

Building on the lobbying in Congress literature in American politics, we make theoretical claims on who the U.S. should target to maximize the vote buying efforts at the UNGA. To the extent that strategic interests of the U.S. at the UNGA intervene in its aid allocation decision, some components of foreign aid allocation should be explained by vote buying incentives. The literature on lobbying strategies in Congress is rich in providing important theoretical insights on who an interest group should direct its lobbying efforts to (Wright 1990, Austen-Smith & Wright 1994, Austen-Smith & Wright 1996, Hojnacki & Kimball 1998). We extend the logic to explain American foreign aid allocation by replacing an organized interest group with a set agenda of the U.S. and legislators with potential recipient countries at the UNGA.

Suppose that the U.S. maintains distinctive foreign policy interests over various issues voted at the UNGA, such as human rights, economic development, regional security in Middle East and

elsewhere, non-proliferation of Weapons of Mass Destruction, and environmental protection. The U.S. with its own pool of resources that it can allocate as it likes, can direct its vote buying efforts to three types of potential recipient countries. First, the U.S. can target those who are already predisposed to vote in favor of the U.S. position more often than not. Second, the U.S. can target those who are uncommitted a priori. Finally, the U.S. can target those who are predisposed against its positions and have history of going against them. Providing bilateral aid to those who are already disposed in favor of the American position will not increase the number of votes casted in line with the American position, because it only reinforces existing favorable votes. In comparison, the U.S. can direct its vote buying efforts to target those who are uncommitted to its position or those who are predisposed against its position. In these cases, if positive economic incentives are effective, then at least some of aid receiving countries will switch their votes in favor of the U.S. position some of the time, thus resulting in more vote buying at the UNGA. In sum, the United States should lobby both uncommitted and those who are predisposed to vote against it. This result is theoretically intuitive, assuming the United States wishes to lessen opposition to, and increase support for, their preferred outcomes at the UNGA.

Similarly, there are two moving types of countries that the U.S. can direct its limited resources of bilateral foreign aid to. First, the U.S. can target those who are already moving toward its foreign policy position without any explicit promise of foreign aid. For these countries, providing bilateral foreign aid is redundant in maximizing the votes casted in line with its favored positions on certain issues as it will not increase the number of votes casted at the UNGA that are in line with the U.S. positions. In comparison, countries who are moving away from the American position, should be bought with foreign aid promises, to maximize favorable votes or to minimize unfavorable votes.

Importantly, the above discussion assumes that only the U.S. can use its bilateral aid in order to buy votes. But what happens when there is a competing country who are likely to take an opposite position to the United States? When there is an opposing country lobbying against the American position, the dynamics laid out above do not hold any more. Most significantly, among the three types of countries, the U.S. now has an incentive to provide foreign aid to those countries

who are predisposed to its position as well as those uncommitted and those predisposed against it. The explanation for the change of the dynamics is termed as "counteractive lobbying" by Austen-Smith and Wright (1994, 1996). Essentially, because of the presumed similar vote buying efforts of a competing country with opposing interests, the U.S. faces an incentive to counteract the vote buying efforts of the competing country, resulting in providing foreign aid to all three types of countries.

By extension, given that there are two types of countries who are moving their positions vis-a-vis the U.S. position, the U.S. now has incentives to provide foreign aid not only to those who are moving away from its own position but also those who are moving closer to its position in order to counteract potential vote buying attempts by the competing country.

We argue that the first kind of dynamics with the U.S. as the only country trying to buy votes at the UNGA is largely applicable since the collapse of the Soviet Union. No serious diplomatic challengers have risen since the end of the Cold War, so we should expect that the U.S. mainly focuses on those who are maintaining some distance or those who are moving away from its own foreign policy position. The second kind of dynamics of counteractive foreign aid allocation seems more suited to the Cold War era when the United States and the Soviet Union were in constant battle to expand their influence beyond their respective areas of influence. Following the theoretical discussion, we derive the following hypotheses. If there exists vote buying attempts at the UNGA by the United States, we should observe the following:

- *Hypothesis 1*: Since the end of the Cold War, the United States is more likely to provide more foreign aid to countries who are farther away from its foreign policy position.

- *Hypothesis 2*: Since the end of the Cold War, the United Staes is more likely to provide more foreign aid to countries moving away from its foreign policy position.

- *Hypothesis 3*: During the Cold War, the United States did not base its bilateral aid allocation decision on a country's UNGA voting pattern.

4 Empirical Analysis

We test the hypotheses on a foreign aid dataset. The most comprehensive cross-sectional, time-series aid data are available for U.S. Official Development Assistance (ODA).[1] This dataset covers bilateral aid flows from the United States to most developing countries from 1960 to 2009. In order to make sure that our results are not driven by any particular way of measuring bilateral foreign aid flow, we use three distinctive measures often used in the existing studies. First, we use aid per capita. Second, we use foreign aid to a recipient country as a share of total bilateral aid flow from the United States. Third, we use the amount of grant provided to a country by the United States. These three measures of bilateral foreign aid flow between the U.S. and a recipient country are used as dependent variables.

We use the Affinity index calculated and maintained by Eric Gartzke (N.d.) for our main independent variable. The data is generated and downloaded using EUGene (Bennett & Stam 2000). The Affinity index captures similarity of state voting positions in the UNGA. The index varies from -1 to 1, with -1 having least similar voting record and 1 having most similar voting record. The Affinity used here is calculated as "$1 - 2 * (\mathrm{d})/\mathrm{D}_{max}$, where d is the sum of metric distances between votes by dyad members in a given year and d_{max} is the largest possible matrix distance for those votes from 2 category UNGA vote data." The UNGA voting records used in calculating the Affinity come from Voeten and Merdzanovic (N.d.). The dataset contains the Affinity between the U.S. and all aid receiving countries.

In order to control for other factors influencing foreign aid allocation, we include a number of variables capturing recipients needs and donor interests. First, we include Polity IV to control for the regime of a recipient country (Jaggers & Gurr 1995). Recent studies report that the U.S. is more likely to provide more foreign aid to countries with established democracy or countries making democratic transition (Alesina & Dollar 2000). Second, we control for the volume of trade as a percentage of GDP. Studies find that countries more open to trade receive more foreign aid (Alesina & Dollar 2000, Berthelemy 2006). Third, we control for the countries with special historic

[1] DAC Statistics is available at www.oecd.org/dac/stats.

relations with the United States. Having few colonial ties with other countries, the United States has long been providing disproportionately large amounts of bilateral foreign aid to Egypt and Israel (Alesina & Dollar 2000, Berthelemy 2006). Fourth, we include a number of socioeconomic variables that are often used in empirical models of foreign aid allocation. These variables include GDP per capita, gross GDP, and population size. Because these measures tend to be right-skewed, we logarithmize the all three variables. Trade and socioeconomic variables come from the World Bank Development Indicators.

Table 1 provides summary statistics of all the variables used in the empirical analysis.

Table 1: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Aid PC	9.803	165.659	0	11407.07	8993
Gross Aid (% of Total U.S. Aid)	0.537	2.214	-0.822	53.257	8690
Grant Committed	37.937	266.023	-0.52	12149.33	6027
Affinity	0.304	0.391	-0.425	1	6324
Polity	-0.116	7.52	-10	10	6286
log GDP	22.522	2.487	16.026	30.285	7160
log GDPPC	0.226	1.593	-3.342	4.712	7141
log Population	15.235	2.042	9.402	21.005	8993
trade (% of GDP)	73.271	43.288	0.309	456.646	6647

Per capita aid varies enormously with e few outliers driving the standard deviation upward. On overage, the United States has increased its bilateral foreign aid to about $\$21$ per person in aid receiving countries since the end of the Cold War. This is a huge increase compared to the per capita aid disbursed during the Cold War era (Fleck & Kilby 2010). About two thirds of all countries at one point have received bilateral foreign aid from the U.S. with an average share of aid to a country as percentage of total U.S. bilateral aid around .5. The main independent variable, Affinity index theoretically varies between -1 and 1, but in the dataset, it only varies between -.425 to 1 with the mean of .30 and the standard deviation of .39.

The assembled dataset is both time-series and cross-sectional. We use error correction models for their many advantages. The ECM is a dynamic model that estimates the rate at which the dependent variable will change after a change in an independent variable (Keele & DeBoef 2008). In

comparison to more widely used Autoregressive Distributive Lag models, the main advantages of an ECM is that it provides closer ties to the theoretical predictions presented in the theoretical section.[2] Since our hypotheses are about how the U.S. changes its foreign aid allocation in response to changes in UNGA voting pattern, ECM models are particularly useful. In addition, interpretation of estimation results, both immediate and longer term effects, is more intuitive in ECMs. Lastly, the ECM does not require making arbitrary assumptions about the lag structure in a typical time-series model. We use the most general version of the error correction model without imposing any restriction with random effects. The estimated equation can be generically expressed as follows:

$$\Delta Y_t = \alpha_1 Y_{t-1} + \beta_0 \Delta X_t + \beta_1 X_{t-1} + \epsilon_t$$

The change of the dependent variable is a function of the lagged dependent variable, the change in the independent variables, the lagged independent variables, and a stochastic term. Including all independent variables shrinks the time span of the data to 1963 to 2004. We expect different dynamics between during and post Cold War period, thus we run separate models for during the Cold War, spanning between 1963 to 1990, and for post Cold War, spanning between 1991 to 2004. Given that we use the three different dependent variables, Table 2 shows results from six models — two models for each dependent variable.

[2]Keele and DeBoef (2008) demonstrate the equivalence of the two models and highlight many advantages of error correction models.

Table 2: Allocation of U.S. Foreign Aid

	AID PC Cold War Coef./se	AID PC Post CW Coef./se	AID PCT Cold War Coef./se	AID PCT Post CW Coef./se	GRANT Cold War Coef./se	GRANT Post CW Coef./se
Lagged DV	-0.10	-0.59***	-0.12***	-0.72***	0.19	-0.95***
	(0.08)	(0.16)	(0.04)	(0.20)	(0.32)	(0.04)
Δ Affinity	0.53	-1.49*	-0.22*	-0.33***	-18.00	-13.49**
	(0.73)	(0.81)	(0.12)	(0.10)	(22.81)	(6.56)
Lagged Affinity	-0.29	-3.35**	0.01	-0.32***	-10.21	-17.62**
	(0.33)	(1.31)	(0.04)	(0.10)	(8.23)	(7.62)
Δ Polity	0.05*	0.03	-0.00	0.02	-0.80	2.65*
	(0.03)	(0.22)	(0.02)	(0.02)	(1.03)	(1.46)
Lagged Polity	0.03	0.12**	0.00	0.02***	-0.12	1.40***
	(0.02)	(0.06)	(0.00)	(0.01)	(0.32)	(0.30)
Δ GDP	-1.70	-30.85	0.80	-0.03	12.73	-119.83
	(5.00)	(25.76)	(0.75)	(1.57)	(63.08)	(152.55)
Lagged GDP	0.05	-0.84***	0.04**	0.06***	1.63	-7.12***
	(0.08)	(0.24)	(0.02)	(0.02)	(2.04)	(1.41)
Δ GDPPC	0.42	34.50	-0.91	0.27	-14.43	157.42
	(4.85)	(25.60)	(0.75)	(1.52)	(57.78)	(149.21)
Lagged GDPPC	-0.19**	0.06	-0.08**	-0.18***		
	(0.09)	(0.14)	(0.03)	(0.05)		
Δ Trade	0.02	0.05	0.00	0.00	0.47	-0.03
	(0.02)	(0.05)	(0.00)	(0.00)	(0.39)	(0.12)
Lagged Trade	0.02***	0.00	0.00***	-0.00*	0.01	-0.18***
	(0.01)	(0.01)	(0.00)	(0.00)	(0.09)	(0.05)
Lagged Population					-1.99	12.66***
					(4.99)	(1.58)
Egypt	2.13*	12.17	2.20***	11.91***	429.64	718.17***
	(1.22)	(9.94)	(0.78)	(3.06)	(355.49)	(52.40)
Israel	24.36**	69.96	2.11**	6.07	-62.84	646.90***
	(9.81)	(42.79)	(0.91)	(3.73)	(188.14)	(234.23)
Constant	-1.52	22.32***	-1.05**	-0.91**	-4.85	9.54
	(2.10)	(6.15)	(0.41)	(0.45)	(35.54)	(26.26)
N	2732.00	1645.00	2716.00	1643.00	1977.00	1314.00
R^2	0.07	0.30	0.09	0.37	0.05	0.90

Note: Robust standard errors in parentheses. * indicates statistical significance at the 0.90 level, ** at the 0.95 level, and *** at the 0.99 level or greater.

The analysis highlights the stark difference in aid allocation dynamics between the Cold War era and the post Cold War era. Overall, statistical models do a better job in explaining aid allocation decisions in the post Cold War era than in the Cold War era.

The main results clearly support all three hypotheses proposed in the theoretical section. In all of the three post Cold War models, the coefficients for the difference of and the lagged independent variables, are statistically significant. This would suggest that the United States indeed disburses more aid to countries that are moving away from its position and countries that used to vote more against its position in the post Cold War era. In comparison, none of the coefficients for the independent variables in the Cold War models are statistically significant. Substantively, in the post Cold War period, when a country moves from .5 to -.5 in the Affinity index, a rare but significant movement away from the U.S. position, the country is likely to receive more foreign aid. The immediate effect of the -1 move will be the increase of per capita foreign aid of $\$1.50$. In addition, there is also a long term repercussion of the movement resulting in further increase of a little over $\$4$. Overall, the total effect of the -1 move is estimated to be around $\$5.68$. [3]. Given that an average amount of per capita aid is around $\$21$ in the post Cold War era, the resulting increase is substantial. Similar substantial effects can be found in the other two models. In the model with the aid as a percentage of total U.S. aid, the effect of the -1 move, moving from Affinity index of .5 to -.5, will be the increase of .33% immediately and the overall increase of .44%. In the model with the amount of grant commitment, the effect of the -1 move will be the immediate increase of $\$13.5$ million with the total effect calculated around $\$18.5$ million.

Among the control variables, it is clear that democracies are more rewarded with foreign aid in the post Cold War era. In all three post Cold War models, the coefficients of the lagged Polity variable are statistically significant. In addition, countries with larger economies receive less per capita aid and total grant commitment, but account for a larger share of aid as percentage of total U.S. aid in the post Cold War era. Relatively more developed countries with higher GDP per capita

[3]The total effect can be calculated by dividing the coefficient of the lagged independent variable with the coefficient of the lagged dependent variable. The detailed procedures can be found in Keele and DeBoef (2008)

receive less aid than countries with lower GDP per capita and this seems to apply to both the Cold War and post Cold War era. As the literature recognizes, Egypt and Israel continue to receive favorable treatment from the U.S.

There is a potential concern for endogeneity when we regress the difference of foreign aid on the contemporaneous difference of Affinity index. Thus, in Table 3, we lag the difference and lagged independent variable. Essentially, we try to see how the movement of Affinity from the $t-2$ to the $t-1$ and the status in the $t-2$ affect the aid allocation decision.

The main results still hold when we lag one of our main independent variables one more year in the post Cold War models. The coefficients of the lagged difference and two year lagged independent variables are still statistically significant. The respective substantive effects are also substantial. For instance, in the aid per capita model, a move from .5 to -.5 in Affinity index would result in $\$2.83$ increase in per capita aid immediately and $\$5.51$ in total. In comparison, few exhibit statistical significance in the Cold War models. Only the coefficient of the lagged difference of the independent variable is statistically significant, yet the substantive effect is much smaller.

Among the control variables, as are the cases in the previous models, democratic countries are rewarded with more aid in the post Cold War era. Countries with larger economies receive less per capita aid and grant commitment but still claim a larger share of the total U.S. foreign aid. Other variables also behave very consistently. We repeatedly observe that Egypt and Israel enjoy favorable treatment from the U.S.

Lastly, we try to see if a few outliers are driving our results. First, we simply take the natural log of the aid per capita variable, as Alesina and Dollar (2000). Second, in order to see if our results hold if we exclude some extreme outliers, we sequentially exclude those cases with more than $\$1000$ and cases with more than $\$100$ per capita aid. The results are reported in Table 4. We only report the post Cold War models.

The results reported still hold when we use measures to rid of unwarranted influence of a few outliers. In fact, excluding the cases with abnormally large amount of per capita aid generally increased the statistical model's explanatory power.

Table 3: Allocation of U.S. Foreign Aid with Lagged UNGA Voting

	AID PC Cold War Coef./se	AID PC Post CW Coef./se	AID PCT Cold War Coef./se	AID PCT Post CW Coef./se	GRANT Cold War Coef./se	GRANT Post CW Coef./se
Lagged DV	-0.11	-0.55***	-0.10**	-0.68***	0.19	-0.94***
	(0.08)	(0.15)	(0.04)	(0.20)	(0.32)	(0.05)
Lagged Δ Affinity	-1.01**	-2.83***	0.02	-0.13	4.06	-21.56***
	(0.45)	(1.00)	(0.11)	(0.10)	(14.63)	(7.78)
2 Lagged Affinity	-0.33	-3.03**	-0.01	-0.21**	-10.22	-18.75**
	(0.37)	(1.33)	(0.04)	(0.09)	(8.83)	(8.59)
Δ Polity	0.05*	0.00	0.00	0.02	-0.73	2.43*
	(0.03)	(0.22)	(0.02)	(0.02)	(0.98)	(1.46)
Lagged Polity	0.03	0.11*	0.00	0.01**	-0.11	1.30***
	(0.02)	(0.06)	(0.00)	(0.01)	(0.32)	(0.33)
Δ GDP	-3.83	-18.73	0.60	1.06	8.72	-65.15
	(5.33)	(24.05)	(0.72)	(1.49)	(60.64)	(151.56)
Lagged GDP	0.04	-0.78***	0.04**	0.07***	2.02	-6.40***
	(0.08)	(0.24)	(0.02)	(0.02)	(2.43)	(1.67)
Δ GDPPC	2.56	21.73	-0.76	-0.84	-9.74	114.41
	(5.18)	(23.89)	(0.72)	(1.44)	(55.37)	(148.08)
Lagged GDPPC	-0.19**	0.08	-0.07**	-0.17***		
	(0.09)	(0.14)	(0.03)	(0.05)		
Δ Trade	0.02	0.05	0.00	0.00	0.48	0.03
	(0.02)	(0.05)	(0.00)	(0.00)	(0.40)	(0.12)
Lagged Trade	0.02***	0.00	0.00***	-0.00	0.01	-0.18***
	(0.01)	(0.01)	(0.00)	(0.00)	(0.09)	(0.05)
Lagged Population					-2.24	14.14***
					(5.28)	(1.95)
Egypt	2.37*	10.36	2.18***	10.27***	428.93	655.93***
	(1.26)	(9.27)	(0.79)	(3.08)	(354.77)	(64.73)
Israel	26.13**	58.78	2.00**	5.13	-64.99	583.10***
	(10.39)	(37.83)	(0.93)	(3.38)	(190.19)	(220.44)
Constant	-1.06	20.44***	-0.95**	-1.12**	-8.72	-28.85
	(2.12)	(6.15)	(0.41)	(0.47)	(32.09)	(30.71)
N	2644.00	1767.00	2628.00	1765.00	1965.00	1412.00
R^2	0.07	0.27	0.08	0.35	0.05	0.88

Note: Robust standard errors in parentheses. * indicates statistical significance at the 0.90 level, ** at the 0.95 level, and *** at the 0.99 level or greater.

Table 4: Allocation of U.S. Foreign Aid Excluding Outliers

	Log Aid PC	Aid PC Less than 1000	Aid PC Less than 100
	Coef./se	Coef./se	Coef./se
Lagged DV	-0.17***	-0.59***	-0.86***
	(0.02)	(0.16)	(0.06)
Δ Affinity	-0.16***	-1.49*	-1.39***
	(0.06)	(0.81)	(0.52)
Lagged Affinity	-0.10**	-3.35**	-2.61***
	(0.05)	(1.31)	(0.60)
Δ Polity	0.01	0.03	0.16
	(0.01)	(0.22)	(0.17)
Lagged Polity	0.00	0.12**	0.14***
	(0.00)	(0.06)	(0.04)
Δ GDP	-2.48**	-30.85	-38.66*
	(1.21)	(25.76)	(19.89)
Lagged GDP	-0.03***	-0.84***	-0.97***
	(0.01)	(0.24)	(0.15)
Δ GDPPC	2.57**	34.50	41.52**
	(1.19)	(25.60)	(19.57)
Lagged GDPPC	-0.03***	0.06	0.04
	(0.01)	(0.14)	(0.14)
Δ Trade	0.00	0.05	0.00
	(0.00)	(0.05)	(0.01)
Lagged Trade	-0.00	0.00	-0.00
	(0.00)	(0.01)	(0.01)
Egypt	0.31*	12.17	9.34***
	(0.17)	(9.94)	(1.56)
Israel	0.14	69.96	-2.57
	(0.46)	(42.79)	(8.57)
Constant	0.99***	22.32***	25.86***
	(0.23)	(6.15)	(4.03)
N	1645.00	1645.00	1634.00
R2	.10	.30	.82

Note: Robust standard errors in parentheses. * indicates statistical significance at the 0.90 level, ** at the 0.95 level, and *** at the 0.99 level or greater.

Overall, the series of empirical analysis we execute and report here strongly support the three hypotheses we propose. First, the United States rewards both the ones who are moving away from its one position and the ones who are either uncommitted or unfavorable to its position a priori. The estimated substantive effects are substantial. Second, the stated effects are conditional on a particular time period. As we predict, the effects only hold when there is a single actor actively pursuing more favorable votes, the likely case of the post Cold War era. Third, during the Cold War, when the Soviet Union and the United States struggled and competed against each other to buy more influence, the effect of UNGA voting on aid disbursement does not hold. We argue that this is because of the incentive to counteract the lobbying by the other country.

5 Conclusion

In this paper, we provide an alternative theoretical argument on the relationship between UNGA voting patterns and bilateral aid allocation decisions. We argue that if the United States is to buy votes at the UNGA with its bilateral foreign aid, the United States has incentives to provide aid to recipient countries that do *not* support their position a priori. We contend that this is the rationale strategy for the United Sates to maximize favorable votes. The United States has little incentive to provide foreign aid to those who already support its position. This is the case when we assume that the United States is the only country who tries to buy votes at the UNGA. In comparison, when there is another country with comparable power and opposing interests trying to buy votes in the UNGA, as we can assume was the case in the Cold War, there is an incentive for the United States to provide aid even to those who support its position a priori, in order to counteract the vote-buying of the opposing country. We empirically test our hypotheses and show that the United States systematically provides more bilateral foreign aid to countries that hold an unfavorable position or are moving away from its position in the post Cold War era.

Our paper thus presents considerable evidence of vote buying efforts of the United States in the UNGA. But contrary to multilateral aid, the ones that receive more foreign aid are the ones that

hold a priori unfavorable positions at the UNGA. Taken together with the findings in the literature on UNGA voting behavior, we can conclude that the U.S. provides more aid to a priori unfavorable countries, and once aid is extended to those countries, they tend to change their voting behavior to support the U.S. position.

The paper has extended implications for other related research programs. Most importantly, the current paper demonstrates that aid allocation is systematically influenced by a recipient country's voting at the UNGA. Thus, in assessing aid effectiveness, one should account for the political nature of aid allocation (Wright & Winters 2010, Bearce & Tirone 2010). Furthermore, it is important to distinguish between aid allocation during and after the Cold War. We theoretically argue and empirically demonstrate that aid allocation decisions are driven differently depending on whether there exist overall one or two competing countries actively pursuing vote buying.

In the next iteration of the paper, we aim to examine if focusing only on votes on important issues makes any difference. Wang (1999) and Carter and Stone (Cater & Stone N.d.) argue that it is more appropriate to focus on the votes that the United States State Department deems important as those issues are the ones the U.S. is likely to attempt to buy votes on. In addition, more theoretical rationales on why multilateral and bilateral aid allocations are driven differently are needed.

References

Alesina, Alberto & David Dollar. 2000. "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth* 5(1):33–63.

Andersen, Thomas Barnebeck, Thomas Harr & Finn Tarp. 2006. "On US Politics and IMF Lending." *European Economic Review* 50:1843–1862.

Austen-Smith, David & John R. Wright. 1994. "Conteractive Lobbying." *American Journal of Political Science* 38(1):25–44.

Austen-Smith, David & John R. Wright. 1996. "Theory and Evidence for Counteractive Lobbying." *American Journal of Political Science* 40(2):543–564.

Bearce, David H & Daniel C. Tirone. 2010. "Foreign Aid Effectiveness and the Strategic Goals of Donor Governments." *The Journal of Politics* 72(3):837–851.

Bennett, Scott D. & Allan Stam. 2000. "EUGene: A Conceptual Manual." *International Interactions* 26:179–204.

Berthelemy, Jean-Claude. 2006. "Bilateral Donors' Interest vs. Recipients' Development Motives in Aid Allocation: Do All Donors Behave the Same?" *Review of Development Economics* 10(2):179–194.

Bueno de Mesquita, Bruce & Alastair Smith. 2009. "A Political Economy of Aid." *International Organization* 63:309–340.

Burnside, Craig & David Dollar. 2000. "Aid, Policies, and Growth." *American Economic Review* 90(4):847–868.

Cater, David B. & Randall W. Stone. N.d. "Sincere or Strategic? U.S. Aid Disbursements and Voting in the United Nations General Assembly.".

Dollar, David & Victoria Kevin. 2006. "The Increasing Selectivity of Foreign Aid, 1984-2003." *World Development* 34(12):2034–2046.

Dreher, Axel & James Raymond Vreeland. N.d. "Buying Votes and Interantional Organizations.".

Dreher, Axel & Jan-Egbert Sturm. 2012. "Do IMF and World Bank Influence Voting in the UN General Assembly?" *Public Choice* 151:363–397.

Dreher, Axel, Jan-Egbert Sturm & James Raymond Vreeland. N.d. "Does Membership on the UN Security Council Influence IMF Decisions?: Evidence from Panel Data.".

Dreher, Axel & Nathan Jensen. 2007. "Independent Actor or Agent? An Empirical Analysis of the Impact of US Interests on IMF Conditions." *The Journal of Law and Economics* 50:105–124.

Dreher, Axel, Rainer Thiele & Peter Nunnenkamp. 2008. "Does US Aid Buy UN General Assembly Votes? A Disaggregated Analysis." *Public Choice* 136(1):139–161.

Fleck, Robert K. & Christopher Kilby. 2006. "How do Political Changes Influence US Bilateral Aid Allocations? Evidence from Panel Data." *Review of Development Economics* 10(2):210–223.

Fleck, Robert K. & Christopher Kilby. 2010. "Changing Aid Regimes? U.S. Foreign Aid from the Cold War to the War on Terror." *Journal of Development Economics* pp. 185–197.

Gartzke, Erik. N.d. "The Affinity of Nations Index, 1946-2002.".

Hojnacki, Marie & David C. Kimball. 1998. "Organized Interests and the Decision of Whom to Lobby in Congress." *The American Political Science Review* 92(4):775–790.

Hufbauer, Gary C., Jeffrey J. Schott, Kimberly Ann Elliott & Barbara Oegg. 2007. *Economic Sanctions Reconsidered*. Peterson Institute for International Economics.

Jaggers, Keith & T. R. Gurr. 1995. "Tracking Democracy's Third Wave with the Polity III Data." *Journal of Peace Research* 32:469–482.

Keele, Luke & Suzanna DeBoef. 2008. "Taking Time Seriously: Dynamic Regression." *American Journal of Political Science* 52(1):184–200.

Kegley, Jr., Charles W. & Steven W. Hook. 1991. "U.S. Foreign Aid and U.N. Voting: Did Reagan's Linakge Strategy Buy Deference or Defiance?" *International Studies Quarterly* 35(3):295–312.

Lai, Brian & Daniel S. Morey. 2006. "Impact of Regime Type on the Influence of U.S. Foreign Aid." *Foreign Policy Analysis* 2:385–404.

Maizels, Alfred & Machiko K. Nissanke. 1984. "Motivations for Aid to Developing Countries." *World Development* 12(9):879–900.

Morgan, T. Cllifton, Navin Bapat & Valentin Krustev. 2009. "The Threat and Imposition of Economic Sanctions, 1971-2000." *Conflict Management and Peace Science* 26(1):92–110.

Nunnenkamp, Peter & Rainer Thiele. 2006. "Targeting Aid to the Needy and Deserving: Nothing But Promises?" *The World Economy* .

Rai, Kul B. 1980. "Foreign Aid and Voting in the UN General Assembly, 1967-1976." *Journal of Peace Research* 17(3):269–277.

Thacker, Strom Cronan. 1999. "The High Politics of IMF Lending." *World Politics* 52:38–75.

Voeten, Erik & Adis Merdzanovic. N.d. "United Nations General Assembly Voting Data." hdl:1902.1/12379 UNF:3:Hpf6qOkDdzzvXF9m66yLTg==.

Wang, T. Y. 1999. "U.S. Foreign Aid and UN Voting: An Analysis of Important Issues." *International Studies Quarterly* 43:199–210.

Wright, John R. 1990. "Contributions, Lobbying, and Committee Voting in the U.S. House of Representatives." *The American Political Science Review* 84(2):417–438.

Wright, Joseph & Matthew Winters. 2010. “The Politics of Effective Foreign Aid.” *Annual Review of Political Science* .