

Research Centre for International Economics

Working Paper: 2014015

Title of Paper

Vote-Buying Behavior in the Security Council: Theory and Evidence from U.S. Foreign Aid

Authors' List

Fumiko Tamura, News Corp Takuma Kunieda, City University of Hong Kong

Abstract

Motivated by a question about the determination of foreign aid flows, we examine the United States' (U.S.) vote-buying behavior in the United Nations (U.N.) Security Council (SC). We propose a model that takes into account both (1) optimal U.S. cost-and-benefit considerations of foreign aid, and (2) veto powers of the permanent members. Imputing U.S. expected benefits from SC resolutions through the probit estimation, we find empirical evidence supporting the hypothesis that the U.S. traded foreign aid for rotating members' votes on vital issues during the period 1960-2001. Our finding suggests that SC seat rotation is a useful predictor of U.S. foreign aid distribution.

© 2014 by Takuma Kunieda. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Vote-Buying Behavior in the Security Council: Theory and Evidence from U.S. Foreign Aid

Fumiko Tamura^{*} Finance Department News Corp

Takuma Kunieda[†] Department of Economics and Finance City University of Hong Kong

July 12, 2014

Abstract

Motivated by a question about the determination of foreign aid flows, we examine the United States' (U.S.) vote-buying behavior in the United Nations (U.N.) Security Council (SC). We propose a model that takes into account both (1) optimal U.S. cost-and-benefit considerations of foreign aid, and (2) veto powers of the permanent members. Imputing U.S. expected benefits from SC resolutions through the probit estimation, we find empirical evidence supporting the hypothesis that the U.S. traded foreign aid for rotating members' votes on vital issues during the period 1960-2001. Our finding suggests that SC seat rotation is a useful predictor of U.S. foreign aid distribution.

Keywords: Foreign aid, Voting behavior, United Nations Security Council.

JEL Classification: F35, D72, C13, C25

^{*}Email: ftamura@newscorp.com, Postal address: Finance Department, News Corp, 1211 Avenue of the Americas, New York, NY 10036, USA, Phone: +1-917-207-1984.

[†]E-mail: tkunieda@cityu.edu.hk, Postal address: Department of Economics and Finance, City University of Hong Kong, P7318, Academic Building, 83 Tat Chee Avenue, Kowloon Tong, Hong Kong, Phone: +852 3442-7960, Fax: +852 3442-0195.

1 Introduction

What determines the United States' (U.S.) foreign aid pattern? Alesina and Weder (2002) find that the U.S. does *not* reward recipient countries that have good institutions. Rather, it allocates more aid to more corrupt governments. This fact is surprising, as the U.S. government, apparently, has no intention of encouraging corruption. This finding may be explained by considering that the U.S. distributes aid out of other motives, and in doing so, ends up allocating more aid to more corrupt governments. Many researchers have tried to identify determinants of foreign aid flows.¹ The literature has long viewed the determinants of foreign aid flows from the following three dimensions: (1) historical and cultural ties, (2) recipients' needs and performances, and (3) donors' political and strategic considerations.² In the case of the U.S., its political and strategic considerations seem to dominate.

It has long been said that the U.S. government uses foreign aid as a tool to induce certain political outcomes.³ As documented by Alesina and Dollar (2000), the U.S. aid flow is largely influenced by its interest in the Middle East, into which it pours much of its foreign aid to bring about favorable political outcomes. The U.S. has been giving approximately one-third of its total economic aid to Middle Eastern countries since 1975 in response to the Middle East conflict of 1973, the oil embargo of 1973-74, and the Camp David Accord in 1978.⁴ Following the terrorist attacks of September 11 2001, Afghanistan became a major recipient of U.S. aid; its receipt of Official Development Assistance (ODA) from the U.S. has risen 40-fold.⁵ On the premise that the U.S. pursues its political interests in a particular region, providing aid directly to that region is not the only way to do so. Bringing a dispute to the Security Council (SC), which is the body of the United Nations (U.N.) in charge of maintaining world peace and security, is another way.⁶ Given these situations regarding U.S. foreign aid, we address the political economy in the Security Council, focusing on U.S. vote-buying behavior in it.

The current paper belongs to the literature of vote-buying or vote-trading behavior in the United Nations. Several studies (Wittkopf, 1973; Rai, 1980; Kegley and Hook, 1991; Wang, 1999; Dreher et al., 2008) explore a link between foreign aid and the voting pattern in the General Assembly, instead of in the Security Council. These studies yield mixed results regarding the existence of such a link. Dreher and Sturm (2012) present evidence indicating that countries that receive adjustment projects and larger non-concessional loans from the World Bank, or non-concessional programs from the International Monetary Fund (IMF), are highly likely to vote in the General Assembly the same as the average G7 country. Dreher et al. (2009a) find that rotating (i.e., non-permanent) members of the Security Council receive favorable treatment from the IMF, and Dreher et al. (2009b) provide similar evidence regarding favorable assistance to rotating members from the World Bank.⁷ Kuziemko and Werker (2006) show that foreign aid receipt from the U.S., as well as from the U.N., increases during a rotating member's tenure on the Security Council, especially during years when key diplomatic events occur. These results produced by Dreher et al. (2009a,b) and Kuziemko and Werker (2006) suggest that the votes of rotating members are traded for cash in the Security Council. Moreover, Lockwood (2013) presents a novel normative framework to investigate international vote buying, aiming to promote debates on it.

Our study is related to Kuziemko and Werker (2006)'s, among others, in that we focus on a link between the U.S. foreign aid pattern and the U.S. politics in the Security Council.⁸ Unlike Kuziemko and Werker (2006) who measure the value of a seat on the Security Council, the procedure that we employ demonstrates that large benefits that the U.S. obtains from resolutions in the Security Council draw its large foreign aid to rotating members. More specifically, we take two steps as follows: (1) Using the probit model and computing the inverse Mills ratio, we first estimate the U.S. expected benefits brought by a given SC resolution, and (2) the U.S. expected benefits then serve as an explanatory variable in the OLS regression that accounts for the U.S. foreign aid pattern, which is the cost incurred to the U.S. Applying this procedure to time-series data, we find that the higher the stakes for the U.S. on a given resolution, the more foreign aid the U.S. distributes to rotating members. This outcome suggests the presence of U.S. vote-buying behavior in the Security Council, specifically, the U.S. pays cash to secure votes of rotating members, unless the secured votes are negated by veto powers that other permanent members might exercise.

The current paper proceeds as follows. In section 2, we briefly discuss the structure of the General Assembly and the Security Council. In Section 3, we develop a theoretical framework that takes into account U.S. optimal behavior and the five permanent members' veto powers, and we display econometric specifications and testable implications. In Section 4, we describe the data and explain how we construct variables used for the empirical analysis. In Section 5, we report the results of both the probit and the OLS estimations. In Section 6, we check the robustness of the results obtained in the previous section by applying the same analyses to Non-SC members, by using another dataset of foreign aid, and by conducting bootstrap tests. In Section 7, we draw our conclusion.

2 The Security Council as a Powerful Body

The Security Council is a subset of the General Assembly. Table 1 shows the structure of the General Assembly and the Security Council. Whereas the General Assembly is represented by all 191 member states, the Security Council consists of 15 members: five permanent members and ten rotating members, also known as "P-5" and "Elected-10," respectively. The five permanent members are the U.S., France, the U.K., Russia and China. The remaining ten seats of the two-year term rotate among the rest of U.N. members. Every year, five countries that have served the two-year term retire, to be replaced with five new countries. While SC decisions require nine affirmative votes, decisions in the General Assembly are usually reached by a simple majority vote, except for the important ones, which require a two-thirds majority to pass. Since 1946, voting coincidence in the General Assembly with U.S. positions has varied among members from year to year, from subject to subject. This voting pattern of the General Assembly contrasts that of the Security Council, where many of the resolutions are adopted unanimously.

One might think that it would be more comprehensive if an analysis encompassed all U.N. votes; however, we intentionally limit our focus to the Security Council after considering a problem dealing with votes in the General Assembly; namely, not all votes in the General Assembly are important enough for the U.S. to buy. Resolutions in the General Assembly have no power of enforcement, and, in addition, the subject matters of votes range broadly from conflicts to values. In general, voting in the General Assembly is a place for expressing opinions and taking positions, rather than a place for exercising political powers. In this respect, excluding votes in the General Assembly from an analysis does no harm and, in fact, makes more sense for examining U.S. vote-buying behavior. Once the Security Council adopts a resolution, the Council is able to enforce it, to call upon U.N. members to apply diplomatic and economic sanctions, and even to take military action against an aggressor.⁹ The Security Council, represented by five permanent members and ten rotating members, is a powerful body; one could imagine how high the stakes on its resolutions are.

O'Neill (1996) measures voting power of SC members in the absence of possible side-payment (e.g., foreign aid).¹⁰ He finds that, in such a setting, the voting powers of the permanent members are enormous due to their right to veto, while rotating members hold little voting power. O'Neill's finding implies that the value of seats for rotating members lies not in voting power per se, but in other prestige. Vreeland and Dreher (2014, pp.6-14) discuss the importance of votes in the Security Council. According to them, powerful countries are likely to buy insurance votes, provided that they can trade cash

for such votes at low cost. They consider two key factors that corroborate the importance of votes in the Security Council, namely, *legitimacy* and *domestic support*. The vote of a member of the Security Council brings legitimacy and indicates that the elected representative supports a resolution. The members of the Security Council can have access to sensitive documents regarding international agenda items. Thus, they have more information about each agenda item than other countries when making a decision on it. Accordingly, the vote would become a credible signal to citizens all over the world. Furthermore, leaders in powerful countries often hesitate to perform foreign policy actions without being supported by domestic citizens; however, once the Security Council approves a foreign policy, leaders can easily obtain domestic support for it. These situations incentivize powerful countries to buy votes in the Security Council.

3 Theoretical Framework

3.1 Model

Consider a country among the permanent members of the Security Council. When an agenda item arises, the country casts a vote for the agenda item or rejects it using its veto power.¹¹ Each of the permanent members has a preference for each agenda item, which reflects both the characteristics and the importance of the agenda item. Let y_j^p be the benefits from agenda item j. The benefits are determined by x'_j , which includes some exogenous variables reflecting both the characteristics and the importance of the agenda item. Then, we have

$$y_j^p = x_j'\beta + \epsilon_j,\tag{1}$$

where ϵ_j is a preference shock and β is a set of parameters. Although y_j^p is unobservable, we can observe the voting behavior of the country. Each of the permanent members accepts the agenda item if $y_j^p > 0$, and rejects it if $y_j^p \leq 0.^{12}$

We assume that the U.S. government gives foreign aid to rotating members to maximize its expected utility. There are a large number of agenda items that the U.S. government votes on. The U.S. government could receive positive or negative benefits from each agenda item if passed. We further assume that the benefits from an agenda item are affected by the preference shock ϵ_j and that the U.S. cannot observe its preference shock as it gives foreign aid to rotating members. The preference shock may arise from the prevalent domestic issues in the United States. When the U.S. government does not prefer the agenda item, it simply exercises its veto power. Owing to its veto power, the U.S. can prevent any agenda items that bring negative benefits from passing. Thus, negative benefits are not realized as a result of U.S. optimal behavior, and the U.S. government takes into account the expected benefits over the preference shock given the condition that the U.S. government decides to accept the agenda item: $E_{\epsilon_j}[y_j^p|z_j = 1, x_j']$, where z_j is the U.S. government's voting behavior. $(z_j = 1 \text{ denotes the U.S. government's acceptance of an item, whereas <math>z_j = 0$ denotes its rejection.) The U.S. government is assumed to obtain its utility U_j from the expected benefits over the preference shock as follows:¹³

$$U_j = exp(\phi E_{\epsilon_j}[y_j^p | z_j = 1, x_j']), \qquad (2)$$

where $\phi > 0$ is a constant.

While the expected benefits of the U.S. government over its preference shock are $E_{\epsilon_j}[y_j^p|z_j = 1, x'_j]$, the U.S. government cannot gain these benefits if other permanent members veto the agenda item, or if the Security Council itself rejects it by majority voting. Therefore, the U.S. government gives rotating members foreign aid to maximize its expected utility (over the uncertainty of majority voting and the possibility of other permanent members' veto-exercising) minus the amount of foreign aid distributed. Let $P^i(z_j^i = 1|x'_j)$ be the probability that a permanent member other than the United States does not exercise the power of veto for an agenda item.¹⁴ Then, the expected utility given x'_j becomes as follows:

$$\mathcal{P}(v_j = 1 | w_j) \prod_{i=1}^4 P^i(z_j^i = 1 | x_j') U_j \tag{3}$$

where $\mathcal{P}(v_j = 1|w_j)$ is the probability that an agenda item will achieve a twothirds majority vote in the Security Council. $(v_j = 1 \text{ implies that an agenda}$ item reaches a two-thirds majority vote in the Security Council, whereas $v_j = 0$ implies that it does not.) w_j is the foreign aid associated with agenda item j that is given to rotating members by the U.S. This probability is an increasing function of the amount of foreign aid w_j . We have assumed that if the U.S. government exercises its veto power, its utility, which is initially expected to be negative, becomes zero. Note that $\mathcal{P}(v_j = 1|w_j)$ is not affected by x'_j . $\mathcal{P}(v_j = 1|w_j)$ embodies U.S. vote-buying behavior. The U.S. government distributes foreign aid to rotating members to increase the probability that an agenda item will achieve a two-thirds majority vote. We consider that the impact of the vote-buying behavior on the probability is so great that the effect of the characteristic of an agenda item can be ignored. To pass an agenda item, the U.S. government collects only four votes of rotating members out of ten members (two votes out of five members until 1965), provided that the other four permanent members are expected to accept the agenda item.¹⁵ The U.S. government does not have to give foreign aid to rotating members that are not likely to accept an agenda item, so it is likely that $\mathcal{P}(v_j = 1|w_j)$ is independent of x'_j .

The U.S. government solves the following maximization problem:

$$\max_{w_j} \mathcal{P}(v_j = 1 | w_j) \prod_{i=1}^4 P^i(z_j^i = 1 | x_j') U_j - w_j,$$
(4)

The first term is the expected utility and the second term is foreign aid associated with agenda item j that is a cost incurred to the U.S. government to pass the agenda item. Substituting (2) into (4), (4) can be rewritten as follows:

$$\max_{w_j} \mathcal{P}(v_j = 1 | w_j) \prod_{i=1}^4 P^i(z_j^i = 1 | x_j') exp(\phi E_{\epsilon_j}[y_j^p | z_j = 1, x_j']) - w_j, \quad (5)$$

To obtain an analytical solution, we specify $\mathcal{P}(v_j = 1 | w_j) = 1 - e^{-\lambda w_j}$. The first-order condition of the maximization problem is given by

$$\Pi_{i=1}^{4} P^{i}(z_{j}^{i}=1|x_{j}')\lambda exp(-\lambda w_{j}+\phi E_{\epsilon_{j}}[y_{j}^{p}|z_{j}=1,x_{j}'])=1$$
(6)

or equivalently,

$$w_{j} = \frac{\log(\lambda)}{\lambda} + \frac{1}{\lambda} \sum_{i=1}^{4} \log(P^{i}(z_{j}^{i} = 1|x_{j}')) + \frac{\phi}{\lambda} E_{\epsilon_{j}}[y_{j}^{p}|z_{j} = 1, x_{j}'].$$
(7)

Equation (7) illustrates that the amount of U.S. foreign aid given to rotating members is affected by two factors: (a) the expected benefits that the U.S. receives from its favored agenda item, and (b) the probability that the other four permanent members also favor that agenda item, given the item's characteristics and importance. Equation (7) contains $E_{\epsilon_j}[y_j^p|z_j = 1, x_j']$ on its right-hand side, not just y_j^p . The U.S. government can never observe the true value of y_j^p ; however, it obtains an expected value of y_j^p over the preference shock. In addition, the U.S. government has veto power over agenda items, which serves as an option with which the U.S. government is able to save foreign aid dollars that would have been spent had the U.S. government no such power. Accordingly, the U.S. government plans for its aid-giving by taking into account $E_{\epsilon_j}[y_j^p|z_j = 1, x_j']$, as opposed to $E_{\epsilon_j}[y_j^p|x_j']$ or y_j^p . It also takes into consideration the probability that the other members do not exercise a veto, that is, their voting for the agenda item: $P^i(z_i^i = 1|x_j')$.

3.2 Empirical Specifications

3.2.1 The First Step

We estimate β in Equation (1) for each of the five permanent members, separately. For example, because we cannot observe the U.S. benefits, y_j^p , but can observe its voting behavior, we can use the probit model. Applying a straightforward calculation, we obtain the following: $E_{\epsilon_j}[y_j^p|z_j = 1, x'_j] = x'_j\beta + \phi(x'_j\beta)/\Phi(x'_j\beta)$, where $\phi(x'_j\beta)/\Phi(x'_j\beta)$ is well-known as the inverse Mills ratio. Although we cannot observe the true value of $E_{\epsilon_j}[y_j^p|z_j = 1, x'_j]$, consistent estimates $\hat{\beta}$ can be made available from the probit estimation. Substituting $\hat{\beta}$ into $E_{\epsilon_j}[y_j^p|z_j = 1, x'_j]$, we have

$$\hat{E}_{\epsilon_j}[y_j^p|z_j=1, x_j'] = x_j'\hat{\beta} + \frac{\phi(x_j'\hat{\beta})}{\Phi(x_j'\hat{\beta})}$$

Likewise, for each of the other four permanent members, the estimate of $P^i(z_j^i = 1|x_j')$ is calculated by substituting $\hat{\beta}$: $\hat{P}^i(z_j^i = 1|x_j') = \Phi(x'\hat{\beta})$.¹⁶

For the independent variables, x'_j , we use the characteristics and importance of each agenda item. Since the importance of each agenda item cannot be measured in a systematic way, we use as a proxy the degree of the importance of the Security Council itself in each year (see Section 2 for details). As will be explained in Section 2, we construct dummy variables by breaking down the contents of agenda items into multiple categories. Basically, we use an "Admission" dummy, an "Africa Conflict" dummy, and a "Middle East Conflict" dummy as independent variables that represent the characteristics of each agenda item. The basic specification for the probit estimation is as follows:

$$y_{j}^{p} = \alpha + \beta_{1}Admision + \beta_{2}Africa_Conflict + \beta_{3}MiddleEast_Conflict + \beta_{4}Importance + \epsilon_{j}$$
(8)

Regarding China, the probit estimation predicts China's acceptance rate perfectly when the "Africa Conflict" and the "Middle East Conflict" dummies are included, which means the coefficients of those variables approach infinity. The perfect prediction of the acceptance rate is implausible because the past data do not necessarily predict the future voting behavior. Thus, we eliminate the "Africa Conflict" and the "Middle East Conflict" dummies from China's probit estimation. For the same reason, we eliminate the "Admission" dummy from France's and the U.K.'s probit estimations.

3.2.2 The Second Step

Although Equation (7) expresses how U.S. foreign aid given to rotating members is affected by the U.S. expected benefit and the probability that the other four permanent members favor an agenda item, we cannot directly estimate Equation (7). To estimate the impacts that the U.S. expected benefit and the probability have on U.S. foreign aid, we use $\hat{E}_{\epsilon_j}[y_j^p|z_j = 1, x_j']$ and $\hat{P}^i(z_j^i = 1|x_j')$ that are obtained from the probit estimation. In estimation, we cannot directly observe foreign aid w_j associated with each agenda item because the data on foreign aid that we can use are yearly. We denote U.S. foreign aid in year t given to rotating members as w_t . Due to the structure of our data on foreign aid, the independent variables in Equation (7), $\hat{E}_{\epsilon_j}[y_j^p|z_j = 1, x_j']$ and $\hat{P}^i(z_j^i = 1|x_j')$ did not match the corresponding dependent variable w_t because each observation in these independent variables pertains to the agenda item voted upon, ungrouped by year. Thus, to obtain the representative benefits and the acceptance probabilities by year, we take the respective average of $\hat{E}_{\epsilon_j}[y_j^p|z_j = 1, x_j']$ and $\hat{P}^i(z_j^i = 1|x_j')$ over each year, thereby constructing yearly independent variables.¹⁷

As to how to choose the data on foreign aid w_t , we have two main choices, for each of which we have two sub-choices: the two main choices are the total economic or military aid dollars distributed by the U.S. government, and the two sub-choices are their current year's values or one-period-lagged values.¹⁸ We use these four variables for our estimations. We do not take lags of more than one-period for dependent variables because the tenure of rotating members lasts for two years. Giving foreign aid more than two years ahead of voting is contradictory to the U.S. government's optimal behavior, and therefore we need not look further than the one-period for the analysis of vote-buying.¹⁹

We include other variables in the estimations to control for their effects on U.S. foreign aid. These control variables are: (1)the growth rate of the GDP of the United States: GGDP; (2) U.S. government expenditure: DGX;²⁰ (3) the inflation rate of the United States: INFLATION; and (4) the year's importance:²¹ DIMPORTANCE or IMPORTANCE, where DIMPORTANCE is the difference between the current value and the previous one of IMPORTANCE. In addition to these four control variables, we have another control variable: the one-period-lagged value of foreign aid, w_{t-1} , to control for the persistency effect of the dependent variable.²²

Then, we consider the following basic specification for the second-step

OLS:

$$w_{t} = constant + \psi_{1} \sum_{i=1}^{4} ilog_{t} + \psi_{2}US_{t} + \gamma_{1}GGDP_{t} + \gamma_{2}DGX_{t} + \gamma_{3}INFLATION_{t} + \gamma_{4}DIMPORTANCE_{t} + \gamma_{5}w_{t-1} + \mu_{t},$$
(9)

where *ilog* is the log of country *i*'s annual average of $\hat{P}^i(z_j^i = 1|x_j')$ and US is the United States' annual average of $\hat{E}_{\epsilon_j}[y_j^p|z_j = 1, x_j']$. μ_t is an error term. In the course of the decision-making process, the U.S. government cannot learn the absolute value of $E_{\epsilon_j}[y_j^p|z_j = 1, x_j']$. In practice, however, the U.S. government is able to make a decision based on the *relative* value of the benefits. Therefore, it is reasonable to assume that the U.S. government compares the current-year benefits with the previous-year benefits, thereby determining an increment of aid-giving to rotating members. Hence, we take the first difference of w_t , $ilog_t$, and US_t and obtain another estimable equation:

$$\Delta w_{t} = constant + \psi_{1} \sum_{i=1}^{4} \Delta i log_{t} + \psi_{2} \Delta US_{t} + \gamma_{1} GGDP_{t} + \gamma_{2} DGX_{t} + \gamma_{3} INFLATION_{t} + \gamma_{4} IMPORTANCE_{t} + \gamma_{5} w_{t-1} + \mu_{t},$$
(10)

where μ_t is an error term. We estimate Equation (9) and (10) to investigate the impacts that the U.S. expected benefit and the probability that the other four permanent members vote on an agenda item have on U.S. foreign aid given to rotating members. Note that we do not use *IMPORTANCE* and *US* at once in the estimation equations because of their near multicollinearity. The testable implication drawn here is that there exists votebuying behavior of the US government in the Security Council if and only if $\psi_2 > 0$. Therefore, the null and alternative hypotheses are

$$H_0:\psi_2=0,$$

and

$$H_1:\psi_2>0,$$

respectively.

4 Data

4.1 Sample Set

To prepare a sample population of developing countries that are eligible for a two-year-term SC seat, the following two processes are taken. First, we select developing countries based on Gross National Income (GNI) per capita in 2003 that hold U.N. memberships.²³ Then, for each of these countries selected, we create the database beginning with the year they joined the U.N., to the present. After this process, 150 countries remain, and as many as 5,943 data points could be made available in the period 1945-2004.²⁴

Our main analysis begins with the year 1960 based on historical considerations. A number of African nations gained independence and joined the U.N. in the 1960s. Moreover, an amendment of the U.N. Charter was made in 1965, increasing the number of rotating SC seats from six to ten. The current structure of the Security Council, which continues to the present day, seems to have been shaped in the 1960s.²⁵ Starting analysis from 1960 is also supported by the country composition of the Security Council, as seen in Appendix B. At least five developing countries have served on the Security Council since 1960, in contrast to the prior period when the number of developing countries serving on the Security Council drops to as low as three. Based on a two-thirds majority rule observed by the Security Council, the U.S. needs to collect at least four affirmative votes from among developing countries serving on the Security Council.²⁶

4.2 Data Sources

For U.S. foreign aid, two distinct data sources are available. U.S. Agency of International Development (USAID) provides annual data on U.S. economic and military assistance, separately, and according to the recipients, from the fiscal year 1946 to the present. "Economic Assistance" and "Military Assistance" cover grants and loans, excluding non-concessionary loans. On the other hand, Organization for Economic Co-operation and Development (OECD) publishes Official Development Assistance (ODA) flows, listing donors according to recipient, from the calendar year 1960 to the present. ODA is defined as foreign grants and concessionary portions of loans that are provided for economic development purposes, and therefore it does not include military aid. Due to differences in definition, "economic assistance in USAID data" and "ODA in OECD data" are not the same; however, the correlation between these two variables is $0.81.^{27}$

U.N. voting records on all adopted agenda items are retrieved from United

Nations Bibliographic Information System (UNBISNET). Agenda items that were considered but blocked by veto-exercising appear in a U.N. publication (e.g., United Nations, 2004) along with each of these items' subject and voting summary.²⁸

Data source of the "Importance" variable is ProQuest Historical Newspapers The New York Times, which offers full-page-article images from the first issue through December 31, 2001. The other control variables used in our analysis (U.S. GDP growth rate, government expenditure, and inflation rate) are calculated based on the data by International Finance Statistics 2004 (International Monetary Fund, 2004). A minor inconsistency among price indices should be noted. While inflation adjustment for foreign aid, GDP growth and government expenditure is done with a GDP deflator, the inflation rate used as a control variable represents a change in CPI.

4.3 Construction of Variables

For probit estimation, we need to look at two exogenous aspects of each agenda item voted on: characteristics and importance. Agenda items are characterized as either "conflicts," "admission of new members," or "general international issues," according to the subject matter on which voting is carried out. Agenda items that are obviously categorized as "procedural" are discarded from the dataset. Furthermore, to indicate concerned regions and countries, "conflicts" and "admission of new members" are subcategorized into the following eight regions: North America, South America, Central/South Asia, East Asia, Middle East, Africa, Eastern Europe and Western Europe. In total, 17 dummy variables capturing characteristics of agenda items are constructed, as shown in Table 2. We lump together all admission variables across the regions under one new variable, "Admission," for econometric reasons.²⁹ As specified in the previous section, we use the "Admission" variable, and top two conflict variables in terms of the number of items: "Africa Conflict" and "Middle East." As for importance, it would be ideal if we could measure each agenda item's importance in a systematic way. However, there is no such measure that is sufficiently objective. Thus, following Kuziemko and Werker (2006), we use as a proxy the "Importance" variable, which represents media coverage of the Security Council, *i.e.*, the number of New York Times articles that cite "United Nations" and "Security Council" in a given year.

These two aspects, characteristics and importance, are assumed to be exogenous in respect to the behavior not only of the permanent members, but also of all of the other U.N. members.³⁰ Given the characteristics and importance, each of the five permanent members makes its own decision on voting, and in addition, the U.S. decides how much money to spend on securing votes. Meanwhile, in the course of lobbying for seats, rotating member candidates cannot predict the type and importance of agenda items that will be voted on during their tenure.³¹ Thus, for rotating members, there is an element of the "lottery" involved in the amount of aid received from the U.S. in exchange for their votes. This element renders SC seat rotation exogenous, eliminating possible biases.³²

For OLS estimation, we aggregate annual U.S. foreign aid data into the following four groups: (1) economic aid to the SC members, (2) military aid to the SC members, (3) economic aid to the Non-SC members, and (4) military aid to the Non-SC members. Since seats on the Security Council rotate every year, the country composition of the Security Council varies from year to year (see Appendix B). By bundling SC members into one group, we avoid the possible endogeneity problem between U.S. preferences and its aid-giving pattern. We treat U.S. aid-giving as if the U.S. had a single resource pool for vote-buying in the Security Council, no matter how many recipients in the Security Council there are, and no matter what demand or preferences each of the recipients has. This argument holds because the U.S. always needs to secure at least four affirmative votes among developing countries, regardless of a change in the total number of these countries serving on the Security Council across years. Hence, we pay attention to the total aid dollars given by the U.S. to the SC members as a group, rather than taking an average. Table 3 provides summary statistics. All variables in Table 3 pass unit root tests.

5 Results

5.1 The First Step – Probit Estimation

Along with an independent variable capturing the importance of agenda items, we use three independent variables relating to agenda items' characteristics, which are selected out of ten according to the number of items voted upon (see Equation (8)).³³ These three variables are "Africa Conflict," "Middle East Conflict," and "Admission." The dependent variable in the probit estimation is each permanent member's voting behavior. (One is assigned to an affirmative vote, whereas zero is assigned to veto exercised.) The results of the probit estimation are reported in Table 4, where four of the five equations exhibit highly significant coefficients.³⁴

First, as the significantly negative coefficients on the "Admission" variable suggest (see the first row of Table 4), the U.S. tends to oppose admissions

of new members, and so too does Russia, formerly known as the U.S.S.R. This result reflects the confrontation of these two nations during the Cold War era; the U.S. tried to block admissions of communist countries, while the U.S.S.R. tried to block U.S. allies from joining the U.N.

Second, as their significantly negative coefficients suggest (see the second and the third rows of Table 4), the U.S. tends to oppose agenda items classified as "Africa Conflict" and "Middle East Conflict." Similarly, France and the U.K. tend to oppose agenda items classified as "Africa Conflict." The latter result is consistent with the fact that these two nations have colonial ties to Africa and are still involved in issues in that region, regardless of the independence of their former colonies.

Third, the coefficients on the "Importance" variable are all significant, except for China's equation (see the fourth row of Table 4). While the coefficients for the U.S., France, and the U.K. equations are significantly positive, the coefficient for Russia is significantly negative. In other words, the more intensive the media coverage of the Security Council in a given year, the higher the stakes held by the U.S. in its favored agenda items. The same argument applies to France and the U.K. as well. Russia has the opposite sign on the "Importance" coefficient to the U.S., possibly reflecting dis-favor on the part of the U.S.S.R. towards those items during the Cold War era.

More importantly, the coefficient on the "Importance" variable in the U.S. equation is informative. Had there been no veto power entitled to the U.S., the U.S. media would have taken up all agenda items, both those favored and those dis-favored by the U.S., with equal weight. In such a case, the probit estimation would not have differentiated these two types of agenda items, and therefore it would have yielded an insignificant coefficient on the "Im*portance*" variable. Contrary to the hypothetical argument above, in reality, the U.S. reserves its veto power over agenda items, which allows for the rejection of its dis-favored items without complicated negotiation, and perhaps the U.S. media does not cover those issues that are dis-favored by the U.S. intensively. The reason the media frequently takes up certain agenda items is that related negotiations are held (possibly prolonged), and the results of voting on those items are unforeseeable. That is, the "Importance" variable is associated with only the items favored by the U.S. In this respect, the effect of the "Importance" variable on agenda items is asymmetric between those favored and those dis-favored by the U.S. This asymmetry makes our probit estimation considerably meaningful, as demonstrated by their coefficients. In summary, the probit estimation carried out here successfully incorporates veto powers in the analysis, while simultaneously capturing the two aspects of agenda items: characteristics and importance.

As shown in Figure 1, we plot the "Importance" and the level of "U.S.

expected benefits," the latter of which is imputed from the above probit estimation.³⁵ At many points, these two variables move in lockstep, however, they are not exactly the same. The "*Importance*" variable, though it is an incredibly innovative variable used by Kuziemko and Werker (2006), is a somewhat crude measure to capture the nature of agenda items voted on.³⁶ By adding the characteristics variables, our probit estimation supports Kuziemko and Werker's claim, as well as yielding more refined measurements of the U.S. expected benefit level.

5.2 The Second Step – OLS Estimation

In the OLS estimation, we use the five variables constructed from the above probit estimation as independent variables. These five variables are: U.S. expected benefits from agenda items, Russia's acceptance rate of agenda items, U.K.'s acceptance rate of agenda items, France's acceptance rate of agenda items, and China's acceptance rate of agenda items.

Based on Equation (9), we first run regressions of the current levels of foreign aid on those five constructed variables. In both types of foreign aid (economic and military), the coefficients on the "US" variable are negative, that is, insignificant for a one-sided test (see the first row of Table 5). Among the control variables, only the one-period-lagged level of foreign aid (*Econ*-Lag1 and MilLag1) exhibits a strong positive sign, implying that the persistency effect dominates in foreign aid distribution (see Column (2) and (4) in Table 5). We obtain similar results when choosing the one-period-lagged level of foreign aid as a dependent variable.³⁷ These results, derived from the level regressions as in Equation 9, are not significant for a one-sided test. However, they do turn out to be consistent with our main results, which will be discussed later in this sub-section.

Next, we look at the first-difference of the equation as in Equation (10). This specification is more plausible than the previous one, because the U.S. cannot learn the absolute level of utility, but only compares the current level with the previous level in the course of its decision-making. Thus, what really matters is an increment of foreign aid dollars given by the U.S. to rotating members. Furthermore, we can safely assume here that foreign aid distribution precedes actual voting for the following two reasons. First, U.S. foreign aid is, in general, regarded as an inducement, as opposed to a reward, for recipients to coincide with U.S. positions in voting (Kegley and Hock, 1991). Second, negotiations, perhaps including an attempt to secure votes, take place prior to actual voting toward a consensus on issues brought up on the upcoming agenda (Fujita, 1998).

In Table 6 and 7, we report the result of the OLS regressions where the

dependent variables are the one-period-lagged first-difference of economic aid and military aid, respectively.³⁸ For both economic and military aid, the coefficients on the "U.S. expected benefit" variable are significantly positive (see the " ΔUS " coefficients in Column (1) of Table 6 and 7). The interpretation is the following: as the benefit level received from agenda items is higher compared with the previous level, the U.S. gives a larger increment in aid to rotating members one period before voting on those items.

Equally importantly, the coefficients on the "Russia's acceptance rate" and "U.K.'s acceptance rate" variables are significantly positive. That is, the aforesaid interpretation holds true as long as other permanent members having veto powers are likely to vote for those items as well. To put it another way, when any one of the other permanent members is expected to veto agenda items, the U.S. does not bother to distribute extra aid dollars to rotating members. For France, the sign of its coefficient is negative, probably reflecting that the U.S. and France do not agree on agenda items after all.

In contrast to the baseline results shown in Column (1), the significance of " ΔUS " coefficients are weak in Columns (2) through (6) of Table 6 and 7. These estimations with weak coefficients do not include a growth of U.S. government expenditure (DGX) as a control variable, thus implying that U.S. government expenditure plays a fundamental role in the determination of aid distribution, especially for military aid (compare Column (2) with Column (5) in Table 7). In other words, U.S. foreign aid is distributed according to vote-buying behavior given the size of each year's budget.

The effect of Egypt, which receives a tremendous portion of U.S. foreign aid, does not interfere with our main results that support the existence of U.S. vote-buying behavior (see Column (6) in Table 6 and 7, which includes "Egypt dummy"). This finding concerning Egypt suggests that a large increment of economic aid to rotating SC members is not due to Egypt serving on the Security Council, even though it might appear so, based on casual observations.³⁹ As far as military aid is concerned, the effect of Egypt's presence on the Security Council accounts for an increased increment of military aid from the U.S. to the SC members. Nonetheless, we still find evidence of vote-buying behavior even after controlling for the effect of Egypt.

As a remark, the coefficients on the two-period-lagged level of the foreign aid (*EconLag2* and *MilLag2*) show significantly negative signs. That is, an increment of foreign aid is larger when the initial level of foreign aid is lower. This pattern, which seems to mitigate a fluctuation in the total foreign aid given to rotating members, is consistent with an assumption made in the previous section: the U.S. acts as if it had a single resource pool for vote-buying in the Security Council.⁴⁰ To reinforce the validity of this assumption, we run the baseline regressions excluding the period prior to 1966 when only six rotating members served on the Security Council. Throughout each year, during the period 1966-2001, ten rotating members serve on the Security Council; equivalently four affirmative votes are required from among developing countries. For that period, we obtain the same results with greater significance of the " ΔUS " coefficients (see Table 8).

Lastly, our main results, summarized in Table 6 and 7, suggest that an increment of the U.S. benefit level from period t-1 to period t is associated with an increment of the U.S. aid-giving from period t-2 to period t-1. If we look at the levels of both variables in the same period, the inverse relationship is expected. This inverse relationship, translated into a negative coefficient on the "US" variable, is found in the level regression analysis conducted at the beginning of this sub-section (see Table 5). Although that result was irrelevant for a one-sided test, the sign would have been significantly negative for a two-sided test, which would be consistent with our main results. All of the results found thus far are consistent with U.S. vote-buying behavior, rejecting the null hypothesis in favor of the alternative.

6 Robustness Check

6.1 Non-SC Members

It is expected that the null hypothesis, $\psi_2 = 0$, cannot be rejected when we choose "foreign aid given to Non-SC members" as a dependent variable. In Table 9, we report the results of the OLS regressions for a sample of Non-SC members where the dependent variable is the one-period-lagged firstdifference of economic and military aid. In contrast to the results shown in Column (1) and (2) in Table 6 and 7, the " ΔUS " coefficients in Table 9 are insignificant; we cannot reject $\psi_2 = 0$. In other words, an increment of U.S. foreign aid given to Non-SC members does not significantly correspond with a relative increase in U.S. expected benefits from agenda items voted on in the Security Council. This result serves as indirect evidence supporting U.S. vote-buying behavior in the Security Council.

6.2 ODA Data by OECD

We conduct the same regressions using the second dataset, "Geographical Distribution of Financial Flows," published by OECD, and use "net ODA" as a dependent variable with the same specification as in our main analysis. The results derived from using the OECD data are similar to those from the USAID data (see Table 10). The regressions using "ODA to SC members"

as a dependent variable show the significantly positive coefficient on the " ΔUS " variable (see Column (1) and (2)). On the other hand, the regressions using "ODA to Non-SC members" as a dependent variable do not show any significance of the " ΔUS " coefficients (see Column (3) and (4)).

6.3 Bootstraps

We examine the significance of ψ_2 by semiparametric bootstraps. Our sample size is small; there are only 40 observations of the OLS in the previous section, which make it difficult to convince us of approximate asymptotic distributions. Even bootstrap tests based on asymptotically pivotal test statistics are not exact; nevertheless, bootstrap tests generally work better than do tests which rely upon approximate asymptotic distributions.⁴¹

We construct simulated P values of the coefficients on the " ΔUS " variable, which are reported in Table 11.⁴² We have parallel results with the previous regressions. Overall, the simulated P values are sufficiently low, implying the significance of the coefficients on the " ΔUS " variable. As Column (3), (4), and (5) demonstrate, the significance of ψ_2 is lowered if we eliminate U.S. government expenditure (DGX) from the regressions. In particular, in the military-aid-regression, ψ_2 becomes insignificant. These results agree with the ones obtained from the OLS estimations, reinforcing our main findings.

7 Conclusion

In search for determinants of U.S. foreign aid flows, we have found empirical evidence supporting the hypothesis that the U.S. distributes foreign aid in exchange for rotating members' votes in the U.N. Security Council. Not only have we provided an underlying theoretical framework where an optimization problem is solved from the viewpoint of an aid donor (the U.S.), but we have also successfully utilized the probit estimation, thereby imputing U.S. benefits received from its favored Security Council resolutions. By incorporating veto powers into the analysis, we have also found empirical evidence supporting the hypothesis that the U.S. does not bother to distribute extra aid dollars to rotating members under the following circumstances:(1) any one of the other permanent members is expected to *veto* a resolution, or (2) the U.S. dis-favors that resolution. In the latter case the U.S. simply exercises its veto power to prevent it from passing.

Based on those results derived by the OLS regressions and then confirmed by the bootstrap tests, we conclude the following: as the level of expected benefits received from a resolution is higher than the previous level, the US gives a larger increment in aid to rotating members one period ahead of the voting on that resolution, as long as other permanent members are likely to *vote* for that resolution as well. Our finding suggests that seat rotation in the Security Council is a useful explanatory factor of U.S. foreign aid distribution. One limitation of our analysis is, however, that although we have shown the existence of U.S. vote-buying *behavior*, such behavior does not necessarily result in loyalty and votes secured for the U.S. position.

Our model, tailored to analyze vote-buying behavior in the Security Council, can be readily applicable to various other settings where a party tries to secure votes in the presence of veto powers. Moreover, our methodology allows us to calculate, in monetary values, how much a veto is worth. In the current U.N. reform, which offers several possible scenarios, one could measure a value of a seat with a veto, using our methodology. Our paper offers wide applicability, from the determination of foreign aid flows to the valuation of veto powers; these topics are open to further research.

Notes

1 The recent literature of the determinants of foreign aid includes Alesina and Dollar (2002), Alesina and Weder (2002), Berthèlemy and Tichit (2004), Gates and Hoeffler (2004), Kpodar and Le Goff (2011), Neumayer (2003), and Svensson (2003). In particular, Kpodar and Le Goff (2011) provide an extensive literature review regarding this topic.

2 Examples of historical and cultural ties are colonial background (notably France's aid to former French colonies), and cultural affinity (such as language and religion.) Recipients' needs include: recipients' income level, emergency calls due to natural disaster, e.g., Tsunami relief for Indonesia, and post-conflict reconstruction efforts. Recipients' performance includes both political and economic performance: the government quality (the degree of being free of corruption), political openness such as civil liberties and democracy, economic openness, and commitments to sound economic policies. Although in the literature what constitutes "donors' political and strategic considerations" varies from study to study, there is a general agreement that donors' interests matter for their aid-giving patterns.

3 See Black (1968) and Eberstadt (1988). During the Cold War era, the Reagan administration promoted an "aid-for-support" linkage strategy, in which it started to monitor foreign policy behavior of its aid recipient countries. The Clinton administration argued that foreign assistance remained an important instrument of U.S. foreign policy, strongly opposing deep cuts in the budget for foreign aid (Christopher, 1995). In the midst of a war on terrorism, the Bush administration agreed to double its aid to Africa, partly in fears that "failed states can become breeding grounds for terrorism" (*New York Times*, July 6, 2005).

4 In regard to U.S. military aid, the late 1970s as much as 80% of its total military aid is distributed to Egypt and Israel (U.S. Agency for International Development, various years).

5 Source: Organization for Economic Co-operation and Development (2005).

6 Charter of United Nations, Chapter V, VI, and VII.

7 Dreher et al. (2013) find that rotating members of the Security Council receive approximately 30 percent fewer conditions imposed by IMF than other countries and conclude that softer conditionality is traded for political influence on the Security Council.

8 An analogue of this kind of link is examined extensively in the context of the U.S. federal system, namely a link between federal grants-in-aid and committee representation. The interested reader is referred to Knight (2002).

9 Charter of United Nations, Chapter V, VI, and VII.

10 According to O'Neill (1996), voting power is the probability that one's vote would make a difference.

11 We use the term "agenda item" throughout this section, though we loosely call it "resolution" in the previous section. Strictly speaking, agenda items become

resolutions once passed in the Security Council.

12 An abstention, a third option available for all SC members, is implicitly embodied in our theoretical framework. Conventionally, in the Security Council, an abstention is not counted towards an affirmative vote, and at the same time it never constitutes a veto either. Nine affirmative votes are required in order for an agenda item to pass. The function $\mathcal{P}(v_j = 1|w_j)$, introduced later, is the probability that rotating members cast affirmative votes on the agenda item. The function $P^i(z_j^i = 1|x_j')$, also introduced later, is the probability that the other permanent members do not veto the agenda item, either by casting affirmative votes or by abstaining.

13 The assumption that the U.S. government obtains its utility from the expected benefits over the preference shock, rather than the true benefits, might seem unusual; however, such an assumption is plausible, provided that the U.S. government never knows the true value of each agenda item because of the organizational distortions of the country (such as its representative system), but it knows the distribution of the preference shocks. The U.S. government also knows the characteristics and importance of each agenda item when it gives foreign aid to rotating members.

14 Therefore *i* stands for the U.K., France, the U.S.S.R., or China.

15 We should note that five permanent members' acceptance of an agenda item in the Security Council is a separate process from their opportunity to exercise veto power. This is because the power of veto is exercised after voting in the Security Council, rather than at the beginning, or during voting.

16 Since we estimate five equations, we have a different β for each equations. The subscript *i* is, however, omitted for the sake of simplification.

17 Roughly speaking, a chunk of foreign aid given to rotating members is good for a year, no matter how many agenda items are considered.

18 We use a "total" value, rather than "average" of each recipient because testable implications are derived from the viewpoint of the aid donor, the U.S., which acts as if it had a single resource pool for vote-buying. For further discussion, see Section 2.

19 This claim might be too much because a country that has finished its tenure could become a rotating member again in the future. If we take this fact into account, we should consider a game-theoretic situation. In the current paper, we ignore such a situation and we leave it for future research.

20 The U.S. government expenditure referred to here, DGX, is the difference between the current year's U.S. government expenditure and the previous one. We do not use the level value of U.S. government expenditure because it does not pass the unit root test. See Table 3.

21 The year's importance represents the media coverage of the "Security Council" in a given year. See Section 2 for the definition of this variable.

22 Plotting the data, it seems that w_t follows a mean-reverting process.

23 Countries with GNI per capita below 9,386 U.S. dollars in 2003 are cat-

egorized as developing countries, according to World Bank's income classification (World Development Indicators database).

24 Israel, a major recipient of U.S. aid, is classified as a high-income country based on its 2003 GNI per capita. Thus, it is not included in our sample set. A list of the sample countries along with their code, regional classification, and years when U.N. memberships were granted is attached in Appendix A.

25 For the probit estimation, we use voting records in the Security Council from 1950 onwards in order to gather as much information as possible for estimating the unobservable variables. The period immediately after the Second World War, 1945-1949, is excluded due to its special circumstances and a lack of data reliability.

26 Under the U.N. Charter prior to the amendment in 1965, the U.S. had to collect only two votes from among the developing countries. To take this change into account, each year from 1960-1965 is indicated in the dataset by appropriate dummy variables.

27 Since these two data sources rely on different accounting periods, we convert USAID data, originally in a fiscal year, into a calendar-year equivalent, through proration.

28 To the best of our knowledge, there is no agenda item that was rejected by the Council's majority voting.

29 For admission of new members, the observations of each region are too few to sensor voting behavior.

30 Another measure of importance, used in some literature, is based on the US government's recognition of "important issues." We avoid using this measure since it is evidently endogenous in respect to the U.S. government behavior. For these "important issues," see footnote 5.

31 Technically speaking, any country, even a non-U.N. member, can bring a dispute to the Security Council, and thus candidates can time themselves by bringing disputes to the Security Council on their own during their tenure. However, this possibility must be trivial considering the total size of the U.N.

32 In fact, it seems that some countries tend to serve on the Security Council more often than others. This bias is, however, mitigated sufficiently by introducing the above exogenous variables.

33 The ten dummy variables relating to the characteristics are: eight regional conflict dummies, an admission dummy, and an international dummy.

34 Although the significance of the coefficients in China's equation is not as high as the other four equations, they are acceptable.

35 For comparison, both values are normalized.

36 For instance, the "*Importance*" variable solely indicates less importance than we expect attached to the years following the terrorist attacks of September 11. By including the characteristic variables, which we have constructed, the levels of importance are elevated to align with a pre-established conventional wisdom on that event. 37 The estimation result is available from the authors upon request.

38 Without taking a one-period lag of foreign aid variables, we gain no significant results. The estimation result is available from the authors upon request.

39 Egypt served on the Security Council in the years of 1946, 1949-1950, 1961-1962, 1984-1985, and 1996-1997.

40 This pattern is also consistent with a mean-reverting process, as mentioned in footnote 21.

41 See Davidson and MacKinnon (1999a, 1999b, 2002, 2004), Beran (1988), Horowitz (1994), and Godfrey (1998).

42 For the construction of the simulated P values, see Davidson and MacK-innon (2004).

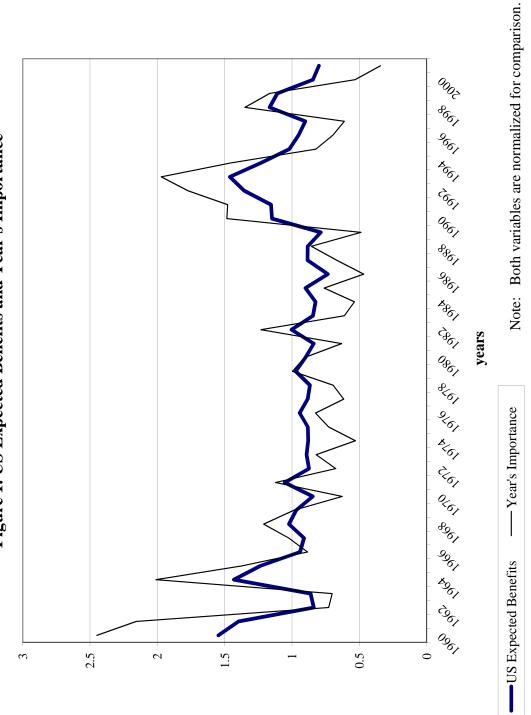
References

- [1] Alesina, Alberto and David Dollar. 2000. "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth* 5(1): 33-63.
- [2] Alesina, Alberto and Beatrice Weder. 2002. "Do Corrupt Governments Receive Less Foreign Aid?" American Economic Review 92(4): 1126-1137.
- [3] Beran, Rudolf. 1988. "Prepivoting test statistics: A Bootstrap View of Asymptotic Refinements." Journal of the American Statistical Association 83(403): 687-697.
- [4] Berthèlemy, Jean-Claude and Ariane Tichit. 2004. "Bilateral Donors Aid Allocation Decisions: A Three-dimensional Panel Analysis." International Review of Economics and Finance 13(3):253-274.
- [5] Black, Lloyd D. 1968. The Strategy of Foreign Aid. Princeton: D. Van Nostrand.
- [6] Christopher, Warren. 1995. "The Foreign Affairs Budget: Our Foreign Policy Cannot Be Supported on the Cheap." U.S. Department of State Dispatch 6: 285-291.
- [7] Davidson, Russell and James G. MacKinnon. 1999a. "Bootstrap Testing in Nonlinear Models." *International Economic Review* 40(2): 487-508.
- [8] Davidson, Russell and James G. MacKinnon. 1999b. "The Size Distortion of Bootstrap Tests." *Econometric Theory* 15(3): 361-376.
- [9] Davidson, Russell and James G. MacKinnon. 2002. "Bootstrap J Tests of Nonnested Linear Regression Models." *Journal of Econometrics* 109(1): 167-193.
- [10] Davidson, Russell and James G. MacKinnon. 2004. Econometric Theory and Methods. New York: Oxford University Press..
- [11] Dreher, Axel, Peter Nunnenkamp and Rainer Thiele. 2008. "Does US Aid Buy UN General Assembly Votes? A Disaggregated Analysis." *Public Choice* 136(1): 139-164.
- [12] Dreher, Axel, Jan-Egbert Sturm, and James Raymond Vreeland. 2009a. "Development Aid and International Politics: Does Membership on the UN Security Council Influence World Bank Decisions?" Journal of Development Economics 88(1): 1-18.

- [13] Dreher, Axel, Jan-Egbert Sturm, and James Raymond Vreeland. 2009b. "Global Horse Trading: IMF Loans for Votes in the United Nations Security Council." *European Economic Review* 53(7): 742-757.
- [14] Dreher, Axel and Jan-Egbert Sturm. 2012. "Do the IMF and the World Bank Influence Voting in the UN General Assembly?" *Public Choice* 151(1): 363-397.
- [15] Dreher, Axel, Jan-Egbert Sturm, and James Raymond Vreeland. 2013. "Politics and IMF Conditionality." *Journal of Conflict Resolution* (in press). Doi:10.1177/0022002713499723.
- [16] Eberstadt, Nicholas. 1988. Foreign Aid and American Purpose. Washington, DC: American Enterprise Institute.
- [17] Fujita, Hisaichi. 1998. Kokuren hou. Tokyo: Tokyo Daigaku Shuppan kai.
- [18] Gates, Scott and Anke Hoeffler. 2004. "Global Aid Allocation: Are Nordic Donors Different?" CSAE Working Paper No. 2004.34. University of Oxford: Centre for the Study of African Economies.
- [19] Godfrey, L. G. 1998. "Tests of Non-Nested Regression Models: Some Results on Small Sample Behaviour and the Bootstrap." *Journal of Econometrics* 84(1): 59-74.
- [20] Horowitz, Joel L. 1994. "Bootstrap-Based Critical Values for the Information Matrics Test." Journal of Econometrics 61(2): 395-411
- [21] International Monetary Fund (IMF). 2004. International Finance Statistics 2004. Washington, DC: IMF. CD-ROM.
- [22] Kegley, Charles W. and Steven W. Hock. 1991. "U.S. Foreign Aid and U.N. Voting: Did Reagan's Linkage Strategy Buy Deference or Defiance?" *International Studies Quarterly* 35(3): 295-312.
- [23] Knight, Brian. 2002. "Endogenous Federal Grants and Crowd-out of State Government Spending: Theory and Evidence form the Federal Highway Aid Program." American Economic Review 92(1): 71-92.
- [24] Kpodar, Kangni and Maëlan Le Goff. 2011. "Do Remittances Reduce Aid Dependency?" IMF Working Papers 11/246. International Monetary Fund.

- [25] Kuziemko, Ilyana and Eric Werker. 2006. "How Much is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations." Journal of Political Economy 114(5): 905-930.
- [26] Lookwood, Natalie J. 2013. "International Vote Buying." Harvard International Law Journal 54(1): 97-156.
- [27] Neumayer, Eric. 2003. "Do Human Rights Matter in Bilateral Aid Allocation? A Quantitative Analysis of 21 Donor Countries." Social Science Quarterly 84(3): 650-666.
- [28] New York Times. 2005. "Africa Tackles Graft, With Billions in Aid in Play." July 6.
- [29] OECD (Organization for Economic Co-operation and Development). (2005) and various years. *Geographic Distribution of Financial Flows* to Developing Countries. Paris: OECD. CD-ROM.
- [30] O'Neill, Barry. 1996. "Power and Satisfaction in the United Nations Security Council." *Journal of Conflict Resolution* 40(2): 219-237.
- [31] Rai, Kul B. 1980. "Foreign Aid and Voting in the UN General Assembly, 1967-1976." Journal of Peace Research 17(3): 269-277.
- [32] Svensson, Jakob. 2003. "Why Conditional Aid Does Not Work and What Can Be Done About It?" Journal of Development Economics 70(2): 381-402.
- [33] Tamura, Fumiko and Takuma Kunieda. 2005. "Vote-Buying Behavior in the Security Council: Theory and Evidence from U.S. Foreign Aid." mimeo. Department of Economics, Brown University.
- [34] United Nations. 2004. Report of the Open-ended Working Group on the Question of Equitable Representation on and Increase in the Membership of the Security Council and Other Matters Related to the Security Council. A/58/47.
- [35] USAID (U.S. Agency for International Development). U.S. Overseas Loans and Grants [Greenbook]. Available on-line at http://qesdb.cdie.org/gbk/home.html, various years.
- [36] U.S. Department of State, Bureau of International Organization Affairs. 2000-2004. Report to Congress on Voting Practices in the United Nations. Available on-line at http://www.state.gov/p/io/conrpt/vtgprac/,

- [37] Vreeland, James Raymond and Axel Dreher. 2014. *The Political Economy of the United Nations Security Council.* New York: Cambridge University Press.
- [38] Wang, T.Y. 1999. "U.S. Foreign Aid and UN Voting: An Analysis of Important Issues." *International Studies Quarterly* 43(1): 199-210.
- [39] Wittkopf, Eugene R. 1973. "Foreign Aid and United Nations Votes: A Comparative Study." *American Political Science Review* 67(3): 868-888.
- [40] World Bank. 2004. World Development Indicators. Washington, DC: World Bank, database.





General Assembly	Security Council			
All 191 members	15 SC members	5 permanent members	US	
[simple majority votes]*	[nine affirmative votes]	with veto powers	France	
		(P-5)	UK	
			Russia	
			China	
		10 non-permanent	Algeria	Argentina
		rotating members without	Benin	Denmark
		veto powers**	Brazil	Greece
		(Elected-10)	Philippines	Japan
			Romania	Tanzania
	176 Non-SC members	the rest of the UN membe	r states	

Table 1. General Assembly and Security Council

* With the exception of a two-thirds majority required for important decisions.

** Countries serving in 2005. The term starts on January 1 and ends on December 31.

Algeria, Benin, Brazil, Philippines, and Romania have been serving from 2004 and will retire at the end of 2005 to be replaced with five new members.

Classification		Number of Items	: of which Items
		Considered	Rejected
Conflict		1224	155
	NAMC (North America)	18	10
	SAMC (South America)	68	14
	CASIC (Central/South Asia)	42	6
	EASI (East Asia)	56	10
	ARAC (Middle East)	305	53
	AFRC (Africa)	400	30
	EEURC (Eastern Europe)	166	11
	WEURC (Western Europe)	169	21
Admission		170	42
	ADNAME (North America)	0	0
	ADSAME (South America)	16	0
	ADCASI (Central/South Asia)	18	5
	ADEASI (East Asia)	36	15
	ADARA (Middle East)	17	5
	ADAFR (Africa)	45	2
	ADEERU (Eastern Europe)	15	0
	ADWEUR (Western Europe)	23	15
International		158	7

Table 2. Classification of Agenda Items

Note: The regional classification follows the one in World Development Indicators (World Bank, 2004)

Variable	Code	Definition	Average	Source
			[S.D.]	
Economic aid to SC members	ECON_SC	Total US economic aid to developing countries that serve on the	0.771 0.8771	USAID
Military aid to SC members	MIL_SC	Total US military aid to developing countries that serve on the SC,	0.249	USAID
		in billions, adjusted to calendar year	[0.495]	
Economic aid to NSC members	ECON_NSC	Total US economic aid to developing countries that do not serve	5.907	USAID
		on the SC, in billions, adjusted to calendar year	[1.972]	
Military aid to NSC members	MIL_NSC	Total US military aid to developing countries that do not serve on	2.330	USAID
		the SC, in billions, adjusted to calendar year	[0.707]	
ODA to SC members	ODA_SC	Total ODA from US to developing countries that serve on the SC,	0.771	OECD
		in billions, calendar year	[1.082]	
ODA to NSC members	ODA_NSC	Total ODA from US to developing countries that do not serve on	5.693	OECD
		the SC, in billions, calendar year	[2.531]	
US expected benefit level	SU	Imputed value that represents US expected benefits received from	2.802	*
		agenda items	[0.566]	
Russia's acceptance rate	RUSlog	Logarithm of likelihood that Russia to vote yes or to abstain	-0.034	*
			[0:0.0]	•
China's acceptance rate	CHNI0g	Logarithm of likelihood that China to vote yes or to abstain	-0.003 [0.002]	*
France's acceptance rate	FRAlog	Logarithm of likelihood that France to vote ves or to abstain	-0.014	*
· · · · · · · · · · · · · · · · · · ·	0		[0.001]	
UK's acceptance rate	UKlog	Logarithm of likelihood that UK to vote yes or to abstain	-0.011	*
			[0.008]	
Year's importance	IMPORTANCE	The number of New York Times articles that cite "United Nations"	3.875	ProQuest
		and "Security Council," in 1/100th	[1.938]	
US GDP growth rate	GGDP	US real GDP growth rate, adjusted by GDP deflator	0.034	IMF
			0.021	ļ
US government expenditure growth	DGX	US real government expenditure growth, adjusted by GDP deflator	0.272 [0.208]	IMF
US inflation rate	INFLATION	US inflation rate based on CPI	0.044 [0.030]	IMF

Table 3. Summary Statistics — 42 observations, 1960-2001

All financial values are in 1995 US dollars, adjusted by a GDP deflator. All variables listed above pass unit root tests. * Constructed by the authors.

	Dependent Va	ariable: Voting "	Yes"		
	USA	RUS	CHI	FRA	UK
Admission	-0.645	-0.337	-0.624		
	[0.252]***	[0.180]*	[0.448]		
Africa Conflict	-0.432	0.569		-1.183	-1.215
	[0.177]**	[0.219]***		[0.366]***	[0.263]***
Middle East Conflict	-1.031	0.012		-0.879	-0.562
	[0.171]***	[0.174]		[0.390]**	[0.310]*
Importance	0.278	-0.125	0.140	0.194	0.208
	[0.049]***	[0.030]***	[0.128]	[0.079]**	[0.064]***
Constant	1.178	2.355	2.444	2.424	2.064
	[0.199]***	[0.186]***	[0.459]***	[0.418]***	[0.313]***
Obs.	1386	1386	1386	1386	1386
Prob > chi2	0	0	0.2389	0	0
Pseudo R2	0.164	0.091	0.067	0.167	0.195

 Table 4.
 Probit Estimation

*** Denotes 1-percent significance, ** denotes 5-percent significance, and * denotes 10-percent significance.

	(1)	(2)	(3)	(4)
Dependent Variable	ECON_SC(t)	ECON_SC(t)	MIL_SC (t)	MIL_SC (t)
US	-2.054	-3.012	-0.446	-0.954
	[0.853]	[0.754]	[0.533]	[0.551]
RUSlog	-19.858	-54.693	-5.003	-18.107
	[12.635]	[14.556]	[7.887]	[10.672]
CHIlog	176.355	198.404	46.625	88.775
	[114.410]*	[91.873]**	[71.415]	[66.662]*
FRAlog	104.856	192.328	34.879	93.272
-	[80.937]*	[67.643]***	[50.521]	[50.568]**
UKlog	-75.279	-206.456	-40.817	-112.999
-	[94.434]	[81.406]	[58.946]	[60.396]**
GGDP	8.522	8.056	5.045	4.954
	[7.298]	[5.874]	[4.555]	[4.162]
DGX	1.039	0.755	0.673	0.173
	[0.721]	[0.580]	[0.450]	[0.444]
INFLATION	-2.204	-3.704	-0.894	1.005
	[6.049]	[4.842]	[3.776]	[3.522]
dIMPORTANCE	0.005	0.038	0.008	-0.017
	[0.084]	[0.069]	[0.053]	[0.050]
1960-65 dummy	0.465	-0.334	-0.020	-0.161
	[0.586]	[0.501]	[0.366]	[0.341]
Constant	6.439	7.817	1.188	2.277
	[2.688]**	[2.226]***	[1.678]	[1.608]
EconLag1		0.447		
		[0.129]***		
MilLag1				0.539
				[0.190]***
adj. R^2	0.118	0.451	-0.078	0.127
Observations	42	41	42	41
F	F(10, 31)=1.55	F(11, 29)=3.98	F(10, 31) = 0.70	F(11, 29)=1.53
Prob > F	0.170	0.001	0.715	0.175
DW	D(11, 42)=1.35		D(11, 42)=1.163	
Dubin's alternative test		Prob>chi2= 0.554		Prob>chi2= 0.020

Table 5. OLS Regressions — Dependent Variable: Current Year's Level of Foreign Aid

Notes:

a) *** Denotes 1-percent significance, ** denotes 5-percent significance, and * denotes 10-percent significance for onesided tests of the following variables: "*US*," "*RUSlog*," "*CHIlog*," "*FRAlog*," and "*UKlog*." For the rest of the variables, these symbols are associated with two-sided tests.

b) For Dubin's alternative test, the null hypothesis is that there is no serial correlation between error terms.

c) In the case of military aid, columns (4) indicates that a serial correlation exists between error terms. This correlation, however, disappears when *MilLag2* is added to the equation as a regressor, and the result remains unchanged.

Aid
e of Economic Aid
ofEc
srenc
First-Diffe
Lagged I
<u> </u>
able: One-Period-
$\tilde{\cdot}$
/ariable
endent V
- Depo
- suoise-
OLS Regr
<u>6.</u>
Table

	(1)	(2)	(3)	(4)	(5)	(9)
ΔUS	1.720	1.807	1.349	1.383	1.369	1.460
	$[1.012]^{**}$	**[0.960]	$[0.906]^{*}$	$[0.976]^{*}$	$[0.917]^{*}$	$[0.968]^{*}$
$\Delta RUSlog$	41.695	42.834	35.015	35.560	33.402	32.087
	$[21.149]^{*}$	$[20.542]^{**}$	$[19.298]^{**}$	[20.278]	$[19.602]^{**}$	[21.343]
ΔCHIlog	-35.041	-38.144	-11.211	-11.775	-18.262	-62.605
	[102.615]	[100.633]	[97.012]	[98.648]	[100.926]	[99.885]
$\Delta FRAlog$	-111.106	-113.134	-105.322	-106.159	-107.794	-75.647
	[61.778]	[60.538]	[60.373]	[61.821]	[61.235]	[64.287]
$\Delta UKlog$	137.356	141.495	132.918	134.359	134.300	94.761
	[77.917]**	$[75.712]^{**}$	$[75.619]^{**}$	[78.013]	$[76.558]^{**}$	[80.363]
GGDP	7.332	7.121			7.675	7.302
	[7.036]	[6.901]			[6.983]	[6.760]
DGX	0.994	0.931				0.526
	[0.721]	[0.684]				[0.722]
INFLATION	3.889	3.189			1774	4.636
	[5.701]	[5.198]			[5.162]	[5.180]
IMPORTANCE	0.036			-0.011		
	[0.111]			[0.101]		
Egypt dummy						0.689
						[0.457]
EconLag2	-0.555	-0.559	-0.573	-0.574	-0.561	-0.586
	$[0.151]^{***}$	$[0.148]^{***}$	$[0.147]^{***}$	$[0.150]^{***}$	$[0.150]^{***}$	$[0.146]^{***}$
Constant	-0.432	-0.239	0.420	0.460	0.069	-0.265
	[0.784]	[0.503]	$[0.170]^{**}$	[0.413]	[0.455]	[0.492]
adj. R ²	0.216	0.240	0.237	0.213	0.219	0.271
Observations	40	40	40	40	40	40
ĹL	F(10, 29)=2.08	F(9, 30)=2.36	F(6, 33)=3.02	F(7, 32)=2.51	F(8, 31)=2.36	F(10, 29)=2.45
Prob > F	0.061	0.037	0.018	0.036	0.041	0.029
DW	D(11, 40)=1.690	D(10, 40)=1.708	D(7, 40)=1.651	D(8, 40)=1.659	D(9, 40) =1.628	D(11, 40)=1.520

	(1)	(2)	(3)	(4)	(5)	(9)
ΔUS	1.129	0.917	0.287	0.473	0.317	0.499
	$[0.580]^{**}$	$[0.550]^{*}$	[0.525]	[0.565]	[0.534]	$[0.319]^{*}$
$\Delta RUSlog$	23.272	20.241	8.406	11.416	7.802	5.108
	$[11.948]^{**}$	$[11.689]^{**}$	[11.211]	[11.721]	[11.400]	[6.956]
$\Delta CHIlog$	-38.875	-30.930	9.004	6.388	-4.484	-82.668
	[56.099]	[55.894]	[56.733]	[56.959]	[59.245]	$[32.642]^{*}$
$\Delta FRAlog$	-78.155	-72.503	-58.518	-63.829	-59.094	-14.436
	[34.092]	[33.866]	[35.531]	[36.105]	[36.099]	[20.720]
$\Delta UKlog$	102.534	92.254	74.136	82.759	75.295	20.752
	$[43.320]^{**}$	$[42.527]^{**}$	$[44.648]^{*}$	$[45.766]^{**}$	$[45.323]^{*}$	[25.956]
GGDP	0.565	1.034			1.898	1.104
	[3.808]	[3.801]			[4.087]	[2.175]
DGX	0.988	1.053				0.617
	$[0.427]^{**}$	$[0.425]^{***}$				$[0.249]^{***}$
INFLATION	-3.012	-1.489			-1.954	0.262
	[3.219]	[2.932]			[3.159]	[1.692]
IMPORTANCE	-0.069			-0.054		
	[0.062]			[0.060]		
Egypt dummy						1.206
						$[0.152]^{***}$
<i>MilLag2</i>	-0.863	-0.814	-0.579	-0.608	-0.621	-1.047
	$[0.173]^{***}$	$[0.169]^{***}$	$[0.151]^{***}$	$[0.155]^{***}$	$[0.162]^{***}$	$[0.101]^{***}$
Constant	0.318	-0.054	0.142	0.347	0.182	-0.109
	[0.434]	[0.265]	$[0.084]^{*}$	[0.241]	[0.266]	[0.152]
adj. R2	0.310	0.304	0.212	0.208	0.189	0.772
Observations	40	40	40	40	40	40
F	F(10, 29)=2.75	F(9, 30)=2.89	F(6, 33)=2.75	F(7, 21)=2.46	F(8, 31)=2.13	F(10, 29)=14.22
Prob > F	0.016	0.0138	0.028	0.039	0.0625	0.0000
DW	D(11, 40)=1.859	D(10, 40)=1.745	D(7, 40)=1.718	D(8, 40)=1.786	D(9, 40)=1.726	D(11, 40)=1.471
*** Denotes 1-per	cent significance, *:	*** Denotes 1-percent significance, ** denotes 5-percent significance, and * denotes 10-percent significance for one-sided tests of the	significance, and *	denotes 10-percent :	significance for one-	-sided tests of the
following variable	S: "AUS," "ARUSIO	following variables: " ΔUS ," " $\Delta CHIog$," " $\Delta CHIlog$," " $\Delta FRAlog$," and " $\Delta UKlog$." For the rest of the variables, these symbols are	FRAlog," and " ΔU	Klog." For the rest	of the variables, the	se symbols are

associated with two-sided tests.

Table 7. OLS Regressions — Dependent Variable: One-Period-Lagged First-Difference of Military Aid

	(1)	(2)	(3)	(4)
Dependent Variable	$\Delta ECON_SC(t-1)$	$\Delta ECON_SC (t-1)$	Δ MIL_SC (t-1)	Δ MIL_SC (t-1)
ΔUS	2.275	2.352	1.700	1.330
	[1.308]**	[1.176]**	[0.676]***	[0.642]**
$\Delta RUSlog$	41.747	42.937	33.553	28.066
	[31.805]	[30.150]*	[16.510]**	[16.458]*
$\Delta CHIlog$	-67.250	-66.395	8.668	3.800
	[140.729]	[137.717]	[73.029]	[74.673]
$\Delta FRAlog$	-126.068	-128.766	-111.327	-98.529
	[71.129]	[67.363]	[36.886]	[36.681]
$\Delta UK log$	134.134	137.390	130.284	114.092
	[89.804]*	[85.305]*	[47.401]***	[47.180]**
GGDP	7.291	6.921	-0.863	0.703
	[8.304]	[7.761]	[4.140]	[4.093]
DGX	1.142	1.100	1.062	1.224
	[0.806]	[0.740]	[0.471]**	[0.469]***
INFLATION	4.939	4.614	-3.521	1.775
	[5.871]	[5.340]	[3.179]	[3.017]
IMPORTANCE	0.020		-0.100	
	[0.135]		[0.069]	
Constant	-0.492	-0.379	0.504	-0.038
	[0.931]	[0.520]	[0.453]	[0.267]
EconLag2	-0.531	-0.537		
	[0.173]***	[0.164]***		
MilLag2			-0.882	-0.846
			[0.177]***	[0.179]***
adj. R^2	0.197	0.230	0.386	0.357
Observations	34	34	34	34
F	F(10, 23)=1.81	F(9, 24)=2.09	F(10, 23)=3.07	F(9, 24)=3.03
Prob > F	0.116	0.072	0.013	0.014
DW	D(11, 34)=1.071	D(10, 34)=1.065	D(11, 34)=1.847	D(10, 34)=1.792

Table 8. OLS for 1966-2001

*** Denotes 1-percent significance, ** denotes 5-percent significance, and * denotes 10-percent significance for one-sided tests of the following variables: " ΔUS ," " $\Delta RUSlog$," " $\Delta CHIlog$," " $\Delta FRAlog$," and " $\Delta UKlog$." For the rest of the variables, these symbols are associated with two-sided tests.

	(1)	(2)	(3)	(4)
Dependent Variable		$\Delta ECON_NSC (t-1)$		Δ MIL NSC (t-1)
ΔUS	-1.895	-1.808	-0.919	-0.858
	[1.371]	[1.289]	[0.844]	[0.802]
$\Delta RUSlog$	-27.691	-26.574	-13.098	-12.354
	[28.468]	[27.550]	[17.654]	[17.174]
$\Delta CHIlog$	294.691	289.702	70.552	68.104
	[145.040]	[140.912]**	[88.230]	[86.417]
$\Delta FRAlog$	48.691	46.858	49.587	48.283
	[83.102]	[81.348]	[51.872]	[50.854]
$\Delta UK log$	-82.817	-79.094	-47.800	-44.972
	[105.318	[102.246]	[65.759]	[63.943]
GGDP	-6.519	-6.867	-1.844	-1.973
	[9.989]	[9.702]	[5.967]	[5.857]
DGX	0.545	0.485	0.350	0.303
	[0.982]	[0.928]	[0.619]	[0.586]
INFLATION	-3.889	-4.476	0.563	0.073
	[7.683]	[7.075]	[4.801]	[4.390]
IMPORTANCE	-0.034		0.026	
	[0.156]		[0.094]	
Constant	1.326	1.471	0.822	0.966
	[1.078]	[0.834]**	[0.765]	[0.550]
EconLag2	-0.223	-0.217		
	[0.104]***	[0.098]**		
MilLag2			-0.424	-0.427
			[0.161]***	[0.158]***
adj. R ²	0.043	0.073	0.049	0.078
Observations	40	40	40	40
F	F(10, 29)=1.17	F(9, 30)=1.34	F(10,29)=1.20	F(9, 30)=1.37
Prob > F	0.347	0.258	0.332	0.247
DW	D(11, 40)=1.602	D(10,40)=1.596	D(11, 40)=1.827	D(10,40)=1.820

Table 9. OLS for Non-SC

*** Denotes 1-percent significance, ** denotes 5-percent significance, and * denotes 10-percent significance for one-sided tests of the following variables: " ΔUS ," " $\Delta RUSlog$," " $\Delta CHIlog$," " $\Delta FRAlog$," and " $\Delta UKlog$." For the rest of the variables, these symbols are associated with two-sided tests.

	(1)	(2)	(3)	(4)
	$\Delta ODA_SC(t-1)$	$\Delta ODA_SC(t-1)$	$\Delta ODA_NSC(t-1)$	$\Delta ODA_NSC(t-1)$
ΔUS	1.855	1.976	-3.715	-3.173
	[1.265]*	[1.199]*	[1.994]	[1.919]
$\Delta RUSlog$	45.818	47.384	-67.805	-61.483
	[26.434]**	[25.665]**	[41.675]	[41.186]
$\Delta CHIlog$	-48.509	-52.721	319.706	293.119
0	[129.198]	[126.735]	[206.893]*	[205.147]*
$\Delta FRAlog$	-121.493	-124.261	150.223	141.082
Ū.	[77.353]	[75.810]	[122.443]	[122.087]
$\Delta UKlog$	147.674	153.202	-212.886	-191.781
U	[97.780]*	[95.063]*	[155.241]	[153.776]
GGDP	7.479	7.169	-1.868	-4.128
	[8.881]	[8.706]	[14.382]	[14.200]
DGX	1.255	1.164	0.061	276
	[0.918]*	[0.867]*	[1.445]	[1.405]
INFLATION	4.889	3.924	-7.806	-11.006
	[7.196]	[6.544]	[11.501]	[11.043]
IMPORTANCE	0.049		0.237	
	[0.141]		[0.238]	
Constant	-0.650	-0.382	1.024	1.959
	[1.000]	[0.632]	[1.561]	[1.247]**
EconLag2	-0.501	-0.509	-0.283	-0.238
0	[0.155]***	[0.151]***	[0.124]**	[0.115]*
adj. R ²	0.172	0.196	-0.001	-0.001
Observations	40	40	40	40
F	F(10, 29)=1.81	F(9, 30)=2.05	F(10,29)=1.00	F(9, 30)=1.00
Prob > F	0.104	0.068	0.469	0.463
DW	D(11, 40)=1.717	D(10, 40)=1.727	D(11, 40)=1.705	D(10, 40)=1.649

Table 10. OLS using OECD Data

*** Denotes 1-percent significance, ** denotes 5-percent significance, and * denotes 10-percent significance for one-sided tests of the following variables: " ΔUS ," " $\Delta RUSlog$," " $\Delta CHIlog$," " $\Delta FRAlog$," and " $\Delta UKlog$." For the rest of the variables, these symbols are associated with two-sided tests.

Corresponding Columns	(1)	(2)	(3)	(4)	(5)	(6)
Table 6 (Econ)	0.0507	0.0399	0.0792	0.0834	0.0761	0.0524
Table 7 (Mil)	0.0310	0.0584	0.2862	0.2109	0.2815	0.1024

Table 11. P-Values for the Coefficients on the " ΔUS " Variable by Bootstraps

Appendix A. Country List

# Country Name	Code	Region	Year of Admission	Years serving as a UN member	Years serving on the SC	
				(1945-2004)	(1946-2006)	
1 Afghanistan	AFG	Central/South Asia	1946	59		
2 Angola	AGO	Africa	1976	29		
3 Albania	ALB	Eastern Europe	1955	50		
4 Argentina	ARG	South America	1945	60	1	
5 Armenia	ARM	Eastern Europe	1992	13		
6 Antigua and Barbuda	ATG	South America	1981	24		
7 Azerbaijan	AZE	Eastern Europe	1992	13		
8 Burundi	BDI	Africa	1962	43		
9 Benin	BEN	Africa	1960	45		
0 Burkina Faso	BFA	Africa	1960	45		
1 Bangladesh	BGD	Central/South Asia	1974	31		
2 Bulgaria	BGR	Eastern Europe	1955	50		
3 Bosnia and Herzegovina	BIH	Eastern Europe	1992	13		
4 Belarus	BLR	Eastern Europe	1945	60		
5 Belize	BLZ	South America	1981	24		
6 Bolivia	BOL	South America	1945	60		
7 Brazil	BRA	South America	1945	60	1	
8 Barbados	BRB	South America	1966	39		
9 Bhutan	BTN	Central/South Asia	1971	34		
0 Botswana	BWA	Africa	1966	39		
1 Central African Republic	CAF	Africa	1960	45		
2 Chile	CHL	South America	1945	60		
3 Côte d'Ivoire	CIV	Africa	1960	45		
4 Cameroon	CMR	Africa	1960	45		
5 Congo, Rep.	COG	Africa	1960	45		
6 Colombia	COL	South America	1945	60		
7 Comoros	COM	Africa	1975	30		
8 Cape Verde	CPV	Africa	1975	30		
9 Costa Rica	CRI	South America	1945	60		
0 Cuba	CUB	South America	1945	60		
1 Czech Republic	CZE	Eastern Europe	1993	12		
2 Djibouti	DJI	Middle East	1977	28		
3 Dominica	DMA	South America	1978	27		
4 Dominican Republic	DOM	South America	1945	60		
5 Algeria	DZA	Middle East	1962	43		
6 Ecuador	ECU	South America	1945	60		
7 Egypt, Arab Rep.	EGY	Middle East	1945	60		
				12		
8 Eritrea	ERI	Africa	1993			
9 Estonia	EST	Eastern Europe	1991	14		
0 Ethiopia	ETH	Africa	1945	60		
1 Fiji	FJI	East Asia	1970	35		
2 Micronesia, Fed. Sts.	FSM	East Asia	1991	14		
3 Gabon	GAB	Africa	1960	45		
4 Georgia	GEO	Eastern Europe	1992	13		
5 Ghana	GHA	Africa	1957	48		
6 Guinea	GIN	Africa	1958	40		
7 Gambia, The	GMB	Africa	1965	40		
8 Guinea-Bissau	GNB	Africa	1974	31		
9 Equatorial Guinea	GNQ	Africa	1968	37		
0 Grenada	GRD	South America	1974	31		
1 Guatemala	GTM	South America	1945	60		
2 Guyana	GUY	South America	1966	39		
3 Honduras	HND	South America	1945	60		
4 Croatia	HRV		1992	13		
		Eastern Europe				
5 Haiti	HTI	South America	1945	60		
6 Hungary	HUN	Eastern Europe	1955	50		
7 Indonesia	IDN	East Asia	1950	54		
8 India	IND	Central/South Asia	1945	60	1	
9 Iran, Islamic Rep.	IRN	Middle East	1945	60		
0 Iraq	IRQ	Middle East	1945	60		
1 Jamaica	JAM	South America	1962	43		
2 Jordan	JOR	Middle East	1955	50		
3 Kazakhstan	KAZ	Central/South Asia	1933	13		
		Africa				
4 Kenya	KEN		1963	42		
5 Kyrgyz Republic	KGZ	Central/South Asia	1992	13		
6 Cambodia	KHM	East Asia	1945	60		
7 Kiribati	KIR	East Asia	1999	6		
8 St. Kitts and Nevis	KNA	South America	1983	22		
9 Lao PDR	LAO	East Asia	1955	50		
0 Lebanon	LBN	Middle East	1945	60		
1 Liberia	LBR	Africa	1945	60		
2 Libya	LBX	Middle East	1955	50		
3 St. Lucia	LCA	South America	1979	26		
4 Sri Lanka	LKA	Central/South Asia	1955	50		
5 Lesotho	LSO	Africa	1966	39		
6 Lithuania	LTU	Eastern Europe	1991	14		
7 Latvia	LVA	Eastern Europe	1991	14		
8 Morocco	MAR		1956	49		
9 Moldova		Eastern Europe	1992	13		
		Africa	1992	45		
0 Madagascar						
1 Maldives	MDV		1965	40		
2 Mexico	MEX	South America	1945	60		
3 Marshall Islands	MHL	East Asia	1991	14		
4 Macedonia, FYR	MKD		1993	12		
	MLI			45		
5 Mali		Africa	1960			
	MMP	East Asia	1948	57		
36 Myanmar 37 Mongolia 38 Mozambique	MNG	East Asia Africa	1961 1975	44		

89 Mauritania	MRT	Africa	1961	44	4
90 Mauritius	MUS	Africa	1968	37	2
91 Malawi	MWI	Africa	1964	41	0
92 Malaysia	MYS	East Asia	1957	48	5
93 Namibia	NAM		1990	15	2
94 Niger	NER	Africa	1960	45	2
95 Nigeria	NGA	Africa	1960	45	6
96 Nicaragua	NIC NPL	South America Central/South Asia	1945 1955	60 50	4 4
97 Nepal 98 Nauru	NRU	East Asia	1955		4
98 Nauru 99 Oman	OMN	Middle East	1999	6 34	2
100 Pakistan	PAK	Central/South Asia	1971	58	12
100 Panama	PAN	South America	1947	58 60	8
102 Peru	PER	South America	1945	60	6
103 Philippines	PHL	East Asia	1945	60	6
104 Palau	PLW	East Asia	1994	11	0
105 Papua New Guinea	PNG	East Asia	1975	30	ő
106 Poland	POL	Eastern Europe	1945	60	9
107 Korea, Dem. Rep.	PRK	East Asia	1991	14	0
108 Paraguay	PRY	South America	1945	60	2
109 Romania	ROM	Eastern Europe	1955	50	7
110 Rwanda	RWA	Africa	1962	43	2
111 Saudi Arabia	SAU	Middle East	1945	60	0
112 Sudan	SDN	Africa	1956	49	2
113 Senegal	SEN	Africa	1960	45	4
114 Solomon Islands	SLB	East Asia	1978	27	0
115 Sierra Leone	SLE	Africa	1961	44	2
116 El Salvador	SLV	South America	1945	60	0
117 Somalia	SOM	Africa	1960	45	2
118 São Tomé and Principe	STP	Africa	1975	30	0
119 Suriname	SUR	South America	1975	30	0
120 Slovak Republic	SVK	Eastern Europe	1993	12	0
121 Swaziland	SWZ	Africa	1968	37	0
122 Seychelles	SYC	Africa	1976	29	0
123 Syrian Arab Republic	SYR	Middle East	1945	58	6
124 Chad	TCD TGO	Africa Africa	1960	45 45	0 2
125 Togo 126 Thailand	THA	East Asia	1960 1946	43 59	2
120 Thanand 127 Tajikistan	TJK	Central/South Asia	1940	13	0
127 Tajikistan 128 Turkmenistan	TKM	Central/South Asia	1992	13	0
129 Timor-Leste	TMP	East Asia	2002	3	0
130 Tonga	TON	East Asia	1999	6	0
131 Trinidad and Tobago	TTO	South America	1962	43	2
132 Tunisia	TUN	Middle East	1956	49	6
133 Turkey	TUR	Western Europe	1945	60	5
134 Tuvalu	TVL	East Asia	2000	5	0
135 Tanzania	TZA	Africa	1961	44	4
136 Uganda	UGA	Africa	1962	43	3
137 Ukraine	UKR	Eastern Europe	1945	60	6
138 Uruguay	URY	South America	1945	60	2
139 Uzbekistan	UZB	Central/South Asia	1992	13	0
140 St. Vincent and the Grenadines	VCT	South America	1980	25	0
141 Venezuela, RB	VEN	South America	1945	60	8
142 Vietnam	VNM		1977	28	0
143 Vanuatu	VUT	East Asia	1981	24	0
144 Samoa	WSM		1976	29	0
145 Yemen, Rep.	YEM	Middle East	1947	58	2
146 Serbia and Montenegro	YUG ZAF	Eastern Europe Africa	2000	5 60	0
147 South Africa	ZAF ZAR	Africa	1945 1960	60 45	4
148 Congo, Dem. Rep. 149 Zambia	ZMB	Africa	1960	45	4
150 Zimbabwe	ZWE	Africa	1980	25	4
150 Zimbaowe	LWE	/ minea	1900	23	4

Sources: A/58/47 (United Nations, 2004) and World Development Indicators (World Bank, 2004). Compiled by the author

Notes:

Democratic Republic of the Congo was formerly called Zaire until its name changed in 1997.

To differentiate between the countries "Democratic Republic of the Congo," and "Republic of the Congo," we rely on the name of each country's capital. Kinshasa is the capital of "Democratic Republic of the Congo";

Brazzaville is the capital of "Republic of the Congo."

Czech Republic and Slovakia are successor states of Czechoslovakia, which ceased to exist on December 31, 1992.

Egypt and Syria formed the United Arab Republic in 1958, and they shared a single membership until Syria

separated from the union, resuming its status as an independent state in 1961. Egypt changed its name to the Arab Republic of Egypt in 1971.

Democratic People's Republic of Korea is conventionally referred to as North Korea.

The Socialist Federal Republic of Yugoslavia (SFRY) dissolved in 1990, and subsequently the following five states were established: Bosnia and Herzegovina, Croatia, Slovenia, Macedonia, and the Federal Republic of Yugoslavia.

The Federal Republic of Yugoslavia changed its name to Serbia and Montenegro in 2003.

Myanmar is also known as Burma.

Timor-Leste is also called East Timor.

Byelorussia changed its name to Belarus in 1991.

Yemen and Democratic Yemen were merged in 1990, and are represented as one country "Yemen." Malaya changed its name to Malaysia in 1963.

Tanganyika and Zanzibar were members of the UN from 1961 and 1963, respectively. In 1964, they united to

form a single state, the United Republic of Tanzania. In 1964, they united to form a single state, the United

Republic of Tanzania.

Indonesia withdrew from the UN in 1965 and it resumed its participation in 1966.

Appendix.B UN Security Council Members (1946-2006)

Permanent Members (P-5)
China France Russia UK US

Africa/Asia					Latin America		Eastern Europe	Western Europ	e and Other Stat	tes	Elected-10	of which
		Tanzania		Japan	1	Argentina		Donmostr	Greece		5	developing count
Algeria	Benin	Tanzania	Philippines	Japan	Brazil	Argentina	Romania	Denmark Denmark	Greece		10	
Algeria	Benin	Angola	Philippines	Pakistan	Brazil	Chile	Romania	Germany	Spain		10	
Cameroon	Guinea	Angola	Syria	Pakistan	Mexico	Chile	Bulgaria	Germany	Spain		10	
Cameroon	Guinea	Mauritius	Syria	Singapore	Mexico	Colombia	Bulgaria	Ireland	Norway		10	
Mali	Tunisia	Mauritius	Bangladesh	Singapore	Jamaica	Colombia	Ukraine	Ireland	Norway		10	
Mali	Tunisia	Namibia	Bangladesh	Malaysia	Jamaica	Argentina	Ukraine	Canada	Netherlands		10	
Gabon	Gambia	Namibia	Bahrain	Malaysia	Brazil	Argentina	Slovenia	Canada	Netherlands		10	
Gabon	Gambia	Kenya	Bahrain	Japan	Brazil	Costa Rica	Slovenia	Portugal	Sweden		10	
Egypt	Guinea-Bissau	Kenya	Rep. Korea	Japan	Chile	Costa Rica	Poland	Portugal	Sweden		10	
Egypt	Guinea-Bissau Guinea-Bissau	Botswana	Rep. Korea	Indonesia	Chile	Honduras	Poland	Germany	Italy		10	
Nigeria	Rwanda	Botswana	Oman	Indonesia	Argentina	Honduras	Czech Republic	Germany	Italy		10	
Nigeria	Rwanda	Djibouti	Oman	Pakistan	Argentina	Brazil	Czech Republic	New Zealand	Spain		10	
Cape Verde	Morocco	Djibouti	Japan	Pakistan	Venezuela	Brazil	Hungary	New Zealand	Spain		10	
Cape Verde	Morocco	Zimbabwe	Japan	India	Venezuela	Ecuador	Hungary	Austria	Belgium		10	
Cote d'Ivoire	Congo, DR	Zimbabwe	Yemen	India	Cuba	Ecuador	Romania	Austria	Belgium		10	
Cote d'Ivoire	Congo, DR	Ethiopia	Yemen	Malaysia	Cuba	Colombia	Romania	Canada	Finland		10	
Algeria	Senegal	Ethiopia	Nepal	Malaysia Malaysia	Brazil	Colombia	(Yugoslavia)	Canada	Finland		10	
Algeria	Senegal	Zambia	Nepal	Japan	Brazil	Argentina	(Yugoslavia) (Yugoslavia)	Germany, FR	Italy		10	
Congo	Ghana	Zambia	UAE	Japan Japan	Venezuela	Argentina	(i ugosiavia) Bulgaria	Germany, FR Germany, FR	Italy		10	
			UAE								10	
Congo Burking Ecco	Ghana	Madagascar Madagascar	UAE India	Thailand Thailand	Venezuela Peru	Trinidad & Tobago Trinidad & Tobago	Bulgaria Ukraine	Australia Australia	Denmark Denmark		10	
Burkina Faso	Egypt		India					Malta			10	
Burkina Faso	Egypt	Zimbabwe		Pakistan	Peru	Nicaragua	Ukraine		Netherlands			
Congo, DR	Togo	Zimbabwe	Jordan	Pakistan	Guyana	Nicaragua	Poland Poland	Malta	Netherlands		10 10	
Congo, DR	Togo	Uganda	Jordan	Japan	Guyana	Panama		Ireland	Spain			
Niger	Tunisia	Uganda	Philippines	Japan	Mexico	Panama	German, DR	Ireland	Spain		10	
Niger	Tunisia	Zambia	Philippines	Bangladesh	Mexico	Jamaica	German, DR	Norway	Portugal		10	
Gabon	Nigeria	Zambia	Kuwait	Bangladesh	Bolivia	Jamaica	(Czechoslovakia)	Norway	Portugal		10	
Gabon	Nigeria	Mauritania	Kuwait	India	Bolivia	Venezuela	(Czechoslovakia)	Canada	German, FR		10	
Benin	Libya	Mauritania	Pakistan	India	Panama	Venezuela	Romania	Canada	German, FR		10	
Benin	Libya	Tanzania	Pakistan	Japan	Panama	Guyana	Romania	Italy	Sweden		10	
Cameroon	Mauritania	Tanzania	Iraq	Japan	Costa Rica	Guyana	Belarus	Italy	Sweden		10	
Cameroon	Mauritania	Kenya	Iraq	Indonesia	Costa Rica	Peru	Belarus	Australia	Austria		10	
Guinea	Sudan	Kenya	India	Indonesia	Panama	Peru	(Yugoslavia)	Australia	Austria		10	
Guinea	Sudan	Somalia	India	Japan	Panama	Argentina	(Yugoslavia)	Belgium	Italy		10	
Burundi	Sierra Leone	Somalia	Syria	Japan	Nicaragua	Argentina	Poland	Belgium	Italy		10	
Burundi	Sierra Leone	Zambia	Syria	Nepal	Nicaragua	Colombia	Poland	Finland	Spain		10	
Algeria	Senegal	Zambia	Pakistan	Nepal	Paraguay	Colombia	Hungary	Finland	Spain		10	
Algeria	Senegal	Ethiopia	Pakistan	India	Paraguay	Brazil	Hungary	Canada	Denmark		10	
Mali	Nigeria	Ethiopia	Japan	India	Argentina	Brazil	Bulgaria	Canada	Denmark		10	
Mali	Nigeria	Uganda	Japan	Jordan	Argentina	Uruguay	Bulgaria	Netherlands	New Zealand		10	
Cote d'Ivoire	Malaysia	Jordan			Bolivia	Uruguay		Netherlands			6	
Cote d'Ivoire	Morocco				Bolivia	Brazil	(Czechoslovakia)	Norway			6	
Ghana	Morocco	Philippines			Venezuela	Brazil		Norway			6	
Ghana		Egypt			Venezuela	Chile	Romania	Ireland			6	
Liberia	Sri Lanka	Egypt			Ecuador	Chile		Turkey			6	
Tunisia	Sri Lanka				Ecuador	Argentina	Poland	Italy			6	
Tunisia		Japan			Panama	Argentina		Italy	Canada		6	
	Iraq	Japan			Panama	Colombia		Sweden	Canada		6	
Philippines	Iraq				Cuba	Colombia		Sweden	Australia		6	
Iran					Cuba	Peru	(Yugoslavia)	Belgium	Australia		6	
Iran					Brazil	Peru		Belgium	New Zealand	Turkey	6	
	Lebanon				Brazil	Colombia		Denmark	New Zealand	Turkey	6	
Pakistan	Lebanon				Chile	Colombia		Denmark		Greece	6	
Pakistan					Chile	Brazil		Netherlands	Turkey	Greece	6	
	India				Ecuador	Brazil	(Yugoslavia)	Netherlands	Turkey		6	
Egypt	India				Ecuador	Cuba	(Yugoslavia)	Norway	-		6	
Egypt					Argentina	Cuba	Ukrain	Norway	Canada		6	
Syria					Argentina	Colombia	Ukrain	Belgium	Canada		6	
Syria					Brazil	Colombia	Poland	Belgium	Australia		6	
					Brazil	Mexico	Poland	Netherlands	Australia		~	

Sources: A/58/47 (United Nations, 2004) and World Development Indicators (World Bank, 2004). Compiled by the authors.

Notes: Term starts on January 1st and ends on December 31st. Following the amendments to the Charter provisions (articles 23 and 27), 10 rotating members have been elected each year from 1965 onwards. Prior to 1966 the number of rotating members was six. Since 1966, geographical allocation has been considered according to the following pattern: five from Asia/Africa; two from Latin America; one from Eastern Europe; and two from Western Europe and other states. The remainder of the rotating members for 2006 are yet to be elected.