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**Does US Aid Buy UN General Assembly Votes?
A Disaggregated Analysis**

by

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Does US Aid Buy UN General Assembly Votes?

A Disaggregated Analysis

Abstract

Using panel data for 143 countries over the period 1973-2002, this paper empirically analyzes the influence of US aid on voting patterns in the UN General Assembly. We use disaggregated aid data to account for the fact that various forms of aid may differ in their ability to induce political support by recipients. We obtain strong evidence that US aid buys voting compliance in the Assembly. More specifically, our results suggest that general budget support and untied grants are the major aid categories by which recipients have been induced to vote in line with the United States. When replicating the analysis for other G7 donors, no comparable patterns emerge.

Keywords: Bilateral Aid, UN General Assembly, Voting

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I. Introduction¹

According to the rhetoric of donors, foreign aid rewards efficient and honest governments striving for the economic and social development of the countries they rule. Recently, important donors such as the EU countries and the United States have announced to increase their aid substantially, which they claim would help prevent various recipient countries from missing the Millennium Development Goals. Hence, it poses a puzzle that various empirical studies show foreign aid to be rather ineffective in promoting economic growth in recipient countries. Both the meta study by Doucouliagos and Paldam (2005) and the extensive survey by Harms and Lutz (2005) conclude that the aid effectiveness literature has not established that aid works.

Critical evaluations of actual donor behavior suggest that this puzzle may be solved by taking into account that donors are by far less altruistic than they claim. Research conducted in the 1970s and 1980s, summarized by McGillivray (2003), revealed that bilateral donors largely pursued their own interests when allocating aid across recipients. The rhetoric of donors is also in conflict with more recent empirical studies such as Schraeder et al. (1998), Alesina and Dollar (2000), Alesina and Weder (2002), and Collier and Dollar (2002). According to these studies, aid may not only serve the *economic* self-interest of donors, but may also be used to buy *political* support from the recipients of aid. Even though some studies have addressed the links between aid and political support in terms of UN voting in line with donors, this issue has received less attention in the recent literature (see Section II). This neglect may be because it is widely believed that political considerations are no longer distorting a needs-based distribution of aid after the end of the Cold War. However, expecting that aid would no longer be granted for political reasons is rather naïve (Langhammer 2004). Arguments underlying this skeptical view include the fight against terrorism and the contested bid by important donors, i.e., Germany and Japan, to become permanent members of the UN Security Council.

Particularly for the United States, political considerations are likely to remain important. Harrigan et al. (2006) argue that the fight against terrorism and the related domestic security concerns might even strengthen the motive to employ aid as a foreign policy tool. The recent message of US Secretary of State, Condoleezza Rice, that “you can’t preach violence and expect international aid” (*The Economist*, February 23, 2006) – though referring to the particular case of political developments in Palestine – supports this view. Hence, we suppose

¹ We thank Michaela Rank for excellent research assistance.

that Morgenthau's (1962: 302) statement is still relevant: "The transfer of money and services from one government to another performs here the function of a price paid for political services rendered or to be rendered." Likewise, Ruttan (1996) and Zimmermann (1993) claim US administrations to have typically considered financial aid as being an important means to achieve their foreign policy objectives.

One policy objective that has supposedly been pursued by means of aid is to affect the recipients' voting behavior in the UN General Assembly. It has been argued that "certain states in the Assembly are very susceptible to bilateral pressure" (Keohane as quoted in Wittkopf 1973: 869). At the same time, there are indications that the United States and other G7 countries keep close record of the voting behavior of UN member states and that the voting behavior influences bilateral relationships, including aid relationships (Barnebeck Andersen et al. 2004; Dreher and Sturm 2006). Clearly, as compared to the Security Council, the power of the General Assembly is rather limited, and not all of its decisions are likely to be important for the United States. Still, there is ample evidence that the US government places some weight on the outcome of General Assembly votes. As has been pointed out by the US Department of State (1985), examining UN votes makes it possible "to make judgments about whose values and views are harmonious with our own, whose policies are consistently opposed to ours, and whose practices fall in between." A report from the same department in 2000 states that "a country's behavior at the United Nations is always relevant to its bilateral relationship with the United States, a point the Secretary of State regularly makes in letters of instruction to new U.S. ambassadors" (quoted in Barnebeck Andersen et al. 2004: 15). Thacker (1999: 54) cites a memo to the director of the Food for Peace Program noting that "at critical moments in the world's recent history, the U.S. 'bought' votes subtly and indirectly to support its stand in the General Assembly." Bennis (1997) claims that "U.S. influence in (and often control of) the UN comes in the form of coercing the organization to take one or another position, or to reject some other position, or pressuring a country or countries to vote a certain way in the General Assembly."²

Voting in the General Assembly thus clearly has some relevance for US foreign policy. Consequently, it is instructive to test whether and to what extent the United States are actually successful in inducing aid recipients to vote according to their preferences. The existing literature on this question reports mixed results. While some studies confirm the link between

² As a specific example of US pressure on the Assembly, Bennis (1997) describes US efforts to overturn the 1975 resolution identifying political Zionism as a form of racism and racial discrimination: "U.S. diplomats took off, criss-crossing the globe using Gulf War-tested methods of bribing and threatening other nations to win support for the repeal effort."

voting behavior and aid, others do not find any clear relationship. Arguably, the failure to identify a link from aid to voting might be due to the focus on aggregate flows of aid. This is because some forms of aid are more likely to be given for political reasons than others. We therefore use disaggregated aid data to take into account that various forms of aid may differ in their ability to induce political support by the recipients. It turns out that general budget support and untied grants have been employed to bribe recipients to vote in line with the United States in the UN General Assembly.

The organization of the paper is as follows. The next section provides a short overview of previous empirical work on bilateral aid and UN voting. Section III introduces our hypotheses, while our data and method of estimation are discussed in Sections IV and V, respectively. Section VI presents the results. Finally, we provide a short summary.

II. Previous Literature

We draw on two strands of the literature in assessing the effects of foreign aid on UN voting behavior of recipient countries. The first strand concerns bilateral aid allocation, while the second relates to the determinants of UN voting behavior.

Though the literature on aid allocation is quite extensive, important gaps remain. The main focus of the recent literature is on the extent to which aid has been targeted to recipient countries that are most needy (given their per-capita income and/or the prevalence of absolute poverty) and, at the same time, offering favorable local conditions for aid to be effective (measured by the quality of local policies and institutions). Studies along these lines include Neumayer (2003), Berthélemy and Tichit (2004), Dollar and Levin (2004), and Canavire et al. (2005). While these studies report ambiguous results regarding the targeting of needy and deserving recipients, they pay little attention to selfish motivations of bilateral aid, especially when it comes to the political determinants of aid.³ Dollar and Levin (2004) represent an extreme case in that they do not control at all for donor interests. Other studies do account for trade-related interests of donors. However, political interests are typically considered in an ad hoc manner – usually by including dummy variables for post-colonial ties between donors and recipients.

³ Yet, these studies have hardly been criticized for neglecting political determinants, but rather for neglecting local conditions other than the quality of policies and institutions for aid to be effective; see, e.g., Guillaumont and Chauvet (2001) for the importance of vulnerability to external shocks as well as Collier and Hoeffler (2004) for the importance of post-conflict situations.

There is a smaller literature in which political interests receive more explicit treatment. Apart from altruistic motivations of aid, Schraeder et al. (1998) list several selfish motivations including aid as a means to promote strategic and political considerations of bilateral donors. For the Cold War period they find, for example, that the security alliance between the United States and certain recipient countries ensured the generous provision of US aid. Alesina and Dollar (2000), Alesina and Weder (2002) as well as Gates and Hoeffler (2004) all consider both colonial dummies and UN voting behavior of recipients as political determinants of bilateral aid. The results of these studies differ in one important respect: According to Alesina and Weder (2002), only the United States rewards recipients' voting compliance by granting more aid; Alesina and Dollar (2000) as well as Gates and Hoeffler (2004) find the same pattern also for the other G7 countries.⁴

The literature on the impact of aid on UN voting behavior has been summarized in Dreher and Sturm (2006). According to their survey, empirical findings have remained inconclusive. Some studies, including Kato (1969), Kegley and Hook (1991), Sexton and Decker (1992) as well as Morey and Lai (2003), conclude that aid is ineffective in influencing the voting behavior of recipients. By contrast, Bernstein and Alpert (1971), Rai (1972, 1980), Wittkopf (1973), Lundborg (1998) and Wang (1999) find the expected positive relation between bilateral aid and voting similarity. According to Rai (1980), there is a stronger coincidence of votes cast by the United States and Latin American countries, compared with votes cast by UN members from Africa, the Middle East and South Asia. Considering votes (by 65 countries in 1984-1993) that were classified by the US State Department as being important, Wang (1999) finds that changes in the level of US aid significantly increase voting coincidence, while the coefficient of the level itself is insignificant. Lundborg (1998) focuses on relative support for the United States and the Soviet Union in 1948-1979. His simultaneous regressions reveal that (i) both donors employed aid to stimulate international political support, and (ii) aid recipients allocated their support to stimulate aid.

Donors other than the United States have hardly been investigated in this strand of the literature. An early exception is Wittkopf (1973), who covers all member countries of the OECD's Development Assistance Committee (DAC) and the Soviet Bloc for the years 1962 and 1967. His correlation analysis shows, however, that only US aid is significantly associated with voting patterns. Dreher and Sturm (2006) analyze whether G7 donors employ financial assistance provided by the IMF and the World Bank to change the UN voting

⁴ Gates and Hoeffler (2004) also find that Nordic countries differ from G7 countries in that they do not give more aid to political allies.

behavior of developing countries.⁵ They use panel data for 188 recipient countries over the period 1970-2002. Applying Extreme Bounds Analysis to test for the robustness of results, they find that countries receiving financial support from the IMF and the World Bank tend to vote more frequently in line with G7 countries. By contrast, *bilateral* aid by G7 donors is not robustly related to UN voting behavior.

III. Hypotheses

The aid allocation literature and the literature on the links between aid and UN voting behavior have a serious limitation in common, which we attempt to overcome in the present paper. Aid is typically considered in aggregate terms. The only adjustment made in the aid allocation literature to account for the heterogeneity of aid concerns emergency relief, which is often netted out of total aid flows (e.g., Canavire et al. 2005; Dollar and Levin 2004). The obvious reason is that the determinants of emergency relief cannot reasonably be assumed to be the same as the determinants of other aid categories. However, the need for differentiating aid extends far beyond this minor adjustment.⁶ Thiele et al. (2006) show that the composition of aid has changed significantly over time, and bilateral donors differ considerably with regard to the focus attached to different aid categories. The relative importance of aid determinants is likely to vary across specific aid categories. For instance, the quality of local institutions is less likely to affect project-related aid, e.g., social infrastructure projects, and more likely to affect program aid such as general budget support. At the same time, specific aid categories are better suited to buy political support from the recipient countries than other aid categories.

The guiding principle underlying the disaggregation of aid is that the degree of political support a donor expects from the recipients is likely to differ across categories of aid. Arguably, donors pursue multiple objectives when allocating aid. Apart from emergency aid given for humanitarian reasons, aid may be granted altruistically to promote the social and economic development of recipient countries. Project-related aid devoted to social infrastructure (such as education and health systems) is a case in point. Project-related aid may also be motivated by the economic self-interests of donors. Japanese aid provided to economic infrastructure (such as communication and energy systems) and production sectors in neighboring Asian countries with which Japan trades intensively come to mind in this

⁵ In related research, Dreher and Jensen (2007) find that closer allies of G7 countries receive IMF loans with fewer conditions attached.

⁶ Emergency relief accounted for 10.4 percent of total aid over the period 2002–2004.

regard (Thiele et al. 2006). Compared to project-related aid, program aid is more likely to be motivated by political considerations of donors. Furthermore, aid not related to specific projects may be more “effective” in buying political support. Recipients will typically prefer program over project aid as the former offers more discretion in using aid according to the recipient’s own priorities.⁷ According to Roodman (2004), recipients might have almost complete control over program aid. Hence, recipients should be more inclined to grant political favors to donors of program aid as compared to those of project aid. Our first hypothesis therefore is:

Hypothesis 1: Program aid increases the probability that the recipient votes in line with the donor.

The benefit of program aid for the recipient is probably greatest when it comes in the form of “general budget support”. General budget support is thus supposed to be most relevant in buying political support from aid recipients. Two other sub-categories of program aid, namely "developmental food aid" and "other commodity assistance", though not project-related, are probably at least partly driven by economic self-interests of donors, notably the motive to please domestic farmers. "Action related to debt", which includes debt forgiveness and rescheduling, is influenced by coordinated donor initiatives so that an individual donor may not have full control over this aid category. Moreover, from the perspective of recipients, debt relief tends to be cumbersome and subject to various economic and political conditions. Recipients may thus value general budget support higher than other forms of program aid. Hence, our second hypothesis is:

Hypothesis 2: General budget support increases the probability that the recipient votes in line with the donor.

Aid in the form of grants as compared to (concessional) loans provides another relevant distinction. The rationale is similar to the one described above. Even though most loans are characterized by a high grant element, especially when extended to low-income recipients

⁷ This is not to ignore that the distinction between program and project aid gets blurred when the fungibility of aid is taken into account. However, unless fungibility is perfect, program aid should carry higher benefits to the recipient. According to Feyzioglu et al. (1998), aid is unlikely to be fully fungible. This is particularly true for low-income recipient countries where the generally large share of aid in public budgets limits the ability of governments to shift resources.

(Nunnenkamp et al. 2005), most donors and recipients tend to regard grants as more generous. As a consequence, donors may not only use grants for altruistic reasons but also when expecting political favors from recipients, and recipients may reward grants with political support. Our third hypothesis is:

Hypothesis 3: Grants increase the probability that the recipient votes in line with the donor.

Finally, we distinguish tied aid from untied aid. The reason is that tied aid provides fewer benefits to the recipients. The economic, rather than political self-interest of donors is most obvious when aid is strictly conditioned on recipients using the funds transferred for the procurement of goods and services from the donor country. In the case of partially tied aid, the recipient is still constrained in spending the funds.⁸ Roodman (2004) suspects that tying reduces the value of aid by 13-23 percent. In other words, recipients are probably less inclined to support donors politically if aid is tied. Our fourth hypothesis is therefore:

Hypothesis 4: Untied aid increases the probability that the recipient votes in line with the donor.

One of the main challenges in empirically testing these hypotheses is to come up with a reliable model. We employ the benchmark established in Dreher and Sturm (2006) as our base model. Dreher and Sturm follow a general-to-specific method to construct their baseline model – based on the variables introduced in the previous literature. The robustness of the base model has been tested with Extreme Bounds Analysis. According to this method, a measure of democracy and an indicator of national capability are robustly associated with UN voting behavior: More democratic countries tend to vote in line with G7 countries, whereas higher national capability lowers the probability of voting coincidence. We use the same control variables here: The measure of democracy is a composite of the political rights index and the civil liberty index given by Freedom House. The indicator of national capability is a measure of power based on six elements: military expenditure, military personnel, energy consumption, iron and steel production, urban population, and total population. Appendix A lists all variables with their definitions and sources; Appendix B reports summary statistics.

IV. Voting and Aid Data

Voting coincidence in the UN General Assembly represents our dependent variable.⁹ There are several ways to construct this variable (see Dreher and Sturm 2006). Barro and Lee (2005) employ the fraction of times a country votes the same as the country of interest (either both voting yes, both voting no, both voting abstentions, or both being absent). Thacker (1999), among others, codes votes in agreement with the United States as 1, votes in disagreement as 0, and abstentions or absences as 0.5. Kegley and Hooock (1991) discard abstentions or absences. In all three approaches, the resulting numbers are divided by the total number of votes in each year. The difference between the approaches lies in the way they weigh abstentions or absences, attaching to them a weight of 1, 0.5 and 0, respectively, in case the donor country does vote. As argued by Zimmermann (1993), Palmer et al. (2002), and Hawes (2004), abstentions can be of considerable importance. Donors might bribe recipient governments not only to comply, but also to avoid non-compliance. We therefore decided against discarding abstentions and absences and opt for the approach proposed by Barro and Lee (2005).

An important issue in previous studies has been the question of which UN General Assembly votes to include in either definition of voting coincidence (Dreher and Sturm 2006). Most of the literature includes all votes, while some researchers consider “important” votes only. Clearly, the amount of effort a country puts on influencing others will depend on the importance of a vote. As pointed out in the Introduction, not all votes in the General Assembly are likely to be of great importance to the United States. Restricting the analysis to a sub-set of votes might thus be superior. However, inclusion of all votes has also been defended. Wittkopf (1973) states that none of the alternatives focusing on “important” votes is preferable to the general approach. Wittkopf replicates his overall results including only those votes on which the United States and the Soviet Union disagreed, finding that the results do not differ substantially from the analysis including all votes. Similarly, he replicates the previous analysis of Russett (1967), and again finds no substantial differences between “important” votes and all votes.

Labeling votes as being important is highly subjective (e.g., Kegley and McGowan 1981). This issue could potentially be solved by employing the categorization provided by the US

⁸ The OECD defines partially tied aid as loans and grants which are tied to procurements of goods and services from the donor country and from a restricted number of countries which must include substantially all aid recipient countries.

⁹ Voting behavior of each country on every roll call vote in the UN General Assembly since 1946 has been documented by Voeten (2004).

State Department. However, the State Department classifies votes since 1983 only. As the present study deals with a longer period of time (1973-2002), our main analysis includes all votes. We present additional estimations based on key votes for comparison.¹⁰ Finally, we follow the previous literature in concentrating on the United States as the donor of principal interest. Yet we replicate major results for the other G7 countries for comparison.

Aid data are taken from the Creditor Reporting System (CRS) as presented by the Development Cooperation Directorate of the OECD (<http://www.oecd.org/dataoecd/50/17/5037721.htm>). The data refer to aid commitments, rather than actual disbursements. In the aid allocation literature, it is disputed whether the choice between disbursements and commitments affects empirical results.¹¹ Disbursements may be the preferred aid measure as the behavior of recipients is more likely to depend on resource transfers actually made, rather than on donor promises. Nevertheless, several authors, including Berthélemy and Tichit (2004), favor commitments, which constitute the only aid variable over which donors have full control. Moreover, data on disbursements are not available for several of the categories our analysis refers to. For the sake of consistency we thus use commitments throughout the paper.

The differentiation between program and project aid is based on the so-called DAC sector codes of the CRS. Program aid consists of “general budget support”, “developmental food aid”, “other commodity assistance”, and “action related to debt”, while project aid comprises most other sector codes, including investment in social and economic infrastructure as well as aid to production sectors such as agriculture.¹² We do not consider emergency aid (because of its humanitarian motivation) as well as administrative costs of donors and unallocated aid (because these items are neither project-related nor program aid).

Data on the tying status of aid are incomplete. This applies especially to the United States. The distinction between tied and untied aid is available since 1984 only, whereas all aid was classified as partially tied in previous years. Hence, the estimates for tied and untied aid presented below refer to the period 1984-2002. For this period, donors provide (almost)

¹⁰ Some studies exclude nearly unanimous votes, as it is unlikely that countries bribe on those. Voting alignment might also depend on the underlying topic. With almost 20 percent of all votes in our sample, decisions related to Israel account for the by far biggest share. As shown by Dreher and Sturm (2006), excluding almost unanimous votes or votes related to Israel does not affect the results. Moreover, the decision of which votes to exclude is purely subjective. Hence, we do not investigate this issue further.

¹¹According to McGillivray and White (1993), the patterns of disbursements and commitments differ significantly in most of the cases analyzed. By contrast, Neumayer (2003) suggests that estimations are unlikely to be affected much as disbursements and commitments are highly correlated.

¹² For a similar approach, see Roodman (2004).

complete data on tied and untied loans, but entries are largely missing for tied grants. To overcome this problem, we assume all aid to be tied that is not reported as untied. This assumption is a reasonable approximation, as donors have incentives to report untied aid completely in order to appear more generous. From the estimated amount of tied aid we subtract the (reported) amount of tied loans to calculate tied grants.

Table 1 indicates the importance of the various aid categories employed in our analysis. For the G7 as a whole, program aid accounted for 29 percent of total aid commitments over the period 1973-2004. However, this share varied considerably across donor countries, with the United States reporting the by far highest share. The United States also stands out regarding the significance of "general budget support". Likewise, the emphasis on grants differed significantly across G7 donors over the period 1973-2004.¹³ Together with Canada and the United Kingdom, the United States clearly preferred grants, whereas grants played a marginal role for Japanese aid. In contrast to the other aid categories, the United States ranks at the bottom of G7 donors with regard to untying aid. Arguably, the fact that more than half of aid by several other donors was untied during the whole period of observation is due to altruism, rather than political self-interest of these donors.

V. Method of Estimation

Our regressions are pooled time-series cross-section analyses (panel data) and cover the period 1973-2002. We include fixed country and time effects in all estimated model specifications. Since some of the data are not available for all countries or years, the panel data are unbalanced and the number of observations depends on the choice of explanatory variables. As an obvious problem, we have to deal with the potential endogeneity of aid. Voting coincidence in the UN General Assembly might as well cause aid flows to adjust (see Section II). Voting and aid could also be jointly influenced by other common determinants. We pursue two strategies to deal with this potential problem.

First, we estimate Two-Stage-Least-Squares (2SLS) employing instruments for aid by G7 donors. Bilateral aid flows by other donors widely believed not to grant aid for political reasons are natural instruments. Arguably, aid given for humanitarian and developmental reasons should be highly correlated with aid by G7 donors, and uncorrelated with voting coincidence between aid recipients and G7 donors. Earlier research has shown that humanitarian and developmental concerns have been particularly important for the

¹³ In recent years, the composition of aid by all donors has shifted considerably towards grants (Nunnenkamp et al. 2005: Figure 1).

Netherlands, Denmark, Norway, and Sweden. These countries' aid has not been affected by the UN voting behavior of recipients (Stokke 1989; Alesina and Dollar 2000; Gates and Hoeffler 2004). In line with the previous literature we thus employ aid by these 'humanitarian' donors as instruments for G7 aid (e.g. Kilby 2006).

As a second approach to deal with the potential endogeneity of aid, we employ the GMM estimator as suggested by Arellano and Bond (1991). This estimator first-differences the estimation equation and uses lags of the dependent variable from at least the previous two periods as well as lags of the exogenous variables as instruments. Since there are more instruments than right-hand-side variables, the equations are over-identified and the instruments must be weighted appropriately. We present results from the Arellano-Bond one-step estimator, which uses the identity matrix as the weighting matrix. In all estimations we treat the covariates as strictly exogenous. For the GMM estimator, we conduct a Sargan test on the validity of the instruments used. This amounts to a test for the exogeneity of the covariates. We also report results of the Arellano-Bond test of second order autocorrelation, which must be absent from the data in order for the estimator to be consistent.

VI. Results

Columns 1 and 2 of Table 2 report the results for the United States, separating program aid and project aid (estimated with OLS and 2SLS). Voting coincidence rises with the degree of democracy in the recipient country, with a coefficient significant at the one percent level in both regressions. Greater national capability significantly reduces voting coincidence with the United States. These results are in line with Dreher and Sturm (2006).

Regarding a potentially differential effect of program aid and project aid (hypothesis 1), the results support our a priori hypothesis for the United States. In the OLS regression, both project and program aid significantly increase the probability that the recipient votes in line with the United States in the General Assembly. However, only the coefficient of program aid remains significant at the five percent level when we take the potential endogeneity of aid into account. The Sargan test accepts the overidentifying restrictions at the one percent level. An F-test shows that the instruments do not enter the first stage regression significantly (conditioned on all explanatory variables in the system). According to the estimated coefficient, a ten-percentage point increase in US program aid increases voting coincidence by 0.2 (column 2). This is far from being quantitatively negligible compared with, e.g., the impact of democracy – for which a one-point increase on the seven-point scale increases voting coincidence by 0.008.

The further columns of Table 2 replicate the analysis for the other G7 countries. Regarding democracy, the previous results remain. In all (OLS and 2SLS) equations the coefficient of democracy is significant at the one percent level. However, national capability does not have a significant impact on voting compliance with most other G7 countries. This provides some evidence that these countries exert overall less pressure on recipient countries. Only when there is no pressure in the first place would we expect the power to potentially resist the pressure being irrelevant. This conjecture is supported by our results with respect to bilateral aid flows. As can be seen, bilateral program aid by G7 donors other than the United States rarely has an impact on voting coincidence when the potential endogeneity of aid is taken into account. The exception is Canada, where program aid increases voting compliance at the ten percent level of significance. However, the Sargan test rejects the instruments, so we cannot put any faith in this result. The same is true for those cases where the results reveal a significant impact of project aid. Overall, our results imply no support for the hypothesis that any G7 country other than the United States (successfully) bribes aid recipients.

Table 3 reports the Arellano-Bond GMM estimates and further disaggregates US program aid. Column 1 shows that the previous result remains in the GMM estimation – voting coincidence is more likely with greater US program aid, with a coefficient significant at the one percent level. The Sargan test accepts the instruments at the one percent level of significance. However, the Arellano-Bond test rejects the null hypothesis of no second order autocorrelation. We therefore included a further lag of the dependent variable to the regression (not reported in the table). Both the Sargan and the Arellano-Bond tests accept the specification with two lags of the dependent variable included, while the previous results regarding US aid still hold.

The further columns of Table 3 list the disaggregated results for general budget support, (developmental) food aid, and debt relief. According to our three methods of estimation, it is general budget support that drives the results, supporting hypothesis 2. As the results show, the coefficients are somewhat higher than those of program aid as a whole, indicating a sizeable impact of US budget aid on UN voting behavior. The Sargan test accepts the instruments at the one percent level of significance in the 2SLS and GMM regressions. The Arellano-Bond test again only accepts the null hypothesis of no second order autocorrelation when a second lag of the dependent variable is included. As before, however, this has no qualitative impact on the results.

Table 4 disaggregates total aid into loans and grants (hypothesis 3). Loans have no impact on voting coincidence at conventional levels of significance. With respect to grants, the picture is more nuanced. The overall amount of US grants does not significantly affect voting once their endogeneity is taken into account. However, the amount of untied grants affects voting compliance according to the 2SLS regression. The results in column 4 reveal that recipients of higher untied US grants are more likely to vote in line with the United States in the UN General Assembly. Again, the impact of aid is substantial: A rise in untied grants by ten percentage points raises voting coincidence by 0.3. This lends support to hypothesis 4.¹⁴

Table 5 replicates the analysis including only those votes that the US State Department considers important. Since observations are missing for the first ten years, the sample period is reduced to 1983-2002. In qualitative terms, most of the previous results for the United States are hardly affected by dropping “unimportant” votes from the regression. The only notable exception is overall grants, which turn out to be a significant determinant of UN voting behavior when the analysis is restricted to key votes. Quantitatively, however, some major changes occur. In particular, the 2SLS regressions yield an impact of budget aid and untied grants on voting coincidence that is more than twice the impact reported above (columns 5 and 10). When focusing on those votes that the United States considers important, the results are thus even more strongly in line with our a priori hypotheses.

VII. Summary

This paper empirically investigated whether US aid has had an influence on voting patterns in the UN General Assembly over the period 1973-2002. Compared to other bilateral donors, notably the Netherlands and Scandinavian countries, the United States is widely believed to be less altruistic in allocating aid for humanitarian and developmental reasons. Apart from pursuing economic self-interests, US aid is supposed to be used to buy political support from recipient countries. The hypothesis that aid is applied as an instrument to induce recipients voting in line with the United States in the UN General Assembly is based on two observations: (i) various UN members are susceptible to bilateral pressure, and (ii) UN voting is considered relevant by the United States in defining bilateral relationships and foreign policy.

¹⁴ When replicating the analysis for the other G7 countries, we did not find any significant pattern. These results are not reported in the tables. They are available on request.

As the main innovation of this paper, we used disaggregated aid data in order to assess whether aid was “effective” in inducing recipients to vote in line with the United States in the UN General Assembly. Different forms of aid may differ in their ability to induce political support by recipients. In particular, program aid (notably in the form of general budget support), grants, and untied aid are most likely to shape UN voting behavior. These links have been ignored in the previous literature.

Accounting for the potential endogeneity of aid, our results provide strong evidence that US aid has indeed bought voting compliance. More specifically, the results suggest that general budget support and untied grants are the major aid categories with which recipients have been induced to vote in line with the United States. When replicating the results for the other G7 countries, however, we did not find a similar pattern.

By relying on specific aid categories, our analysis provides a more nuanced account than previous studies of how the United States might bribe recipient countries. The findings of this paper complement the literature on aid allocation, which has shown US aid to be affected by political considerations and thus at best partly serving altruistic purposes. As a means of obtaining a yet more complete picture of the two-way relationship between political interests and aid allocation, one fruitful avenue for future research would be to extend the analysis of disaggregated aid data to other political spheres such as decision making in the UN Security Council. We intend to address this in future research.

References

- Alesina, A., and D. Dollar (2000). Who Gives Foreign Aid to Whom and Why? *Journal of Economic Growth* 5(1): 33-63.
- Alesina, A., and B. Weder (2002). Do Corrupt Governments Receive Less Foreign Aid? *American Economic Review* 92(4): 1126-1137.
- Arellano, M., and S. Bond (1991). Some Tests for Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations. *The Review of Economic Studies* 58(2): 277-297.
- Barnebeck Andersen, T., T. Harr and F. Tarp (2004). On US Politics and IMF Lending. *European Economic Review*, forthcoming (online version as of November 2005).
- Barro, R.J., and J.-W. Lee (2005). IMF-Programs: Who Is Chosen and What Are the Effects? *Journal of Monetary Economics* 52: 1245-1269.
- Bennis, P. (1997). The United Nations and Palestine: Partition and Its Aftermath - UN Stance on Palestine's Displacement by Creation of Israel. *Arab Studies Quarterly* 19(3): 47-77.
- Bernstein, S.J., and E.J. Alpert (1971). Foreign Aid and Voting Behavior in the United Nations: The Admission of Communist China. *Orbis* 15(3): 963-977.
- Berthélemy, J.-C., and A. Tichit (2004). Bilateral Donors' Aid Allocation Decisions: A Three-Dimensional Panel Analysis. *International Review of Economics and Finance* 13(3): 253-274.
- Canavire, G., P. Nunnenkamp, R. Thiele and L. Triveño (2005). Assessing the Allocation of Aid: Developmental Concerns and the Self-Interest of Donors. Working Paper 1253. Kiel Institute for the World Economy, Kiel.
- Collier, P., and D. Dollar (2002). Aid Allocation and Poverty Reduction. *European Economic Review* 46(8): 1475-1500.
- Collier, P., and A. Hoeffler (2004). Aid, Policy, and Growth in Post-Conflict Societies. *European Economic Review* 48(5): 1125-1145.
- Dollar, D., and V. Levin (2004). The Increasing Selectivity of Foreign Aid, 1984–2002. Policy Research Working Paper 3299. The World Bank, Washington, D.C.
- Doucouliafos, H., and M. Paldam (2005). The Aid Effectiveness Literature: The Sad Results of 40 Years of Research. Working Paper 2005.15. Department of Economics, University of Aarhus.
- Dreher, A., and N. M. Jensen (2007). Independent Actor or Agent? An Empirical Analysis of the Impact of US Interests on IMF Conditions. *The Journal of Law and Economics* 50, (1), forthcoming.
- Dreher, A., and J.-E. Sturm (2006). Do IMF and World Bank Influence Voting in the UN General Assembly? KOF Working Paper, ETH Zurich, forthcoming.
- Feyzioglu, T., Swaroop and M. Zhu (1998). A Panel Data Analysis of the Fungibility of Foreign Aid. *World Bank Economic Review* 12(1): 29-58.
- Freedom House (2004). Freedom in the World, Annual Report. www.freedomhouse.org.
- Gates, S., and A. Hoeffler (2004). Global Aid Allocation: Are Nordic Countries Different? Working Paper 2004-34. Centre for the Study of African Economies, Oxford.

- Guillaumont, P., and L. Chauvet (2001). Aid and Performance: A Reassessment. *Journal of Development Studies* 37: 66-92.
- Harrigan, J., C. Wang and H. El-Said (2006). The Economic and Political Determinants of IMF and World Bank Lending in the Middle East and North Africa. *World Development* 34 (2): 247-270.
- Harms, M., and M. Lutz (2005). The Macroeconomic Effects of Foreign Aid. In: H. Ahrens (ed.), *Development Cooperation – Evaluation and New Approaches*. Berlin.
- Hawes, M. B. (2004). Inflationary Influence – The Diminishing Effect of U.S. Aid on U.N. Voting. University of California, San Diego, mimeo.
- Kato, M. (1969). A Model of US Foreign Aid Allocation: An Application of a Rational Decision-Making Scheme. In: J. E. Mueller (ed.), *Approaches to Measurement in International Relations*. Appleton Century Croft, New York.
- Kegley, C.W., Jr., and S.W. Hook (1991). U.S. Foreign Aid and U.N. Voting: Did Reagan's Linkage Strategy Buy Defence or Defiance? *International Studies Quarterly* 35(3): 295-312.
- Kegley, C.W., Jr., and P.J. McGowan (1981). *The Political Economy of Foreign Policy*. Beverly Hills: Sage Publications.
- Kilby, C. (2006). Donor Influence in MDBs: The Case of the Asian Development Bank. *The Review of International Organizations* 2, 1, forthcoming.
- Langhammer, R.J. (2004). Halving Poverty by Doubling Aid: Is There Reason for Optimism? *The World Economy* 27(1): 81-98.
- Lundborg, P. (1998). Foreign Aid and International Support as a Gift Exchange. *Economics & Politics* 10(2): 127-42.
- McGillivray, M. (2003). Aid Effectiveness and Selectivity: Integrating Multiple Objectives into Aid Allocations. *DAC Journal* 4(3): 27-40.
- McGillivray, M., and H. White (1993). Explanatory Studies of Aid Allocation among Developing Countries: A Critical Survey. Working Paper 148. Institute of Social Studies, The Hague.
- Morey, D., and B. Lai (2003). Liberalism, Realism, and United Nations Voting: An Empirical Test of Contending Theories. Department of Political Science, University of Iowa, mimeo.
- Morgenthau, H. (1962). A Political Theory of Foreign Aid. *The American Political Science Review* 56: 301-309.
- Neumayer, E. (2003). *The Pattern of Giving Aid: The Impact of Good Governance on Development Assistance*. Routledge Studies in Development Economics 34. London and New York.
- Nunnenkamp, P., R. Thiele and T. Wilfer (2005). Grants Versus Loans: Much Ado About (Almost) Nothing. Economic Policy Paper 4. The Kiel Institute for the World Economy, Kiel.
- Palmer, G., S. Wohlander and T.C. Morgan (2002). Give or Take: Foreign Aid and Foreign Policy Substitutability. *Journal of Peace Research* 39: 5-26.
- Rai, K.B. (1972). Foreign Policy and Voting in the UN General Assembly. *International Organizations* 26(3): 589-594.

- Rai, K.B. (1980). Foreign Aid and Voting in the UN General Assembly, 1967-1976. *Journal of Peace Research* 17(3): 269-277.
- Roodman, D. (2004). An Index of Donor Performance. Working Paper 42. Center for Global Development, Washington, D.C.
- Russett, B.M. (1967). *International Regions and the International System*. Rand McNally & Company, Chicago.
- Ruttan, V.W. (1996). *United States Development Assistance Policy: The Domestic Politics of Foreign Economic Aid*. The Johns Hopkins University Press, Baltimore.
- Schraeder, P., S. Hook and B. Taylor (1998). Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French, and Swedish Aid Flows. *World Politics* 50: 294-323.
- Sexton, E.A., and T.N. Decker (1992). U.S. Foreign Aid: Is It for Friends, Development or Politics? *The Journal of Social, Political and Economic Studies* 17(3 & 4): 303-315.
- Singer, J.D., S. Bremer and J. Stuckey (1972). Capability Distribution, Uncertainty, and Major Power War, 1820-1965: In Bruce Russett (ed.), *Peace, War, and Numbers*, Beverly Hills, Sage: 19-48.
- Stokke, O. (ed.) (1989). *Western Middle Powers and Global Poverty: The Determinants of the Aid Policies of Canada, Denmark, the Netherlands, Norway, and Sweden*. The Scandinavian Institute of African Studies, Uppsala.
- Thacker, S.C. (1999). The High Politics of IMF Lending. *World Politics* 52: 38-75.
- Thiele, R., P. Nunnenkamp and A. Dreher (2006). Sectoral Aid Priorities: Are Donors Really Doing their Best to Achieve the Millennium Development Goals? Working Paper 1266. The Kiel Institute for the World Economy, Kiel.
- US Department of State (1985). Report to Congress on Voting Practices in the United Nations, Washington, D.C.
- Voeten, E. (2004). Documenting Votes in the UN General Assembly. The George Washington University (<http://home.gwu.edu/~voeten/UNVoting.htm>).
- Wang, T.Y. (1999). US Foreign Aid and UN Voting: An Analysis of Important Issues. *International Studies Quarterly* 43(1): 199-210.
- Wittkopf, E. (1973). Foreign Aid and United Nations Votes: A Comparative Study. *The American Political Science Review* 67(3): 868-888.
- Zimmermann, R. (1993), *Dollars, Diplomacy and Dependency – Dilemmas of U.S. Economic Aid*. Lynne Reiner Publishers Inc., Colorado.

Table 1: Selected Aid Categories for G7 Donors (percent of total aid commitments), 1973-2004

Donors	Program aid ^a	General budget support ^b	Grants ^c	Untied aid ^d
United States	38.1	17.2	84.9	23.0
Canada	21.5	2.4	87.8	32.5
France	29.8	8.0	51.5	40.0
Germany	32.2	0.6	47.0	56.8
Italy	29.1	2.1	52.2	31.0
United Kingdom	23.4	9.6	90.4	65.7
Japan	20.8	5.1	20.8	79.6

^a Sum of “commodity aid and general programme assistance” and “action related to debt.” – ^b Note that “general budget support” is part of “commodity aid and general programme assistance.” – ^c Excluding “ODA/OA grant like.” – ^d The tying status of aid is available for 58–98 percent of overall commitments, with the United States representing the lower bound; note that the sum of untied, partially tied and tied aid is set equal to 100.

Source: DAC online database.

Table 2: Bilateral Aid and UN Voting, Project vs. Program Aid, 1973-2002^a

	USA		France		Japan		Germany		Canada		Italy		UK	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Democracy (t-1)	0.007 (7.77***)	0.008 (6.83***)	0.013 (7.76***)	0.013 (6.77***)	0.012 (5.58***)	0.011 (4.81***)	0.015 (7.37***)	0.013 (4.79***)	0.015 (7.24***)	0.016 (7.16***)	0.015 (7.49***)	0.015 (6.58***)	0.014 (8.37***)	0.014 (7.64***)
National capability (t-1)	-2.092 (2.58***)	-2.285 (2.50**)	-2.426 (1.72*)	-2.341 (1.51)	-0.689 (0.39)	-0.933 (0.37)	-0.878 (0.51)	-0.953 (0.54)	-1.087 (0.64)	-1.185 (0.63)	-1.322 (0.80)	-1.178 (0.68)	-1.872 (1.31)	-1.847 (1.28)
Project aid	0.003 (2.65***)	-0.005 (0.43)	-0.001 (0.47)	0.000 (0.95)	0.002 (1.00)	0.000 (0.02)	0.005 (1.04)	-0.085 (4.96***)	0.001 (0.17)	-0.004 (0.23)	0.006 (2.08**)	-0.028 (1.64*)	-0.011 (2.97***)	-0.027 (1.94*)
Program aid	0.006 (10.83***)	0.021 (2.45**)	-0.013 (3.22***)	0.030 (1.02)	-0.008 (1.69*)	0.016 (0.31)	0.004 (1.23)	0.017 (0.60)	0.006 (0.67)	0.133 (1.78*)	0.001 (0.39)	0.006 (0.17)	-0.001 (0.39)	0.007 (0.30)
R2 (within)	0.68	0.61	0.41	0.33	0.29	0.27	0.49	0.46	0.30	0.22	0.35	0.30	0.47	0.47
Method	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS	OLS	2SLS
Sargan test (p-value)		0.72		0.01		0.01		0.01		0.05		0.09		0.00
First stage F-test (prob>F)		0.43		0.01		0.02		0.02		0.02		0.02		0.01
Number of countries	143	143	143	143	143	143	143	143	143	143	143	143	143	143
Number of observations	3227	3227	3227	3227	3227	3227	3227	3227	3227	3227	3227	3227	3227	3227

^a * significant at 10% level; ** significant at 5% level; *** significant at 1% level.

Table 3: Bilateral Aid and UN Voting, US Project vs. Program Aid, 1973-2002^a

	(1)	(2)	(3)	(4)
Lagged dependent variable	0.289 (13.68***)			0.288 (13.66***)
Democracy	0.003 (1.67*)	0.008 (7.88***)	0.007 (4.57***)	0.003 (1.70*)
National capability	-4.936 (3.13***)	-2.065 (2.54**)	-1.814 (1.45)	-4.857 (3.08***)
Project aid	0.001 (0.74)	0.003 (2.68***)	-0.004 (0.32)	0.001 (0.82)
Program aid	0.004 (4.63***)			
Budget aid		0.007 (10.78***)	0.025 (1.92*)	0.005 (5.40***)
Food aid		0.004 (1.75*)	0.012 (0.51)	0.003 (1.24)
Debt relief		-0.003 (0.70)	0.139 (0.65)	-0.001 (0.18)
R ² (within)		0.68	0.44	0.33
Method	GMM	OLS	2SLS	GMM
Sargan test (p-value)	1.00		0.72	1.00
First stage F-test (prob>F)			0.42	
Number of countries	141	143	143	143
Number of observations	3025	3227	3227	3227

^a * significant at 10% level; ** significant at 5% level; *** significant at 1% level.

Table 4: Bilateral Aid and UN Voting, US Loans vs. Grants, 1973-2002^a

	(1)	(2)	(3)	(4)
Democracy	0.008 (7.82***)	0.007 (6.35***)	0.008 (7.98***)	0.007 (5.47***)
National capability	-1.992 (2.44**)	-2.232 (2.49**)	-1.918 (2.35**)	-2.407 (2.50**)
Loans	0.001 (0.70)	0.017 (0.81)		
Loans, untied			-0.003 (0.74)	-0.036 (0.18)
Loans, tied			-0.001 (0.35)	0.010 (0.44)
Grants	0.005 (10.12***)	0.005 (1.39)		
Grants, untied			-0.003 (1.07)	0.029 (2.55**)
Grants, tied			0.005 (9.88***)	-0.007 (1.33)
R ² (within)	0.68	0.67	0.68	0.59
Method	OLS	2SLS	OLS	2SLS
Sargan test (p-value)		0.01		0.60
First stage F-test (prob>F)		0.04		0.05
Number of countries	143	143	143	143
Number of observations	3227	3227	3227	3227

^a * significant at 10% level; ** significant at 5% level; *** significant at 1% level.
Data for tied and untied aid are available for the period 1984-2002 only.

Table 5: Bilateral Aid and UN Voting, US Key Votes, 1983-2002^a

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Lagged dependent variable			0.347 (12.47***)			0.344 (12.41***)				
Democracy	0.024 (8.27***)	0.023 (6.08***)	0.015 (2.75***)	0.024 (8.28***)	0.021 (3.63***)	0.015 (2.86***)	0.024 (8.31***)	0.022 (5.72***)	0.024 (8.33***)	0.025 (4.16***)
National capability	-4.846 (2.05**)	-5.405 (1.87*)	-15.105 (2.78***)	-4.871 (2.06**)	-4.941 (1.40)	-15.346 (2.84***)	-4.780 (2.01**)	-5.211 (1.87*)	-4.748 (2.00**)	-5.981 (1.62)
Project aid	0.009 (3.02***)	0.024 (0.78)	-0.004 (1.00)	0.009 (3.00***)	0.027 (0.71)	-0.003 (0.88)				
Program aid	0.007 (4.93***)	0.056 (2.46**)	0.013 (5.48***)							
Budget aid				0.007 (4.86***)	0.059 (1.84*)	0.015 (6.19***)				
Food aid				0.008 (0.87)	0.045 (0.74)	-0.013 (1.00)				
Debt relief				-0.004 (0.44)	0.295 (0.54)	-0.002 (0.16)				
Loans							0.004 (0.83)	0.039 (0.66)		
Loans, untied									-0.004 (0.43)	-0.486 (0.79)
Loans, tied									0.005 (0.47)	0.040 (0.54)
Grants							0.005 (4.41***)	0.035 (3.06***)		
Grants, untied									0.003 (0.49)	0.060 (1.75*)
Grants, tied									0.005 (4.02***)	0.019 (0.91)
R ² (within)	0.46	0.20		0.46	0.28		0.46	0.29	0.46	0.18
Method	OLS	2SLS	GMM	OLS	2SLS	GMM	OLS	2SLS	OLS	2SLS
Sargan test (p-value)		0.66	1.00		0.60	1.00		0.21		0.99
First stage F-test (prob>F)		0.03			0.03			0.04		0.09
Number of countries	143	143	143	143	143	143	143	143	143	143
Number of observations	2455	2455	2078	2455	2455	2078	2455	3227	2455	2455

^a * significant at 10% level; ** significant at 5% level; *** significant at 1% level.

Appendix A: Sources and Definitions^a

Variable	Description	Source
Voting with USA	Number of times a country votes the same as the US (either both voting yes, both voting no, both voting abstentions, or both being absent), divided by the total number of votes in each year. The same definition applies for the other G7 countries.	Dreher and Sturm (2006)
Democracy	$8 - (\text{Political Rights Index} + \text{Civil Liberties Index}) / 2$	Freedom House (2004)
National capability	Composite indicator of national capability, based on total population, urban population, iron and steel production, energy consumption, military personnel, and military expenditure. This measure is generally computed by summing all observations on each of the 6 capability components for a given year, converting each state's absolute component to a share of the international system, and then averaging across the 6 components.	Singer et al. (1972)
Project aid (USA, France, Germany, Japan, Canada, Italy, UK)	Sum of DAC sector codes 110, 120, 130, 140, 150, 160, 200, 210, 220, 230, 240, 250, 310, 320, 330, 400, 410, 420, 430, 920	CRS
Program aid (USA, France, Germany, Japan, Canada, Italy, UK)	Sum of DAC sector codes 500, 510, 520, 530, 600	CRS
USA		
Budget aid	DAC sector code 510 (General Budget Support)	CRS
Food aid	DAC sector code 520 (Developmental Food Aid/ Food Security Assistance)	CRS
Debt relief	DAC sector code 600 (Action Relating to Debt)	CRS
Loans	ODA/OA Loans	CRS
Grants	ODA/OA Grants	CRS
Tied loans	ODA/OA Loans Tied	CRS
Untied loans	ODA/OA Loans Untied	CRS
Tied grants	(ODA/OA Total Amount – ODA/OA Total Untied) – ODA/OA Loans Tied	CRS
Untied grants	ODA/OA Total Amount Untied – ODA/OA Loans Untied	CRS
Note: CRS = Creditor Reporting System		
^a All aid variables are in percent of GDP.		

Appendix B: Summary Statistics^a

Variable	Mean	Minimum	Maximum	Standard deviation
Voting with				
USA	0.22	0.00	0.90	0.13
Canada	0.48	0.00	0.98	0.19
France	0.39	0.00	0.95	0.17
UK	0.38	0.00	0.93	0.18
Germany	0.45	0.00	1.00	0.21
Italy	0.47	0.00	1.00	0.19
Japan	0.51	0.00	0.92	0.17
Democracy	4.00	1.00	7.00	2.06
National capability	0.01	0.00	0.18	0.02
USA				
project aid	0.24	0.00	21.64	0.80
program aid	0.22	0.00	46.67	1.52
budget aid	0.09	0.00	46.67	1.32
food aid	0.10	0.00	12.79	0.37
debt relief	0.01	0.00	13.05	0.19
France				
project aid	0.25	0.00	31.60	0.97
program aid	0.06	0.00	11.80	0.34
Germany				
project aid	0.14	0.00	25.53	0.55
program aid	0.08	0.00	14.45	0.48
Japan				
project aid	0.35	0.00	40.13	1.41
program aid	0.08	0.00	10.56	0.37
Canada				
project aid	0.09	0.00	12.18	0.50
program aid	0.02	0.00	6.52	0.18
Italy				
project aid	0.07	0.00	18.02	0.56
program aid	0.05	0.00	67.01	1.06
UK				
project aid	0.13	0.00	28.49	0.85
program aid	0.08	0.00	22.60	0.69
USA				
loans	0.10	0.00	24.29	0.61
grants	0.40	0.00	49.37	1.95
tied loans	0.03	0.00	7.50	0.19
untied loans	0.00	0.00	13.05	0.18
tied grants	0.33	0.00	49.37	1.88
untied grants	0.03	0.00	17.71	0.36

^a All aid variables are in percent of GDP.