Villanova School of Business Economics Working Paper # 9

An empirical assessment of informal influence in the World Bank

Christopher Kilby[a]

February 25, 2010

[a]Department of Economics, Villanova University, 800 Lancaster Ave., Villanova, PA 19085 USA. Telephone: 610-519-4324; FAX: 610-519-6054. chkilby@yahoo.com

Abstract:

Recent scholarship has uncovered convincing evidence of systematic donor influence in international financial institutions (IFIs) such as the World Bank. Less clear is *how* donors influence IFI decisions. Possible avenues are formal and informal: formal influence through official decisions of the board of executive directors and informal influence over decisions not made at the board level. This paper explores the role of informal influence at the World Bank by examining the flow of funds after loans are approved. Controlling for commitments (loan approvals), are subsequent disbursements linked to the geopolitical interests of important donors? Since the board of executive directors is formally involved in loan approval but not in disbursement decisions, this provides an interesting case to identify the avenues of influence. The results indicate the scope of reforms needed to bolster the independence of the World Bank.

Key words: World Bank; Donor Influence; United States; UN voting; Informal Influence

JEL codes: F35, F53, F55, O19

I. Introduction

There is a well-established literature investigating donor influence in international financial institutions (IFIs). Many scholars focus on the IMF (e.g., Andersen, Harr and Tarp, 2006; Barro and Lee, 2005; Dreher *et al*., 2009b; Dreher and Jensen, 2007; Stone, 2002, 2004; Thacker, 1999) but studies of the political economy of IFI lending cover other institutions as well, including the World Bank. For example, Dreher *et al.* (2009a) find that the number of World Bank projects approved is higher when the borrowing country is a rotating member of the UN Security Council than when the country is not, *ceteris paribus*. Andersen, Hansen and Markussen (2006) uncover a positive link between alignment with the U.S. on UN votes designated as important by the U.S. State Department on the one hand, and IDA commitments on the other. The systematic influence of donors in IFI lending decisions appears well established through such econometric analyses.

Somewhat less well studied are the formal and informal pathways through which donors exert influence in IFIs. In the case of the IMF, Stone (2004) provides a convincing story regarding program interruptions. When countries fail to meet lending conditions, Fund staff members suspend programs, apparently with little regard to geopolitics. The board of executive directors then reviews cases to see if the program should be reinstated. Stone finds that reinstatements happen more expeditiously for geopolitically important countries. This work provides evidence of formal influence as board decisions appear to reflect the interests of powerful countries. Dreher *et al.* (2009a) suggest two routes at the World Bank. First, staff may anticipate donor preferences and bring forward more project proposals for favored countries (i.e., informal influence). Second, the board may simply act more quickly on such projects (formal influence).

In general, studies of loan decisions (e.g., using commitment data) reflect the combined

effect of formal and informal influence but cannot distinguish between them, fundamentally because the details of executive board decisions are not public record. It is possible, however, to assess informal influence in other settings. For example, Kilby (2009a) looks at disbursements of World Bank adjustment loans, controlling for commitments.[1] That study finds that World Bank structural adjustment loan disbursements are less dependent on macroeconomic performance in countries aligned with the United States. Because the decision to release a loan tranche is not officially made by the board, this presents evidence of informal U.S. influence over Bank operations.

Apart from that study, previous work on the World Bank has examined behavior that at least in part reflects formal influence. This is clear for studies based on commitment data which directly reflect loan approval decisions made by the board (e.g., Andersen, Hansen and Markussen, 2006) but it also applies to most studies using disbursement data since the level of disbursements depends on the level of prior commitments. For example, Fleck and Kilby (2006) find a link between U.S. interests and World Bank disbursements. This link could be driven, at least in part, by the role U.S. interests play in the formal process of loan approval by the board. The U.S. executive director could vote for and lobby other countries to support loans that further U.S. interests. Such efforts would result in more commitments which in turn result in more disbursements in subsequent years.

[1]Aid agencies and governments typically commit funds before they disburse them. In the case of the World Bank, commitments are IDA credit amounts and IBRD loan amounts approved by the Board of Directors. These are counted in full at the time the Board approves the loan/credit. Disbursements are counted at the time the World Bank actually pays out funds, e.g., when a program loan tranche is released or a project expense reimbursed. For program loans, disbursements usually happen over a one to three year period after loan approval (but longer delays are possible); for project loans, a six year disbursement profile is typical. Committed amounts may not fully disburse if loan conditions are not fully satisfied, a project is completed under budget, the project/program is cancelled, or the loan is cancelled.

This paper looks at World Bank disbursements after controlling for prior commitments. If donor influence over the flow of funds is largely confined to board approval of projects and thus commitments, subsequent geopolitical events (UN voting, military alignments, etc.) should have no influence on the flow of these already committed funds from the Bank to the borrower. Following this logic, proxies for donor interests should prove insignificant in a regression with World Bank disbursements as the dependent variable and the commitments from which these funds are disbursed as a control variable. In this scenario, Bank staff make disbursement decisions free from donor pressure. Alternatively, donor influence could extend more deeply so that donor priorities influence disbursement decisions over which the donor has no formal control. Kilby (2009a) finds patterns consistent with U.S. influence in disbursement decisions for the case of World Bank adjustment lending; the question is whether donor operational influence is more widespread.

Understanding how donors influence IFI decisions, whether via formal channels, informal channels, or both, is critical for successful institutional reform. If donor influence is largely formal, governance reform at the board level is the appropriate solution. But changing the governance structure (e.g., voting shares, majority requirements, etc.) may be a much less potent approach if donors have significant informal influence. In this case, the key factors may be the location of the institution, hiring and promotion practices, information disclosure, and linking performance to pay in the appropriate fashion. The location of the Bretton Woods institutions just blocks from the White House clearly facilitates informal U.S. control of the institution. A lot has been written about hiring and promotion practices and the dominance of U.S.-educated

professionals within the Bank.[2] These characteristics insure the U.S. government good access to information regardless of official disclosure policies so that World Bank disclosure restrictions merely hinder others from providing a check to U.S. informal influence. With pay and promotions not closely tied to project outcomes, Bank staff have little incentive to resist informal pressures that may reduce project performance.

The rest of the paper is structured as follows. Section II develops a framework for examining the influence of donors on post-approval allocation decisions. Section III presents and describes the data used in the analysis. Section IV discusses the estimation procedure and results. Section V is a brief conclusion.

II. Model

I start by examining the World Bank's allocation of funds at the project or program level. I divide the opportunities for donors to influence World Bank allocation decisions into two periods: up through loan approval and post-approval. Up through loan approval, donors may accelerate the process and expand loan size when they wish to use access to World Bank funds to reward countries. Conversely, donors may slow the process and reduce loan size when they wish to limit access to World Bank funds to punish countries. At this stage, donor influence can be exercised through formal or informal channels. After loan approval, donors may pressure the Bank to disburse funds expeditiously, ignoring potential problems (corruption, lack of counterpart funding, failure to reach benchmarks). Alternatively, donors may pressure the Bank to disburse slowly (or even suspend disbursements) when the project or program is more or less on track, potentially

[2]On the World Bank see, for example, French (1994), Gwin (1997), Stern and Ferreira (1997) or Woods (2003). More extensive work on similar issues in the IMF can be found in Chwieroth (2007).

creating implementation problems. Post-approval influence is informal only.

I introduce the following notation to describe projects. Let j index all World Bank-funded projects (across all recipient countries i and time periods t). At loan approval, the World Bank commits c_{ij} to country i for project j.[3] While the loan is "active" (after loan approval but before loan closing), the World Bank disburses a variable amount d_{ijt} to country i for project j in year t. Define A_{it} as the set of active projects in recipient country i in year t. If $j \notin A_{it}$ (project j is not active), then $d_{ijt} = 0$; if $j \in A_{it}$ (project j is active), then $d_{ijt} \geq 0$.

Actual disbursements (d_{ijt}) may differ from planned disbursements (d^*_{ijt}) if the project/program does not go according to the plan laid out in the Staff Appraisal Report and loan documents or if changing donor interests lead to pressure to accelerate or slow disbursement. Planned disbursements will depend on the commitment amount, characteristics of the project/program, and country characteristics. We can incorporate these considerations by modeling the ratio of actual to planned disbursements as a function of these variables:

$$d_{ijt}/d^*_{ijt} = f(\boldsymbol{X}_{ijt}, \boldsymbol{DI}_{it}, \varepsilon_{ijt}) \quad (1)$$

where $\boldsymbol{X}_{ijt}$ is a vector of "technical" factors that influence the speed of disbursement, $\boldsymbol{DI}_{it}$ is a vector of donor interest variables that may reflect donor pressure on the World Bank regarding disbursements to country i, and ε_{ijt} is a stochastic element. I define $\boldsymbol{X}$ such that higher values correspond to technical factors that speed disbursement and $\boldsymbol{DI}$ such that higher values correspond to greater (more intense positive) donor interest. One possible form of this function which proves convenient from an econometric standpoint is:

$$d_{ijt}/d^*_{ijt} = e^{(\boldsymbol{\beta}_1 \boldsymbol{X}_{ijt} + \boldsymbol{\beta}_2 \boldsymbol{DI}_{it} + \varepsilon_{ijt})} \quad (2)$$

[3]Although the subscript i is redundant given that j indexes all projects (across all countries and time periods), it is helpful for tracking other variables.

where $\boldsymbol{\beta}_1 > \mathbf{0}$ for appropriately defined $\boldsymbol{X}$. The hypothesis that donors influence disbursement rates is equivalent to $\boldsymbol{\beta}_2 > \mathbf{0}$ for appropriately defined $\boldsymbol{DI}$ while the alternative hypothesis that donors do not influence disbursement rates implies $\boldsymbol{\beta}_2 = \mathbf{0}$. Taking logs of both sides and rearranging yields

$$lnd_{ijt} = lnd^*_{ijt} + \boldsymbol{\beta}_1 \boldsymbol{X}_{ijt} + \boldsymbol{\beta}_2 \boldsymbol{DI_{it}} + \varepsilon_{ijt} \quad (3)$$

Data on planned disbursements (d^*_{ijt}) are not systematically available but data on commitments (c_{ij}) are. Recall that c_{ij} is the amount committed by the World Bank to country *i* for project *j* in whatever year that project was approved (i.e., the original World Bank loan amount for project *j*). Assuming a standard disbursement profile by project type and "age" (years since the project was approved), d^*_{ijt} is proportional to c_{ij} once we control for project type (e.g., with a sector dummy variable) and age.[4] Incorporating the appropriate control variables in $\boldsymbol{X}_{ijt}$, the equation becomes:

$$lnd_{ijt} = lnc_{ij} + \boldsymbol{\beta}_1 \boldsymbol{X}_{ijt} + \boldsymbol{\beta}_2 \boldsymbol{DI_{it}} + \varepsilon_{ijt} \quad (4)$$

Data on actual disbursements from the OECD DAC are available only at the country level ($d_{it} = \sum_{j \in A_{it}} d_{ijt}$), not at the project level (d_{ijt}).[5] In addition, other than project and aid type, few project-level factors ($\boldsymbol{X}_{ijt}$) are available. I address these issues by shifting to country-level analysis, summing over all active projects in country *i* in year *t* (i.e, summing over $j \in A_{it}$):

$$lnd_{it} = lnc_{it} + \boldsymbol{\beta}_1 \boldsymbol{X}_{it} + \boldsymbol{\beta}_2 \boldsymbol{DI_{it}} + \varepsilon_{it} \quad (5)$$

I refer to the country-level commitment variable c_{it} as "Original Commitments" to distinguish it

[4] This does not assume that loans are designed to disburse in the year they are approved; rather planned disbursement could extend over several years. This contrasts with the link assumed between commitments and disbursements in Bulíř and Hamann (2003, 2007), Celasun and Walliser (2008), and Odedokun (2003).

[5] Although PLAID provides project level data, disbursement data are available only as cumulative totals, not on a yearly basis by project.

from new commitments approved by the board in year *t*. Original Commitments are defined as the sum of World Bank commitments to country *i* for all projects still active in year *t*: $c_{it} = \sum_{j \in A_{it}} c_{ij}$. Thus, c_{it} reflects the portfolio of originally committed funds for active projects from which current disbursements could be drawn (the country's loan portfolio).[6] $\boldsymbol{X}_{it}$ is a vector of technical country characteristics that may influence disbursement. It also includes variables describing the loan portfolio for country *i* in year *t*: sectoral count variables (constructed by adding project-level sectoral dummy variables) and average project age (for active projects, weighted by loan size (c_{ij}/c_{it})).

There are a number of possible donor interest variables. Much of the IFI literature uses UN-related measures but even here there are many choices. Using donor-recipient alignment on all UN General Assembly (UNGA) votes may be appropriate if UN voting proxies for broader alliances or commonality of interests (Stone 2004). Following Thacker (1999), one could focus just on UNGA votes designated as important by the U.S. State Department. Andersen, Harr and Tarp (2006) advocate a swing voter model based on a narrowly rational view of voting where outcomes reflect vote buying.[7] They argue that votes on "unimportant" measures (ones the U.S. does not designate important and on which the U.S. does not lobby intensively) reflect a country's true preferences, free of U.S. influence. A country's alignment with the U.S. on these votes reflects the country's ideal location in the voting space. Conversely, votes on important measures do reflect U.S. influence or concessions to the U.S. position. Thus, payments to a country for its

[6]In practice, I limit the "active life" of a project to 8 years because very little disbursement is likely to happen after this point even if World Bank staff have not officially closed the project. This limit also allows for cases where the closing date is missing, either because of incomplete data or projects that had not yet closed by 2009.

[7]I use the term "narrowly rational" because vote buying is the outcome of a rational actor model that considers only the vote at hand, not strategic voting, vote trading or broader issues.

concessions to the U.S. should be related to the difference between the country's alignment with the U.S. on important votes and its alignment with the U.S. on unimportant votes. This is consistent with a swing voter model where alignment on unimportant votes reflects the voter's bliss point. Kilby (2009b) evaluates these competing approaches empirically using World Bank lending data and finds considerable support for a swing voter formulation.[8]

In the present analysis, I use *diffUS*, defined as a country's alignment with the U.S. on important UN votes minus the country's alignment with the U.S. on unimportant UN votes, as a geopolitical measure. One problem in interpreting coefficient estimates based on *diffUS* is the possible correlation between U.S. votes in the UN and the votes of other influential countries. Without other appropriate controls, the estimated coefficient for *diffUS* could reflect the combined influence of these countries. In the present context, this is important for understanding which donors have influence but not for the larger question of whether donors exercise informal influence. Nonetheless, I introduce an additional variable, *diffG7*, the difference between a country's alignment with the other G7 countries (excluding the U.S.) on important and unimportant UN votes. The designation of UN votes as important is as before, reflecting the U.S. State Department's assessment (the only one systematically available). This is the correct approach to isolate U.S. influence though the resulting estimated coefficient for *G7diff* need not reflect the true influence of the other G7 countries as they may view different UN votes as

[8]Most UN votes are not close and the U.S. often loses even those votes it considers important. This can be consistent with a vote buying model if the U.S. values support regardless of the outcome. For example, in the case of the UNSC, Dreher *et al.* (2009b) argue that the U.S. values being closer to consensus so that it rewards swing voters even when their votes are not required to win (for example, "No" votes where the U.S. could simply exercise its veto). Conversely, in UNGA voting, the U.S. designates as important some votes where the U.S. has the support of only two or three other countries.

important.[9]

III. Data

The data used in this analysis are described in Table 1. Variables include aid flows (from the World Bank and various bilateral donors), recipient country economic and political characteristics, UN voting alignments, and military aid. The unit of observation is the recipient country/year. The sample is determined by data availability. Important UN voting data start in 1983 while DAC data on aid flows end with 2007. Given the lag structure used, this restricts the sample to 1984 to 2007. Table 1 lists descriptive statistics for two samples, first the eligibility/selection equation sample that includes cases where no funds were disbursed (2822 observations on 141 countries with an average 20 observations per country) and second, the allocation equation sample that excludes those cases (2613 observations on 141 countries with an average of 19 observations per country).[10]

Data come from a number of sources. Disbursement variables are based on total official gross disbursements from the *International Development Statistics CD-ROM* (OECD,

[9]Because other donors do not systematically report which UN votes they consider to be important, one cannot construct other variables conceptually parallel to the U.S. variable. This data limitation means that this test allows us to either reject or fail to reject the narrower hypothesis of U.S. informal influence individually. But on the basis of these data, we cannot reject the broader hypothesis of donor influence (U.S. or otherwise).

[10]I set the sample for each equation based on the most restrictive specification so that the sample size is constant for any given equation. Results are the same without this restriction. I also limit the sample to countries that are members of the World Bank in the applicable year; information on their year of entry ("signing date"), exit ("withdrawal date") and re-entry ("return date") comes from the World Bank web site. Thus, the selection equation does not include selection into or out of Bank membership. The disbursement rate equations (that include Original Commitments as an independent variable−Tables 2 and 3 plus Columns 1 and 4 of Table 4) also restrict the sample to cases where Original Commitments are positive, i.e., where disbursements are possible.

2006-2009).[11]

I take World Bank commitment data from the World Bank Projects Database (World Bank 2009a) because the OECD reports commitments only for official development assistance (ODA) and the interest rate on IBRD loans is not concessional enough for these loans to qualify as ODA. Constructing Original Commitments and related variables (portfolio age and sectoral variables) also require the project/program level data provided in the Projects Database rather than the country level data in the IDS. GDP and population data are from the World Development Indicators (World Bank, 2009b) with missing values imputed using Penn World Tables data (Heston *et al*., 2002, 2006). Recipient country political/governance indicators are derived from Freedom House indices (Freedom House, 2009) and Polity IV scores (Polity IV Project, 2009). Conflict data from PRIO cover through 2008 (Gleditsch *et al*., 2002). U.S. military aid data are from U.S. Agency for International Development's *Greenbook* (USAID, 2009).

Data on UN voting come from several sources. Voeten and Merdzanovic (2009) provide data on all UNGA regular session resolutions passed by roll call vote. The State Department also designates other roll call votes as important–votes on defeated amendments, votes on motions, votes on paragraphs or language of proposed amendments, etc. I collected data for these other votes from the State Department's annual report to Congress (U.S. State Department,

[11]I use older IDS CD-ROM data to fill-in missing values in new data, effectively recovering countries dropped from OECD coverage (especially from 2007 on). This is necessary because IDS data are not historical in the sense that the DAC "updates" its data to the current situation. For example, when two countries unite, the two country time series are combined into one and henceforth only available in the combined format even over the period before the countries united. When a country splinters, DAC data are divided accordingly, again even back through the period when only one country existed. When a country is dropped from DAC coverage (e.g., in 2007 when CEECs/NICs were dropped as no longer "developing"), the historical data for those countries disappear.

1984-2009).[12]

[Table 1 (A and B) about here]

Table 1A reports descriptive statistics for the eligibility equation variables and sample, Table 1B for the allocation equation. As nearly 93 percent of the observations have positive World Bank disbursements (*WB Eligible*), reported values are similar across the two samples. When World Bank disbursements (*WB disbursements*) are positive, they average $183 million with a maximum of $4 billion (Ghana 2006).[13] Original Commitments (*Original Commitments*) average $1.1 billion with a maximum of $22 billion (India 1992). The portfolio-weighted age (*Age*) averages 4 years, close to the middle of the possible 1 to 9 range.[14] The number of active "development policy lending" operations (the designation for Structural Adjustment Programs in

[12]I collected State Department data at the vote level rather than aggregated to the country level so that measures can be constructed for the other G7 countries. Early State Department reports have some limitations (not distinguishing between abstentions and absences, inconsistencies between different tables). Where possible, I used original documents reproduced in these reports rather than the report tables generated from those documents. However, discrepancies were minimal.

[13]Results reports are not sensitive to excluding this observation, an IDA disbursement that is about 10 times Ghana's typical disbursement level in this period. Other observations in excess of $3 billion in disbursements are: 1990–Mexico; 1997–Korea; 1998–Korea; 2006–Ethiopia, Tanzania, Uganda. Mexico and Korea are IBRD disbursements during financial crises. The 2006 disbursements are IDA credits associated with the Multilateral Debt Relief Initiative (MDRI) resulting from the 2005 G8 Summit in Gleneagles, Scotland. Results reported are not sensitive to excluding these observations, underscoring the utility of a log specification.

[14]I allow *Age* to run from 1 (commitments in the current year) to 9 (commitments made 8 years ago). I start counting at 1 rather than 0 to give a non-zero weight to current commitments in the calculation of this weighted average. Mathematically,

$$Age_{it} = \left(\sum_{s=0}^{8} \sum_{j \in A_{it}} (s+1) c_{ij(t-s)} \right) \Big/ \left(\sum_{s=0}^{8} \sum_{j \in A_{it}} c_{ij(t-s)} \right)$$

where $c_{ij(t-s)}$ are new commitments to country *i* for project *j* in period $t-s$, i.e., loan amounts for projects approved in year $t-s$.

the World Bank Projects Database–*SAL count*) averages a bit over 1 with a maximum of 13 (Côte d'Ivoire, Ghana, Tanzania, Uganda, various year). The number of active projects (excluding technical assistance projects–*Project count*) averages 13 with a maximum of 122 (China 2000). The number of technical assistance projects (*TA count*) averages a bit over 1 with a maximum of 17 (Vietnam 2005). The dummy variable *Blend* equals 1 for countries that have access to both IDA and IBRD funds (i.e., Original Commitments greater than zero in both categories), a situation that applies to 14 percent of the country/years in the sample.

The remaining variables describe country characteristics, including measures of U.S. and G7 geopolitical interests in the country. *Population* averages 37.6 million, ranging from 40,130 people (St. Kitts and Nevis 1998) to 1.3 billion (China 2007). *GDP per capita* averages $4,000 in 2000 PPP dollars, running from $392 (Tanzania 1986) to $20,984 (Czech Republic 2007). *Freedom House* is the average of the civil liberties and political rights indices, inverted so that 1 indicates least free and 7 indicates most free with an average of 4. The Polity IV autocracy to democracy index (*Polity*) averages just under 2, running from most autocratic (–10) to most democratic (+10).[15] The variable *War* is a dummy indicating whether the country is involved in a major conflict with at least 1000 war-related deaths in that year, the case in almost six percent of the sample.

The variable *diffUS* is the difference between a borrowing country's alignment with the U.S. on important UN votes and its alignment with the U.S. on "unimportant" UN votes; *diffG7* is the equivalent measure for alignment with the other G7 countries. The voting alignment

[15]This variable is "Polity 2" which has interpolated values during periods of government transition. In cases where the polity index is not available but all other data are, I impute a polity index based on the separate values of Freedom House's political rights and civil liberties indices. The estimated coefficients on *Polity* and *Freedom House* do not change substantially if I do not use this procedure.

calculation is the same as in Kilby (2006, 2009a, 2009b) and closely follows Thacker (1999) and Dreher and Jensen (2007). For each vote, a country scores a 1 if it follows the U.S., a 0.5 if it abstains or is absent when the U.S. votes (or vice versa), and a 0 if it opposes the U.S. For the G7 score, this process is repeated with each of the 6 other G7 countries. A country's alignment is its mean score for the year on either important or unimportant votes (averaged either over scores with the U.S. or over scores with the other G7 countries).

The values of *diffUS* and *diffG7* are lagged one year since UN votes happen predominantly in the last quarter of the calendar year. There is some small variation in the average values of these variables across the two samples. In the eligibility sample, *diffUS* averages 0.1585, with a minimum of −0.364 (Afghanistan 2002) and a maximum of 0.787 (Zambia 1985). In the allocation sample the *diffUS* average is slightly higher at 0.163. The G7 equivalent, *diffG7*, averages 0.0126 in the larger sample with a minimum of −0.4414 (Hungary 1985) and a maximum of 0.3524 (Guatemala 1989). In the smaller allocation sample, the mean is again slightly higher at 0.0144.

Another possible geopolitical indicator is military aid. The presumption is that the U.S. only gives substantial military aid to allies it seeks to support. *US miliary aid* is an indicator variable that equals one if the country received a non-trivial amount of aid from the U.S. that year (defined as more than a half million dollars), true for 39% of the sample. Data on military aid are not systematically available for other G7 countries.

Following similar logic, I include bilateral economic aid as a possible measure of geopolitical interests. However, bilateral aid could also proxy for need factors not already included in the equations (i.e., beyond population, GDP per capita and governance) and complicate interpretation of the estimated coefficients. To mitigate this possibility, I also include

aid from the "like-minded" donors, Canada, Denmark, the Netherlands, Norway and Sweden. These countries are known for their relatively humanitarian aid practices but they wield relatively little power within the World Bank.[16] The eligibility equation includes dummy variables indicating positive levels of U.S., G7, and like-minded donor bilateral economic aid. The allocation equation includes the continuous version of these variables, that is the level of aid disbursements.[17] All bilateral aid variables are lagged one year to mitigate the possibility of endogeneity, for example, cases where bilateral donors follow the World Bank's lead. Eighty-seven percent of the observations in the larger eligibility sample are cases where countries receive economic aid from the U.S. (*US eligible*); the average annual amount for *US disbursements* in the smaller allocation sample is about $80 million, $90 million if we exclude cases with no U.S. aid. The highest level of U.S. aid is $7.8 billion (Egypt 1991).[18] More than 98 percent of the eligibility observations have positive G7 bilateral economic aid (*G7 eligible*) with

[16]See Fleck and Kilby (2006) for more discussion.

[17]To avoid log of zero and thereby shrinking the sample, I add 0.01 to each bilateral aid value before taking logs. This figure ($10,000 or −4.065 in log terms) is the lowest positive disbursement level reported in the raw data. In the raw data, there are 270 cases with no U.S. bilateral aid, 4 cases with no bilateral aid from any of the other G7 countries, and 54 cases with no bilateral aid from any of the like-minded donors. Results are not sensitive to the choice of the "trivial" value. Alternatively, using binary variables throughout for bilateral aid gives roughly the same results for UN variables as reported in the tables below.

[18]This anomalous amount includes Egyptian military debt forgiven by the U.S. following Egypt's support in the first Gulf War. At this time, Japan was emerging as the largest aid donor. In a related move, the OECD DAC temporarily changed its rules to allow write-offs of military aid loans to count toward individual donor's development assistance totals, mainly benefitting the U.S. (Raffer, 1998). The next largest figure is $4.8 billion for Panama in 1999, again driven by flexible definitions of aid (this time related to the handover of the canal zone). Next is $3.7 billion for Poland in 1991 and $2.7 billion for Egypt in 1988. Note that Israel is excluded from the sample because it did not borrow from the World Bank during this period. These anomalous cases again underscore the merits of a log specification.

an average of $300 million dollars (*G7 disbursements*) in the allocation sample.[19] The largest value for G7 aid is $11.3 billion to Nigeria in 2006, part of a wide-ranging debt write-down deal. Ninety-six percent of the observations in the eligibility sample are cases with positive like-minded donor aid (*LM eligible*); the average level (*LM disbursements*) in the allocation sample is $50 million. The largest value of *LM disbursements* is $1 billion for Russia in 1993.

IV. Estimation and Results

We can think of the World Bank disbursement decision as happening in two steps. First, World Bank staff decide whether a country is eligible for disbursements. Second, if the country is eligible, the staff decide how much to disburse. To allow for this approach, I estimate a two part model with separately estimated selection/eligibility and conditional allocation equations.[20] This has the limitation that interpretation of the allocation equation is conditional on selection–unless we are willing to assume the error terms in the two equations are independent. However, it also has certain benefits relative to alternative estimation techniques. A Type I Tobit, for example, requires the same process for selection and allocation, an assumption that we will see does not hold well in this case. In addition, that approach would rule out use of country fixed effects. The number of countries (N) is greater than the number of time periods (T) so consistent estimation of country fixed effects is not possible for estimators that cannot be transformed to eliminate the country fixed effects. A Type II Tobit (Heckman Selection Model) has similar limitations. There

[19]Because there are so few cases with no G7 aid, I also estimated the eligibility equation with the continuous variable, *ln G7 disbursements*. As one would expect, this variable enters even more strongly. Otherwise, estimation results are similar.

[20]A two part model is simply separate estimation of a selection equation (here via probit with clustered standard errors) and an allocation equation (via least squares with country fixed effects). For more on the two part model, see Cameron and Trivedi (2005: 544-546, 680-681).

are no theory-based exclusion restrictions for the selection equation so identification would rest either on ad hoc, empirically based exclusions or the nonlinearities of the probit function. In addition, introducing fixed effects in this context (say, through a conditional logit as the selection equation) would cause the 77 countries that always get funding to drop from the sample (since their country fixed effect would perfectly predict the selection outcome), reducing the sample by more than half and likely introducing an even more severe selection problem.[21]

Is there informal influence?

Table 2 presents results of probit estimation of the selection/eligibility equation using the full sample described in Table 1A. The estimated equation fits the form of Equation (5) above (particularly from Column 2 on). The dependent variable (*WB eligible*) is equal to one if the country received any World Bank disbursements that year. The reported t-statistics are based on standard errors allowing for clustering by country. The first column, excluding Original Commitments, is primarily a baseline for comparison. Countries that have access to both IDA and IBRD funds are significantly more likely to receive disbursements; the estimated effect of blend status is a 3 percentage point increase in the probability of receiving aid. The predicted probability of receiving disbursements also increases with country size while it decreases with per capita income, both outcomes one would expect from a need-based eligibility system. Freer, more democratic countries are not significantly more likely to receive disbursements (individually or

[21]I also estimate Heckman Selection Models following the specifications in Tables 2 and 3 (Columns 2-4) but with regional dummies rather than country fixed effects. This improves identification because I use bilateral aid variables as dummies in the selection equation and as continuous variables in the allocation equation. The estimate yields results very similar to those reported in Tables 2 and 3. Furthermore, Likelihood Ratio tests fail to reject the hypothesis of independent error terms ($p = 0.8710$, $p = 0.9437$, $p = 0.9500$), i.e., the hypothesis that the two part model is correct.

jointly) and although an on-going war is associated with a lower probability of receiving aid, this link is also not statistically significant.

The UN voting variable, however, is significant. Countries making concessions to the U.S. on important UN votes are significantly more likely to receive funding from the World Bank. Moving from the lowest value to the highest value of *diffUS* increases the estimated probability by 25 percentage points, a larger impact than moving between the extremes of population (14 percentage point change) or GDP (18 percentage point change). In this baseline, however, *diffUS* captures both pre- and post-loan approval U.S. influence (conditional on positive Original Commitments) so we cannot yet interpret this as evidence of informal influence.

[Table 2 about here]

Column 2 of Table 2 introduces controls for the commitment portfolio (*ln Original Commitments* plus portfolio age and composition variables). As one would expect, the Original Commitments variable enters with a positive and significant coefficient indicating that countries with larger active portfolios are more likely to receive disbursements from the World Bank. Increasing *ln Original Commitments* from one standard deviation below to one standard deviation above the mean results in six percentage point increase in the predicted probability of disbursement. Going from the lowest value of Original Commitments in the estimation sample to the highest results in an 80 percentage point increase in the predicted probability of disbursement. The age profile of commitments enters the equation non-linearly with predicted probability of disbursement first increasing up to four years, then decreasing. Going from the age profile with the highest predicted probability (four years) to that with the lowest predicted probability (nine years) lowers the predicted probability of disbursement by 22 percentage points. Of the other portfolio composition variables, only the number of technical assistance projects (*TA_count*)

enters with a statistically significant estimated coefficient in the selection equation. Starting from the sample mean, one additional technical assistance project increases the predicted probability of disbursement by half a percentage point. Going from no technical assistance projects to 17 (the sample maximum) increases the predicted probability of disbursement by two percentage points.

With commitment portfolio controls included, we now can interpret the estimated coefficients on other variables as plausibly measuring the impact of post-approval events. As expected, this leads to some substantial changes in the estimated coefficients. Conditioning on their commitment portfolio, blend countries are not significantly more likely to receive disbursements than countries whose loan portfolios do not contain a mix of IDA credits and IBRD loans. The estimated coefficient for population reverses sign so that, conditional on their (larger) commitment portfolio, larger countries are less likely to receive disbursements. Poorer countries are still more likely to receive disbursements though the magnitude of the estimated coefficient is reduced by half.

Finally, the *diffUS* coefficient now can be interpreted as measuring U.S. influence after loan approval, i.e., informal influence only. As one would expect, the estimated impact is somewhat smaller but remains positive and statistically significant. Again going from the lowest value to the highest value of *diffUS*, the estimated probability of disbursement increases by 6.5 percentage points.

Column 3 of Table 2 introduces other measures of U.S. interests–U.S. military and economic aid.[22] This broader array of U.S. interests should more fully capture the impact of U.S. influence. As explained above, I also introduce a parallel economic aid variable for the

[22]I also investigated trade variables but found no statistically significant links in either the selection or allocation equations for this time period.

like-minded donors to reduce the possibility that the U.S. bilateral aid variable is proxying for need.[23] In this specification, all aid variables are indicators: *US military aid* equals one if the country received significant U.S. military aid that year; *US eligible* equals one if the country received U.S. economy aid that year; and *LM eligible* equals one if the country received economic aid from any of the like-minded donors that year. As it turns out, U.S. military aid never enters as significant in these post-loan approval estimates. However, when countries receive U.S. economic aid they are significantly more likely to receive World Bank disbursements, *ceteris paribus*. Receiving U.S. economic aid (also measured by disbursements) corresponds to a 2 percentage point jump in the predicted probability of World Bank disbursements. Taking the U.S. interest variables as a group, going from least U.S. interest (*diffUS*=−0.364, *US eligible*=0) to greatest U.S. interest (*diffUS*=0.787, *US eligible*=1) increases the predicted probability of disbursement by 11.5 percentage points.

The final column of Table 2 introduces donor influence variables for the other G7 countries collectively to get a better sense of whose influence we are measuring. By including these variables, we can see what portion of the measured influence is actually due to U.S. informal pressure, rather than just proxying for broader correlated G7 informal influence. In the case of UN voting, the outcome is clear: the estimated coefficient for *diffUS* continues to be positive, statistically significant and of the same magnitude while the estimated coefficient for *diffG7* is negative and insignificant. Measuring influence via bilateral aid, both U.S. and G7 variables enter with positive and significant estimated coefficients.

Table 3 presents results for the allocation equation, estimated with country fixed effects.

[23]Note that the impact of introducing *LM eligible* is fully consistent with it capturing need factors: the estimated coefficient on *ln GDP per capita* falls in size and significance. Also, the estimated coefficient on *US eligible* is 15 percent larger if *LM eligible* is not included.

Country fixed effects allow for time-invariant, country-specific factors that influence the level of disbursements (Column 1) or the rate of disbursement (Columns 2-4) and therefore reduce the potential for omitted variables bias.[24] The structure of the table is the same as for Table 2 but dependent variable is the log of World Bank disbursements (as in Equation (5)), the sample is restricted to cases with positive disbursements, and the results should be interpreted as conditional on selection unless we make additional assumptions.[25] Also, I use continuous variables for bilateral aid though results do not depend greatly on this.

[Table 3 about here]

Column 1 of Table 3 again presents a baseline without commitment portfolio controls. The significant estimated coefficient for *Blend* indicates countries that receive disbursements get significantly more than their normal level when they have both IDA and IBRD commitments. That population and GDP per capita are not statistically significant in this fixed effects specification is unsurprising since these variables generally are slow moving. In contrast to their role in the eligibility equation, both the Freedom House and the Polity indices are significant. When a country is more free than its norm, it receives significantly more disbursements when eligible. Conversely, when a country is more democratic than its norm, it receives significantly fewer disbursements when eligible. Here, the implied *ceteris paribus* assumption is crucial as the estimated coefficient for *Polity* becomes positive (though insignificant) if *Freedom House* is

[24]Strictly speaking, to interpret Columns 2-4 as reflecting the disbursement rate, the coefficient on *ln Original Commitments* must be equal to 1 (as in Equation (5)). The results consistently fail to reject the hypothesis that the coefficient on *ln Original Commitments* is equal to 1 and actually setting the coefficient equal to one has very little impact. For ease of exposition, I refer to the allocation equation dependent variable as the disbursement rate in all specifications that include *ln Original Commitments*.

[25]See, however, the earlier footnote reporting Likelihood Ratio tests that fail to reject independence for similar models.

omitted. Disbursements are significantly below normal when a country is engaged in a major conflict, an outcome that could reflect difficult operating conditions, government priorities, or World Bank concerns about aid effectiveness. The UN voting variable enters with a large and significant positive coefficient. When they get disbursements, countries get greater-than-usual disbursements if they made greater-than-usual concessions to the U.S. in UN voting, *ceteris paribus*.

Column 2 of Table 3 includes the commitment portfolio controls. As one would expect, the amount of Original Commitments has tremendous explanatory power for disbursements. In keeping with Equation (5), the estimated coefficient for *ln Original Commitments* is not significantly different from 1; this is true across all allocation equations in which it is included. The disbursement rate peaks when *Age* reaches 2.5 years and portfolios with more Structural Adjustment Loans disburse more quickly, *ceteris paribus*.[26]

The remaining coefficients are reduced in magnitude but with signs and significance as before. The exceptions are the *Blend* and *War* dummies. The disbursement rate is not significantly faster for countries that can draw on both IDA and IBRD resources and not significantly slower in conflict situations. The magnitude of the estimated coefficient on *diffUS* is reduced by nearly two thirds but remains positive and significant, evidence consistent with U.S. informal influence after loan approval. An increase in *diffUS* from one standard deviation below to one standard deviation above the sample mean increases predicted disbursements from $38

[26]As one might expect, the critical difference is between no SALs and some SALs since whether an adjustment program is packaged as one economy-wide program or several simultaneous sectoral programs depends mostly on internal World Bank politics (i.e., introducing SECALs as "something new" when initial SALs fail to improve macroeconomic performance). The coefficients on other variables are the same whether I use a dichotomous or count variable so I leave the count version in for symmetry with the other categories (where count variables are appropriate).

million to $44 million (15%). An increase in *diffUS* from its sample minimum to its sample maximum corresponds to an increase in predicted disbursements from $34 million to $53 million (55%).[27]

The specifications in Columns 3 and 4 of Table 3 parallel those in Table 2. The estimated coefficient for *diffUS* changes little from Column 2, remaining positive and statistically significant. Of the other variables introduced, only *ln LM disbursements* (bilateral aid from like-minded donors intended to proxy for need) enters with a statistically significant estimated coefficient. The other U.S. interest variables are not statistically significant in Column 3; this persists even if *diffUS* is dropped (even if country fixed effects are omitted). In Column 4, the G7 interest variables also prove statistically insignificant.

Taken collectively, these results provide convincing evidence of informal U.S. influence in the World Bank after loan approval. That influence is reflected in the significance of a UN voting measure that is consistent with a vote buying model. In short, countries are more likely to have their World Bank loans disbursed and disbursed quickly if they make concessions to the U.S. on UN votes that matter to the U.S.

Comparing influence before and after loan approval

How important is post-approval, informal influence compared to the influence donors exert within the World Bank up through loan approval? Table 4 presents a series of estimations to shed some light on this question. These estimates differ in terms of the specification, the sample and the dependent variable. Columns 1 to 3 are selection equations, Columns 4 to 6 allocation equations. The first column in each group (Columns 1 and 4) repeats the final specifications in Tables 2 and 3

[27]The sample mean of *ln WB disbursements* is 3.722 in log terms or $41 million in level terms, substantially below the sample mean without logs ($183 million).

but does not report the commitment portfolio variables as these variables are excluded from the other specifications in Table 4. To keep the table manageable, I re-label bilateral aid variables so that, for example, *US aid* indicates the dummy variable *US eligible* in Columns 1 to 3 and the continuous variable *ln US disbursements* in Columns 4 to 6.[28]

Column 1 of Table 4 is the disbursement eligibility equation that includes (unreported) commitment portfolio variables and hence is restricted to the sample where Original Commitments are positive. As outlined above, this specification estimates the probability of disbursement conditional on commitments. Column 2 of Table 4 has the same dependent variable but omits commitment portfolio variables. In addition, the sample includes observations where the country was a member of the World Bank but had no active loans, i.e., no commitments that could have been disbursed. Thus, this disbursement eligibility equation actually reflects a combination of decisions–current and past loan approval decisions and current loan disbursement conditions. Finally, Column 3 is the selection equation for current commitments (loan approval decisions) so that, in a rough sense, Column 3 may explain differences between Columns 1 and 2.

As an example of this, consider population. Column 1 shows that larger countries are less likely to receive disbursements conditional on commitments but Column 2 shows that larger countries are actually more likely to get disbursements overall. The apparent contradiction is explained by the commitment selection equation (Column 3) which shows that larger countries are more likely to get commitments. This is easiest to understand with a simple example. Suppose there are 10 large countries and 10 small countries. Since large countries are more likely to get loans approved (Column 3), say that 8 large countries and 4 small countries get loans approved.

[28]For parallelism, bilateral aid variables in the commitment equations (Columns 3 and 6) are in terms of ODA commitments as well though this "refinement" has little impact.

Since small countries with approved loans are more likely to get disbursements (Column 1), say that 3 of the 4 small countries get disbursements and 4 of the 8 large countries get disbursements. The end result is also consistent with unconditional result of Column 2; overall, the large countries were more likely to get disbursements (4/10 v. 3/10).

This suggests that we can compare the sign, significance and magnitude of coefficient estimates across Columns 1 and 3 to understand how informal donor influence in the post-approval disbursement process compares with the mix of formal and informal influence in the period up through approval. If these differ in kind, we can see which effect dominates in terms of its influence on the overall disbursement probability (Column 2).

[Table 4 about here]

Looking first at UN voting, *diffUS* plays a similar role in the two settings, entering with a positive and significant coefficient in all three columns. The magnitude of the estimated coefficient is highest in Column 1 (looking just at informal influence post-approval) and lowest in Column 3 (looking at formal and informal influence up through approval). The voting variable for the other G7 is not significant in any of the three selection equations. U.S. military aid is a significant covariate at the commitment stage (Column 3) but is not an important determinant of the conditional probability of disbursement subsequently (Column 1). The estimated link between receiving U.S. economic aid and receiving World Bank funds is slightly stronger at the disbursement stage (Column 1) than at the commitment stage (Column 3). Receiving G7 aid is a significant covariate if we look at the disbursement rate (Column 1) or the combined effect (Column 2) but not for commitments alone (Column 3).

Columns 4 to 6 of Table 4 are the disbursement rate equation (conditioning on the commitment portfolio), the disbursement allocation equation (not conditioning on commitments),

and the commitment or loan allocation equation. As with the selection equations, the estimated coefficient on the U.S. UN vote variable is larger post-approval (Column 4) than it is earlier (Column 6). Again, the voting variable for the other G7 countries is not significant in any of the three equations. U.S. military aid is an insignificant factor across all three allocation equations.[29] There is a significant positive link between U.S. bilateral aid and loan allocation amounts (Column 6) that persists in disbursement levels (Column 5) but is not evident in disbursement rates (Column 4). The results for G7 aid are difficult to explain–marginally significant and negatively related to the commitment amount (Column 6) but significant and positively related to the disbursement amount (Column 5). This would make sense if the disbursement rate were particularly high but the coefficient estimate in Column 4 is neither large nor statistically significant.

Overall, the results in Table 4 suggest that informal donor influence in the post-approval period is at least comparable to the combined formal/informal donor influence exercised up through loan approval. This is particularly true in the case of the U.S. using access to World Bank funds to win concessions in UN voting.

V. Conclusions

Efforts to reform international financial institutions to better serve their efficiency-promoting goals depend critically on understanding the functioning of these institutions in their current forms. Recent reform efforts focus on governance changes that may reduce the formal influence of the U.S. and other historically powerful nations.[30] Less reform attention–and

[29]Combined with the earlier results, this means that receiving significant U.S. military aid is associated with improved chances of getting a World Bank loan but not a significantly larger loan, or a significantly higher probability the loan will disburse, or significantly faster disbursement of that loan if it is disbursing.

[30]See Lombardi (2008) for a synopsis of these efforts.

less research attention–have been devoted to the avenues through which informal influence operates. Indeed, the relative importance of formal and informal influence is not well understood. With such gaps in our knowledge, it is impossible to say how effective governance reform is likely to be in changing the actual functioning of an institution.

This paper picks apart the avenues through which donors influence the World Bank, focusing on informal influence over disbursement of loans that have already been formally approved. In this setting, I find quantitatively and statistically significant links between UN voting and World Bank disbursements, primarily reflecting U.S. informal influence. A comparison with donor influence over the loan approval process suggests that informal donor influence has at least as much impact on the allocation of World Bank resources as formal donor influence. This finding means that reform efforts should go well beyond a simple reallocation of voting shares, reaching deeper into the workings of the institution to change the fundamental structure of how "business gets done" at the World Bank.

References

Andersen, T.B., Hansen, H., Markussen, T., 2006. US politics and World Bank IDA-lending. Journal of Development Studies 42(5), 772-794.

Andersen, T.B., Harr, T., Tarp, F., 2006. On US politics and IMF lending. European Economic Review 50, 1843-1862.

Barro, R., Lee, J., 2005. IMF programs: Who is chosen and what are the effects? Journal of Monetary Economics 52, 1245-1269.

Bulíř, A., Hamann, A., 2003. Aid volatility: An empirical assessment. IMF Staff Papers 50(1), 64-89.

Bulíř, A., Hamann, A., 2007. Volatility of development aid: An update. IMF Staff Papers 54(4), 727-739.

Cameron, A., Trivedi, P., 2005. Microeconometrics: Methods and Applications. Cambridge University Press, New York.

Celasun, O., Walliser, J., 2008. Predictability of aid: Do fickle donors undermine aid effectiveness? Economic Policy 23(55), 545-594.

Chwieroth, J., 2007. Testing and Measuring the Role of Ideas: The Case of Neoliberalism in the International Monetary Fund. International Studies Quarterly 51(1), 5-30.

Dreher, A., Jensen, N., 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), 105-124.

Dreher, A., Sturm, J., Vreeland, J., 2009a. Development aid and international politics: Does membership on the UN Security Council influence World Bank decisions? Journal of Development Economics 88, 1-18.

Dreher, A., Sturm, J., Vreeland, J., 2009b. Global horse trading: IMF loans for votes in the United Nations Security Council. European Economic Review 53(7), 742-757.

Fleck, R., Kilby, C., 2006. World Bank independence: A model and statistical analysis of U.S. influence. Review of Development Economics 10(2), 224-240.

Freedom House, 2009. Freedom in the World. http://www.freedomhouse.org/uploads/fiw09/CompHistData/FIW_AllScores_Countries2009.xls Accessed 5/17/2009.

French, H., 1994. Rebuilding the World Bank. In: Brown, L. (Ed.), State of the World 1994, W.W. Norton, New York, pp. 156-176.

Gleditsch, N., Wallensteen, P., Eriksson, M., Sollenberg, M., Strand, H., 2002. Armed conflict 1946-2001: A new dataset. Journal of Peace Research 39(5), 615-637. Updated data set: http://new.prio.no/CSCW-Datasets/Data-on-Armed-Conflict/UppsalaPRIO-Armed-Conflicts-Dataset/ file="Main Conflict Table v4_2009.xlsx" Accessed on 8/27/2009.

Gwin, C., 1997. US Relations with the World Bank, 1945-92. In: Kapur, D., Lewis, J., Webb, R. (Eds.), The World Bank: Its First Half Century, vol. 2. The Brookings Institute, Washington, pp.243-274.

Heston, A., Summers, R., Aten, B., 2002. Penn World Tables 6.1. Center for International Comparisons, University of Pennsylvania. Accessed 9/25/2006.

Heston, A., Summers, R., Aten, B., 2006. Penn World Table Version 6.2. Center for International Comparisons of Production, Income and Prices, University of Pennsylvania. Accessed 8/29/2009.

Kilby, C., 2006. Donor influence in multilateral development banks: The case of the Asian Development Bank. Review of International Organizations 1(2), 173-195.

Kilby, C., 2009a. The political economy of conditionality: An empirical analysis of World Bank loan disbursements. Journal of Development Economics 89(1), 51-61.

Kilby, C., 2009b. Donor influence in international financial institutions: Deciphering what alignment measures measure. Working paper.

Lombardi, D., 2008. The governance of the World Bank: Lessons from the corporate sector. Review of International Organizations 3(3), 287-323.

Odedokun, M., 2003. Analysis of deviations and delays in aid disbursements. UN WIDER Discussion Paper No. 2003/26.

OECD Development Cooperation Directorate, 2006-2009. International Development Statistics, CD-ROM.

Polity IV Project, 2009. Polity IV Dataset [Computer file; version p4v2007] College Park, Maryland: Center for International Development and Conflict Management, University of Maryland. http://www.cidcm.umd.edu/polity/ Accessed on 5/15/2009.

Raffer, K., 1998. Looking a gift horse in the mouth: Analysing donors' aid statistics. Zagreb International Review of Economics & Business 1(2), 1-21.
Stern, N., Ferreira, F., 1997. The World Bank as 'Intellectual Actor.'" In Kapur, D., Lewis, J., Webb, R. (Eds.), The World Bank: Its First Half Century, vol. 2. The Brookings Institute, Washington, pp. 523-610.

Stone, R., 2002. Lending Credibility: The International Monetary Fund and the Post-Communist

Transition. Princeton University Press, Princeton.

Stone, R., 2004. The political economy of IMF lending in Africa. American Political Science Review 98(4), 577-591.

Thacker, S., 1999. The high politics of IMF lending. World Politics 52, 38-75.

USAID, 2009. U.S. overseas loans and grants: obligations and loan authorizations, July 1, 1945-September 30, 2007 (Greenbook). http://qesdb.usaid.gov/gbk/ Accessed 5/15/2009.

U.S. State Department, 1984-2009. Voting Practices in the United Nations. GPO, Washington.

Voeten, E., Merdzanovic, A., 2009. United Nations General Assembly Voting Data. http://hdl.handle.net/1902.1/12379 UNF:3:Hpf6qOkDdzzvXF9m66yLTg== Access 7/23/2009.

Woods, N., 2003. The United States and the International Financial Institutions. In: Foot, R., MacFarlane, S., Mastanduno, M. (Eds.), U.S. Hegemony and International Organizations: the United States and Multilateral Institutions. Oxford University Press, Oxford, pp. 92-114.

World Bank, 2009a. Projects Database. http://go.worldbank.org/IAHNQIVK30 Accessed on 8/26/2009.

World Bank, 2009b. World Development Indicators. http://www.worldbank.org/data/onlinedatabases/onlinedatabases.html Accessed 5/15/2009.

Table 1: Descriptive Statistics

Table 1A: Eligibility Sample (2822 observations)

Variable	Mean	StDev	Min	Max	Description
WB eligible	0.9259	0.2619	0	1	Receives World Bank disbursements
Original Commitments	1,065	2,439	0.29	21,968	Sum of commitments for active projects, in millions
Age	4.039	1.397	1	9	Average loan ages weighted by amounts
SAL count	1.483	2.362	0	13	# active SALs
Project count	13.04	15.36	0	122	# active projects (non-TA)
TA count	1.441	1.797	0	17	# active Technical Assistance projects
Blend	0.1403	0.3474	0	1	Dummy for country with IDA and IBRD Original Commitments
Population	37.6	141.5	0.04013	1,318	Population in millions
GDP per capita	4,169	3,661	391.8	20,984	PPP GDP per capita in chained 2000 $
Freedom House	4.044	1.786	1	7	Averaged Freedom House Rating (inverted)
Polity	1.89	6.725	-10	10	Polity IV index
War	0.05634	0.2306	0	1	Dummy indicating on-going major conflict ($\geq$1000 dead)
diffUS	0.1585	0.1781	-0.364	0.7872	Concessions to US on UN votes important to US
diffG7	0.01261	0.1298	-0.4414	0.3524	Concessions to other G7 on UN votes important to US
US military aid	0.387	0.4871	0	1	Receives significant US military aid (>$500,000)
US eligible	0.8703	0.336	0	1	Receives disbursements of US economic aid (lagged 1 year)
G7 eligible	0.9851	0.1211	0	1	Receives disbursements of other G7 economic aid (lagged 1 year)
LM eligible	0.9589	0.1986	0	1	Receives disbursements of Like-minded donor aid (lagged 1 year)

Table 1: Descriptive Statistics

Table 1B: Allocation Sample (2613 observations)

Variable	Mean	StDev	Min	Max	Description
WB disbursements	183.4	397.1	0.1	4,069	World Bank disbursements in millions
Original Commitments	1,133	2,519	1.4	21,968	Sum of commitments for active projects, in millions
Age	4.025	1.271	1	9	Average loan ages weighted by amounts
SAL count	1.579	2.422	0	13	# active SALs
Project count	13.78	15.66	0	122	# active projects (non-TA)
TA count	1.529	1.829	0	17	# active Technical Assistance projects
Blend	0.1481	0.3553	0	1	Dummy for country with IDA and IBRD Original Commitments
Population	39.67	146.7	0.04013	1,318	Population in millions
GDP per capita	3,903	3,273	391.8	17,709	PPP GDP per capita in chained 2000 $
Freedom House	4.025	1.734	1	7	Averaged Freedom House Rating (inverted)
Polity	1.821	6.691	-10	10	Polity IV index
War	0.05702	0.2319	0	1	Dummy indicating on-going major conflict ($\geq$1000 dead)
diffUS	0.163	0.1785	-0.364	0.7872	Concessions to US on UN votes important to US
diffG7	0.01444	0.1296	-0.4347	0.3524	Concessions to other G7 on UN votes important to US
US military aid	0.3949	0.4889	0	1	Receives significant US military aid (>$500,000)
US disbursements	78.54	259.7	0	7,779	US economic aid disbursements in millions (lagged 1 year)
G7 disbursements	301.1	669.4	0	11,267	Other G7 economic aid disbursements in millions (lagged 1 year)
LM disbursements	49.57	79.49	0	1,037	Like-minded donors aid disbursements in millions (lagged 1 year)

Table 2: Eligibility

	(1)	(2)	(3)	(4)
	Dependent Variable: *WB eligible*			
ln Original Commitments		0.498**	0.520**	0.524**
		(6.68)	(6.74)	(6.83)
Age		0.728**	0.732**	0.725**
		(5.22)	(5.04)	(5.01)
Age^2		-0.0854**	-0.0843**	-0.0841**
		(-5.36)	(-5.22)	(-5.22)
SAL count		0.146	0.111	0.119
		(1.62)	(1.45)	(1.53)
Project count		-0.00989	-0.00931	-0.00871
		(-1.29)	(-1.22)	(-1.11)
TA count		0.315**	0.282**	0.274**
		(3.30)	(3.48)	(3.47)
Blend	0.511**	0.287	0.350*	0.349*
	(2.53)	(1.49)	(1.83)	(1.81)
ln Population	0.152**	-0.289**	-0.363**	-0.346**
	(4.47)	(-3.57)	(-4.30)	(-4.16)
ln GDP per capita	-0.446**	-0.261**	-0.194*	-0.168
	(-4.21)	(-2.10)	(-1.71)	(-1.52)
Freedom House	0.153	0.104	0.118	0.107
	(1.47)	(0.86)	(0.94)	(0.88)
Polity	-0.0208	-0.0439	-0.0450	-0.0445
	(-0.81)	(-1.44)	(-1.38)	(-1.40)
War	-0.233	-0.0826	-0.0692	-0.113
	(-1.04)	(-0.31)	(-0.26)	(-0.44)
diffUS	2.164**	1.901**	1.470**	1.769**
	(4.72)	(3.30)	(2.57)	(2.39)
US military aid			-0.0228	-0.0267
			(-0.13)	(-0.15)
US eligible			0.653**	0.515**
			(3.53)	(2.51)
LM eligible			0.971**	0.725**
			(4.44)	(3.19)
diffG7				-0.385
				(-0.46)
G7 eligible				0.903*
				(1.76)
N	2822	2822	2822	2822
	Probit	Probit	Probit	Probit

t statistics in parentheses based on country clustered standard errors. Unreported year dummies.
* p<.1, ** p<.05

Table 3: Allocation

	(1)	(2)	(3)	(4)
	Dependent Variable: *ln WB disbursements*			
ln Original Commitments		0.973**	0.963**	0.962**
		(26.48)	(26.28)	(26.14)
Age		0.0697	0.0412	0.0374
		(1.14)	(0.67)	(0.61)
Age^2		-0.0139**	-0.0108	-0.0104
		(-2.00)	(-1.56)	(-1.49)
SAL count		0.0258**	0.0237**	0.0237**
		(2.41)	(2.22)	(2.22)
Project count		-0.00462	-0.00615*	-0.00606*
		(-1.39)	(-1.86)	(-1.83)
TA count		-0.00926	-0.0102	-0.0108
		(-0.80)	(-0.88)	(-0.93)
Blend	0.164**	0.0346	0.0546	0.0548
	(2.08)	(0.54)	(0.85)	(0.85)
ln Population	0.398	0.271	0.224	0.232
	(1.22)	(1.02)	(0.84)	(0.87)
ln GDP per capita	-0.0928	-0.0943	-0.0917	-0.101
	(-0.71)	(-0.88)	(-0.85)	(-0.93)
Freedom House	0.210**	0.0790**	0.0880**	0.0884**
	(5.83)	(2.68)	(2.99)	(3.00)
Polity	-0.0348**	-0.0189**	-0.0214**	-0.0215**
	(-3.94)	(-2.64)	(-3.00)	(-3.01)
War	-0.462**	-0.115	-0.118	-0.119
	(-4.70)	(-1.44)	(-1.48)	(-1.49)
diffUS	0.925**	0.386**	0.344**	0.400*
	(5.05)	(2.58)	(2.28)	(1.78)
US military aid			-0.0283	-0.0288
			(-0.65)	(-0.66)
ln US disbursements			0.0143	0.0132
			(1.46)	(1.32)
ln LM disbursements			0.0746**	0.0699**
			(4.54)	(3.90)
diffG7				-0.102
				(-0.38)
ln G7 disbursements				0.0143
				(0.63)
N	2613	2613	2613	2613
	FE	FE	FE	FE

t statistics in parentheses. Unreported year dummies. FE = country fixed effects
* p<.1, ** p<.05

Table 4: Comparisons

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent Variable: *WB eligible*			Dependent variable: *ln WB aid*		
Blend	0.349*	-0.290	0.0957	0.0548	0.228**	-0.0349
	(1.81)	(-1.31)	(0.60)	(0.85)	(2.90)	(-0.33)
ln Population	-0.346**	0.147**	0.258**	0.232	0.496	1.166**
	(-4.16)	(3.75)	(8.83)	(0.87)	(1.53)	(2.65)
ln GDP per capita	-0.168	-0.390**	-0.434**	-0.101	-0.176	-0.202
	(-1.52)	(-2.75)	(-4.47)	(-0.93)	(-1.36)	(-1.14)
Freedom House	0.107	0.244**	0.206**	0.0884**	0.211**	0.0796
	(0.88)	(2.63)	(3.57)	(3.00)	(5.82)	(1.63)
Polity	-0.0445	-0.0301	-0.0166	-0.0215**	-0.0399**	-0.0193
	(-1.40)	(-1.32)	(-1.08)	(-3.01)	(-4.52)	(-1.63)
War	-0.113	-0.981**	-0.702**	-0.119	-0.432**	-0.325**
	(-0.44)	(-3.96)	(-3.94)	(-1.49)	(-4.39)	(-2.49)
diffUS	1.769**	1.571**	1.278**	0.400*	0.619**	0.245
	(2.39)	(2.72)	(2.82)	(1.78)	(2.24)	(0.61)
diffG7	-0.385	-0.758	-0.884	-0.102	0.0363	0.0873
	(-0.46)	(-1.09)	(-1.58)	(-0.38)	(0.11)	(0.19)
US military aid	-0.0267	0.491**	0.304**	-0.0288	0.0130	0.0510
	(-0.15)	(3.51)	(2.97)	(-0.66)	(0.24)	(0.70)
US aid	0.515**	0.641**	0.340**	0.0132	0.0439**	0.0493**
	(2.51)	(4.62)	(2.90)	(1.32)	(3.61)	(2.57)
G7 aid	0.903*	0.871**	0.117	0.0143	0.128**	-0.0930**
	(1.76)	(2.23)	(0.41)	(0.63)	(4.72)	(-3.13)
LM aid	0.725**	0.766**	0.508**	0.0699**	0.101**	0.0285
	(3.19)	(3.52)	(3.40)	(3.90)	(4.70)	(1.14)
N	2822	3369	3369	2613	2650	2044
	Probit	Probit	Probit	FE	FE	FE

t statistics in parentheses, based on country clustered standard errors for (1)-(3). Unreported year dummies.
* p<.1, ** p<.05

(1) & (4) repeat Column (4) of Tables 2 and 3 but do not report commitment and portfolio variables
(2) & (5) also based on disbursements but exclude commitment & portfolio variables. Sample includes cases with no Original Commitments
(3) & (6) based on current commitments.