# Institutionalized Insiders: Board Membership and Loan Commitments at the World Bank

Ashwin Kaja

### Eric Werker\*

### PRELIMINARY - PLEASE DO NOT CITE WITHOUT AUTHORS' PERMISSION

### Abstract

Most major decisions at the World Bank are made by its Board of Executive Directors. However, in any given year the majority of the Bank's member countries do not get a chance to serve on this powerful body. In this paper, we empirically investigate whether board membership leads to higher funding from the World Bank's two main development financing institutions, the IBRD and the IDA. We find that countries serving on the Board of Executive Directors can expect an approximate doubling of funding from the IBRD. In absolute terms, countries serving on the board are rewarded with an average \$60 million 'bonus' in IBRD loans. This is more likely driven by soft forces like Bank culture rather than by the power of the vote itself. We find no significant effect in IDA funding.

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<sup>\*</sup> Harvard Law School and Harvard Business School respectively. E-mail addresses:

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### 1 Introduction

The World Bank, a Bretton Woods institution built as part of the post-World War II international economic order, is arguably the most influential development organization today. During fiscal year 2006, the Bank's two component institutions – the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA) – committed over \$23 billion in loans and grants through 279 development projects scattered across its member countries. In addition to providing development loans and grants, the Bank also serves as a major source of ideas in the field of development and policy implementation.

The high profile of the World Bank has welcomed both praise and scrutiny. But while its management and policies are often criticized, there is a limited empirical understanding of the institutional decision-making structure of the Bank. In this paper, we investigate the most powerful decision-making body of the Bank: the Board of Executive Directors. Since the board is made up of representatives of different member states, we can examine the power structure and how it affects the allocation of World Bank resources. We find that countries receive a large increase in Bank loans and grants during years when they have a seat on the board.

This paper ties into three areas of economic research: corporate governance, the political economy of representative committees, and international institutions (including foreign aid). Much of the existing literature on corporate governance studies the disconnect between the incentives of shareholders and those of the management. Shareholders, the owners of a corporation, often attempt to bridge that gap by entrusting a board of directors with overseeing the management's activities, as we see at the World Bank (Fama and Jensen 1983).

Other papers suggest that the composition of a board of directors could have a significant effect on various firm outcomes. Several studies find that the proportion of directors with links to management is negatively related to firm performance (Baysinger and Butler 1985, Dalton and Kesner 1987). On the other hand, Hermalin and Weisbach (1991) claim that there is no such effect. Separately, Cyert, Kang, and Kumar (2002) both theoretically and empirically examine the relationship between the independence of self-interested board directors and management compensation and find no significant effect. In a recent study, Bebchuk and Fried (2004) consider the opportunistic timing of executive stock-option grants in the context of executive compensation. They point out that while this issue has recently been discussed heavily in the media and public discourse, a similar problem with stock-option grants for outside board directors has gone relatively unnoticed.

While the literature on corporate governance is relevant to the World Bank's structure, the unique mission of the World Bank to provide development financing to a large proportion of its shareholders, including those serving on the Bank's board, creates a separate concern of institutional governance echoing the political-economic literature on Congressional committees. Members on these

committees are supposed to represent the mission of the larger body, yet anecdotes and empirical evidence suggest that members of representative committees may also be self-serving. Ferejohn (1974) and Johnston (1979) find that membership on public works committees allows members of the US Congress to bring home more projects to their constituencies. They find that this 'pork-barreling' effect is particularly strong for members of committees involved in making appropriations. While some of their methodologies have been questioned (Rundquist and Griffith 1976), several studies show a connection between membership on defense committees and military spending in a politician's home district (Goss 1972, Ray 1981). Furthermore, there is evidence that the committees with 'pork-barreling' potential are the most sought after committees in the US Congress (Groseclose and Stewart-III 1998, Stewart-III and Groseclose 1999). Most of this political-economic literature focuses on domestic institutions.

In addition to the literature on corporate governance and Congressional committees, this paper is also situated in the current literature on international institutions and foreign aid. Much of the existing empirical literature on international aid focuses on bilateral aid. Alesina and Dollar (2000) find that political and strategic interests play a significant role in determining patterns of bilateral foreign aid, trumping considerations of recipient countries' domestic institutions such as democracy. Wang (1999) finds that countries that vote in line with US interests in the UN General Assembly tend to receive greater amounts of

US foreign aid. Kuziemko and Werker (2006) show evidence of vote-buying on the UN Security Council. In particular, they show that UN Security Council membership is associated with higher levels of US foreign aid. Additionally, they find a significant increase in UN development aid to these countries – namely when this aid comes from UN agencies in which the US has an historically strong influence in decision-making. Dreher, Sturm, and Vreeland (2006) find that temporary UN Security Council membership is positively associated with countries' participation in IMF programs.

This paper extends the existing literature on corporate governance and Congressional committees to international institutions, which have been relatively understudied. Furthermore, it contributes to the literature on international aid, currently heavily focused on bilateral aid, by examining the allocation of aid by a multilateral aid institution.

The World Bank's corporate structure raises questions similar to those explored in the literature on corporate governance. Like many corporations, the Bank is owned by shareholders – in the Bank's case, the shareholders are its member countries. However, for reasons of practicality, not all decisions are made by all of the member countries – such a process would be unwieldy and inefficient. Since leaving all decision-making power in the hands of Bank management creates a potential agency problem where the interests of the shareholding countries and the management may not be aligned, a Board of Executive Directors is charged with overseeing the management of the Bank's general operations. Among other duties, the Board must approve all projects and policies of the Bank. The President of the Bank, the top management official, serves as the chair of the Board. All other seats are given to representatives of share-holding countries, and are therefore independent from the management.

The Articles of Agreement outline a procedure by which multiple countries are often represented by a single Executive Director, who serves a two-year term. Five of the twelve seats originally allotted to the board were to be appointed by the five largest shareholding countries. The remaining seven would be elected by all of the Banks' member countries. Since the Bank's founding, the number of elected seats on the board has been increased to 19.

In a sense, the World Bank's Board of Executive Directors can be viewed as an 'international appropriations committee.' Representatives of countries serve on this committee to determine where development aid, in the form of loans and grants, should be allocated, much as representatives of geographic districts serve on US Congressional appropriations committees to determine where government funds should flow. Can self-interested members of this international appropriations committee bring more Bank funds to their home countries?

There are several hypotheses for why there may be a positive association between board membership and loan and grant commitments. First, a seat on the Board may serve as a platform for countries to draw attention to their legitimate development needs. This may not be entirely troubling, though the fact that most countries rarely get this platform could be unfair. Second, there might be reverse causality, creating the false perception that board membership itself is causing higher financial commitments. For example, countries perceived as good candidates for future loans may be elected to the board. Finally, the correlation could be explained by pork-barreling behavior in which the Executive Board is used as a platform to channel more or greater Bank loans and grants to the home countries of the directors.

The World Bank consists of two main development institutions, the IBRD and the IDA. The IBRD offers low-interest loans to middle and lower-income developing countries. The IDA, on the other hand, exclusively focuses on the world's poorest and neediest countries. Each of these institutions is overseen by a Board of Executive Directors. Membership in the IDA is contingent on membership in the IBRD. And as long as a country with a seat on the IBRD's board is also a member of the IDA, as is the case with most of these countries, it serves ex officio on the IDA board, as well. In this paper, we use country-level panel data to test for a correlation between membership on the IBRD and IDA Boards of Executive Directors and funding commitments from each of those institutions, respectively. We use empirical methods to determine whether the pork-barreling hypothesis can be differentiated from other hypotheses in order to explain a positive correlation.

The results of our analysis paint a picture of an international institution that offers rich rewards to developing countries with seats on its main decisionmaking body. Countries' IBRD loan commitments are on the order of twice as high during years that they are serving on the Board. On average, this translates into a bonus of \$60 million in loans. Furthermore, loan commitments rise significantly during the years that a country is serving on the board compared to the years immediately prior, and these commitments fall back to baseline levels in the years immediately after. This result provides strong evidence for the porkbarreling hypothesis. Furthermore, our finding that alternate directors who may participate in all meetings but can only vote in the absence of their appointing executive director may also see an increase in loans – though these results are not as robust as those for executive directors – suggests that these increases are not due to just voting rights on the board, but to the creation of an insider culture around the board table. We do not find convincing evidence that wealth or democracy increase the Executive Board bonus, however we do find that it has become more marked following the end of the Cold War.

Interestingly, the same results are not borne out by the data on IDA funding. We find no significant association between board membership and IDA loan and grant commitments. The difference in our IBRD and IDA results may be explained by the difference in their missions and funding policies.

The remainder of this paper presents the background and results of our empirical analysis. In Part 2, we provide a brief primer on the World Bank and its decision-making structures, with particular emphasis on the Bank's Board of Executive Directors. In Part 3, we introduce our data and explain the empirical methodology underlying our analysis. Part 4 presents the results, while Part 5 examines whether the IBRD bonus varies by country characteristics. Part 6 concludes.

### 2 The World Bank

In the wake of World War II, the major world powers set up an international economic order composed of three main institutions: the General Agreement on Tariffs and Trade (GATT), an international trade regime now known as the World Trade Organization (WTO); the International Monetary Fund (IMF), devoted to monetary cooperation; and the World Bank, with the mission of financing post-war reconstruction and development (Gavin and Rodrik 1995). Since the World Bank's founding in 1944, its purpose has gradually shifted. As Europe rebuilt and the Bank's membership expanded to include many countries from disparate parts of the world, its focus on development became more global in nature.

Today, the World Bank has 185 member countries. Originally, it was just composed of the International Bank for Reconstruction and Development (IBRD). In 1960, the IBRD was joined by the International Development Association (IDA). The IBRD and the IDA, together with the International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA), and the International Center for Settlement of Investment Disputes (ICSID), constitute the World Bank Group today. Reconstruction continues to constitute an important component of the Bank's activities, particularly dealing with the aftermath of natural disasters and wars. But the Bank has "broadened [its] portfolio's focus to include social sector lending projects, poverty alleviation, debt relief and good governance," and views poverty reduction as the "overarching goal of all its work" (World Bank 2007). In addition to directing credit to developing countries, the Bank has become very influential as a source of ideas and practices in the field of international development (Gavin and Rodrik 1995). In recent years, it claims to have focused its efforts on achieving its antipoverty mission within the framework of the recently formulated Millennium Development Goals.

The two main branches of the World Bank, the IBRD and the IDA, perform different functions that contribute to its broader mission. The IBRD, the historical core of the Bank's operations, now directs credit mainly to middle-income and creditworthy poorer countries (World Bank 2007). The IDA is especially geared towards the world's neediest countries – countries that fall below a certain income threshold, have poor credit ratings, or in some other way require special assistance. The IDA is more responsive to short-term disasters and emergencies and has the power to negotiate the income ceiling under special circumstances.

Despite its generally respected mission, the World Bank has come under fire for its policies and management by critics of globalization, among others. While Gavin and Rodrik (1995) tout the Bank's role as a major source of ideas in the field of development – a source of ideas with money to back them up – the

Bretton Woods institutions are often criticized for being too forceful in tying money to specific country policies or actions. This conditionality in World Bank and IMF projects and programs is attacked for the policies it requires, such as trade liberalization, and for its effect on the sovereignty of country governments (Mosley, Harrigan, and Toye 1995, Kovach and Lansman 2006). The transparency of the Bank's operations continues to come under scrutiny despite a significant increase in information made available after some widely publicized internal reforms (Global Transparency Initiative 2006). Some critics suggest that the Bank's lending hinders development, for example, by burdening countries with massive debts (Shah 2006). Others criticize the environmental impact of Bank projects (BBC 2003). Corruption in Bank operations has also raised serious concerns (Knight and Pound 2006). The criticisms of the World Bank peaked during the Bank and IMF's annual meetings in 1994, the institutions' 50th anniversary. Organizations like the '50 Years is Enough' network led the charge during these meetings in Madrid, greeting them with criticism and street protests.

The Bank acknowledges some of its critics, even prominently noting concerns on its web site. It claims that World Bank Group institutions have been working "separately and in collaboration – to improve internal efficiency and external effectiveness" (World Bank 2007). In recent years, there has been a noticeable effort on the part of the World Bank to, at the very least, create the impression that it is interested in actively engaging national governments and segments of civil society in its operations (BBC 2003). Among other efforts, the Bank launched the 'Poverty Reduction and Growth Strategy' to address these concerns (2003). During the 2005 G8 summit in Gleneagles, Scotland, the major industrialized countries agreed to forgive the debts of 18 mostly African developing countries (BBC 2005).

While there has been significant discussion of the World Bank, the academic discourse and literature regarding the institutional structure of the Bank, particularly political-economic literature, is relatively thin. Woods, a political scientist at Oxford University, has published a number of papers regarding the Bretton Woods institutions. She scrutinizes the structure of the World Bank, questioning its ability to address concerns regarding accountability and national sovereignty and calling for "a structure of representation which better reflects the stakes of all state members" (2001). Hexner (1964) considers the role of the Board of Executive Directors at the IMF, which is designed similarly to the World Bank. Neither of these studies provides broad-based empirical support.

#### 2.1 Membership and Voting Power<sup>1</sup>

The World Bank is structured like many major corporations and banks. However, it is solely owned by countries, which serve as its shareholders. The IBRD currently has 185 shareholding member countries while the IDA has 166.

<sup>&</sup>lt;sup>1</sup> Unless otherwise cited, all facts in this section should be cited as (World Bank 1944), for information from the World Bank's Articles of Agreement, or (World Bank 2007).

Each member country is required to purchase a certain 'quota' or number of shares based on a special formula that essentially accounts for its weight in the world economy (Woods 2001). The shareholders are technically the ultimate authority in Bank decisions. Each country is assigned a certain number of votes in broad, high-level Bank decision-making that is related to the number of shares it owns. These votes serve as an explicit valuation of a country's power within the institution. The Articles of Agreement allocate 250 basic votes to each country, plus one additional vote for each share of stock held. While the 250 basic votes are a concession to the principle of equality, tremendous growth in the total number of shares has marginalized their value. At their peak in 1955, the basic votes comprised 14 percent of the votes at the Bank; by 2001, this number had decreased to around 3 percent (Woods 2001).

#### 2.2 Decision-making and Election of Executive Directors<sup>2</sup>

Each member country appoints a 'governor' and an 'alternate governor' to serve on the IBRD's Board of Governors for a five-year term. Usually, these governors are finance ministers or ministers of development in the member countries. If the country is also a member of the IDA, then the governor serves *ex officio* on the

<sup>&</sup>lt;sup>2</sup> Unless otherwise cited, all facts in this section should be cited as (World Bank 1944) for procedural information from the World Bank's Articles of Agreement, or (World Bank 2007).

IDA Board of Governors as well. While it is officially the highest authority at the Bank, the Board of Governors only meets once per year at the World Bank's Annual Meetings each July. Governors "admit or suspend members, increase or decrease the authorized capital stock, determine the distribution of net income, review financial statements and budgets, and exercise other powers that they have not delegated to the Executive Directors."

The Board of Governors delegates all powers not expressly reserved for the governors in the Articles of Agreement to the Board of Executive Directors. Thus, the Board of Executive Directors is responsible for the general operations of the Bank and makes important day-to-day decisions. The Board of Executive Directors meets regularly and is responsible for approving Bank loan and grant proposals put forth by the management. Executive directors report to the Board of Governors on Bank operations, accounts, and other matters during the Bank's Annual Meetings.

As having a board that includes all member countries would be unwieldy and inefficient, the Articles of Agreement establish a procedure by which multiple countries are represented by one executive director. Five of the original twelve executive directors were to be appointed by the five largest shareholding countries. The remaining seven would be elected by the Bank's member countries and serve two-year terms.

The election of executive directors generally occurs ever two years at the Bank's Annual Meetings. Each member country's governor may cast the number of votes allotted to his or her country (see Section 2.1) for one candidate. The seven candidates receiving the greatest number of votes are elected as long as they each receive at least 14 percent of the total vote. If a candidate receives less than 14 percent, there are provisions for additional balloting until all positions are filled. Since the founding of the Bank, the number of elected executive directors has been increased by the Board of Governors from seven to 19, leading to a total of 24 today.

Additional election rules, which must be adopted by the Board of Governors prior to each election, customarily help ensure geographic diversity. As with governors, each IBRD executive director serves as an *ex officio* member of the IDA Board of Executive Directors if his or her country is also a member of the IDA. During the conduct of regular business, each executive director is responsible for casting, as a unit, the votes of all the countries whose votes he or she received during elections. He or she may also appoint an alternate to assume full power and responsibilities in his or her absence at board meetings. When the executive director is present, the alternate may still participate in the meeting, but cannot vote. In general, matters before the Board are decided on the basis of a majority vote.

It is this decision-making structure of the World Bank that motivates our empirical analysis. Most countries cannot serve on the Board of Executive Directors at a given time, making executive directors responsible for representing the varied interests of the Bank's diverse membership in important decisionmaking. Since directors are to represent the interests of the whole, they ought not to use their temporary influence to further the agendas of the countries they represent. Moreover, many countries rarely or never have the opportunity to serve on the board (see Tables II-a and II-b); higher Bank funding for countries that do get to serve might be seen as an unfair privilege.

# 3 Data and Methodology

The question motivating our analysis lends itself to a fairly clean empirical strategy. We seek to determine whether countries serving on the World Bank's Board of Executive Directors are able to use this position of influence to bring more Bank funding to their own countries. The empirical strategy we use is to observe how the approval of World Bank commitments to countries varies as a function of whether those countries have a seat on the board. A simple correlation between board membership and loan commitments is not, in itself, necessarily illuminating. Factors that affect a country's likelihood of serving on the Board of Executive Directors and its likeliness to receive World Bank funding could bias this result. Furthermore, countries might use a seat on the Board as a platform to draw attention to their legitimate development needs. Using the methods described in this section, we provide empirical support for the hypothesis that board membership itself, rather than alternative explanations, is

driving a positive association between Bank funding commitments and board membership. We call this the pork-barreling hypothesis.

We construct a panel dataset (see Data, Means, and Variances statistics in Table I-a) featuring countries that have been members of the World Bank at any point since its founding. We limit these countries to IDA Part II members, a designation generally given to developing countries. Our main dependent variables are approved loan commitments from the IBRD and approved loan and grant commitments from the IDA. Data on all World Bank development projects since 1946 are readily available on its website, but we restrict our sample to post 1961 when the IDA definition began. We sum all funding commitments for a given country in a given year to determine the total amount of funding that was approved for that country-year, both for the IBRD and the IDA. We convert these values into 1996 US dollars using the Bureau of Labor Statistics' Urban Consumer Price Index (CPI). Since the project database contains only approved loan commitments, countries eligible but not receiving funding are omitted. In order to include these country-years in the dataset, we assign them values of zero. In specifications using the logarithm of Bank commitments as the dependent variable, we set these values to a negligible  $1 (since \ln(1)=0)$ .

While not in a readily usable format, a wealth of information and data are available in the World Bank's Annual Reports. We use the information available in these documents to construct three key variables. First, we create a dummy variable representing whether a country is serving on the Board of Executive

Directors in a given year. We call this variable 'board member.' The number of times each country in the dataset has served on the IBRD and the IDA's boards, which we refer to as the 'service' variable, is shown in Table IIa and IIb, respectively. Less than half the countries who were members of the World Bank at some point since its founding have gotten the opportunity to serve on the board – including countries from Afghanistan and Albania to Zambia and Zimbabwe. Some countries, such as Pakistan, India, and Colombia, have served many times. Since terms on the board begin and end in the middle of the calendar year while all other data is in calendar years, there is a half-year lag effect that must be accounted for in interpreting the results of our analysis. We also create a similar variable, called 'alternate board member', to reflect the same information for alternate directors. The Data, Means, and Variances information found in Table I-a is broken down in Table I-b by full board members, alternate board members, and other countries.

Second, we construct a variable that indicates the amount of voting power assigned to each Bank member country, based on its number of World Bank shares, before it hands it off to the executive director representing it on the board. We call this variable 'bank voting power.' The amount of bank voting power a country has may be an indication of the amount of pull that country has within the institution. Countries with greater voting power and, consequently, more power within the Bank, might have a better chance at landing coveted development projects, regardless of board membership, and a better chance of getting a seat on the Board of Executive Directors. Therefore, in the case of a positive correlation between board membership and funding commitments, one might suspect that the latent voting power each country has based on its membership and shareholding rather than the board seat itself might be driving the positive effect.

Third, we use the data available in the annual reports to construct a variable containing the aggregate voting power each board member wields in making board decisions. This variable is calculated by dividing each executive director's votes (equal to the sum of the general bank votes of each country the executive director represents) by the total votes available in that year. We refer to this variable as 'board voting power.' While the 'board member' variable is a dummy variable that identifies whether or not a country is serving on the board in a given year, this scalar variable takes into account the fact that all board seats are not created equal, scaling membership by the amount of aggregate voting power of each seat.

We test the pork-barreling hypothesis using two main types of specifications. The main model is a fixed effects regression, and the second is an 'event-time specification' in which we continue to use fixed effects but analyze trends before and after membership (Kuziemko and Werker, 2006). After running these main specifications, we conduct robustness checks and perform additional tests to see whether some types of board members are systematically more effective in bringing home increased aid. Our main specifications use the logarithm of World Bank funding commitments as the dependent variable. We also use absolute levels of commitments and a logit model in alternate specifications. Additionally, we compare loan receipts by countries with executive directors with those represented by alternate directors in order to examine whether it is the vote itself, or a more complex institutional explanation, that can explain increased loans. All specifications include standard errors that are clustered at the country level.

We run all of the specifications described in this section on both IBRD commitments and IDA commitments. We also use the same set of control variables in these regressions. There are a number of factors that might influence the amount of World Bank loans a country could expect and its probability of serving on the Board of Executive Directors.

In addition to the 'bank voting power' variable described above, we control for a number of other factors. We control for real per capita GDP since it would seem that lower income countries should get more loans since they are in the greatest need. However, richer developing countries may be better investments and therefore more attractive for World Bank aid. Additionally, richer developing countries may have greater political influence due to their higher economic standing, potentially contributing to their chances at serving on the board. We also control for the size of a country's population, another factor that might influence the amount of funding commitments it receives and its likelihood of being elected to the board. Both real per capita GDP and population data are available from the year 1950 in the Penn World Tables. We take the logarithm of these values when including them in our data set.

We also control for two political variables that could have a significant impact on World Bank lending decisions. First, we control for the occurrence of a major war in a given country-year. Countries in which a major war has occurred might be attractive for development and reconstruction loans. On the other hand, an ongoing major war might cause the international lending institution to shy away from investments in the war-torn country. In order to control for such effects, we use a dummy variable, using data from the Department of Peace and Conflict Research at Uppsala University and the International Peace Research Institute in Oslo, indicating the occurrence of a war with at least 1,000 battle deaths. Second, we control for the political climate in a country (whether its government can be characterized as a democracy, autocracy, or somewhere in between) using the 'Polity 2' variable offered by the University of Maryland's Center for International Development and Conflict Management in its "Polity IV" data set. We refer to this variable, coded as a score from -10 (perfect autocracy) to +10 (perfect democracy) as the 'political climate' variable. These factors might affect both the ability of a country to get elected to the Board of Executive Directors and its attractiveness for World Bank loans and grants.

#### 3.1 Primary Fixed Effects Specification

Even after controlling for the variables described above, there are other omitted effects that could bias our estimate of the value of a seat on the Board of Executive Directors in terms of World Bank funding commitments. In order to account for such bias, we control for country and year fixed effects in our main specification. Trends in World Bank funding over time will be absorbed by the year fixed effects while omitted variables that affect individual countries' average loan receipts will be absorbed by the country fixed effects. The primary logarithmic fixed effects regression is as follows:

 $\ln(\text{Loan Commitments}) = \beta_0 + \beta_1(\text{Board Member})_{it}$ 

+  $\beta_2(\text{Bank Voting Power})_{it} + \beta_3(X)_{it} + \gamma_t + \delta_i + \varepsilon_{it}(1)$ 

where 'Loan Commitments' represents the amount of money committed by either the IBRD or the IDA to a country in a given year; 'Board Member' is a dummy variable for whether or not a country has a seat on the Board of Executive Directors; 'X' is a vector of time-varying Bank, political, and economic controls for each country;  $\gamma$  is a vector of year fixed effects; and  $\delta$  is a vector of country fixed effects. Note that the half-year lag due to board terms beginning and ending in the middle of the calendar year (causing the last year a country is indicated as serving as an executive director before leaving the board to actually be only a half-year of service) may bias estimates of  $\beta_1$  downwards. In another specification, we replace the dummy variable for board membership with the scalar variable 'board voting power.' Since each board member represents a different slate of countries and consequently wields a different amount of collective voting power on the board, all board seats are not created equal. We examine how funding varies with differing amounts of voting power on the board by employing the specification represented by the following equation:

 $\ln(\text{Loan Commitments})_{it} = \beta_0 + \beta_1(\text{Board Voting Power})_{it}$ 

+  $\beta_2(Bank Voting Power)_{it} + \beta_3(X)_{it} + \gamma_t + \delta_i + _{it}(2)$ 

#### **3.2 Event-Time Specification**

If countries use board membership to create awareness about their legitimate development needs, an increase in funding may not be entirely troubling. To rule out this and other alternative explanations, we employ an "event-time specification" similar to that used by Kuziemko and Werker (2006):

 $ln(Loan Commitments)_{it} = \beta_0 + \beta_1(T-3)_{it} + \beta_2(T-2)_{it} + \beta_3(T-1)_{it}$  $+ \beta_4(Board Member)_{it} + \beta_5(T+1)_{it} + \beta_6(T+2)_{it} + \beta_2(Bank Voting Power)_{it}$  $+ \beta_3(X)_{it} + \gamma_t + \delta_i + \__{it}(3)$ 

where 'T - x' is a dummy variable indicating that the year is x full calendar years before a country begins its term on the Board of Executive Directors and 'T + x' is a dummy variable indicating that the year is x full calendar years after the country has completed its term on the Board. We extend our time dummies to the 'T - 3' year in order to account for the lag caused by executive director terms beginning during the middle of the calendar year. Because of this effect, 'T - 1' includes a half-year of board service. As with the primary fixed effects specification, this lag might also bias the estimate of  $\beta_4$  downward.

This specification allows us to identify the effect of serving on the board by comparing a country's loan commitments during years of board membership with those in the years immediately prior to the beginning of its term and the years immediately following the end of its term. A sharp increase in loan commitments during a country's term compared to the years immediately before and after the term would help rule out alternative explanations of a positive association between board membership and Bank funding and lend credence to the pork-barreling hypothesis.

# 4 Results

#### 4.1 IBRD.

#### Main Specifications (see Table III-a)

Table III-a presents the results of our main specifications – equations (1), (2), and (3) – for IBRD commitments. First, we regress the logarithm of IBRD funding commitments on just the board membership dummy variable including country and year fixed-effects, but excluding control variables. The results, shown in column (1), offer a statistically (at the 5% level) and practically significant estimate of the coefficient of the board membership variable. In column (2), the addition of control variables has a negligible effect on that estimate, which maintains significance at the 10% level. The results indicate that board membership in a given year is associated with a 138 log-point, or roughly 300%, increase in World Bank loans to the given country. While there are no significant coefficients on the per capita income, population, or political climate controls in any of the main IBRD specifications, we do find that the occurrence of a major war in a country has a statistically significant negative effect on World Bank loans in all of those specifications.

In column (3), we replace the dummy variable representing board membership with a scalar representing the amount of voting power a country has on the board, with countries not serving on the board receiving a value of zero. The positive coefficient on board voting power, significant at the 5% level, suggests that an 0.1 percentage point increase in board voting power (note that voting power is measured as a percentage of the total amount of available voting power) is associated with an approximately 7.1% increase in IBRD loans.

Column (4) reports the results of the event-time specification for the IBRD. When dummy variables representing the years immediately prior to and following board service are added to the regression, we find that the coefficient on board membership remains essentially unchanged - actually increasing slightly – and remains statistically significant at the 10% level. None of the added pre-entry and post-exit variables are statistically significant, nor do they show any clear pattern, suggesting that there is an increase in Bank loans to a country during years when it is serving on the board, but that that increase does not appear before its entry onto the board or lag after its exit. If omitted characteristics such as changes in a country's reputation within the World Bank or changes in a country's development needs are influencing both a country's election to the board of executive directors and its ability to attract Bank funding, we would expect to see a rise in funding not just during years of service, but possibly the years before and after service, as well. If countries use board membership as a platform to draw attention to their legitimate development needs, we would not expect that increased awareness to disappear after the country completes its board term. By helping to rule out several alternative hypotheses, the event-time specification lends credence to the hypothesis that

increases in IBRD loans are closely tied to an insider bonus for countries serving on the board.

#### *Alternate Specifications (see Table IV)*

In the regressions reported in Table IV, we follow-up the main IBRD regressions with several alternate specifications. First, we replace the dependent variable, the logarithm of IBRD commitments, with the absolute levels of commitments. The absolute regressions are included because we have no obvious ex-ante reason to believe that bonuses work as a proportion of existing loans. In column (1), we find that the board membership variable is significant at the 10% level, indicating an approximately \$60 million board membership bonus. While the major war control variable ceases to be significant in this regression, a positive coefficient on per capita GDP, significant at the 10% level, suggests that wealthier developing countries may see higher Bank loans in a given year. The event-time specification using absolute commitment values as the dependent variable and shown in column (2) shows that only years of board service and the year immediately before board service see higher Bank loans. Since the year immediate before board service in our analysis actually includes the first half-year of board service due to a lag caused by the Bank's election schedule (see Part 3), this result also confirms our findings in the main specifications.

Next, we employ the logit model to determine whether board membership can explain whether or not a country received any Bank loans in a

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given country-year. The results presented in columns (3) and (4) also have a positive coefficient on the board membership variable, suggesting a story on the extensive margin that is similar to what we find in our logarithmic and absolute specifications.

Finally, we extend our IBRD analysis by adding dummy variables representing alternate board membership into our model. In column (5), we add alternate board membership to specification (1). Interestingly, while the coefficient estimate for board membership does not change much, the coefficient on the alternate board membership variable is also significant and similar in magnitude. A t-test comparing the coefficients on board membership and alternate board membership show that there is no significant difference in the two estimates. The estimates of the remaining variable coefficients, including that of the significant major war variable, show little change from the main specifications without alternate membership. Since alternate board members may participate in board meetings but may only vote in the absence of their appointing executive director, the fact that we find a similar positive and statistically significant effect on alternate board members and full board members suggests that the rewards from board membership may result not just from the power to vote on proposals, but from the formation of an insider culture around the board table. However, the findings for alternate directors are not as robust as they are for executive directors, as demonstrated in the event-time specification in column (6).

#### Robustness Checks (see Tables A1 and A2)

In a series of robustness checks, we explore potential limitations of our main analysis and utilize various techniques to further validate the findings explained above. In the regressions presented in Table A1, we address problems that could arise due to the inclusion of countries that have never served on the board of executive directors and country-years with zero IBRD commitment values.

It is possible that our estimate of the returns to board service may be skewed by the inclusion of countries that have never served on the board. In column (1) of this table, we run the main logarithmic specification after dropping all countries in the data that never served on the board. The coefficient estimate for the board member variable barely budges, and remains significant at the 5% level. A similar scenario plays out for the event-time specification without zero service countries in column (2). In column (3), we find that even when zero service countries are dropped from the data, board membership retains its approximately \$60 million bonus, significant at the 10% level. We also re-run the logit specification in our alternate specification after dropping the zero service values in column (4). We find that this treatment has a negligible impact on our estimates, with the coefficient on board membership retaining its positive direction.

In the remainder of the robustness checks listed in Table A1, we test our analysis for problems that might arise from zero IBRD commitment values.

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Under the logarithmic specification, small absolute movements around zero get magnified to large proportional changes. To validate our results in the face of these potential problems, we re-run several regressions after raising all zero commitment values to 12.5, a value just below the lowest non-zero logarithmic commitment value in the data. Upon re-running the main country fixed-effects specification from equation (1) with the raised 'zero' values, we find that the board membership variable remains significant at the 5% level, with the effect mechanically smaller but still very high. These results suggest that countries serving on the board can still expect an approximately 73% increase in Bank funding. The event-time specification with raised zero values in column (6) shows a similar trend further validating its counterpart in the main specifications. This regression also exhibits a smaller yet still significant effect of board membership on funding, while dummy variables for the years immediately preceding and following board service are small and statistically insignificant.

Columns (7) and (8) show that dropping zero service values and zero commitment values, respectively, have a similar effect on the specifications in which we include alternate directors as they do to the specifications just described.

In Table A2, we replace the board member variable with a placebo – board membership ten years prior – to see whether we still find the same effect. If we were to find a similar effect by entering the 'wrong' years before service, that

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would suggest that there was something structurally questionable with our estimation strategy. In the country fixed-effects and event-time specifications treated with the placebo in columns (1) and (2), respectively, we find no significant coefficient on the placebo variable. The positive estimate disappears in the placebo test using absolute commitment values for the dependent variable in column (3).

The results of the robustness checks presented in Tables A1 and A2 described here help confirm the results of our main specifications by addressing potential concerns facing our analysis.

#### 4.2 IDA

Table III-b presents the results of our main specifications for the IDA. We regress IDA funding on board membership with country fixed-effects but without our control variables in column (1). In stark contrast to our findings for the IBRD, we find no significant association between these two variables. The results of our main specifications presented in columns (2) to (4), again, fail to find a statistically significant coefficient estimate on the board membership variable. As with the main IBRD specifications, the only control variable that is significant is that for the occurrence of a major war. Mirroring the IBRD case, we find that countries where there is a major ongoing war can expect a very large decrease in the amount of IDA funding they receive.

In case there may be a fixed bonus to board membership rather than a proportional increase in funds, we employ the alternate specification using absolute commitment levels as the dependent variable since the former effect may escape detection in a specification using the logarithmic dependent variable. We run this alternate version of the main country fixed-effects regression in column (5) and that for the event-time specification in column (6). As in the main specifications, we fail to find a significant link between board membership and funding using absolute commitment levels. The major war variable remains negative, statistically significant at the 10% level.

The vast differences between our results for the IBRD and IDA raise interesting questions. Why would two institutions, similarly structured, exhibit such different behavior in terms of the association between board membership and funding? One plausible explanation is that this difference stems from the different missions of these two main World Bank bodies. The IDA's exclusive focus on the poorest, neediest countries might well alter the dynamics of board politics and decision-making, reducing the effect of its institutional structure on outcomes.

# 5 Differential Treatment

Upon finding that board membership does lead to higher IBRD commitments, we try to determine whether certain characteristics allow countries to better exploit board membership than other countries. To do this, we re-run primary fixed effects specification while including various interaction effects:

$$ln(Loan Commitments) = \beta_0 + \beta_1(Board Member)_{it} + \beta_1(Board Member x \eta)_{it} + \beta_2(Bank Voting Power)_{it} + \beta_3(X)_{it} + \gamma_t + \delta_i + \__{it} (4)$$

where  $\eta$  is the variable being interacted with the dummy variable 'Board Member.'

First, we examine whether a country's per capita GDP influences the amount of benefit it derives from board membership by interacting these two variables. It is possible that economically stronger developing countries may command more respect or influence, making them more able to cash in on insider status for greater loans. Second, we interact board membership with political climate to determine whether the political climate in a country (its degree of autocracy or democracy) has an effect on its ability to convert board membership into funding. For example, the board may be biased against more autocratic governments, limiting such governments' ability to utilize an insider position.

Third, we look at whether the effect of board membership on World Bank funding is significantly different in the years before and after the Cold War by interacting board membership with a dummy variable indicating whether the year is after 1990. The end of the Cold War altered the balance of power in the international system and, consequently, might have influenced the operations of international institutions in a noteworthy manner. Fourth, we interact board membership with a dummy indicating whether a country has served on the board for more than fourteen years – countries that have served for approximately one-third of the years in our data set. It is plausible that countries that have served for longer have more experience and command more respect on the board, leading to a better ability to take advantage of board membership. On the other hand, countries that get the chance to serve on the board many times may be less eager to exploit the opportunity, or may see the returns spread over multiple board terms. Finally, we look at the interaction effect between board membership and board voting power. This pools the dummy and the scalar variables for board membership in the same regression.

The results of these applications of specification (4) for IBRD commitments are reported in Table V-a. In column (1), we find a positive but not statistically significant estimate of the coefficient of the interaction between per capita GDP and board membership. The interaction between board membership and political climate in column (2) offers a negative coefficient estimate, but one that is also not statistically significant. Column (3) shows the only differential treatment regression in which the interaction effect has a statistically significant coefficient estimate. According to these results, the financial bonus from board membership is substantially higher in the post-1990 part of the data set, potentially reflecting shifting power in the post-Cold War world. The estimate on the interaction term in column (4) suggests that countries that have served on the board for more than fourteen years in the data set see higher returns to board membership, though this coefficient estimate is not quite statistically significant. Finally, we find a positive but not statistically significant estimate of the effect of countries with higher amounts of board voting power to translate board membership into higher IBRD commitments.

Consistent with our lack of significant findings in our main and other IDA specifications described in Section 4, our differential treatment of board membership also fails to divine any statistically significant effect. Table V-b presents the results of these regressions.

## 6 Conclusions

The evidence in the preceding analysis exposes a weakness in the design of the World Bank's decision-making structure. A seat on the IBRD's Board of Executive Directors is not only significant for intangible reasons such as the international prestige associated with the position. IBRD executive directors reward themselves with a large increase in loan commitments to their home countries. On average, a developing country serving on the board can expect an increase of approximately 150% above its normal funding levels. In absolute terms, board membership is rewarded with a nearly \$60 million bonus, on average. Furthermore, it appears that board membership, rather than omitted trends or alternative explanations, drives much of this striking effect.

The evidence also suggests that returns to board membership increase following the Cold War and that, as our analysis with alternate directors indicates, the reward to board membership may stem from the formation of a sort of insider culture in the boardroom, as opposed to being solely a function of voting rights. If board membership were egalitarian, with all countries having the opportunity to serve on a regular basis, our findings might not be troubling. However, a majority of World Bank member countries never or rarely get a seat at the table.

While we find strong results for the IBRD, we find no significant association between board membership and IDA funding. This stark contrast between two institutions with similar decision-making structures suggests that this institutional design may not always be problematic. The difference may be caused by the IDA's exclusive focus on the world's poorest and neediest countries, suggesting that the mission of an institution may have important ramifications for the choice of its structure.
## References

ALESINA, A., and D. DOLLAR (2000): "Who Gives Foreign Aid to Whom and Why?," *Journal of Economic Growth*, 5(1), 33–63.

BAYSINGER, B. D., and H. N. BUTLER (1985): "Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition," Journal *of Law, Economics, Organization*, 1(1), 101–124.

- BBC (2003): "Explained: the IMF and World Bank," British Broadcasting Corporation, http://news.bbc.co.uk/1/hi/business/95218.stm.
  (2005): "Cautious welcome for G8 debt deal," British Broadcasting Company, http://news.bbc.co.uk/2/hi/business/4084574.stm.
- BEBCHUK, L., and J. FRIED (2004): *Pay without Performance: The Unfulfilled Promise of Executive Compensation*. Harvard University Press.
- CYERT, R. M., S.-H. KANG, and P. KUMAR (2002): "Corporate Governance, Takeovers, and Top-Management Compensation: Theory and Evidence," *Management Science*, 48(4), 453–469.
- DALTON, D. R., and we. F. KESNER (1987): "Composition and CEO Duality in Board of Directors: An International Perspective," *Journal of International Business Studies*.
- DREHER, A., J. E. STURM, and J. R. VREELAND (2006): "Does Membership on the UN Security Council Influence IMF Decisions? Evidence from Panel Data," CES-IFO Working Paper No. 1808.
- FAMA, E. F., and M. C. JENSEN (1983): "Separation of Ownership and Control," *Journal of Law and Economics*, 26(2), 301–325.
- FEREJOHN, J. (1974): Pork Barrel Politics: Rivers and Harbors Legislation, 1947-1968. Stanford University Press.
- GAVIN, M., and D. RODRIK (1995): "The World Bank in Historical Perspective," *The American Economic Review*, 85(2), 329–334.
- GLOBAL-TRANSPARENCY-INITIATIVE (2006): "Assessing World Bank Openness: A Transparency Scorecard," .
- GOSS, C. F. (1972): "Military Committee Membership and Defense-Related Benefits in the House of Representatives," *The Western Political Quarterly*, 25(2), 215–233.
- GROSECLOSE, T., AND C. STEWART-III (1998): "The Value of Committee Seats in the House, 1947-91," *American Journal of Political Science*, 42(2), 453–474.
- HERMALIN, B. E., AND M. S. WEISBACH (1991): "The Effects of Board Composition and Direct Incentives on Firm Performance," *Financial Management*, 20(4), 101–112.
- HEXNER, E. P. (1964): "The Executive Board of the International Monetary Fund: A Decision-Making Instrument," *International Organization*, 18(1), 74–96.
- JOHNSTON, R. J. (1979): "Congressional Committees and Department Spending: The Political Influence on the Geography of Federal Expenditure in the United States," *Transactions of the Institute of British Geographers*, 4(3), 373–384.

- KNIGHT, D., AND E. T. POUND (2006): "Cleaning Up The World Bank," U.S. News World Report.
- KOVACH, H., AND Y. LANSMAN (2006): "World Bank and IMF conditionality: A development injustice," A report of the European Network on Debt and Development (Eurodad).
- KUZIEMKO, I., AND E. WERKER (2006): "How Much Is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations," *Journal of Political Economy*, 114(5), 905–930.
- MOSLEY, P., J. HARRIGAN, AND J. TOYE (1995): Aid and Power: The World Bank Policy-based Lending, vol. 2. Routledge.
- RAY, B. A. (1981): "Military Committee Membership in the House of Representatives and the Allocation of Defense Department Outlays," *The Western Political Quarterly*, 34(2), 222–234.
- RUNDQUIST, B. S., AND D. E. GRIFFITH (1976): "An Interrupted Time- Series Test of the Distributive Theory of Military Policy-Making," *The Western Political Quarterly*, 29(4), 620–626.
- SHAH, A. (2006): "Third World Debt Undermines Development," Website, http://www.globalissues.org/TradeRelated/Debt.asp.
- STEWART-III, C., AND T. GROSECLOSE (1999): "The Value of Committee Seats in the United States Senate, 1947-91," *American Journal of Political Science*, 43(3), 963–973.
- WANG, T. Y. (1999): "U.S. Foreign Aid and UN Voting: An Analysis of Important Issues," International Studies Quarterly, 43(1), 199–210. Woods, N. (2001): "Making the IMF and World Bank more accountable," International Affairs (Royal Institute of International Affairs 1944-), 77(1), 83–100.
- World-Bank (2007): "About Us," Website, <u>www.worldbank.org/about</u>.

## Appendix: Tables

TABLE I-a	Data, Means, and	Variances	
Variable	Observations	Mean	Standard Deviation
IBRD			
Board Member (dummy)	5645	0.076	0.265
Board Voting Power (% total)	5645	0.239	0.854
Bank Voting Power (% total)	5186	0.306	0.508
Alternate Board Member (dummy)	5645	0.087	0.281
In(Per capita GDP, US\$1995)	4751	8.033	0.999
In(Population, thousands)	5409	8.483	1.897
Major War (>1000 deaths, dummy)	5645	0.071	0.256
Political Climate (scale -1 to 1)	4456	-1.134	7.405
IBRD Commitments (US\$1996 millions)	5645	92.2	300
In(IBRD Commitments, US\$1996 millions)	5645	5.443	8.500
Received Any IBRD Funding (dummy)	5645	0.293	0.455
IDA			
Board Member (dummy)	5645	0.076	0.265
Board Voting Power (% total)	5645	0.237	0.866
Bank Voting Power (% total)	4575	0.349	0.506
Alternate Board Member (dummy)	5645	0.086	0.281
In(Per capita GDP, US\$1995)	4751	8.033	0.999
In(Population, thousands)	5409	8.483	1.897
Major War (>1000 deaths, dummy)	5645	0.071	0.256
Political Climate (scale -1 to 1)	4456	-1.134	7.405
IDA Commitments (US\$1996 millions)	5645	36.7	144
In(IDA Commitments, US\$1996 millions)	5645	5.175	8.105
Received Any IDA Funding (dummy)	5645	0.291	0.454

	- · ·		Standard Doviation	
Variable	Observations	Mean	Standard Deviation	
<u>BRD</u>				
Statistics for Board Members				
Bank Voting Power (% total)	420	1.193	1.179	
Per capita GDP (US\$1995)	407	4751	4242	
Population (thousands)	429	187734	344052	
Major War (>1000 deaths, dummy)	429	0.091	0.288	
Political Climate (scale -1 to 1)	413	0.123	7.386	
BRD Commitments (US\$1996 millions)	429	387	637	
Statistics for Alternate Board Members				
Bank Voting Power (% total)	489	0.438	0.411	
Per capita GDP (US\$1995)	420	5613	5302	
Population (thousands)	447	31693	40091	
Major War (>1000 deaths, dummy)	489	0.070	0.255	
Political Climate (scale -1 to 1)	436	-0.661	7.254	
IBRD Commitments (US\$1996 millions)	489	166	368	
Statistics for Non-EDs and Non-Alternate	es			
Bank Voting Power (% total)	4277	0.204	0.262	
Per capita GDP (US\$1995)	3924	5021	6206	
Population (thousands)	4533	13442	42881	
Major War (>1000 deaths, dummy)	4727	0.069	0.253	
Political Climate (scale -1 to 1)	3607	-1.335	7.411	
IBRD Commitments (US\$1996 millions)	4727	57.9	218	
<u>IDA</u>				
Statistics for Board Members				
Bank Voting Power (% total)	391	1.154	1.152	
Per capita GDP (US\$1995)	406	4760	4244	
Population (thousands)	428	188133	344356	
Major War (>1000 deaths, dummy)	428	0.091	0.288	
Political Climate (scale -1 to 1)	412	0.141	7.387	
IBRD Commitments (US\$1996)	428	172	436	
Statistics for Alternate Board Members				
Bank Voting Power (% total)	427	0.528	0.511	
Per capita GDP (US\$1995)	419	5624	5303	
Population (thousands)	446	31762	40110	
Major War (>1000 deaths, dummy)	488	0.070	0.255	
Political Climate (scale -1 to 1)	435	-0.646	7.256	
BRD Commitments (US\$1996)	488	49.4	137	
Statistics for Non-EDs and Non-Alternate	es			
Bank Voting Power (% total)	3757	0.245	0.249	
Per capita GDP (US\$1995)	3926	5019	6205	
Population (thousands)	4535	13441	42872	
Major War (>1000 deaths, dummy)	4729	0.069	0.253	
Major War (>1000 deaths, dummy) Political Climate (scale -1 to 1)	4729 3609	0.069 -1.338	0.253 7.410	

		Years of Service	e on the Board of Ex	ecutive Directors by Country			
Country	Years	Country	Years	Country	Years	Country	Years
AFGHANISTAN	0	DOMINICA	0	LUXEMBOURG	0	SINGAPORE	0
ALBANIA	0	DOMINICAN REPUBLIC	0	MACEDONIA, FYR OF	0	SLOVAK REPUBLIC	0
ALGERIA	22	ECUADOR	2	MADAGASCAR	7	SLOVENIA	0
ANGOLA	0	EGYPT	7	MALAWI	4	SOLOMON ISLANDS	0
ANTIGUA AND BARBUDA	0	EL SALVADOR	3	MALAYA	2	SOMALIA	0
ARGENTINA	23	EQUATORIAL GUINEA	0	MALAYSIA	15	SOUTH AFRICA	0
ARMENIA	0	ERITREA	2	MALDIVES	0	SPAIN	19
AUSTRALIA	37	ESTONIA	0	MALI	4	SRI LANKA	0
AUSTRIA	8	ETHIOPIA	4	MALTA	0	ST. KITTS AND NEVIS	0
AZERBAIJAN	0	FIJI	0	MARSHALL ISLANDS	0	ST. LUCIA	0
BAHAMAS	0	FINLAND	9	MAURITANIA	10	ST. VINCENT & THE GRENADINE	0
BAHRAIN	0	FRANCE	57	MAURITIUS	0	SUDAN	3
BANGLADESH	0	GABON	1	MEXICO	10	SURINAME	0
BARBADOS	0	GAMBIA	2	MICRONESIA, FED. STATES OF	0	SWAZILAND	0
BELARUS	0	GEORGIA	0	MOLDOVA	Ő	SWEDEN	12
BELGIUM	50	GERMANY	51	MONGOLIA	0	SWITZERLAND	12
BELIZE	0	GHANA	0	MONTENEGRO	0	SYRIAN ARAB REPUBLIC	3
BENIN	3	GREECE	2	MOROCCO	12	TAJIKISTAN	0
BHUTAN	0	GRENADA	0	MOZAMBIQUE	2	TANZANIA	2
BOLIVIA	6	GUATEMALA	0	MYANMAR	0	THAILAND	14
BOSNIA AND HERZEGOVINA	0	GUINEA	0	NAMIBIA	2	TIMOR-LESTE	0
BOTSWANA	2	GUINEA GUINEA-BISSAU	3	NEPAL	2	TOGO	0
BRAZIL	2 11	GUYANA	0	NETHERLANDS	55	TONGA	0
	0	HAITI	0	NEW ZEALAND	55 15	TRINIDAD AND TOBAGO	0
BRUNEI DARUSSALAM BULGARIA	0	HONDURAS	0	NICARAGUA	2	TUNISIA	0
BURKINA FASO	0	HUNGARY	0	NIGER	2	TURKEY	4
	5	ICELAND	11	NIGER	5	TURKMENISTAN	0
BURUNDI	5				-		0
CAMBODIA	0		58	NORWAY	8	UGANDA	2
CAMDODIA	0	INDONESIA	8	OMAN	0		0
CAMEROON	0	IRAN	0	PAKISTAN	29		•
CANADA	58	IRAQ	0	PALAU	0		58
CAPE VERDE	0	IRELAND	0	PANAMA	2	UNITED STATES	58
CENTRAL AFRICAN REPUBLIC	4	ISRAEL	0	PAPUA NEW GUINEA	0	UPPER VOLTA	0
CHAD	0	ITALY	42	PARAGUAY	3	URUGUAY	7
CHILE	10	JAMAICA	0	PERU	5	UZBEKISTAN	0
CHINA	50	JAPAN	51	PHILIPPINES	8	VANUATU	0
COLOMBIA	33	JORDAN	0	POLAND	3	VENEZUELA	12
COMOROS	4	KAZAKHSTAN	0	PORTUGAL	0	VIETNAM	0
CONGO, DEM. REP. OF	0	KENYA	0	QATAR	0	YEMEN	0
CONGO, REPUBLIC OF	4	KIRIBATI	0	ROMANIA	0	YEMEN ARAB REPUBLIC	0
COSTA RICA	1	KOREA, REPUBLIC OF	5	RUSSIAN FEDERATION	13	YUGOSLAVIA	0
COTE D'IVOIRE	0	KUWAIT	20	RWANDA	0	ZAMBIA	0
CROATIA	0	KYRGYZ REPUBLIC	0	SAMOA	0	ZIMBABWE	0
CUBA	18	LAOS	0	SAN MARINO	0		
CYPRUS	0	LATVIA	0	SAO TOME AND PRINCIPE	0		
CZECH REPUBLIC	0	LEBANON	0	SAUDI ARABIA	19		
CZECHOSLOVAKIA	0	LESOTHO	1	SENEGAL	0		
DAHOMEY	0	LIBERIA	3	SERBIA	0		
DENMARK	11	LIBYA	0	SEYCHELLES	0		
DJIBOUTI	0	LITHUANIA	0	SIERRA LEONE	2		

TABLE II-a		Years of Service	ID e on the Board of E	xecutive Directors by Country			
Country	Years	Country	Years	Country	Years	Country	Years
AFGHANISTAN	0	DOMINICA	0	LUXEMBOURG	0	SINGAPORE	0
ALBANIA	0	DOMINICAN REPUBLIC	0	MACEDONIA, FYR OF	0	SLOVAK REPUBLIC	0
ALGERIA	22	ECUADOR	0	MADAGASCAR	7	SLOVENIA	0
ANGOLA	0	EGYPT	7	MALAWI	4	SOLOMON ISLANDS	0
ANTIGUA AND BARBUDA	0	EL SALVADOR	3	MALAYA	0	SOMALIA	0
ARGENTINA	21	EQUATORIAL GUINEA	0	MALAYSIA	15	SOUTH AFRICA	0
ARMENIA	0	ERITREA	2	MALDIVES	0	SPAIN	17
AUSTRALIA	25	ESTONIA	0	MALI	4	SRI LANKA	0
AUSTRIA	8	ETHIOPIA	4	MALTA	0	ST. KITTS AND NEVIS	0 0
AZERBAIJAN	0	FIJI	0	MARSHALL ISLANDS	0	ST. LUCIA	0
BAHAMAS	0	FINLAND	9	MAURITANIA	10	ST. VINCENT & THE GRENADINE	0
BAHRAIN	0	FRANCE	9 44	MAURITIUS	0	SUDAN	2
BANGLADESH	0	GABON	1	MAXICO	10	SURINAME	2
BARBADOS	0	GAMBIA	2	MICRONESIA, FED. STATES OF	0	SWAZILAND	0
BELARUS	0	GEORGIA	2	MOLDOVA	0	SWEDEN	9
BELGIUM	36	GERMANY	44	MOLDOVA	0	SWEDEN SWITZERLAND	9 13
BELIZE	0	GHANA	44 0	MONTENEGRO	0		3
	0	GREECE	0	MOROCCO	-	SYRIAN ARAB REPUBLIC TAJIKISTAN	3
BENIN BHUTAN	3	GRENADA	0	MOROCCO	12 2	TANZANIA	2
	0		0		2		-
	0	GUATEMALA	0	MYANMAR	0	THAILAND	14 0
BOSNIA AND HERZEGOVINA	0		-	NAMIBIA	2	TIMOR-LESTE	0
BOTSWANA	_	GUINEA-BISSAU	3	NEPAL	-	TOGO	v
	11	GUYANA	0		44		0
BRUNEI DARUSSALAM	0	HAITI	0	NEW ZEALAND	15	TRINIDAD AND TOBAGO	0
BULGARIA	0	HONDURAS	0	NICARAGUA	0	TUNISIA	4
BURKINA FASO	0	HUNGARY	0	NIGER	0	TURKEY	0
BURUNDI	5	ICELAND	10	NIGERIA	5	TURKMENISTAN	0
CAMBODIA	0	INDIA	45	NORWAY	6	UGANDA	2
CAMDODIA	0	INDONESIA	5	OMAN	0	UKRAINE	0
CAMEROON	0	IRAN	0	PAKISTAN	20	UNITED ARAB EMIRATES	0
CANADA	45	IRAQ	0	PALAU	0	UNITED KINGDOM	44
CAPE VERDE	0	IRELAND	0	PANAMA	0	UNITED STATES	44
CENTRAL AFRICAN REPUBLIC	4	ISRAEL	0	PAPUA NEW GUINEA	0	UPPER VOLTA	0
CHAD	0	ITALY	37	PARAGUAY	1	URUGUAY	7
CHILE	6	JAMAICA	0	PERU	3	UZBEKISTAN	0
CHINA	37	JAPAN	43	PHILIPPINES	8	VANUATU	0
COLOMBIA	26	JORDAN	0	POLAND	0	VENEZUELA	12
COMOROS	4	KAZAKHSTAN	0	PORTUGAL	0	VIETNAM	0
CONGO, DEM. REP. OF	0	KENYA	0	QATAR	0	YEMEN	0
CONGO, REPUBLIC OF	4	KIRIBATI	0	ROMANIA	0	YEMEN ARAB REPUBLIC	0
COSTA RICA	1	KOREA, REPUBLIC OF	5	RUSSIAN FEDERATION	13	YUGOSLAVIA	0
COTE D'IVOIRE	0	KUWAIT	20	RWANDA	0	ZAMBIA	0
CROATIA	0	KYRGYZ REPUBLIC	0	SAMOA	0	ZIMBABWE	0
CUBA	9	LAOS	0	SAN MARINO	0		
CYPRUS	0	LATVIA	0	SAO TOME AND PRINCIPE	0		
CZECH REPUBLIC	0	LEBANON	0	SAUDI ARABIA	19		
CZECHOSLOVAKIA	0	LESOTHO	1	SENEGAL	0		
DAHOMEY	0	LIBERIA	3	SERBIA	0		
DENMARK	9	LIBYA	0	SEYCHELLES	0		
DJIBOUTI	0	LITHUANIA	0	SIERRA LEONE	2		

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TABLE III-a	OLS Estimates of IBRD	Commitments in US	S\$1996 on Board Memb	ership
Dependent variable:	log	log	log	log
	(1)	(2)	(3)	(4)
Board Member	1.464	1.382		1.509
	(1.99)**	(1.97)*		(1.84)*
Board Voting Power			0.539	
			(2.49)**	
Bank Voting Power		0.967	0.781	0.93
		(0.88)	(0.71)	(0.83)
In(per capita GDP)		1.982	1.998	1.96
		(1.6)	(1.6)	(1.57)
In(Population)		0.368	0.393	0.331
		(0.12)	(0.12)	(0.1)
Major War		-1.881	-1.882	-1.915
		(2.51)**	(2.51)**	(2.55)**
Political Climate		-0.01	-0.011	-0.011
		(0.26)	(0.27)	(0.27)
BM entry-3 years				-0.835
				(1.15)
BM entry-2 years				0.503
				(0.65)
BM entry-1 year				0.054
				(0.07)
BM exit + 1 year				-0.096
				(0.1)
BM exit + 2 years				0.912
				(1.02)
Constant	2.072	-16.185	-16.488	-15.696
	(1.56)	(0.56)	(0.57)	(0.54)
Observations	5645	4061	4061	4061
# of countries	173	135	135	135
R-squared	0.04	0.08	0.08	0.08

All regressions include country and year fixed effects and use standard errors clustered at the country level Absolute value of robust t-statistics in parentheses

TABLE III-b		OLS Estimates of	IDA Commitments in US\$1	996 on Board Membersh	ip	
Dependent variable:	log	log	log	log	absolute	absolute
	(1)	(2)	(3)	(4)	(5)	(6)
Board Member	-0.007	0.328		0.408	9.03	8.585
	(0.01)	(0.47)		-0.55	(0.5)	(0.61)
Board Voting Power			0.042			
			(0.24)			
Bank Voting Power		-0.672	-0.641	-0.71	-32.368	-32.268
		(0.51)	(0.49)	(0.54)	(0.86)	(0.86)
In(per capita GDP)		-1.531	-1.516	-1.542	-13.077	-12.811
		(1.12)	(1.1)	(1.12)	(0.62)	(0.61)
In(Population)		-0.09	-0.064	-0.088	25.799	25.775
		(0.02)	(0.02)	(0.02)	(0.92)	(0.92)
Major War		-2.309	-2.311	-2.292	-38.292	-38.376
		(3.19)***	(3.19)***	(3.16)***	(1.70)*	(1.69)*
Political Climate		0.013	0.014	0.011	-0.248	-0.24
		(0.38)	(0.4)	(0.33)	(0.63)	(0.61)
BM entry-3 years				0.433		-10.77
				(0.59)		(1.11)
BM entry-2 years				1.068		8.04
				(1.47)		(0.83)
BM entry-1 year				0.683		-3.415
				(0.95)		(0.49)
BM exit + 1 year				-0.452		-3.009
				(0.64)		(0.58)
BM exit + 2 years				-0.802		-4.285
				(1.54)		(0.63)
Constant	4.06	18.483	18.171	18.523	-114.672	-116.88
	(3.93)***	(0.53)	(0.52)	(0.53)	(0.41)	(0.42)
Observations	5624	3619	3619	3619	3619	3619
# of countries	173	122	122	122	122	122
R-squared	0.05	0.04	0.04	0.05	0.05	0.05

Absolute value of robust t-statistics in parentheses

TABLE IV	OLS Estimates of IBI	RD Commitments in U	IS\$1996 on Board Me	mbership Alternate	Specifications	
Dependent variable:	absolute	absolute	logit	logit	log	log
•	(1)	(2)	(3)	(4)	(5)	(6)
Board Member	59.758	72.256	0.513	0.575	1.835	1.739
	(1.90)*	(2.08)**	(1.64)	(1.55)	(2.38)**	(2.02)**
Alternate Board Member					1.953	2.468
					(3.12)***	(3.33)***
Bank Voting Power	62.687	55.917	0.521	0.515	0.995	1.135
	(1.2)	(1.06)	(0.88)	(0.86)	(0.95)	(1.1)
n(per capita GDP)	113.717	111.489	1.017	1.008	1.867	1.768
	(1.73)*	(1.67)*	(1.91)*	(1.89)*	(1.5)	(1.41)
n(Population)	-67.594	-68.569	-0.277	-0.292	0.561	0.582
	(0.81)	(0.82)	(0.19)	(0.2)	(0.18)	(0.19)
Major War	-34.029	35.204	-1.06	-1.093	-1.825	-1.86
	(1.34)	(1.39)	(2.89)***	(3.01)***	(2.46)**	(2.53)**
Political Climate	-1.734	-1.839	0.005	0.005	-0.008	-0.005
	(1.13)	(1.24)	(0.22)	(0.22)	(0.21)	(0.14)
3M entry-3 years		-7.76		-0.418		-1.676
		(0.29)		(1.42)		(2.09)**
3M entry-2 years		6.309		0.253		-0.24
		(0.22)		(0.81)		(0.3)
3M entry-1 year		74.235		-0.121		-0.654
		(1.75)*		(0.39)		(0.82)
3M exit + 1 year		-12.589		-0.09		-0.038
		(0.52)		(0.23)		(0.04)
3M exit + 2 years		40.952		0.491		1.033
		(0.92)		(1.28)		(1.15)
Alternate entry-3 years				· · ·		0.366
						(0.55)
Alternate entry-2 years						1.763
						(2.74)***
Alternate entry-1 year						2.38
						(3.17)***
Alternate exit + 1 year						0.483
atomato ont i i jour						(0.65)
Alternate exit + 2 years						0.398
						(0.5)
Constant	-403.266	-374.875			-17.156	-16.613
Jonolani	(0.5)	(0.46)			(0.6)	(0.58)
Observations	4061	4061	3117	3117	4061	4061
t of countries	135	135	5117	5117	135	135
	0.1	0.1			0.08	0.09
R-squared Countries with service = 0 <sup>a</sup>	included	included	included	included	included	included
Zero Values	included	included	included	included	included	included

Absolute value of robust t-statistics in parentheses

TABLE V-a		OLS Estimates of IBF	D Commitments on	Board Membership	
Differential Treatment		Dependent variable	: In(IBRD Commitme	ents) in US\$1996	
Board Member interacted with:	GDP	Political Climate	Year > 1990	>14 Years as ED	Board Voting Power
	(1)	(2)	(3)	(4)	(5)
Board Member	-2.688	1.369	0.326	0.539	-4.047
	(0.53)	(2.04)**	(0.37)	(0.76)	(1.88)*
Board Voting Power					1,443
					(1.68)*
Bank Voting Power	0.877	0.776	0.96	0.724	-0.472
	(0.81)	(0.72)	(0.84)	(0.72)	(0.36)
ln(per capita GDP)	1.932	1.999	1.76	2.001	2.067
	(1.59)	(1.62)	(1.51)	(1.62)	(1.69)*
n(Population)	0.345	0.268	0.484	0.307	0.522
	(0.11)	(0.08)	(0.15)	(0.1)	(0.16)
Major War	-1.894	-1.866	-2.024	-1.903	-1.902
	(2.54)**	(2.47)**	(2.75)***	(2.55)**	(2.51)**
Political Climate	-0.009	-0.002	-0.008	-0.007	-0.009
	(0.23)	(0.05)	(0.21)	(0.19)	(0.23)
BM*ln(per capita GDP)	0.504				
	(0.78)				
BM*Political Climate		-0.114			
		(1.12)			
BM*post1990			3.126		
			(2.53)**		
BM*(>14 Years as ED)				2.294	
				(1.45)	
BM*Board Voting Power					1.686
					(1.05)
Constant	-15.507	-15.45	-15.311	-15.79	-17.73
	(0.53)	(0.53)	(0.53)	(0.54)	(0.61)
Observations	4061	4061	4061	4061	4061
# of countries	135	135	135	135	135
R-squared	0.08	0.08	0.08	0.08	0.08

Absolute value of robust t-statistics in parentheses

TABLE V-b		OLS Estimates of IDA	Commitments on B	oard Membership	
Differential Treatment		Dependent variable	: In(IDA Commitmen	its) in US\$1996	
Board Member interacted with:	GDP	Political Climate	Year > 1990	>14 Years as ED	Board Voting Power
	(1)	(2)	(3)	(4)	(5)
Board Member	-3.027	0.296	0.037	0.024	1.262
	(0.71)	(0.46)	(0.05)	(0.03)	(0.53)
Board Voting Power					-0.487
					(0.64)
Bank Voting Power	-0.806	-0.752	-0.7	-0.754	-1.187
	(0.57)	(0.53)	(0.53)	(0.54)	(0.7)
n(per capita GDP)	-1.585	-1.524	-1.597	-1.527	-1.556
	(1.16)	(1.11)	(1.17)	(1.11)	(1.15)
n(Population)	-0.102	-0.147	-0.013	-0.128	-0.214
	(0.03)	(0.04)	(0)	(0.04)	(0.06)
Major War	-2.318	-2.302	-2.348	-2.314	-2.304
	(3.20)***	(3.19)***	(3.23)***	(3.19)***	(3.19)**
Political Climate	0.014	0.017	0.014	0.014	0.015
	(0.41)	(0.48)	(0.4)	(0.42)	(0.43)
3M*In(per capita GDP)	0.42				
	(0.78)				
BM*Political Climate		-0.044			
		(0.46)			
3M*post1990		· · ·	0.871		
			(0.93)		
BM*(>14 Years as ED)			× ,	0.776	
, , , , , , , , , , , , , , , , , , ,				(0.52)	
3M*Board Voting Power				· · ·	0.964
Ŭ					(0.93)
Constant	19.133	18.948	18.397	18.799	19.839
	(0.54)	(0.54)	(0.52)	(0.53)	(0.56)
Observations	3619	3619	3619	3619	3619
# of countries	122	122	122	122	122
R-squared	0.04	0.04	0.04	0.04	0.05

Absolute value of robust t-statistics in parentheses

 $^{\ast}$  significant at 10%;  $^{\ast\ast}$  significant at 5%,  $^{\ast\ast}$  significant at 1%

TABLE A1		OLS Estimates of	IBRD Commitment	s in US\$1996 on I	Board Membership	Robustness Check	S	
Dependent variable:	log	log	abs	logit	log	log	log	log
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Board Member	1.38	1.488	61.522	0.508	0.549	0.61	1.692	0.699
	(2.04)**	(1.83)*	(1.96)*	(1.63)	(2.17)**	(2.05)**	(2.20)**	(2.54)**
Alternate Board Member							1.314	0.648
							(1.95)*	(3.06)***
Bank Voting Power	1.349	1.322	70.687	0.428	0.263	0.24	1.324	0.273
	(0.96)	(0.92	(1.23)	(0.51)	(0.68)	(0.61)	(0.95)	(0.74)
In(per capita GDP)	3.425	3.406	154.903	1.273	0.676	0.666	3.311	0.638
	(1.92)*	(1.91)*	(1.52)	(1.85)*	(1.54)	(1.51)	(1.84)*	(1.45)
In(Population)	-3.455	-3.506	-252.03	-1.742	0.137	0.126	-3.463	0.201
	(0.65)	(0.66)	(1.05)	(0.91)	(0.14)	(0.12)	(0.66)	(0.20)
Major War	-1.379	-1.432	-49.105	-0.679	-0.583	-0.594	-1.382	-0.565
	(1.44)	(1.5)	(1.22)	(1.56)	(2.28)**	(2.33)**	(1.44)	(2.23)**
Political Climate	-0.109	-0.109	-4.017	-0.04	-0.007	-0.008	-0.103	-0.007
	(1.5)	(1.5)	(1.14)	(1.25)	(0.54)	(0.57)	(1.45)	(0.51)
BM entry-3 years		-0.84				-0.244		
		(1.14)				(0.93)		
BM entry-2 years		0.457				0.156		
		(0.57)				(0.58)		
BM entry-1 year		-0.067				0.168		
		(0.08)				(0.59)		
BM exit + 1 year		-0.117				0.006		
		(0.13)				(0.02)		
BM exit + 2 years		0.941				0.266		
		(1.0)				(0.84)		
Constant	7.75	8.358	991.025		6.61	6.789	8.533	6.288
	(0.16)	(0.17)	(0.45)		(0.72)	(0.74)	(0.17)	(0.69)
Observations	2131	2131	2131	1792	4061	4061	2131	4061
# of countries	59	59	59		135	135	59	135
R-squared	0.11	0.11	0.15		0.09	0.09	0.12	0.1
Countries with service = 0 <sup>a</sup>	dropped	dropped	dropped	dropped	included	included	dropped	included
Zero Commitment Values	included	included	included	included	raised to 12.5	raised to 12.5	included	raised to 12.

Absolute value of robust t-statistics in parentheses

\* significant at 10%; \*\* significant at 5%, \*\* significant at 1%

<sup>a</sup>The 'service' variable represents the total number of years a country has served on the board in the data set

TABLE A2	OLS Estimates of IB	RD Commitments in L	JS\$1996	
	on Board Membe	on Board Membership Robustness Checks		
	Placebo Test	Placebo Test	Placebo Test	
Dependent variable:	log	log	abs	
	(1)	(2)	(3)	
Board Member	-0.66	-0.854	-64.461	
	(0.97)	(0.94)	(2.08)**	
Bank Voting Power	1.162	1.153	82.881	
	(0.98)	(0.97)	(1.54)	
In(per capita GDP)	2.147	2.122	126.714	
	(1.61)	(1.6)	(1.73)*	
In(Population)	-0.55	-0.624	-103.946	
·	(0.14)	(0.15)	(0.99)	
Major War	-1.918	-1.883	-37.36	
	(2.43)**	(2.38)**	(1.35)	
Political Climate	-0.022	-0.022	-2.137	
	(0.51)	(0.53)	(1.22)	
entry-3 years		1.163		
		(1.44)		
entry-2 years		-0.489		
		(0.58)		
entry-1 year		0.089		
		(0.08)		
exit + 1 year		-1.074		
		(1.31)		
exit + 2 years		-0.588		
		(0.7)		
Constant	-9.289	-8.506	-176.181	
	(0.25)	(0.23)	(0.17)	
Observations	3696	3696	3696	
# of countries	135	135	135	
R-squared	0.08	0.08	0.1	
Countries with service = $0^{a}$	included	included	included	
Zero Commitment Values	included	included	included	

All regressions include country a

Absolute value of robust t-statistics in parentheses

\* significant at 10%; \*\* significant at 5%, \*\* significant at 1%

aThe 'service' variable represents the total number of years a country has served on the board in the data set

b In the placebo regressions, each of this variable's values is replaced by the value of the same variable ten years prior

Italicized vestimates are those for when each of the particular variable's values is replaced by the value of the same variable ten years prior