

**MASTER OR SERVANT?
AGENCY SLACK AND THE POLITICS OF IMF LENDING¹**

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ABSTRACT

Recent work in international political economy has identified two key political factors influencing the lending decisions of the International Monetary Fund: the domestic interests of the United States, which uses its position as the Fund's largest shareholder to direct larger loans to countries it deems economically or geopolitically important; and the rent-seeking behavior of IMF bureaucrats, who seek to exploit "agency slack" and maximize their budget and autonomy by proposing larger loans. This article addresses potential problems with each of these approaches, as well as potential inconsistencies between them. First, it argues that focusing exclusively on American interests overlooks the importance of other powerful states within the IMF, as well as the effects of disagreements among these states on Fund decisions. To illustrate this, I present a "collective principal" model of IMF lending, in which the Fund's five largest shareholders, the "G-5" countries (US, UK, Germany, Japan, France), exercise *de facto* control over IMF lending decisions. Second, the paper also argues that the IMF staff's autonomy – and therefore its ability to successfully engage in rent-seeking – is conditional on both the intensity and heterogeneity of G-5 interests. Using an original dataset of IMF lending to 47 countries from 1984-2003, I find strong support for this model and its hypotheses. Staff autonomy is greatest in cases where G-5 interests are less intense and more heterogeneous, while it is weakest when G-5 interests are strong and unified. Ultimately, both state interests and bureaucratic politics influence IMF decisions, but the Fund is neither the servant of its member-states nor its own master.

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Introduction

Over the last two decades, the International Monetary Fund (IMF) has played an increasingly prominent role in global financial governance. Between 1984 and 2003, the IMF provided 197 short-term loans to 47 emerging market countries, totaling SDR 253.8 billion.² While the average loan size during this period was SDR 1.21 billion, these loans ranged widely in size, from SDR 7.1 million (Belize 1984) to SDR 22.8 billion (Brazil 2002). This variation is not simply a function of country size or the size of a country's external debt. Indeed, while absolute loan size is strongly correlated with country size and somewhat correlated with country indebtedness, we observe substantial puzzling variation when measuring IMF loans in relation to countries' quota shares in the Fund.³ For example, Turkey, with only the 18th-largest quota, has received three of the ten largest loans over the last twenty years. Likewise, Uruguay, with the 33rd-largest quota, received the fifth largest loan ever (SDR 2.13 billion, 694% of quota) in 2002, while Thailand, with the 22nd-largest quota, received a loan of SDR 2.9 billion (505%) in 1997.⁴ On the other hand, many larger countries have received relatively modest loans (e.g., Russia 1999, 56% of quota; Brazil 1992, 69%; Argentina 1996, 47%). At the same time, IMF lending to individual countries has also varied substantially over time. Argentina and Mexico are two prominent examples: from 1984-2003, Argentina's ten IMF loans ranged in size from 47% of its quota to 527%, while Mexico's five loans over the same period ranged in size from 120% of quota to 688%.

This variation in IMF lending presents a puzzle: why is the Fund more generous to some countries than others, and why does this vary over time and across cases? While critiques of the Fund and proposals for its reform abound, positive analyses of IMF policymaking are relatively limited and provide no clear answers to this question.⁵ Indeed, while existing studies suggest a number of economic and political factors influencing IMF behavior, they leave many critical questions unanswered. How important is politics relative to economics? In what ways is IMF lending a political process, and which political factors matter most? To what extent is the IMF the servant of the United States and other powerful states? Under what conditions does the IMF staff act autonomously of its political principals?

² The SDR, or Standard Depository Receipt, is the IMF's unit of account. Its value is derived from a basket of major international currencies. Currently (as of October 10, 2006), one SDR equals ~\$1.469 (<http://www.imf.org>).

³ The correlation between absolute loan size and country quota (log) is 0.87. Bivariate correlations between absolute loan size and three key measures of indebtedness (external debt/GDP, debt service/exports, reserves/months of imports) are -0.06, 0.40, and 0.18, respectively. The IMF operates much like a credit union: each member-state provides a portion of the Fund's "quota" resources and is eligible to borrow in proportion to these contributions. Country quotas and GDP are almost perfectly correlated (0.92). Thus, amount per quota more accurately measures when a loan is "oversized." A few prominent countries, such as Korea and Turkey, have quotas that are quite small in relation to the size of their economies. I control for this variation in countries' quota/GDP ratio in the statistical analysis that follows and demonstrate that this "quota gap" explains only a relatively small amount of variation in IMF lending.

⁴ Rankings exclude the OECD countries.

⁵ Kenen 2001 and Eichengreen 1999 review the policy literature. Joyce 2002 surveys recent empirical work.

In this article, I address these questions and seek to explain variation in the Fund’s lending policies over the last two decades. I model IMF policymaking as a principal-agent relationship in which the “agent” (the IMF staff) acts on behalf of a “collective principal” comprising the Fund’s five largest shareholders, the “G-5” countries (US, UK, Germany, Japan, France), which exercise *de facto* control over the Fund’s primary decision-making body, the Executive Board (EB). At the same time, the IMF staff enjoys substantial autonomy over the negotiation, design, and proposal of Fund programs. Using this framework, I argue that “agency slack,” or the extent of staff autonomy in IMF lending, is conditional on the intensity and heterogeneity of G-5 governments’ interests. In short, both states and Fund bureaucrats exercise partial but incomplete authority over IMF lending. Staff autonomy is greatest in cases where G-5 interests are both weak and divided, while it is weakest in cases where G-5 interests are strong and unified. Ultimately, the Fund is neither the servant of its member-states nor its own master; rather, the relative influence of the IMF’s largest shareholders and its bureaucrats varies over time and across cases.

The remainder of the article proceeds as follows. I first review existing economic and political explanations for variation in IMF lending and discuss the limitations of these approaches. I then present my “collective principal” argument and develop a set of hypotheses about the extent of agency slack in IMF lending. Using an original dataset of 197 short-term IMF loans to 47 countries from 1984–2003, I test these hypotheses and find clear support for my argument. I conclude with a discussion of the implication of these findings for our understanding of both the IMF and policymaking within international organizations (IOs) more broadly.

What explains variation in IMF lending?

As it makes lending decisions, the IMF faces a central tradeoff between liquidity and moral hazard. This tradeoff arises because IMF loans have two simultaneous effects. On the one hand, Fund lending directly benefits a country by providing it with financing (“liquidity”) needed to service its debts; indirectly, IMF lending may also enhance global financial stability by preventing a crisis in one country from becoming a larger systemic problem. On the other hand, IMF loans also create “moral hazard” – incentives for borrower countries and international lenders to assume additional risk in the expectation that the Fund will provide additional “bailouts” in the future (Crockett 1997).⁶ As a result, IMF lending may actually exacerbate rather than enhance financial instability. This tradeoff presents the

⁶ The classic example of moral hazard is in insurance, where insurers assume two types of risk: the “real hazard” (e.g., accident/theft) and the “moral hazard” arising from risky actions an individual may take once he is insured (e.g., more reckless driving/not locking one’s home).

IMF with a difficult choice: lend freely at the risk of increasing future demand for bailouts, or limit current lending at the risk of having a country default and triggering a broader financial crisis.

How does the IMF weigh this tradeoff and make lending decisions? Economists view this primarily as a technocratic choice that depends on whether a borrower is insolvent or illiquid – that is, whether the country is “bankrupt” due to bad economic policies, or whether it faces a temporary liquidity problem resulting from an unforeseen macroeconomic shock or a “financial panic” (Chang 1999).⁷ From this perspective, IMF lending decisions are primarily “technocratic” – the staff designs and proposes loans based on a variety of country-specific macroeconomic and external debt indicators. To be sure, these economic factors play a large role in shaping Fund lending decisions. Indeed, past studies have found evidence that IMF loans are larger and contain more conditions when a country has fewer foreign exchange reserves, higher levels of external debt, and a record of past Fund borrowing (Knight and Santaella 1997, Joyce 2002). Nonetheless, the empirical record of this technocratic view of IMF behavior is mixed: many macroeconomic variables emphasized in the literature, including GDP, GDP per capita, and government spending, have weak or indeterminate effects on IMF lending (Joyce 2002).⁸ Furthermore, countries with very similar macroeconomic characteristics have received substantially different treatment from the Fund over time and across cases.

A growing literature in international political economy (IPE) has addressed these limitations of a purely economic perspective and focused on the political determinants of IMF lending. In general, this literature offers two political explanations of IMF behavior. On the one hand, many IPE scholars argue that the IMF is the servant of the United States, which utilizes its position as the Fund’s largest shareholder to direct credit toward countries it deems important. The main variant of this argument is geopolitical: it claims that American allies and/or countries of strategic importance receive more favorable treatment from the Fund. Along these lines, several recent quantitative studies have found a relationship between IMF lending and countries’ voting patterns in the United Nations General Assembly (UNGA) and/or levels of US foreign and military aid to a given borrower country (Thacker 1999, Barro and Lee 2002, Stone 2002/4, Vreeland 2005). Several recent high-profile IMF lending cases are also frequently cited in support of this argument, including Russia, Turkey, and Pakistan (Stone 2004). An alternative but related perspective is that the US utilizes IMF lending to protect its domestic economic and financial interests. Studies in this vein have found that

⁷ Unlike a firm, a country technically cannot be declared bankrupt, but the analogy is commonly used to refer to an unsustainable level of sovereign debt.

⁸ One suggested reason for these results is that the Fund uses a range of indicators, rather than a single “trigger” variable, in making decisions (Bird and Rowlands 2003).

IMF loans tend to be larger when a borrower countries owes large amounts of debt to private creditors – primarily commercial banks – located within the US and other major IMF shareholders (Broz and Hawes 2006, Broz 2005, Oatley and Yackee 2004).⁹

On the other hand, scholars in the “public choice” tradition argue that bureaucratic rent-seeking, rather than American interests, is the key political factor in IMF lending (Vaubel 1991, Dreher and Vaubel 2003, Willett 2000). They view the Fund not as the servant of its shareholders, but rather as a highly independent actor in its own right. Drawing on principal-agent theory, this approach portrays the IMF staff as rent-seeking bureaucrats eager to exploit “agency slack” and maximize its autonomy, budget, and/or the likelihood of program success. From this perspective, we should observe the staff consistently favoring larger loans with more extensive conditionality, since more lending and a larger role for the Fund in monitoring its borrowers’ economic policies enhances the staff’s own influence. A key proponent of this approach is Vaubel (1991), who finds that the staff engages in “hurry-up lending” during quota reviews in order to obtain quota increases that will facilitate more extensive future lending. Similar studies have found these rent-seeking incentives to be greater as the growth rate of the staff increases and when the Fund has more resources available to lend (Dreher and Vaubel 2003).

As with purely economic explanations of IMF lending, each of these political stories presents certain problems. Despite popular perceptions to the contrary, the US does not unilaterally control IMF lending decisions. Since voting power in the IMF Executive Board (EB) is directly proportional to countries’ quota contributions, the US unquestionably exercises disproportionate influence: it holds a permanent seat on the EB and 17.4% of the IMF votes, which enables it to unilaterally veto certain decisions requiring 85% supermajorities, including changes in the Fund’s Articles of Agreement. Nevertheless, this unilateral veto power does not extend to lending decisions, since EB approval of IMF loans formally requires the support of only a simple majority of the 24 Executive Directors (EDs). Moreover, in practice the EB does not vote to approve IMF programs, but rather makes decisions on a “consensus basis with respect given to the relative voting power of the states” (Mussa and Savastano 1999, Van Houtven 2002, Vreeland 2005). Thus, while the IMF’s internal rules and norms clearly give the US a powerful say over Fund policies, they also grant other large shareholders a significant voice. In particular, the Fund’s four next largest shareholders (Japan, Germany, United Kingdom, France) also hold permanent seats on the EB, with a combined voting share of 21.82%.¹⁰

⁹ Still others have argued that private creditors influence the IMF independently, rather than as interest groups within the advanced industrialized countries (Gould 2006/3).

¹⁰ China, Russia, and Saudi Arabia also hold their own “elected” seats, with a combined 8.84% of the votes. The other 16 EDs are elected and represent regional sub-groups of the remaining member-states.

It is therefore extremely unlikely that we can accurately explain variation in Fund lending policies without also considering the interests of other powerful states, as well as the extent to which those interests are in harmony or conflict with those of the US.¹¹

Likewise, bureaucratic theories also have important limitations. Most importantly, while these arguments generate clear predictions about variation in Fund lending over time, they do not explain variation across cases within time periods. For example, while it may be the case that the IMF staff proposes larger loans during quota reviews, this prediction does not explain variation in loan size within years in which a quota review is underway. Furthermore, the logic of bureaucratic rent-seeking begs the question of when the IMF staff is able to “get away” with this type of behavior. Yet while bureaucratic arguments draw explicitly on principal-agent theory, they tend to leave unspecified both the identity and interests of the IMF staff’s principal(s). As a result, they offer few predictions about the conditions under which staff behavior will be constrained by member-states’ monitoring and enforcement.

In short, while both state-centric and bureaucratic politics explanations of IMF behavior strongly suggest that political factors influence IMF lending decisions, they leave many key questions unanswered. To what extent is the IMF the servant of the US and other powerful states? Under what conditions does the IMF staff act autonomously? How and why does this vary over time and across cases? In the remainder of this article, I attempt to answer these questions by developing an alternative model of Fund policymaking. Drawing on insights from principal-agent theory, I propose and empirically test a “collective principal” model of IMF policymaking in which state control and staff autonomy are conditional and interactive.

A collective principal model of IMF lending

Principal-agent theory analyzes situations of delegation, in which actor(s) authorized to make a decision conditionally designate this authority to some other actor(s) (Hawkins, et. al. 2003). A central tenet of agency theory is the assumption that agents pursue their own interests, subject to the constraints imposed upon them by their principal(s) (Kiewiet and McCubbins 1991). A second tenet is that some degree of “agency slack” is inevitable: agents always possess some autonomy due to incomplete contracting and/or the principals’ monitoring and enforcement costs (Hawkins, et. al. 2003). The potential for slack is even greater in cases of common agency, because multiple or

¹¹ Recent work has partially addressed this problem by focusing on measuring the aggregate interests of the G-7 countries, rather than focusing solely on US interests (Dreher and Sturm 2006). Similarly, Broz and Hawes (2006) separately measure bank exposure of each of the G-5 countries in their study. However, as I discuss below, this work overlooks the critical issue of interest heterogeneity among these countries.

collective principals may have heterogeneous preferences about the behavior of the agent (Ferejohn 1986; McCubbins, Noll, and Weingast 1987).

Agency theory is a useful tool for analyzing the relationship between the key actors – member-states and the staff – involved in IMF policymaking. The IMF lending process begins when a country formally requests a loan and begins negotiations with the Fund staff over its terms. Once a country signs a formal “Letter of Intent,” the staff presents the program for approval to the Executive Board (EB), a 24-member body composed of Executive Directors (EDs) representing the Fund’s member-states. If the loan is approved, the Fund disburses the first “tranche” and monitors compliance with conditionality. Future disbursements require both a staff review and subsequent EB approval.

G-5 governments as the “collective principal”

Acting through the EB, the IMF’s member-states exercise ultimate control over all Fund lending decisions. EB approval is required before the Fund can lend, and the Board can subsequently suspend a loan if a country fails to meet the conditions specified in the lending arrangement. Formally, the Fund’s “collective principal” consists of the 24 Executive Directors (EDs) on the EB.¹² However, since EB voting power is directly proportional to countries’ quota contributions, the advanced industrialized countries exercise disproportionate influence: the Fund’s five largest shareholders, the “G-5” countries (US, UK, Germany, Japan, and France), hold permanent seats on the EB comprising 39.22% of the votes, while eight elected EDs representing the remaining OECD countries hold an additional 33.46%. These rules give the G-5 countries *de facto* control over IMF policymaking. Formally, approval of IMF loans requires the support of only a simple majority of EDs, rather than a super-majority of weighted EB votes. In practice, however, votes on lending decisions are not taken in the EB; rather, decisions are made on a “consensus basis with respect given to the relative voting power of the states” (Mussa and Savastano 1999, Van Houtven 2002, Vreeland 2005). Thus, while all of the Fund’s member-states legally have a voice in IMF lending decisions, *de facto* control over IMF lending decisions lies with G-5 governments. Indeed, as others have argued, it is almost inconceivable that the IMF will approve a loan without the support – or at least consent – of its five largest shareholders (Fратиanni and Pattison 2005,

¹² Note that the EB is a “collective principal” comprised of multiple members designing a single contract for a single agent. This differs from other types of common agency (e.g., “multiple principals”) where several distinct actors independently offer contracts to an agent. See Lyne, Nielson, and Tierney 2006, 44.

Rieffel 2003).¹³

Specifying G-5 governments' preferences over the liquidity/moral hazard tradeoff – and therefore, over the size of Fund loans – is complicated by the fact that these countries simultaneously have much to gain and much to lose from IMF lending. On the one hand, G-5 governments have a strong interest in utilizing Fund liquidity to maintain international financial stability, since they are the dominant players in international trade and finance. On the other hand, since the G-5 countries also provide the largest share of the Fund's lending quotas, they also have a vested interest in conserving these resources and limiting moral hazard.¹⁴ How do G-5 governments weigh these competing incentives? To a great extent, G-5 preferences over IMF lending should be driven by the same “technocratic” factors – borrower-specific macroeconomic characteristics such as country size, external debt levels, and foreign exchange reserves – that supposedly influence the IMF staff's preferences. All else equal, we should observe the EB approving larger loans for bigger countries, for countries with a greater need for external financing, and in cases where the risk of cross-border financial contagion threatens to undermine broader global stability. In contrast, G-5 governments (and therefore the EB as a whole) should be less willing to approve large loans for smaller countries whose financial difficulties are of less consequence for the international financial system as a whole.

Yet while G-5 governments undoubtedly take economic factors into account, their preferences over IMF loans are also strongly influenced by political factors. In particular, past work suggests that both geopolitical concerns and domestic financial interests also influence G-5 preferences over IMF lending. All else equal, we should therefore expect G-5 governments to favor larger loans for countries that they deem economically or geopolitically important. In these cases, G-5 Executive Directors should be relatively less concerned with the moral hazard costs of IMF lending (or, rather, more willing to accept those costs) and relatively more inclined to pursue their geopolitical and economic interests by providing larger loans. In contrast, when the G-5 countries have little or no economic or geopolitical interest in a given country, they should be relatively more concerned with moral hazard and less willing to approve large-scale Fund lending. As a result, IMF loans should be smaller in these cases.

¹³ As Rieffel writes, “There is no example that comes easily to mind of a position taken by the IMF on any systemic issue without the tacit, if not explicit, support of the United States and the other G-7 countries” (2003, 28-29).

¹⁴ Technically, IMF quota contributions and loans have no direct effect on G-5 budgets, since they take the form of temporary asset transfers and are repaid at interest in all cases except a default on IMF obligations (Oatley and Nabors 1998). Thus, the “costs” of IMF lending for G-5 governments are primarily political rather than economic: domestic voters and their representatives perceive these loans to be taxpayer-finance “welfare for banks.” Nonetheless, the high-profile domestic debates in the US over the merits of the IMF loans during the Mexican and East Asian crises in the mid-1990s clearly suggest that these political costs are quite tangible for G-5 governments.

The IMF staff as agent

While the G-5 countries exercise ultimate control over lending decisions, the Fund's professional staff enjoys substantial autonomy over the IMF's day-to-day operations. Consisting of approximately 2,700 members from 165 countries, the staff acts as the member-states' agent in executing the IMF's day-to-day operations (IMF 2006). The staff negotiates loans directly with borrower governments, and it enjoys agenda-setting power: the EB cannot approve a lending arrangement without first receiving a staff proposal. Moreover, the Board can only vote up-or-down (i.e., without amendment) on staff proposals. These delegated responsibilities give the staff significant influence over IMF lending. Nonetheless, as it operates "in the shadow" of an EB vote, the staff's autonomy is circumscribed by the member-states' final authority.

What determines the IMF staff's preferences over the liquidity/moral hazard tradeoff? The literature emphasizes two main determinants of staff preferences: policy goals and bureaucratic incentives. Above all, staff members are economists and civil servants interested in achieving the Fund's policy objectives: "to enable countries to rebuild their international reserves, stabilize their currencies, continue paying for imports, and restore conditions for strong economic growth" (IMF 2002). This institutional mandate clearly suggests that the staff will take macroeconomic factors, such as the level of foreign exchange reserves and the current account deficit, into account as it designs IMF programs. At the same time, staff members, like all bureaucratic agents, have incentives to engage in "rent-seeking." Therefore, as public choice theorists have argued, the staff has an interest in proposing larger loans with more conditions in order to maximize its budget, autonomy, and influence (Willett 2000). For the purposes of this model, I assume that both of these factors – policy goals and bureaucratic incentives – influence IMF staff preferences. In addition, I assume that the Fund staff also considers the preferences of the G-5 countries as it designs lending proposals for EB approval. Thus, while it enjoys agenda-setting power, the staff will not want to put forth a lending proposal unless it is quite confident that the EB will approve the program. In short, I assume that Fund bureaucrats "seek to do good, but are not immune to bureaucratic incentives and external pressures" (Willett 2000).

Agency slack in IMF policymaking

Neither US-centric theories of IMF lending nor those focusing on bureaucratic rent-seeking adequately explore the implications of this principal-agent relationship for IMF lending decisions. Focusing exclusively on the interests of

the US, without considering either the interests of other powerful states, is unlikely to generate accurate predictions about Fund behavior. Similarly, focusing only on staff incentives without specifying their relative weight vis-à-vis those of G-5 governments is also unlikely to accurately predict IMF behavior. Rather, we need to know when G-5 interests outweigh staff preferences, and vice versa. In other words, we need a testable measure of “agency slack” in order to predict IMF decisions and the relative extent to which loans reflect the interests of the Fund’s member-states and its bureaucrats.

Although measuring agency slack is notoriously difficult, principal-agent theory suggests that agent autonomy is partly dependent on both the *intensity* and *heterogeneity* of the principal’s preferences (Hawkins, et. al. 2003; McCubbins, Noll, and Weingast 1987). Since monitoring an agent’s behavior is costly, a principal will only do so when it has a strong interest in a particular policy outcome. When this not the case, the agent can exploit slack and pursue its own interests. In the case of common agency (i.e., collective or multiple principals), the ability and willingness of the principal(s) to monitor the agent also depends on the heterogeneity of interests among the principal(s). When the principal(s) preferences are divided, the agent can exploit these divisions and exercise greater autonomy.

With respect to the IMF, this logic suggests that staff autonomy and influence over Fund lending decisions should be conditional on the *intensity* and *heterogeneity* of G-5 governments’ preferences (Martin 2006).¹⁵ All else equal, IMF lending should more closely reflect G-5 preferences when these countries have a strong and unified economic or geopolitical interest in a given country. Conversely, staff influence and autonomy – and therefore, the likelihood that we will observe bureaucratic slippage or rent-seeking – should greatest in cases where G-5 interests are both weak and divided. Figure 1 below illustrates this logic more clearly. When G-5 aggregate interests are strong (the top row), we should observe larger IMF loans, since the borrowing countries in question are economic and/or strategically important to the US and its G-5 partners. On the other hand, when G-5 aggregate interests are weak (the bottom row), we should generally observe smaller loans, since the EB is less likely to approve large programs for countries of lesser importance to its key members. The staff, knowing that this is the case, should propose relatively smaller loans in order to ensure EB approval.¹⁶

¹⁵ Martin also suggests that staff autonomy may arise due to informational asymmetries. While this may be the case, these asymmetries are most likely to occur in cases where G-5 governments’ interest intensity is low and their incentives to monitor economic and political developments in the borrower countries are weak.

¹⁶ Obviously, these patterns may vary significantly for individual country cases, but overall the general patterns should hold.

[FIGURE 1 HERE]

At the same time, we should also observe variation in IMF loan size as a result of differences in the heterogeneity of G-5 interests (i.e., within each row of Figure 1). The effect of G-5 interest heterogeneity on IMF loan size, however, is itself conditional on the aggregate level of G-5 interest intensity. At high levels of G-5 interest intensity, greater heterogeneity of G-5 interests should translate into conflict within the EB over the size of Fund programs. Thus, while we should still observe large IMF loans in these cases (the top right cell of Figure 1), these loans should be smaller than those provided when G-5 interests are both strong and unified (the top left cell). In these situations, the G-5 countries still have a strong collective interest in large-scale IMF lending, but those G-5 governments with less at stake will demand a price, or “logrolling cost,” for supporting their more heavily-invested counterparts’ demands for a large Fund loan.

Although it is difficult to find explicit evidence of G-5 conflict and “logrolling” within the Executive Board, there are good reasons to believe that it does occur.¹⁷ The underlying reason is that EB policymaking is not a one-shot game, but rather entails repeated strategic interaction among the same small group of countries.¹⁸ Consequently, G-5 governments’ policy positions in one lending case are likely to influence their counterparts’ future behavior. In this environment, G-5 governments have strong incentives to strike intertemporal bargains, in which those countries with relatively weak interests in a particular case temper their opposition to large-scale IMF lending in exchange for the promise of future reciprocity. This logrolling is especially likely in extreme cases, when G-5 economic or geopolitical interests are overwhelmingly weighted toward one of the five countries.¹⁹

All else equal, greater G-5 interest heterogeneity should therefore have a negative effect on IMF loan size at high levels of G-5 interest intensity. In contrast, when G-5 aggregate interests are less intense, greater interest heterogeneity should have the exact opposite effect on loan size. In these latter cases (the lower right cell of Figure 1), where G-5 preferences are weak and divided, the staff’s autonomy – and its bureaucratic incentives – will be greatest. Thus, rather than observing conflict among the G-5 within the EB in these cases, we should observe the staff engaging in and “getting away” with rent-seeking. The underlying logic here is that, while one or more of the G-5 countries may have a strong interest in the Fund’s lending decisions in such cases, its counterparts are less likely to deem the borrower

¹⁷ Analysis of available Executive Board minutes for some key cases (e.g., Mexico and Korea in the 1980s and 1990s) does indicate that logrolling has occurred in the recent past within the IMF. See Copelovitch 2006.

¹⁸ This is particularly true for the G-5, given their permanent status as EB members.

¹⁹ Such cases are likely to occur with relative frequency, since each of the G-5 countries has certain regions or countries in which they hold privileged economic or strategic interests (e.g., France and North Africa, Germany and Eastern Europe, the US and Latin America).

country or the outcome important enough to closely monitor the staff's lending proposal.²⁰ Furthermore, they are unlikely to exert the effort necessary to sanction the IMF staff for engaging in rent-seeking.²¹ All else equal, loans in the lower right cell of Figure 1 (low G-5 intensity, high G-5 heterogeneity) should therefore be larger than those in the lower left cell (low G-5 intensity, low G-5 heterogeneity). In other words, these loans will include a “rent-seeking premium” rather than a “logrolling cost.”

In sum, focusing on the interactive relationship between G-5 interest intensity and heterogeneity allows us to generate clear, testable, case-specific predictions about the extent of agency slack – and, therefore, about the relative influence of G-5 governments and the Fund staff – in IMF policymaking. All else equal, loans should most closely reflect G-5 geopolitical and economic interests when these countries have strong, unified preferences within the EB. In contrast, the Fund's principal-agent problem is most severe when G-5 preferences are weak and heterogeneous, and the staff is able to exploit its autonomy to engage in bureaucratic rent-seeking. This logic suggests that the IMF is neither servant nor master, and it casts doubt on the explanatory power of existing one-dimensional theories of Fund decision-making. Ultimately, both states and bureaucrats influence Fund policy decisions, and the relative influence of both varies over time and across cases.

Testing the collective principal model

Figure 2 provides some preliminary evidence in support of this logic. Using one common proxy for G-5 interests over IMF lending (commercial bank exposure), this figure shows that, on average, loans are largest when G-5 interests are strong and unified (top left cell). Loans are still large, but less so, when G-5 interests are strong in the aggregate but more heterogeneous (the top right cell).²² At low levels of G-5 aggregate bank exposure, IMF loans are consistently smaller, although the table does not show evidence a “rent-seeking premium” when G-5 interests are weak and divided.

[FIGURE 2 HERE]

²⁰ Examples of these types of cases might include former British or French colonies that are relatively small economically, or small countries in Latin America or East Asia deemed important by the US or Japan.

²¹ The up-or-down nature of EB votes on staff proposals makes this even more likely. Given the delay involved in rejecting a staff loan proposal, the EB is unlikely to vote down a program in these cases, even if it feels that the staff is engaging in rent-seeking by proposing a loan larger than the economic circumstances warrant.

²² This is only one of several variables used to proxy rich countries' interests in IMF lending. See below.

To test these hypotheses more rigorously, I conduct an econometric analysis using an original dataset of 197 short-term IMF loans (Stand-by Arrangements, Extended Fund Facilities) to 47 “emerging market” countries from 1984-2003.²³ These countries are middle-income developing countries that typically borrow internationally on private markets. The IMF also lends on a long-term basis to extremely poor countries that depend almost exclusively on “official” lending for external finance, but these loans differ markedly from short-term Fund programs: they are not linked to specific repayment timetables and are fully financed from a separate trust fund rather than from IMF quotas.²⁴ Although many studies of IMF lending pool these two types of loans and countries, doing so is very likely to result in biased predictions about the Fund’s short-term lending behavior (Copelovitch 2006). Data on each loan’s characteristics are taken from the IMF’s online lending arrangements database, as well as from documents available at the IMF Archives: the “Letter of Intent” declaring a borrower’s intent to borrow from the IMF, the “Memorandum of Economic Policies” specifying a loan’s conditionality, and the “Staff Report” to the EB providing a detailed analysis of the country’s economic situation and the proposed program. Each observation in the dataset is a unique country-year-loan. Since not all country-years are in the sample, the dataset is an unbalanced panel.

Dependent variable

The dependent variable is loan size, measured in terms of a country’s IMF quota. This variable (*AMTQTA*) is the total amount of short-term IMF lending approved for country *i* in year *t*, divided by the country’s Fund quota. *AMTQTA* enters as a natural log to control for outlier observations and to ensure that the data correspond as closely as possible to the OLS assumption of a normally distributed dependent variable.²⁵ Summary statistics for *AMTQTA*, along with those for the independent variables described below, are presented in Table 1.

[TABLE 1 HERE]

²³ Although data for most variables used in this analysis are available from 1970, the BIS banking statistics are available only from 1983. The dataset therefore begins in 1984, since all variables are lagged one period. Missing data reduces the sample to 43 countries in the tables presented below.

²⁴ Eligibility for these Poverty Reduction and Growth Facility (PRGF) loans is determined by a per capita GDP ceiling of \$895 (2003 dollars). 78 countries are currently eligible. From 1989-2001, PRGF loans constituted more than a third (108) of the Fund’s 316 loans but only 7% of total IMF lending.

²⁵ Substituting the natural log of absolute loan size for *AMTQTA* does not change the substantive results. Likewise, the results hold if one tests loan size in relation to GDP rather than quota.

Independent variables

To test my hypotheses, it is necessary to identify proxies for the intensity and heterogeneity of G-5 interests in specific IMF lending cases. In order to do this, I utilize several measures of G-5 interests that have been tested previously in the literature and found to be significant determinants of Fund lending. As noted above, there is a good deal of debate in the literature about which variables are most relevant in shaping the political interests of the US and other powerful states within the IMF. Some argue that G-5 interests are driven primarily by geopolitics (Thacker 1999, Stone 2004), while others emphasize the importance of rich countries' domestic financial interests (Broz and Hawes 2006, Broz 2005, Copelovitch 2006/4, Oatley and Yackee 2004). Following Stone (2004), I test measures of both types of G-5 interests. While each of these variables measures something potentially different about an IMF borrower country's importance for G-5 governments, all gauge – to some extent – the relative importance these countries assign to a borrower as they make decisions within the Fund's Executive Board.

As proxies for G-5 geopolitical interests, I utilize two sets of data: G-5 foreign aid commitments and voting affinity within the UN General Assembly (UNGA). Since donor countries give foreign aid for a variety of reasons, this metric is a very rough measure of a given country's importance to the G-5; nonetheless, as Stone argues, the “distribution of aid across countries reflects the relative priority donors attach to them” (2004, 579). Likewise, while most votes in the UNGA are symbolic, previous scholars have argued that they are a good proxy for the overall foreign policy alignment between countries (Thacker 1999, Stone 2004, Vreeland 2005).

Data on foreign aid are taken from the OECD database on Official Development Assistance (ODA). I utilize data on total commitments, rather than that on net flows, since flows fluctuate significantly from year to year for a variety of reasons. In contrast, overall commitments are fairly stable over time, thereby providing a more consistent measure of a country's relative importance to G-5 governments. For UN voting affinity, I utilize Erik Gartzke's Affinity of Nations dataset (Gartzke 2006), which calculates “S-scores” that measure “the similarity between two countries' voting profiles as the length of a line between two points in a multidimensional issue space” (Stone 2004, 580).²⁶

As a proxy for G-5 economic interests, I follow most recent work in utilizing commercial bank exposure data (Broz and Hawes 2006, Copelovitch 2006, Oatley 2002). While other economic links between G-5 countries and IMF borrowers are also important (e.g., equity financing, foreign direct investment, trade), these flows are highly correlated

²⁶ The specific variable is *S3UN*, which ranges from -1 to 1 and is coded based on a yes/abstain/no voting record. It is worth noting that the results presented here do not change when substituting simple correlations of UN voting in a given year, as well year-to-year changes in voting correlation. To calculate the standard deviations and coefficients of variation below, I rescale *S3UN* from 0 to 2.

with bank lending in most country cases. Moreover, banks and other private creditors (e.g., institutional investors) stand to benefit most directly from IMF lending, since Fund credit is frequently transferred from the borrower to private creditors in the form of external debt payments. Thus, bank exposure provides a strong measure of a country's overall economic and financial importance to the G-5 countries. Data on bank exposure are taken from the Bank for International Settlements' *Consolidating International Banking Statistics* database.

Utilizing these datasets, I calculate two sets of variables. The first is a series of measures of aggregate G-5 interests, which are intended to capture the overall *intensity* of G-5 preferences in a particular lending case. *G5BANK* is the sum of G-5 commercial bank exposure, in millions of dollars, weighted by the relative voting power of the US, UK, Japan, Germany, and France in the EB.²⁷ *G5AID* employs the same specification, substituting the foreign aid commitment data. Finally, *G5S* is the weighted aggregate "S-score," measuring voting similarity between the G-5 countries and each borrower country. *G5BANK* and *G5AID* enter the models below as natural logs, in order to control for the severe rightward skew in the distribution of the data.²⁸

The second series of variables measures the *heterogeneity* of G-5 interests in a particular case. Using individual data for each G-5 country, I calculate the coefficient of variation of bank exposure (*COVG5BANK*), foreign aid commitments (*COVG5AID*), and UN voting affinity "S-scores" (*COVS*). The coefficient of variation (COV), which is the ratio of the standard deviation to the mean, expressed as a percentage, measures the relative dispersion of G-5 bank exposure, G-5 foreign aid levels, and G-5 voting affinity.²⁹ Higher values indicate a more uneven distribution among the G-5 countries for each variable. Figure 3 gives a sense of the extent of G-5 interest heterogeneity; it shows the relative distribution of commercial bank exposure among the G-5 countries in several recent lending cases. As the chart illustrates, significant heterogeneity in G-5 interests exists in both large and small country-cases.

[FIGURE 3 HERE]

As discussed above, I expect the effect of greater heterogeneity of G-5 interests on IMF lending to be conditional on the intensity of those interests. When G-5 aggregate interests are strong, greater heterogeneity should create conflicts within the EB and result in relatively smaller loans (due to the "logrolling cost"). However, when G-5 aggregate interests are weak, greater heterogeneity of G-5 interests is less likely to lead to conflicts within the EB.

²⁷ Data on voting power are taken from <http://www.imf.org/external/np/sec/memdir/members.htm>.

²⁸ A constant (.5) was added to each zero value to calculate the log transformations. The results are robust to the use of alternative constant values. The substantive results also do not change when substituting simple mean G-5 values rather than the weighted averages.

²⁹ $COV=100*(STD/MEAN)$

Rather, the staff should be able to exploit the combination of weak aggregate G-5 interests and internal divisions among the G-5 countries to engage in bureaucratic rent-seeking. Thus, an increase in interest heterogeneity – i.e., higher values of COV – at low levels of G-5 interest intensity should result in larger loans (as a result of the “rent-seeking premium”), rather than smaller ones. In short, I expect an interactive relationship between G-5 interest intensity and heterogeneity. To capture this relationship, I also include interaction terms in the models that follow. Each of these terms (*COVXBANK*, *COVXAID*, *COVXS*) is the product of the relevant *G-* and *COV-* terms described above.

Control variables

To control for other factors that may influence IMF lending, I include a series of additional economic and political variables. These include the duration of the IMF loan in months (*LENGTH*), the current IMF interest rate (“rate of charge”) (*IMFRATE*), and a dummy (*PASTLOAN*) if a country is already under an IMF program at the time of the new loan. I also include a number of variables that measure a variety of borrower country macroeconomic characteristics, including external debt to GDP (*DEBTGDP*); external debt service to exports (*TDSXGS*); the log of GDP in millions of current dollars (*GDP*); the log of GDP per capita (*GDPPC*), and the logged ratio of short-term debt to reserves (*STDRES*).³⁰ While IMF quota size and country GDP are almost perfectly correlated (0.92), there are a few cases (e.g., Korea, Turkey) where countries have significantly “undersized” quotas. To control for this, I also include the log of the ratio between a country’s GDP and its Fund quota (*GDPQTA*); all else equal, IMF loans should be larger as this ratio becomes larger. I also include a dummy variable, *CRASH*, which takes a value of 1 if a country experienced a sharp depreciation, or “currency crash” in the year prior to the IMF loan. This variable follows the definition of Frankel and Rose (1996) in defining a currency crash as a nominal depreciation of the currency of at least 25 per cent that is also at least a 10 per cent increase over the previous year’s depreciation rate. I include the natural log of the number of veto players in a borrower country (*CHECKS*), as a control for the impact of borrower country domestic institutions on IMF lending decisions (Vreeland 2003).³¹ Finally, I include dummy variables for each country in the sample to account for any unobserved heterogeneity not captured by the other explanatory variables.

³⁰ Data are from the World Bank’s *World Development Indicators* and *Global Development Finance*; missing values are filled using *EIU Country Data*.

³¹ The log values control for the possibility of diminishing returns to the number of veto players (Vreeland 2003). Data are from the 2004 version of the World Bank’s *Database on Political Institutions*.

In addition to these loan- and country-specific variables, I include a series of variables that capture the effect of broader global and temporal trends on specific IMF lending decisions. The first variable, *CRISES*, is a simple lagged count of the number of currency crashes in the 47-country sample in a given year (Frankel and Rose 1996). *CRISES* is a proxy for the level of global financial instability at the time in which a country seeks IMF financing. All else equal, I expect IMF loans to be larger in times of greater global instability, since the IMF should be more concerned with the risk of financial contagion. The second variable, *LIQRATIO*, is the IMF's "liquidity ratio," or the ratio of outstanding IMF loans and administrative expenses to total Fund quotas. The expectation here is that the Fund will be more liberal in its lending as its liquidity increases. The third variable, *REVIEW*, is a dummy indicating years in which a quota review was underway. It tests the "hurry-up" lending hypothesis advanced by "public choice" scholars that the staff will propose larger loans during reviews in order exhaust the Fund's resources and generate pressure for new quota increases.³² The final variable, *IMFWGDP*, measures the Fund's total quota resources as a percentage of world aggregate GDP (WDI). All else equal, I expect IMF loans to be larger in terms of country quotas as the Fund's overall resources decline relative to the size of the world economy.

Measurement and endogeneity

Given the duration of both the economic problems leading a country to seek IMF financing and the loan negotiations themselves, the time at which the independent variables are measured in studies of IMF lending involves difficult problems of interpretation and the potential for endogeneity (Knight and Santaella 1997, 413). To mitigate these issues, I follow most previous studies in lagging the explanatory variables by one period.³³ This one-period lag also reflects IMF officials' assessments about the timing and nature of the lending process. As Knight and Santaella explain, "programs approved by the end of the second quarter of a calendar year will normally have been designed on the basis of information about the macroeconomic picture for the preceding calendar year, while arrangements approved in the second half of the calendar year will generally be based on information that extends through the first half of the same year."³⁴ In the dataset, 92 of the 197 IMF loans were approved on or after July 1 of the given year (i.e., on the basis of current year data), while the remaining 105 were approved in the first half of the year. Therefore,

³² Both *LIQRATIO* and *REVIEW* are taken from Dreher and Vaubel 2003.

³³ Thacker 1999, Dreher and Vaubel 2003, Stone 2002.

³⁴ Knight and Santaella 1997, 413. The staff also considers "the latest annual estimates for the country's main macroeconomic variables and preliminary projections for at least one year ahead" (Mussa and Savastano 1999, 87).

lagging the explanatory variables by one year for all observations is actually a conservative estimate of the time lag between the initiation of the Fund lending process and ultimate approval of a loan by the EB.³⁵

Models and results

I specify an OLS model with panel-corrected standard errors and a variant of the lagged dependent variable (*PASTLOAN*), a dummy indicating whether a country has credit outstanding under previous IMF loans.³⁶ This specification accounts for the issues in time-series cross-sectional (TSCS) data that are evident in the sample (heteroskedasticity, serial and spatial autocorrelation). Table 2 presents the raw regression results of my analysis. The table shows seven models. Model 1 is a baseline specification including only the control variables. Models 2-4 present the interactive models using the three different proxies for G-5 interest intensity and heterogeneity: commercial bank exposure (*G5BANK*, *COVG5BANK*, *COVXBANK*), foreign aid commitments (*G5AID*, *COVG5AID*, *COVXAID*) and UN voting affinity “S-scores” (*G5S*, *COVS*, *COVXS*), respectively. As the summary statistics illustrate, the interaction terms are jointly significant in both the bank and foreign aid models (Models 2 and 3) but not in the UN voting affinity model (Model 4). Finally, as a robustness check, Models 5-7 present the results of models that include bank exposure, foreign aid commitments, and UN voting affinity variables for the United States only; as the goodness-of-fit statistics indicate, the interactive G-5 models perform better than those that only account for US domestic interests.

As expected, several of the control variables have consistently strong effects on IMF loan size across the various models. Longer loans tend to be larger in relation to quota: *LENGTH* is positive and significant in each of the seven models. Likewise, loan size is positively and significantly associated with higher levels of external debt/GDP, debt services/exports, and short-term debt/reserves. Similarly, the currency crash dummy is significant and positive in six of the seven models. In contrast, the number of veto players (*CHECKS*) is significant and negative only in Model 7, while the “quota gap” (*GDPQTA*) is significant only in Model 2. In addition, the IMF interest rate (*IMFRATE*), a country’s past record with the IMF (*PASTLOAN*), its GDP and GDP per capita, and the “quota gap” (*GDPQTA*) have no significant impact on IMF loan size. Similarly, *CRISES*, *LIQRATIO*, and *IMFWGDP* are insignificant in all of the

³⁵ Moreover, my goal is not to explain a country’s decision to request a loan, which often evolves over several years, but rather to explain the Fund’s subsequent choices about the loan’s characteristics. While the anticipation of an IMF agreement may have large effects on the factors treated as independent variables in this analysis, these effects generally occur prior to or immediately following the signing of a Letter of Intent, but before the staff proposes a program to the EB. Consequently, they are likely to be “built into” the data used in the staff’s proposals.

³⁶ Beck 2004, Beck and Katz 1995. The model yields substantively identical results using an alternative lagged variable, the log of total outstanding IMF credit. The results are also robust to alternative specifications (OLS, GLS, random effects). Selection bias also does not appear to be an issue: the results are also robust to Heckman two-step selection and one-to-one propensity matching specifications.

models. Of the controls for broader global and temporal trends, only the dummy for quota reviews is consistently significant, although its effect on loan size is negative – a finding that casts doubt on the “hurry-up” lending hypotheses in the “public choice” literature.

Table 3 presents more substantive quantities of interest. Using the results from Model 2, the specification including the G-5 bank exposure variables, I calculate first differences illustrating the effect of a one standard deviation change in each of the significant variables (holding all others constant at their means). Table 4 presents the same quantities of interest for Model 3, the specification including the G-5 foreign aid variables.

[TABLES 3 & 4 HERE]

Since there is an interactive relationship between the variables measuring the intensity and heterogeneity of G-5 interests, one cannot simply interpret their effects on IMF loan size by reading the regression coefficients on each component term and the interaction term (Braumoeller 2004). Rather, the effect of G-5 interest heterogeneity is conditional on the level of G-5 interest intensity (and vice versa). Figures 4-6 illustrate this interactive relationship.³⁷ Using the data from Models 3-5, each chart graphs the coefficient of the three variables measuring G-5 interest heterogeneity (*COVG5BANK*, *COVG5AID*, *COVG5S*) as the respective aggregate “intensity” variables (*G5BANK*, *G5AID*, *G5S*) vary from their minimum to their maximum.

[FIGURES 4-6 HERE]

As Figure 6 illustrates, the UN voting affinity variables do not have a significant effect on IMF loan size. While one interpretation of this finding is that G-5 political interests do not influence IMF lending decisions, the results for the G-5 bank exposure and foreign aid models clearly suggest otherwise.³⁸ Indeed, Figures 4 and 5 provide strong support for the predictions of the collective principal model. At low levels of G-5 aggregate bank and foreign aid exposure, greater G-5 interest heterogeneity (i.e., an increase in *COVG5BANK* or *COVG5AID*) has a positive effect on IMF loan size. At high levels of G-5 aggregate exposure, however, this positive effect disappears and even turns negative in the case of G-5 bank exposure. This result suggests that the IMF does indeed suffer from a principal-agent problem. When the Fund’s collective principal has weak and divided interests in a given lending case, the IMF staff

³⁷ Charts calculated using Bear Braumoeller’s Stata module: (<http://www.people.fas.harvard.edu/~bfbraum/interactgraphstata.do>).

³⁸ A more likely explanation is that UN voting affinity is an imperfect measure of a country’s geopolitical importance to the G-5. In contrast, foreign aid and bank exposure are more concrete measures of a country’s economic and political ties to the G-5.

exploits its autonomy by proposing larger loans. Without strong collective incentives to monitor staff behavior in these cases, the G-5 countries approve these loans within the Executive Board, rather than sanctioning the IMF staff for attaching a “rent-seeking premium” to the loan. In contrast, when the G-5 countries have more intense interests in a borrower country – as measured by bank exposure and foreign aid commitments – their incentives to monitor staff behavior increase. As a result, greater divisions (i.e., more interest heterogeneity) among the G-5 countries have a negative effect on loans in these latter cases; those G-5 countries without strong interests in an IMF bailout demand a “logrolling cost” from their more intensely interested G-5 counterparts in exchange for supporting loan approval in the EB.

The bottom three rows of the first differences tables (Tables 3 and 4) give a sense of the magnitude of these coefficients and how they change in accordance with shifts in both G-5 interest intensity and heterogeneity. In Table 3, we see that the effect of a one standard deviation increase in the heterogeneity of G-5 bank exposure (*COVG5BANK*) is markedly different at three different levels of aggregate G-5 bank exposure (*G5BANK*): its mean and 1.5 standard deviations above and below the mean. At the “low” level of *G5BANK*, the one standard deviation increase in *COVG5BANK* increases IMF loan size by 11.16%. At the mean level of *G5BANK*, however, the effect is negative: a one standard deviation increase in *COVG5BANK* reduces IMF loan size by 10.18%. This negative effect becomes even larger at the “high” level of *G5BANK*: a one standard deviation increase in *COVG5BANK* reduces loan size by 12.29%. Table 4 presents similar results for the corresponding interactive foreign aid model (Model 3, Table 2). At “low” levels of *G5AID* (1.5 standard deviations below the mean aggregate G-5 foreign aid level), a one standard deviation increase in *COVG5AID* increases IMF loan size by 48.35%. At the mean level of *G5AID*, however, this effect is reduced by more than half: the same increase in *COVG5AID* increases loan size by only 20.89%. Finally, at the “high” level of *G5AID* (1.5 standard deviations above the mean), the increase in *COVG5AID* has no statistically significant effect on IMF loan size.

These results clearly suggest that IMF staff autonomy – and therefore, the staff’s ability to successfully engage in rent-seeking – is conditional on the intensity and heterogeneity of G-5 member-states’ interests. When G-5 interests are weak and divided, IMF loans, *ceteris paribus*, tend to be larger. In contrast, when G-5 interests are strong and divided, IMF loans tend to be smaller, all else equal. This finding suggests that divisions among the G-5 countries translate into conflict within the EB in “important” cases, while they result in greater staff autonomy and bureaucratic rent-seeking when the borrower country is less important to the Fund’s largest shareholders.

Ultimately, these findings provide clear evidence in support of the predictions of the collective principal framework. More importantly, they help us to gauge the relative merits of the existing and competing political explanations of IMF lending. Rather than rejecting either these models, these results confirm that both powerful states' domestic interests and the rent-seeking behavior of IMF bureaucrats play a role in shaping Fund lending decisions. However, the results presented here also illustrate that each of these effects is conditional on the other. Thus, while politics does play a key role in shaping IMF lending, it does so in different ways at different times, depending on the importance of a country to the G-5 countries and the extent to which these powerful states disagree about the relative merits of large-scale IMF lending in a given case.

Conclusions

Why do IMF loans vary so widely in size over time and across cases? In this article, I seek to answer this question using a collective principal model, in which a subset of member-states – the G-5 countries that exercise *de facto* control over the IMF Executive Board – acts as the Fund's political principal. Within this framework, IMF lending decisions are heavily influenced by the intensity and heterogeneity of G-5 governments' preferences, which determine the extent to which Fund programs reflect these countries' economic and geopolitical interests, as well as the extent to which the IMF staff acts autonomously and engages in bureaucratic rent-seeking. The empirical analysis provides strong support for this framework and its predictions.

These findings have important implications for our understanding of the politics of IMF lending. Above all, they clearly illustrate that no single actor “controls” the IMF. While powerful states exert great influence over Fund decisions, this influence does not lie unilaterally with the US, and powerful states' ability to control IMF decisions is partially constrained by the staff's substantial autonomy. Likewise, staff influence over Fund policies is circumscribed by the authority of the EB, particularly in cases where the interests of the G-5 countries are strong and unified. Ultimately, the relative influence of states and IMF bureaucrats varies over time, and effective “control” over Fund lending policies depends on what is at stake in a particular case.

More broadly, this paper speaks to the relative merit of recent policy proposals to reform the IMF. In particular, it casts doubt on the merits of proposals to alter the distribution of votes within the EB in order to give developing countries a greater say in Fund decisions.³⁹ Implicit in these proposals is the assumption that reducing the

³⁹ Chris Giles and Krishna Guha, “IMF Chief Seeks More Say for Asian Nations,” *Financial Times*, April 6, 2006.

influence of the G-5 countries will remove “politics” from IMF lending and enhance the Fund’s independence. In contrast, my findings suggest that this outcome is highly unlikely occur. Indeed, replacing G-5 votes with those of other countries would not necessarily result in a more technocratic or independent IMF; rather, it would simply replace G-5 governments’ political interests with those of other large countries. Moreover, spreading voting power more evenly among a broader group of states would likely increase the scope for agency slack by exacerbating the problem of preference heterogeneity among the EB, the Fund’s collective principal. Thus, eliminating the influence of G-5 domestic politics through EB voting reform might have the paradoxical effect of increasing the prevalence of bureaucratic rent-seeking in IMF lending.

This article also speaks to a broader set of issues concerning international organizations (IOs). In particular, it addresses a critical yet understudied question: what do IOs actually do and why? Although questions of international cooperation and institutional design are important, there is a clear need for more empirical work analyzing IOs as actors in their own right. The results presented here suggest that there is much to learn about IOs by focusing on the policies they make, rather than solely on the reasons they are created. Furthermore, this study addresses a key question for both rationalist and constructivist IPE scholars: the relative influence of states and bureaucrats in IO policymaking. Rationalists have addressed this issue largely from a state-centric standpoint by focusing on agency slack and the logic of delegation (Hawkins, et. al. 2006). In contrast, constructivists have focused more extensively on the independent influence of IO bureaucrats, arguing that they are “authorities in their own right, and that authority gives them autonomy vis-à-vis states, individuals, and other international actors” (Barnett and Finnemore 2004, 5). My findings strongly suggest that these approaches are complementary, and that we cannot explain IO behavior without considering the interests and influence of both sets of actors in international relations.

Finally, my findings highlight the potential utility of the “collective principal” model for analyzing policymaking within a variety of different political institutions. For instance, this framework might be applied usefully in the domestic context to analyze the extent to which central banks and regulatory agencies act independently of (and contrary to) their legislative or executive principals. Likewise, we might explain variation in the policies of the World Bank, World Trade Organization, and other formal IOs by focusing more closely on measuring the intensity and heterogeneity of interests among these institutions’ most influential member-states. In short, by treating agency slack as a variable, we can generate testable hypotheses about the relative influence of principals and agents in a wide variety of political institutions at both the domestic and international levels.

TABLE 1 – SUMMARY STATISTICS, IMF LENDING DATASET, 1984-2003

Variable	Observations	Mean	Std. Dev.	Min	Max
AMTQTA	208	-0.30	0.89	-1.93	1.96
LENGTH	208	20.04	9.22	8.25	48.00
IMFRATE	208	5.39	1.51	2.20	8.40
PASTLOAN	208	0.66	0.47	0	1
GDPPC	207	8.61	0.40	7.07	9.58
GDP	208	10.15	1.44	5.66	13.32
GDPQTA	208	4.21	0.60	2.79	6.55
EDTGDP	205	58.49	35.81	0.00	231.33
TDSXGS	196	23.55	18.71	0.02	93.63
STDRES	199	-0.24	1.37	-4.61	5.03
CRASH	208	0.17	0.38	0	1
CHECKS	197	0.95	0.63	0.00	2.08
CRISES	197	6.66	2.76	1	12
LIQRATIO	208	0.30	0.07	0.20	0.46
REVIEW	208	0.60	0.49	0	1
IMFWGDP	208	0.0007	0.0001	0.0006	0.0009
G5BANK	197	7.36	2.54	0.00	11.23
COVG5BANK	208	115.53	46.58	0.00	223.61
G5AID	187	3.20	1.63	-2.85	8.62
COVG5AID	187	134.45	46.40	31.55	223.61
G5S	206	0.22	0.25	-0.22	1.00
COVS	206	23.50	6.73	0.00	39.47

TABLE 2 – REGRESSION RESULTS

Dependent variable: Loan amount/quota (AMTQTA)

	1	2	3	4	5	6	7
LENGTH	0.045*** [0.005]	0.044*** [0.004]	0.046*** [0.004]	0.045*** [0.004]	0.046*** [0.004]	0.044*** [0.004]	0.045*** [0.004]
IMFRATE	-0.060 [0.071]	-0.069 [0.067]	-0.101 [0.062]	-0.088 [0.062]	-0.066 [0.070]	-0.116* [0.065]	-0.076 [0.061]
PASTLOAN	-0.145 [0.127]	-0.203 [0.132]	-0.035 [0.135]	-0.222 [0.135]	-0.116 [0.127]	0.003 [0.141]	-0.223* [0.131]
GDPPC	0.251 [0.916]	0.643 [0.892]	0.505 [0.859]	-0.847 [0.920]	0.488 [0.897]	0.244 [0.939]	-0.923 [0.847]
GDP	0.464 [0.715]	0.473 [0.681]	0.281 [0.731]	0.765 [0.656]	0.246 [0.725]	-0.041 [0.828]	0.750 [0.645]
GDPQTA	0.238 [0.293]	0.443* [0.257]	0.291 [0.302]	0.277 [0.264]	0.314 [0.302]	0.250 [0.284]	0.288 [0.273]
EDTGDP	0.004 [0.003]	0.007** [0.003]	0.005** [0.002]	0.005* [0.003]	0.004 [0.003]	0.005** [0.002]	0.005* [0.003]
TDSXGS	0.014** [0.006]	0.018*** [0.006]	0.015** [0.006]	0.018*** [0.006]	0.014** [0.006]	0.016** [0.006]	0.018*** [0.006]
STDRES	0.078** [0.038]	0.114** [0.048]	0.081 [0.052]	0.085** [0.036]	0.070* [0.042]	0.034 [0.048]	0.085** [0.036]
CRASH	0.266* [0.136]	0.230 [0.152]	0.329** [0.133]	0.255* [0.131]	0.250* [0.143]	0.274** [0.137]	0.254* [0.131]
CHECKS	-0.195 [0.120]	-0.161 [0.116]	-0.143 [0.159]	-0.242* [0.133]	-0.172 [0.121]	-0.237 [0.148]	-0.243* [0.132]
CRISES	0.012 [0.026]	0.016 [0.024]	-0.003 [0.024]	0.022 [0.026]	0.001 [0.026]	0.012 [0.024]	0.023 [0.027]
LIQRATIO	-0.528 [0.795]	-0.310 [0.700]	-0.433 [0.616]	-0.918 [0.664]	-0.097 [0.807]	-0.529 [0.808]	-0.820 [0.685]
REVIEW	-0.120* [0.072]	-0.151*** [0.050]	-0.159** [0.075]	-0.123* [0.063]	-0.136* [0.075]	-0.123 [0.080]	-0.117* [0.067]
IMFWGDP	731.276 [776.297]	1110.657 [743.932]	300.637 [694.026]	811.379 [659.768]	817.573 [773.798]	657.897 [706.521]	831.124 [695.529]
G5BANK		-0.050 [0.064]					
COVG5BANK		0.005*** [0.002]					
COVXBANK		-0.001*** [0.000]					

[CONTINUED]

	1	2	3	4	5	6	7
G5AID			-0.144*				
			[0.077]				
COVG5AID			0.006***				
			[0.002]				
COVXAID			0.000				
			[0.000]				
G5S				-0.091			
				[1.012]			
COVS				0.011			
				[0.014]			
COVXS				-0.016			
				[0.040]			
USBANK					-0.093*		
					[0.053]		
USAID						-0.193***	
						[0.066]	
USS							-0.451*
							[0.243]
CONSTANT	-10.582**	-14.587***	-10.978***	-5.034	-10.135**	-5.193	-4.195
	[4.883]	[4.720]	[4.005]	[4.533]	[4.773]	[4.770]	[4.341]
Observations	178	178	167	177	178	167	177
Number of code	43	43	43	43	43	43	43
Log-likelihood	-117.023	-110.081	-100.933	-105.535	-115.901	-110.375	-106.281
R-squared	0.726	0.747	0.760	0.759	0.730	0.731	0.757
Adj. R-squared	0.597	0.617	0.624	0.635	0.598	0.587	0.638
Interaction joint significance (chi2)	N/A	16.540	37.460	4.670	N/A	N/A	N/A
Interaction joint significance (p-value)	N/A	0.001	0.000	0.198	N/A	N/A	N/A

Standard errors in brackets; country fixed effects not shown

* p<.10; ** p<.05; *** p<.01

TABLE 3 – FIRST DIFFERENCES, IMF LOAN SIZE (MODEL 2)*

Predicted change in loan size (AMTQTA)		Interpretation of one standard deviation change
LENGTH	45.77%	20 to 30 months
GDPQTA	27.61%	67.4 to 127.74 times quota
EDTGDP	24.30%	58.49% to 94.3%
TDSXGS	34.35%	23.55% to 42.26%
STDRES	14.39%	0.79 to 3.09 times reserves
REVIEW	-12.30%	0 to 1
COVG5BANK (G5BANK=3.55)	11.16%	115.53 to 162.10
COVG5BANK (G5BANK=7.36)	-10.18%	115.53 to 162.10
COVG5BANK (G5BANK=9.90)	-12.29%	115.53 to 162.10

*Values of COVG5BANK correspond to values at the mean and ± 1.5 standard deviations.

TABLE 4 – FIRST DIFFERENCES, IMF LOAN SIZE, (MODEL 3)*

Predicted change in loan size (AMTQTA)		Interpretation of one standard deviation change
LENGTH	48.64%	20 to 30 months
EDTGDP	17.60%	58.49% to 94.3%
TDSXGS	28.89%	23.55% to 42.26%
CRASH	32.82%	0 to 1
REVIEW	-14.23%	0 to 1
COVG5AID (G5AID=0.39)	48.35%	134.14 to 178.36
COVG5AID (G5AID=2.91)	20.89%	134.14 to 178.36
COVG5AID (G5AID=5.43)	8.97%**	134.14 to 178.36

*Values of COVG5AID correspond to values at the mean and ± 1.5 standard deviations.

**Not statistically significant at 95% confidence

FIGURE 1: IMPACT OF G-5 PREFERENCE INTENSITY AND HETEROGENEITY ON IMF LENDING

Heterogeneity of G-5 interests

Intensity of G-5 interests	<i>Low</i>	<i>High</i>
<i>High</i>	<ul style="list-style-type: none"> • G-5 consensus • Largest loans 	<ul style="list-style-type: none"> • G-5 conflict • Large loans, but “logrolling” cost
<i>Low</i>	<ul style="list-style-type: none"> • G-5 consensus • Smallest loans 	<ul style="list-style-type: none"> • G-5 conflict • Small loans, but “rent-seeking” premium

FIGURE 2: MEAN LOAN SIZE (AMOUNT/QUOTA) BY G-5 BANK EXPOSURE AND HETEROGENEITY

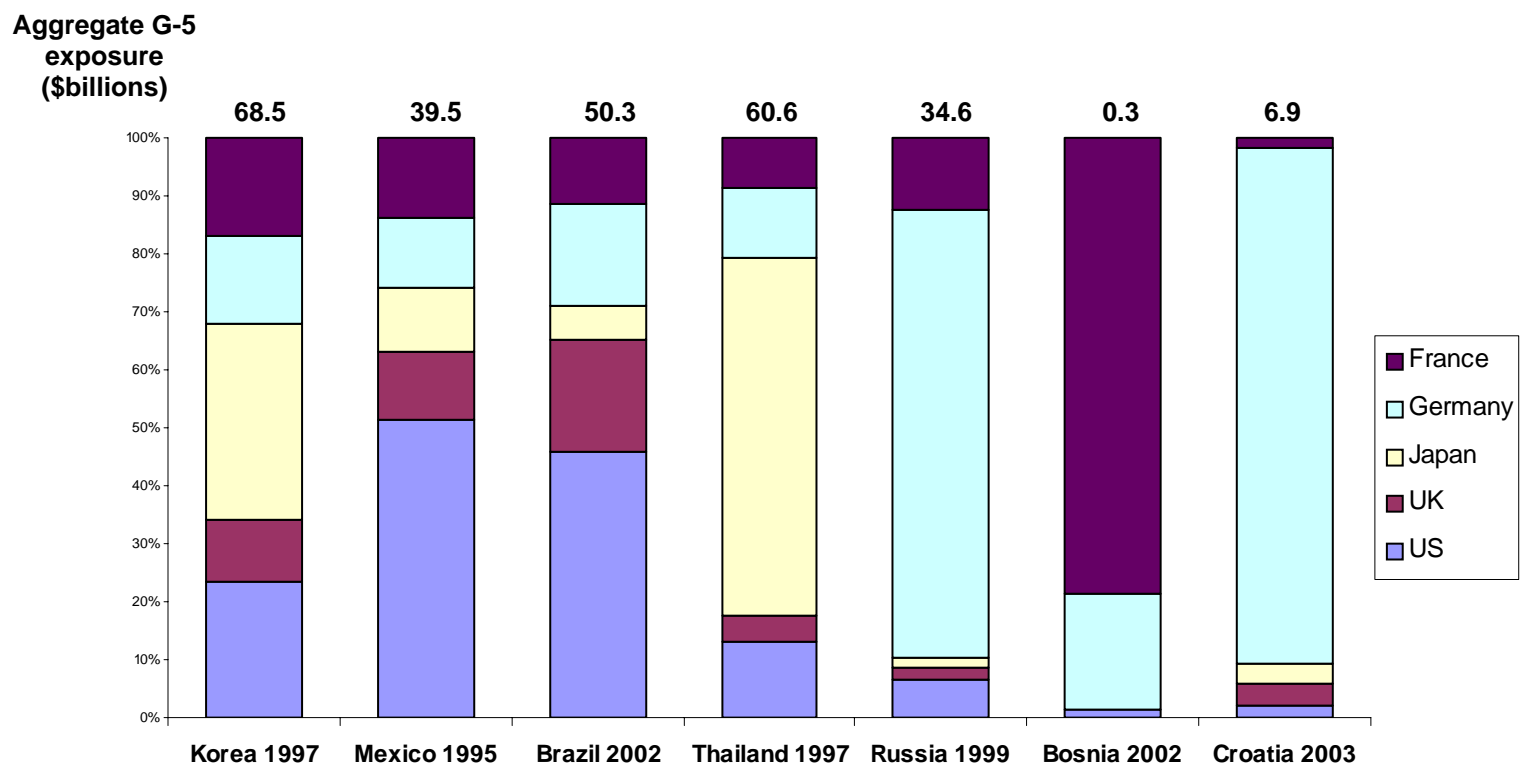
Short-term IMF loans, 47 countries, 1984-2003 (N=208)

G-5 bank exposure, coefficient of variation

Aggregate G-5 bank exposure	<i>Low*</i>	<i>High*</i>
<i>High*</i>	AMTQTA=2.04 (N=84)	AMTQTA=1.12 (N=34)
<i>Low*</i>	AMTQTA=0.63 (N=26)	AMTQTA=0.60 (N=64)

*"High" = above the sample mean in a given year; "Low" = below the sample mean in a given year

FIGURE 3 – G-5 BANK EXPOSURE IN RECENT IMF LENDING CASES



SOURCE: Bank for International Settlements, *Consolidated International Banking Statistics*

FIGURES 4-6

EFFECT OF G-5 INTEREST HETEROGENEITY ON LOAN SIZE AT DIFFERENT LEVELS OF G-5 INTEREST INTENSITY

Figure 4: G-5 commercial bank exposure (G5BANK, COVG5BANK)

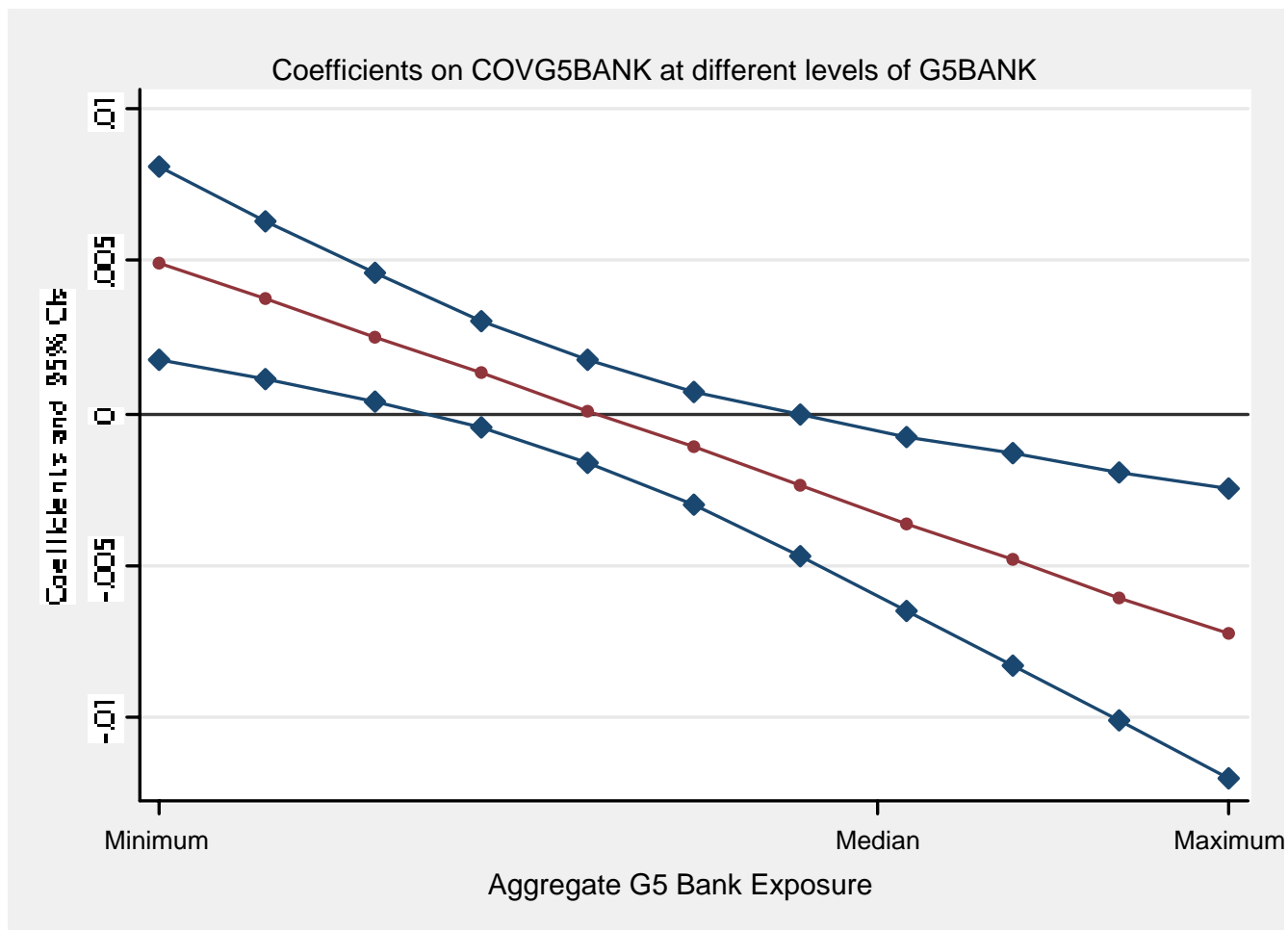


Figure 5: G-5 foreign aid commitments (G5AID, COVG5AID)

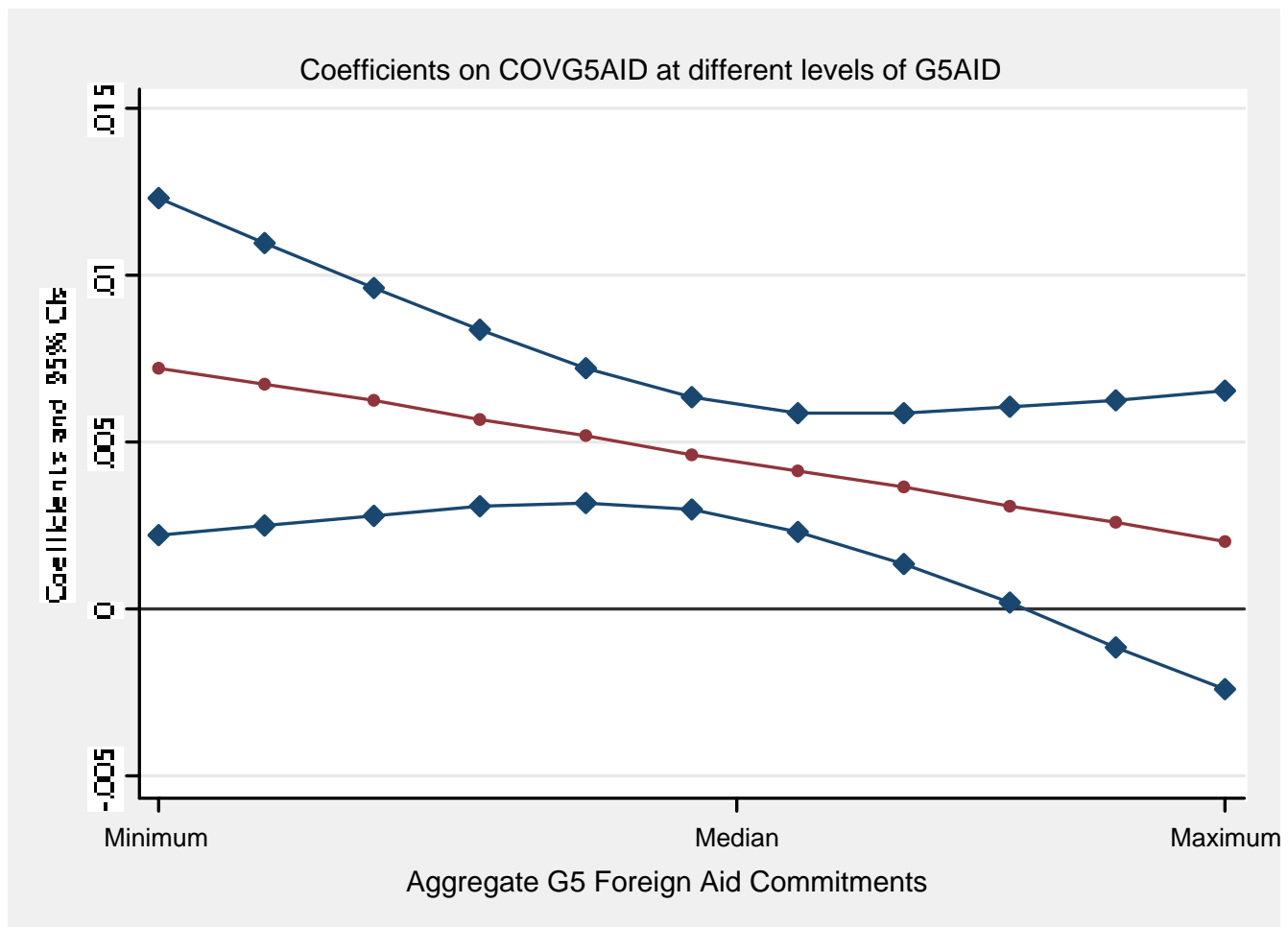
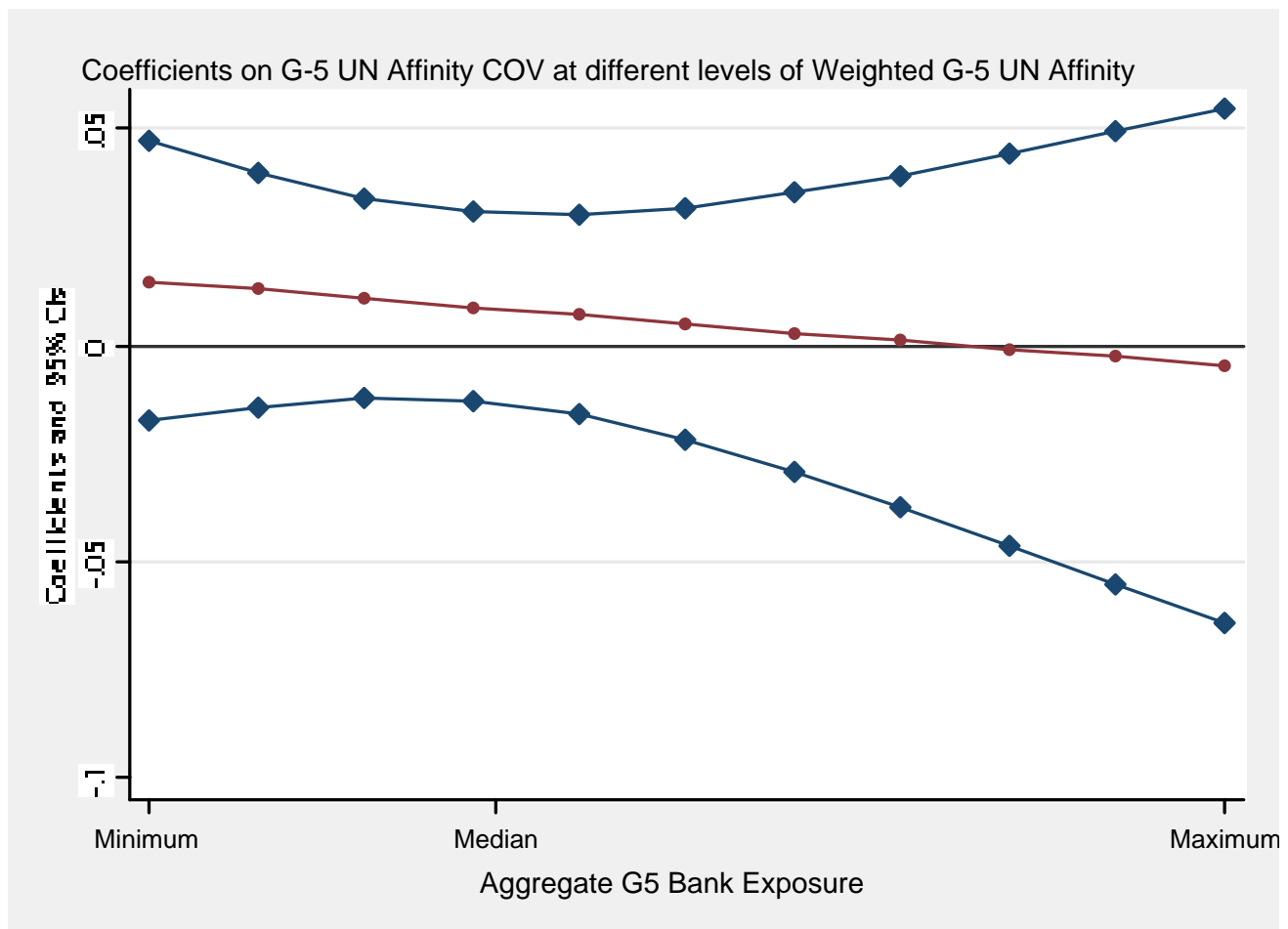


Figure 6: G-5 UN voting affinity (G5S, COVG5S)



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