

# Waiting is the Hardest Part: IMF Lending Responsiveness, 1984-2009\*

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December 4, 2013

## Abstract

While there is a considerable amount of research investigating the political economy of IMF lending, we know strikingly little about how responsive the IMF is to loan requests. In this paper, I introduce new data measuring the duration of IMF loan approval periods from 1984-2009. Examination of these data reveals considerable variation in the number of days between loan requests and approvals across borrowers. Why are some requests approved more swiftly than others? My empirical analysis reveals several interesting findings. First, for the majority of the years in my sample, increased geopolitical importance of a borrower country to both the U.S. and “G5” countries is associated with faster loan approval. However, this relationship does not hold during the first four years of my sample (1984-1987). During this period, financial factors are linked to variation in Fund lending responsiveness. Yet, the direction of the relationship may seem somewhat surprising: loan requests from borrower countries where U.S. and G5 banks were more exposed faced *longer* waits prior to approval when compared to borrower countries where exposures were smaller. I argue this was an effect of the Fund’s concerted lending strategy during these early years of the Least Developed Countries (LDC) Debt Crisis.

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\*Prepared for the 2014 Political Economy of International Organizations (PEIO) annual conference, January 16-18, Princeton, New Jersey. Comments welcome.

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# 1 Introduction

In recent years, scholars of political economy have built an impressive, cohesive literature analyzing the lending practices of the the International Monetary Fund (IMF). This research has produced important new knowledge about the factors that influence variation in IMF loan selection, loan terms, and loan size. Most notably, a number of studies have found consistent evidence that U.S. economic and geopolitical interests influence IMF lending behavior (Broz and Hawes 2006; Dreher and Jensen 2007; Dreher, Strum, and Vreeland 2009; Copelovitch 2010; Oatley and Yackee 2004; Thacker 1999; Stone 2004, 2008, 2011; Vreeland 2003, 2005). Yet, despite this rich body of literature, there has been no systematic analysis of IMF lending responsiveness; that is, the speed with which the Fund approves loan requests.<sup>1</sup> Yet, the issue of IMF lending responsiveness is quite important, especially given the fact that the Fund has for three decades assumed the role of *de facto* international lender of last resort (ILLR)—a role that, according to some scholars, the institution is not well suited to perform given its historical inability to disburse funding to crisis stricken economies with sufficient speed (Fischer 1999; Schwartz 2002; Munk 2010). Yet, in truth, we know strikingly little about how quickly the Fund responds to borrower requests. This is a serious gap in our knowledge about IMF lending. In today’s global financial system, the speed with which an economy in crisis can acquire emergency funding is arguably as important as the size of the loan itself (Bordo and James 2000; Fernández-Arias 2010). For instance, Fernández-Arias and Levy-Yeyati (2010) recently argued that an ILLR should ideally provide “timely, immediate disbursements” to prevent or mitigate financial crises. What good is a fire truck if it arrives after the house has already burned to the ground?

As a first step toward addressing this gap in our knowledge about IMF lending, this paper introduces and analyzes new data on the speed of IMF loan approvals compiled through reviewing documents in the Fund’s digital archives.<sup>2</sup> For sixty years now, the IMF’s workhorse

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<sup>1</sup>Kilby (2011) asks a similar question about variation in project preparation time at the World Bank.

<sup>2</sup>Digital documents were accessed at the IMF archive in Washington D.C. Since beginning this project,

emergency lending mechanism for countries facing short-term balance-of-payments problems has been the Stand-by Arrangement (SBA). In the mid-1970s, the Fund introduced the Extended Fund Facility (EFF) as a complement to the SBA for countries needing medium-term balance-of-payments assistance. Together, the SBA and EFF account for the vast majority of the Fund's non-concessional lending activities dating back to the institution's creation. I focused my data collection efforts on the Fund's responsiveness to SBA and EFF requests by member states over a more than 25 year period from 1984 through 2009. The dependent variable in this study is quite straightforward: The number of days that transpire between the date an IMF member country formally submits a "Letter of Intent" to the IMF Executive Board requesting a loan and the date the Executive Board approves that request. A review of the data reveals an interesting degree of variation in the Fund's responsiveness across time and borrowers. For example, the average number of days between loan request and approval for the sample is about 38, however, the standard deviation is almost as large at about 31 days. Additionally, there is a substantial amount of variation over time. For instance, in 1984—the first year in the sample—approval periods averaged nearly 59 days. By 2009, this had dropped to about 14 suggesting the Fund has become more responsive to borrowers over time.

While the IMF's apparent improvement in responsiveness over time is both a novel and compelling observation itself, this paper does not attempt to explain this broader trend (though it hopes to shed some light on the issue). Instead, this study begins with a more modest question: Why are some loan requests approved relatively quickly while others wait much longer for approval? In other words, what factors affect the responsiveness of loan approval by the Executive Board? Statistical analysis of 258 loan requests from 1984 through 2009 reveals several interesting findings. First, increased geopolitical importance of a borrower country to both the U.S. and "G5" countries (United States, United Kingdom, Ger-

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the Fund has made its digital archive available to the public on the web at [http://www.imf.org/external/adlib\\_is4/default.aspx](http://www.imf.org/external/adlib_is4/default.aspx).

many, Japan, and France) is associated with faster loan approvals. However, this relationship does not hold during the first four years of the sample (1984-1987) which coincide with the so-called “concerted lending” strategy adopted by the Fund during the initial years of the least developed countries (LDC) debt crisis. During this period, financial factors—rather than geopolitical—appear to explain variation in Fund lending responsiveness. Yet, the direction of the relationship is, on its face, somewhat surprising: Loan requests from borrower countries where U.S. and G5 banks were more exposed actually faced *longer* waits prior to approval when compared to borrower countries where exposures were smaller.

This paper is organized as follows. First, I briefly review the existing literature on IMF lending, focusing on two distinct theoretical traditions that inform my argument: public-choice and structural perspectives of international organizations. Next, I present the puzzle this paper aims to explain: variation in the duration of loan approval periods. Here I introduce my newly collected data on IMF lending responsiveness by describing how I operationalize the dependent variable and examining its distribution across borrowers and time. Next, I present my argument and develop several testable hypotheses, introduce my research design, summarize my empirical results before offering some concluding thoughts. Ultimately, I contend that my empirical results are broadly supportive of a structural perspective of international organizations where institutions act as agents that serve the interests of powerful states. However, I also argue that the counterintuitive finding regarding the relationship between bank exposure and IMF responsiveness during the LDC debt crisis is consistent with a particular strand of the public choice analytic tradition. Namely, I conclude that IMF leadership’s fear of blame and failure led them to seek excessive insurance against program failure which directly contributed to longer loan approval periods for countries where major commercial banks were most exposed.

## 2 The Political Economy of IMF Lending: Two Perspectives

In recent years there has been considerable growth in the number of studies investigating the political economy of IMF lending. A prominent debate in the existing literature pits those who assert the IMF is best characterized as an independent actor versus those who argue the Fund is better conceived of as an agent of a few states that hold considerable sway within the institution, especially the U.S. Scholars in the former camp typically operate from within the public choice tradition emphasizing how bureaucratic incentives influence IMF behavior over time (Vaubel 1991; Willett 2002; Dreher and Vaubel 2004). Conversely, Steinwand and Stone (2006) place scholars in the latter (and larger) group into a theoretical tradition that takes a “structural approach” to international institutions, emphasizing power differentials between states and variation in national interests (Broz and Hawes 2006; Copelovitch 2010; Dreher and Jensen 2007; Dreher, Strum and Vreeland 2009; Oatley and Yackee 2004; Stone 2004, 2008, 2011; Thacker 1999; Vreeland 2003, 2005).

In general, within the public-choice analytic tradition, there are two views of the IMF. Vaubel (1991) represents the first. He conceptualized of the Fund as a largely autonomous organization comprised of bureaucrats facing individual employment and income incentives to increase demand for their organization’s credits and to disregard borrower adjustment. Discussing the Fund’s evolution post-Bretton Woods, Vaubel argues, “By slowing down...adjustment, the IMF could increase the size and duration of its lending and extend the period of policy supervision” (215). This “budget-maximization” public-choice approach focused on the perverse incentives IMF officials may face when making lending decisions and left little room for other individual-level motivations. The second approach is best exemplified in Willett (2002) who proposed what he called a “soft-core” public-choice theory differing from Vaubel’s variety. Willett argued that Fund staff members are neither

“saints nor sinners”—while not motivated by greed, they are susceptible to sources of bias. He highlighted three such sources including: (1) responding to lobbying pressure from national policymakers and members of the financial community which may influence the officials’ own perceptions and hence their decision making; (2) a desire for freedom of action which may lead to a lack of transparency at the institution; (3) a fear of failure or criticism which may promote excessive insurance against crises manifested through increasing Fund resources and erring on the side of larger loan packages. Willett also considered IMF officials to be motivated by an interest in attaining personal prestige, self-preservation, and avoiding blame for unsuccessful programs. This relates directly to the last potential source of bias above—“fear of failure”—since the perception that an IMF program failed would tend to harm such interests.

Outside of the public choice approach, most recent studies on IMF lending behavior tend to fall into the “IMF as agent” camp. Typically, these are statistical studies that share the basic goal of determining the extent to which interests of powerful donor countries within the IMF (especially, the U.S.) influence several different dimensions of IMF lending including loan selection, conditionality, and loan size. Broadly speaking, the key explanatory variables in these studies fit one of two categories: geopolitical and financial. The first group consists of predictors like U.N. voting patterns, U.N. Security Council (UNSC) temporary membership, and official development assistance (ODA) flows. These are intended to serve as proxies for the relative geopolitical and strategic value of borrower countries to the U.S., the largest shareholder at the Fund. Studies employing these variables have consistently found support for claims that American allies and countries of strategic import are either more likely to be selected for IMF loans in the first place or, when selected, receive larger IMF loans and face less stringent conditions than countries where U.S. interests are not as apparent (Dreher and Jensen 2007; Dreher, Strum and Vreeland 2009; Oatley and Yackee 2004; Stone 2004, 2008, 2011; Thacker 1999; Vreeland 2003, 2005).

Outside of geopolitical factors, a number of studies have focused on a second type of predictor: U.S. financial interests. The most common variable used to capture this has been

U.S. bank exposure as a proxy for private American financial interests in borrower countries. As was the case with the geopolitical predictors discussed previously, studies have found that countries where American commercial bank loans are more heavily concentrated typically get larger loans with weaker conditionality (Oatley and Yackee 2004; Broz and Hawes 2006; Stone 2011).<sup>3</sup> Copelovitch (2010) broadens the scope beyond just U.S. interests, arguing that existing research overlooks the role of “preference heterogeneity” among major IMF shareholders. He notes that the U.S. is not alone in its influence within the institution and that collectively, the “G5” countries (United States, United Kingdom, Germany, Japan, and France) “are each entitled to appoint their own [Executive Directors to the Executive Board, and] hold a combined 38.39%” of the Executive Board’s votes (55). Thus, collectively, this group of countries has considerable influence within the IMF. Copelovitch’s empirical analysis finds that as G5 countries’ bank exposure vis-a-vis borrowing countries becomes more heterogeneous, IMF loans tend to be smaller. Similarly, as borrowing economies’ UN voting records are less closely aligned with the G5 countries, loan size also tends to shrink.

Despite this sizable extant literature analyzing Fund lending, to my knowledge no study has yet to explore the factors that influence IMF lending responsiveness. Indeed, as noted above, we know strikingly little about the speed of IMF loan approvals, either across borrowers or across time. This paper begins to address that gap in our knowledge of IMF lending practices.

### **3 The Puzzle: Variation in Loan Approval Periods**

As noted in the introduction, the primary goal of this paper is to determine what factors influence the time it takes for the Executive Board to approve an SBA or EFF request. For the purpose of simplification, I will refer to this as the the loan approval period. But,

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<sup>3</sup>In related studies, Gould (2002; 2006) finds that “supplementary financiers”—or private international creditors—influence IMF lending practices independent of the major economies.

before we can begin analyze the lag time between request and approval, we first need to determine how to best measure this. Since the IMF does not provide its own measurement, I had to develop an appropriate method to operationalize the dependent variable. In the first subsection below, I outline how I measure this and then briefly present my descriptive data.

### 3.1 Measuring IMF Lending Responsiveness

Conceptually, I am interested in the time that transpires between the date a country asks the IMF for SBA assistance and the date at which the loan request is approved by the Executive Board of the Fund. However, in practice, determining the best way to measure the speed of IMF lending is not an entirely straightforward process. At issue here is not identifying the proper “endpoint” since this is relatively obvious: the date which the requested funding was approved by the Board. Settling on an appropriate starting point, however, is not as obvious.

The process by which a member country obtains financial assistance from the IMF consists of at least two main stages. In the first stage, the member country approaches the Fund and expresses its interest in seeking assistance. However, before formally requesting a loan, the country must enter into discussions with IMF staff. In these discussions, the two sides negotiate the proposed loan’s terms including its size, maturity, and conditions designed to adjust the borrower country’s economic policies to “overcome the problems that led it to seek financial aid from the international community” in the first place (IMF 2012c). So, one option for a starting point would be the date each borrower country government *initially* approaches the Fund—prior to such negotiations taking place. There is, however, at least one major problem with this approach: Variation in the negotiation time between the borrower country and IMF staff does not necessarily reflect on the IMF’s lending responsiveness since in such bargaining situations, the length of negotiations are a function of the preferences and strategies adopted by *both* parties. Certain governments at certain times may bargain harder



with IMF staff which in turn could increase the amount of time between a loan request and loan disbursement. Yet, this increased amount of time is not entirely reflective of the Fund's responsiveness; it also reflects the behavior of the borrower country government. Since the goal of this paper is to assess IMF lending responsiveness on its own right, starting with the first stage would be theoretically inappropriate for this study.<sup>4</sup>

Another approach, which I employ here, is to use the beginning of the second stage as the appropriate starting point for measuring IMF lending responsiveness. Upon the completion of negotiations with IMF staff, an official "Memorandum of Economic and Financial Policies" is written outlining the objectives and macroeconomic and structural adjustments that the borrower government has agreed to implement in exchange for the loan as described in the memo. The memo is then submitted, along with a dated "Letter of Intent" to the Executive Board of the IMF where the Board decides, by way of a simple majority vote, whether to approve or reject the request. I recorded the date on each SBA and EFF Letter of Intent that was submitted to the IMF between 1984 and 2009.<sup>5</sup> I then calculated the number of days that transpired between the date of the Letter and the date at which the the Executive Board approved the request to determine the duration of each observation's approval period. Identifying the date on the Letters enabled me to adopt a consistent and clear method for establishing when a fully developed loan request was *formally submitted* to the IMF for approval. Moreover, beginning with the second stage isolates the IMF as the sole actor affecting responsiveness since, at this point, the borrower country is out of the picture leaving only the Executive Board to expedite or delay approval.

One potential concern regarding this method for operationalizing IMF lending responsiveness might be that this measurement could be biased by systematic variation in the Board's operation. For instance, what if the Board only meets at particular times during

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<sup>4</sup>From a practical perspective, there is also no readily available record of when each country first began negotiations with Fund staff. So, even if this method were more appropriate, it would be very difficult to obtain this information.

<sup>5</sup>SBA dates were collected by the author at the IMF archives in Washington D.C.; EFF dates were collected by a research assistant via the Fund's digital archive.

the year and is in recess at other times? This is not a major concern, however, since the Executive Board has, since its inception, functioned in “continuous session at the principal office of the Fund” and meets “as often as the business of the Fund may require” (Articles of Agreement, Article XII, Section 3(g)).<sup>6</sup> Thus, the method used here for operationalizing IMF lending responsiveness should not be affected by any systematic variation the Executive Board operations.

### 3.2 Examining the Dependent Variable

I compiled loan approval period data for a total of 343 separate developing country SBA and EFF requests from 1984 through 2009. Figure 1 presents the variation in the duration of approval periods, defined as the number of days between a formal request via a Letter of Intent and loan approval by the Executive Board. As discussed above, the mean lag time between request and approval for the population is 38.1 days with a standard deviation of 31.1. Just under two-thirds of all loan requests (219) were approved in fewer than 38 days leaving about one-third (124) of the requests above the mean approval duration. The award for longest wait in the sample goes to a 1995 SBA request from Belarus at 277 days from request to approval. Costa Rica’s 1987 SBA request tallies the second longest wait at 186 days. The award for shortest wait goes to a 1993 EFF request from Peru which was approved on the same day the Letter was filed. South Korea’s 1997 SBA request is a close second with an approval period of just one day. 21 loan requests in my sample were approved in fewer than ten days. More than half of these rapid approvals (13) occurred in the last ten years of the period under investigation (2000-2009).<sup>7</sup>

The last point speaks to a notable and important pattern in the data: Over time, the

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<sup>6</sup>Van Houtven (2002, 14-15) explained that, at the time of his writing, “Total Board meeting time averages more than 12 hours a week and over 600 hours per year, which demonstrates the intense oversight exercised by the Board on activities of the IMF. Nearly one-third of the Board meeting time is devoted to policy issues, about 60 percent to surveillance, and the remainder to administrative and budgetary matters.”

<sup>7</sup>Additionally, a number of these were approved under the Fund’s fast-track Emergency Financing Mechanisms procedures.

Figure 1: Days from Loan Request to Approval

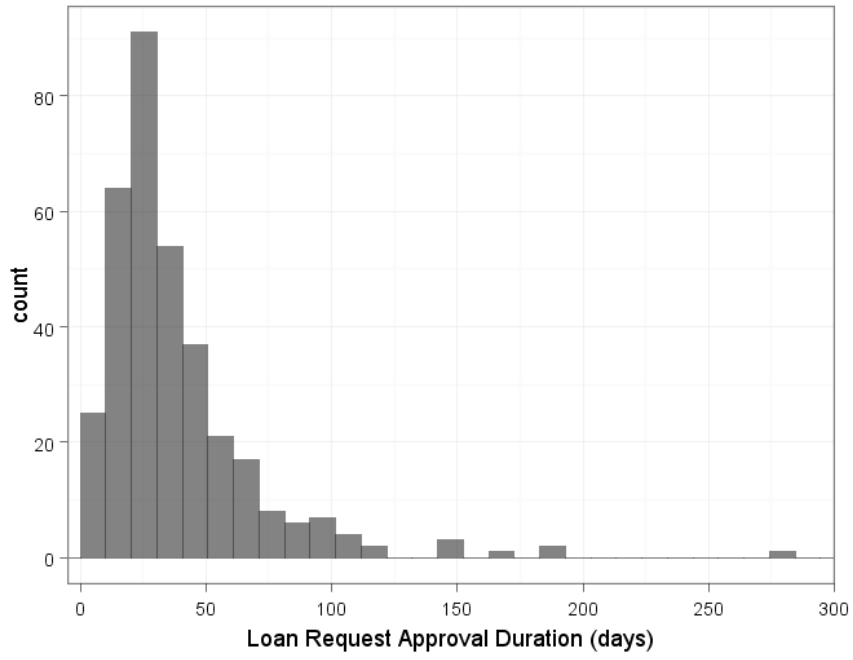
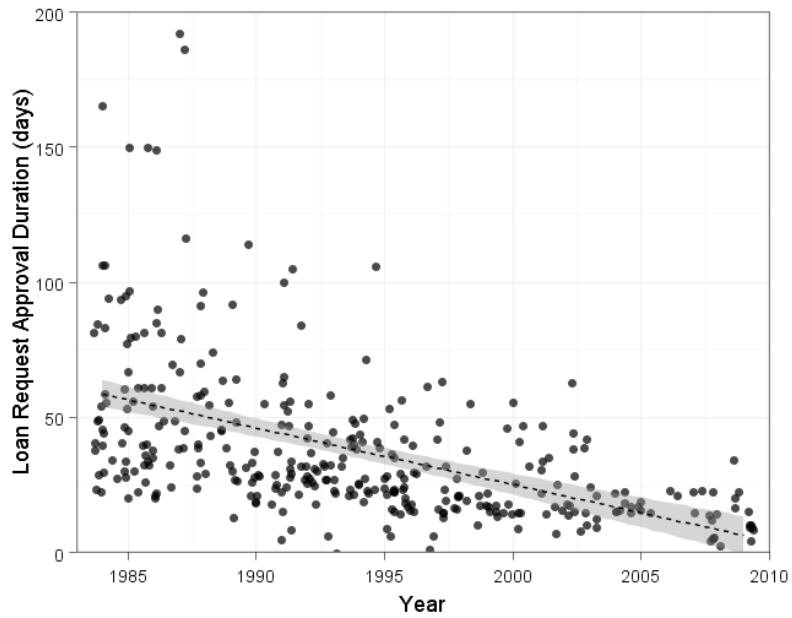


Figure 2: Loan Approval Periods by Year, 1984-2009



IMF appears to have become a more responsive lender. In Figure 2, I plot approval periods by year.<sup>8</sup> The longest waits appear to be clustered in the first several years of the data which coincides with the least developed countries (LDC) debt crisis, an observation that will be discussed further below. The secular trend toward improved responsiveness over time is obvious and quite substantial. For instance, the average lag time between request and approval in the first 10 years of the sample (1984-1993) is 49.3 days with a standard deviation of 32.4. For the last 10 years of the sample, 2000-2009 the numbers drop to 20.3 and 12.6 respectively. Thus, over time the Fund appears to have evolved into a speedier lender.<sup>9</sup>

As measured here, the duration of IMF loan approval periods exhibits a considerable variation both across requests and time. While the apparent improved responsiveness over

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<sup>8</sup>Dots are jittered in order to improve interpretation. Also, to improve interpretation, I cap the y-axis at 200 days which excludes the 1995 Belarus request from the figure.

<sup>9</sup>This trend also comports with other Fund reforms which suggest the institution has become more concerned about its slothful reputation over time. Over the last twenty years, the IMF has taken steps to improve its ability to respond more swiftly to countries facing balance-of-payments pressures by creating several new emergency lending mechanisms. For instance, in the aftermath Mexican Peso crisis of 1994-1995 the IMF introduced the Emergency Financing Mechanism, also referred to as the Rapid Financing Instrument (RFI), which was set up to provide speedier approval of lending arrangements. The RFI has to date been used on 14 occasions: in 1997 during the Asian crisis, the RFI was tapped by the Philippines, Thailand, Indonesia, and Korea; in 2001 for Turkey; and from 2008-2010 it was drawn on by Armenia, Georgia, Greece, Hungary, Iceland, Ireland, Latvia, Pakistan, and Ukraine. The RFI is not a separate lending arrangement *per se* rather it is a mechanism which can be activated when a member country is “facing an urgent balance of payments need” yet does not need a “full-fledged program” (IMF 2012d). Another example of an IMF reform aimed at speeding up its crisis response capabilities came after the Asian crisis when the Fund debuted the Contingent Credit Line (CCL) which was designed to prevent contagion by providing precautionary lines of credit to countries at risk (Bird and Rajan 2002). The CCL proved to be unpopular during the relatively calm 2000s and was allowed to “expire” as a facility in November 2003. More recently, in the aftermath of the Global Financial Crisis of 2008, the IMF has introduced three new facilities designed to provide speedier financing to member states facing balance of payments crises: the Flexible Credit Line (FCL), the Precautionary and Liquidity Line (PLL), and the and Rapid Credit Facility (RCL). The FCL is designed to provide countries with “strong fundamentals” with access to “large and up-front access to IMF resources with no ongoing conditions” while the purpose of the RCL is to provide “low access, rapid, and concessional financial assistance to [low income countries]” (see IMF 2012a; IMF 2012b). The PLL is quiet similar to the FCL, however it meets the needs of countries precluded from drawing on the FCL because of disqualifying economic vulnerabilities. At the time of this writing, three countries—Colombia, Mexico, and Poland—have used the FCL while two countries—Macedonia and Morocco—have used the PLL. No member has yet to tap the RCL. Even the SBA was overhauled post-2008 in order to make the “workhorse” arrangement more effective for members who may not qualify for an FCL arrangement “by providing increased flexibility to front-load access” intended to improve its “crisis prevention and crisis resolution” performance (IMF 2009, 3).

time is itself an interesting question, the focus of this study is to explain variation in approval duration across requests. Building on the research from both the public choice and structural traditions discussed above, I develop my own argument about what drives this variation in loan approval periods below and then propose several testable hypotheses.

## 4 Explaining Variation in Loan Approval Periods

Why are some loan requests approved more swiftly by the Executive Board than others? In order to answer this question, I make two important (and I would argue uncontroversial) assumptions about borrower country interests. Namely, when a government formally submits an SBA or EFF request via a Letter of Intent to the Executive Board, all else equal, it prefers that the request (1) be approved and (2) that it be approved sooner than later. Accordingly, I assert that borrower countries systematically receiving faster loan approvals are—all else equal—recipients of favorable treatment by the IMF while borrower countries that systematically wait longer for approval are not.

Like much of the work cited previously, this paper adopts a structural perspective of international institutions. That is to say, I assume that IMF is not a fully autonomous organization; rather, its actions reflect the interests of powerful national shareholders within the Fund. The U.S. is (and has always been) the singular most powerful country in the institution in terms of quota size and voting share, so I assess the extent to which American interests alone explain variation in loan approval periods. However, following the work of Copelovitch (2010) I also expect Fund actions will reflect the *collective* interests of major Fund shareholders, the G5 countries in particular. For the entire period of time under consideration here, these countries held the top five voting positions within the institution and each appointed their own Executive Director to the Executive Board—a privileged unique to this group.<sup>10</sup> Therefore, I also test the effect of collective G5 interests on loan approval

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<sup>10</sup>This is in the process of changing since the the IMF Quota and Voice Reforms of 2008 and 2010. China

periods.

Following the lead of many studies cited previously, I group major shareholder interests into two categories: geopolitical and financial. Beginning with the former, existing research on the political economy of IMF lending has consistently found that borrower countries tend to receive larger loans with fewer conditions when they hold a temporary seat on the U.N. Security Council (UNSC), when their voting patterns in the U.N. General Assembly (UNGA) are similar to major IMF shareholders and when they receive greater amounts of foreign aid from these countries. While these variables only proxy for the extent to which a borrower is a geopolitical friend of or strategically important to major Fund shareholders, their regular use in such studies is theoretically justifiable. When developing countries assume a temporary seat on the UNSC, their votes—even when not decisive—help lend legitimacy to actions major Fund shareholders have an interest in (Dreher et al 2009a; 2009b). Similarly, while UNGA votes may not carry much actual weight in international relations, they may be useful symbols of support, solidarity, and common interests between countries. As has been argued elsewhere, “Even though UN votes may not be very important, they may still be an accurate signal of alliances and common interests...they may be correlated very strongly with important strategic interests” (Alesina and Dollar 2000, 38). Finally, several recent empirical studies have shown that the direction of U.S. foreign aid flows is influenced by strategic and political factors as much as economic need or policy performance of the recipient government. Specifically, scholars have found that American ODA flows more freely to countries with democratic regimes, countries with pro-U.S. voting patterns in the UNGA, and countries which have temporary seats on the UNSC (Boone 1996; Alesina and Dollar 2000; Alesina and Weder 2002; Kuziemko and Werker 2006; Dreher et al 2009a). In short, ODA flows are also indicators of donor’s strategic and geopolitical interests in recipient countries. Since I assume that, all else equal, borrower countries prefer shorter loan approval periods, I expect that the Executive Board will prioritize loan requests from countries that major IMF

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is now poised to become the third largest shareholder in the IMF.

shareholders view as geopolitical friends or strategically important. Thus,

*H1: All else equal, the duration of loan approval periods will decrease as a borrower country's geopolitical/strategic importance to the U.S. and G5 countries increases.*

Besides geopolitical interests, a number of studies have found links between financial interests of the G5 economies and IMF lending behavior. Because the potential for economic spillovers are greater, the U.S. and G5 countries have more of at stake in the outcome of a Fund program in countries where their banks have large foreign portfolios. Additionally, borrower countries where U.S. or G5 banks are more heavily exposed are in a better bargaining position vis-a-vis the Fund and, therefore, may be able to extract more favorable loan terms from the institution. Thus, from the structural perspective, those countries where the commercial banks of key IMF shareholders are most exposed should be more likely to have their requests prioritized by the Executive Board and experience shorter loan approval periods. Yet, while I do expect that the financial interests of major Fund shareholders will influence the institution's responsiveness to loan requests across borrowers in systematic ways, I *do not* expect this relationship to be constant over time due to unique characteristics of the Fund's lending strategy during the initial years of the LDC debt crisis.

The LDC debt crisis is widely recognized as the defining moment in the IMF's emergence as *de facto* ILLR and necessitated a dramatic revision of the Fund's lending strategy (Boughton 2000; Sachs 1995). Prior to 1982, when a country approached the IMF for a loan, it was standard practice for the Fund to first determine how much financing the borrower could expect to acquire from private as well as other official creditors before calculating the amount of financing the borrower needed from the institution. As Boughton (2001) explains, "That strategy collapsed, at least for the most heavily indebted countries, with the Mexican crisis of August 1982" (406). Boughton goes on to explain how, after the Mexican default, commercial banks actively sought ways to reduce their exposure to the most heavily indebted countries. Therefore, as the Fund was increasing its lending to the economies in crisis, some

commercial banks were hoping to do just the opposite, resulting in little to no net increase in financing for the borrower country. The counterproductive pro-cyclical lending behavior of commercial banks at the start of the crisis led the IMF to alter its traditional approach and adopt a new strategy which became known as “concerted lending.” In short, the concerted lending strategy adopted by the Fund during the LDC crisis relied on issuing an ultimatum: The Fund would not approve loan requests until the group of commercial banks (referred to as a “syndicate”) agreed to *increase their exposures* to the crisis economies.<sup>11</sup> In other cases, the Fund not only sought additional financing from banks, but from official creditors as well.<sup>12</sup>

Of course, rounding up new lending commitments takes time. The process behind Argentina’s 1984 SBA request is illustrative of this. While the Argentine government signed and submitted its Letter of Intent on September 25 the request was not approved until December 28—a 94 day wait. According to the Fund’s calculations at the time, Argentina needed approximately \$8 billion in financing to repay arrears to banks, official creditors, and to replenish its dwindling foreign exchange reserves. Given the size of Argentina’s quota, the Fund could not finance this entirely on its own. So, the Managing Director at the time, Jacques de Larosiere (who also happened to be the architect of the concerted lending strategy) set up a series of bilateral meetings with official creditor countries and bank syndicates in order to round up additional money. Once all parties—private and official—had signed on, the Executive Board approved the request, making \$1.2 billion in IMF financing available to Argentina (Boughton 2001, 393-394). Concerted lending was the Fund’s primary strategy

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<sup>11</sup>Boughton (2001) describes the moment this became the Fund’s new approach: “The turning point came at the November 1982 meeting in New York...at which the Managing Director informed the banks that the Fund would not approve Mexico’s requests for an extended arrangement until the banks provided him with written assurances that they would increase their exposure by enough to cover a substantial fraction (\$5 billion) of Mexico’s scheduled interest payments for 1983” (406).

<sup>12</sup>The U.S. was the primary bilateral official lender during (and even after) the LADC via the Treasury’s Exchange Stabilization Fund (ESF). On occasion, the U.S. and other official lenders would coordinate via the Bank for International Settlements (BIS) on collective, multilateral emergency loans to countries in negotiations with the IMF.



for managing the LDC debt crisis through 1987.<sup>13</sup>

Yet, concerted lending was not without its drawbacks. A review of Executive Board minutes early on in the crisis reveals that Executive Directors were aware that the strategy impacted the Fund's responsiveness. One Director remarked that the so-called "ultimatum" approach resulted in "undue and costly delays" while another noted that such delays were particularly worrisome in cases "where speed was essential to maintain confidence and momentum of adjustment" (EBM 1983a, 17, 37). Board members also cited a number of other drawbacks to the strategy including fears that its overuse would render it ineffective and that it jeopardized the Fund's impartiality in debt negotiations.<sup>14</sup> In light of these concerns, a few Directors suggested that concerted lending should only be used in "exceptional cases." Specifically, situations where the stability of the international financial system was threatened (EBM 1983a, 21; EBM 1983b, 22-23).<sup>15</sup> Additionally, as early as 1983, a number of Executive Directors felt the strategy was no longer necessary in most cases. They argued that IMF approval of loans with sufficiently strong adjustment programs was enough to catalyze private lending by providing "useful information" to banks enabling them to make "their own decisions" about whether to increase exposures (Erb 1983, 6; see also EBM 1983b, 26).<sup>16</sup> Requiring banks to meet an ultimatum prior to approving a program was excessive and unnecessary.

Yet, Managing Director Jacques de Larosiere remained a staunch advocate of concerted lending despite these concerns. In one meeting he forcefully argued that the strategy re-

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<sup>13</sup>Bird and Rowlands (2004) date the strategy from 1982 through 1986 while Caskey (1989) notes that the strategy was adopted during the Mexican debt adjustment program through 1987.

<sup>14</sup>At one meeting, an Executive Director suggested that the IMF find a new crisis management strategy that would not "jeopardize [our] neutrality as an intermediary between debtors and creditors" (EBM 1983b, 29). Others worried that banks were becoming dependent on the strategy and that the actions were being interpreted as a "guarantee by the Fund for the security of bank loans" (EBM 1983b, 32). Lastly, others suggested that overuse of the strategy would weaken the Fund's leverage vis-a-vis the banks and render it ineffective (EBM 1983b, 28).

<sup>15</sup>However, the Board never attempted to define what would qualify as an "exceptional circumstance" and, so, the IMF continued to use a case-by-case approach (Boughton 2001, 401, 403).

<sup>16</sup>One Director argued that the Fund had "almost gone to the limit of what was proper in criticizing banks" (EBM 1983a, 13).

mained necessary in many cases. Without it, the Managing Director argued, the institution faced “uncertainties” about whether new loans from banks would reach satisfactory levels to fully address borrowers’ financing needs. Insufficient commercial bank participation would jeopardize the success of Fund programs and put the institution’s resources at risk (EBM 1983b, 29, 35-36). One Executive Director echoed the Managing Director’s sentiments noting that when it came to deciding which cases the strategy was appropriate, his preferences was “to err on the side of caution and lengthen the list.” In the end, the Executive Board decided against formally limiting the use of the strategy and instead opted for a “case-by-case” approach. Concerted lending would remain the “prevailing strategy” for managing the debt crisis for several more years (Boughton 2001, 481).

The decision to stick with the concerted lending strategy after the initial moments of the crisis exhibits qualities reflective of Willett’s “soft-core” public choice approach. For these years, Fund leadership were willing to accept approval delays in order to obtain an *ex ante* guarantee from the banks that they would increase their exposures to the borrower in question. In other words, Fund officials were willing to accept the numerous costs associated with concerted lending in exchange for assurances of larger overall financing packages. Ostensibly, this was believed to increase the likelihood of program success—something that would reflect well on the Fund. Yet, as noted previously, sufficient new private lending may have been catalyzed in the absence of the strategy. Regardless, Fund leadership was apparently unwilling to take that risk. And it was not just program success that was at risk. The reputation of the IMF was on the line. In meetings where the strategy was discussed at length, the comments of several Executive Directors show they were keenly aware that institution would be judged according to whether or not it brought about a resolution to the crisis. One Executive Director remarked that “the eyes of the international financial community were turning increasingly toward the Fund.” Another noted that the institution’s involvement in crisis management put its “prestige on the line” and exposed it to “strong criticism if the adjustment programs involved did not work out” (EBM 1983a, 12, 17). In short, despite a clear

understanding among the Executive Board that the strategy brought with it a considerable number of drawbacks including costly delays in program approvals, a loss of Fund neutrality in negotiations, and a growing sense among some Executive Directors that the strategy itself was no longer necessary to catalyze private lending, it remained the institution's predominant approach to crisis management until much later that decade. The continued reliance on concerted lending during the first five years of the crisis lines up with Willet's notion that fear of blame and failure may motivate Fund leadership to seek "excessive insurance" against program failure by erring on the side of larger loan packages. In this case, larger packages required commercial bank cooperation.

Due to the special circumstances surrounding the concerted lending approach, I expect that the relationship between U.S./G5 bank exposure and loan approval periods will vary depending on whether the request occurred during the concerted lending years included in my sample (1984-1987) or whether the request was made in the years after the strategy was essentially abandoned (1988-2009). During the concerted lending years, I expect that borrower countries where U.S. and G5 commercial banks were more heavily exposed will have faced longer loan approval duration periods for two reasons. First, in these more "exceptional" cases the Fund should have been more likely to worry about potential systemic risks from retrenchment in bank lending and, thus, be more inclined to implement the strategy in the first place. Second, once implemented, I expect that negotiations between banks and the IMF should take longer in such cases as the overall size of the financing package and the total number of banks in the syndicate are each likely to increase. Thus,

*H2: All else equal, the duration of loan approval periods will increase as U.S. and G5 banks are increasingly exposed to the borrower country for the years 1984-1987*

Conversely, I expect that the inverse will be true during the the post-concerted lending years. During these years, I expect to find results consistent with the standard structural account such that increased U.S./G5 bank exposure will cause these requests to be prioritized

by the Executive Board leading to more favorable outcomes in terms of IMF responsiveness for those borrower countries. Thus,

*H3: All else equal, the duration of loan approval periods will decrease as U.S. and G5 banks are increasingly exposed to the borrower country for the years 1988-2009*

In sum, I expect that that U.S. and G5 geopolitical interests should be consistently linked to speedier loan request approvals regardless of the time period. This contrasts with U.S. and G5 financial interests which should affect loan request approval duration periods in different directions depending on the year in which a request was made.

## 5 Analyzing Variation in IMF Lending Responsiveness

In order to test these hypotheses, I analyze a sample 191 SBA and EFF requests from 64 developing countries between 1984 and 2009.<sup>17</sup> Here, I discuss all aspects of my research design (except the dependent variable, discussed above) including the explanatory and control variables employed here as well as my model specifications.

### 5.1 Independent Variables

Two key independent variables of interest for this study are U.S. and G5 bank exposure. International banking data were gathered from the BIS's Consolidated Banking Statistics database.<sup>18</sup> Specifically, I use the stated foreign claims by nationality of reporting bank, immediate borrower basis.<sup>19</sup> I measure U.S. bank exposure as,<sup>20</sup> the consolidated foreign claims

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<sup>17</sup>Because a number of observations are lost due to missing data, my statistical sample is smaller than the full sample of the dependent variable examined above.

<sup>18</sup>The BIS consolidated bank claims data is the highest level aggregate data type that includes both private and public (sovereign) foreign debts. So, foreign government debt to private U.S. banks is captured by this as well as private foreign bank debts.

<sup>19</sup>Data available at <http://www.bis.org/statistics/consstats.htm>

<sup>20</sup>Formally, bank exposure is measured as the relationship between a bank's loans to a given borrower and its total assets; in this case, what I refer to as bank exposure is technically a measure of the concentration

of U.S. banks to country  $i$  in year  $t-1$  divided by the sum total of U.S. banks consolidated foreign claims against all developing countries in year  $t-1$ .<sup>21</sup> I measure G5 bank exposure as, the sum total of French, German, Japanese, British, and American banks' consolidated foreign claims to country  $i$  in year  $t-1$  divided by the sum of the sum total of all five countries' banks' consolidated foreign claims against all developing countries in year  $t-1$ .<sup>22</sup>

Besides these proxies for financial interests, I also include several covariates designed to represent U.S. and G5 geopolitical/strategic interest in a borrower country. I rely on variables used regularly in previous studies on the political economy of IMF lending including measures of UNGA voting similarity, UNSC membership, and annual foreign aid flows. To account for UNGA voting, I rely on data from Dreher and Sturm (2012) which measures the similarity of countries' votes in the U.N. General Assembly with U.S. votes according to the definition from Kegley and Hook (1991). The measure varies from 0 (least similar) to 1 (most similar).<sup>23</sup> To account for a country's voting similarity with the G5 countries, I calculate the average of the five individual similarities scores. I also include a dummy variable that accounts for whether or not a country was a temporary member of the UNSC in a given year. Data used are from Dreher et al (2009b; 2011). Finally, I include a third proxy for borrower country geopolitical importance: the annual share of aid flows from the U.S. and G5 countries to

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of U.S. banks' developing country loans by country. I have chosen to use the term exposure for the sake of consistency as existing studies on variation in IMF lending use similar language.

<sup>21</sup>The decision to use the sum total of foreign claims against only reporting developing countries was made because of a significant change in BIS data that occurs in 1999. At that time, the countries that reported their exposures to the BIS (made up exclusively of advanced industrial countries) began reporting exposures vis-a-vis each other for the first time. This resulted in a significant increase in the total reported consolidated foreign claims which means that, prior to 1999, the extent of U.S. exposure to developing countries from 1984-1998 would measure significantly higher than it really was. Because developing country exposures were consistently reported to the BIS from 1984 on, the sum total of foreign claims against developing countries is a much more reliable denominator for calculating the exposure metric. In sum, the substantial change in the exposure metric after 1999 makes the specification I use more consistent as well as appropriate since all countries in the sample excludes all advanced industrial countries as classified by the BIS.

<sup>22</sup>From 1984 to 1998 BIS Consolidated Banking Statistics were reported twice annually and from 1999 to present, four times annually. To get a single annual measure of foreign claims by year, I calculated the annual mean bank claims from the quarterly data. This applies to both bank exposure variables.

<sup>23</sup>I also tested the robustness of my results against similar definitions of UNGA voting similarity from Thacker (1999) and Barro and Lee (2005). These results are presented in Table 5 in the appendix. I also substituted measures of U.N. voting similarity on so-called "key" votes, however, the results were not statistically significant at conventional levels.

borrower countries. Using data from the World Bank’s World Development Indicators (WDI) database I calculate a measure of U.S. aid share as the net official U.S. ODA to country  $i$  in year  $t-1$  divided by the sum total of foreign U.S. ODA in year  $t-1$ . I measure G5 aid share as the sum of net official French, German, Japanese, British, and American ODA to country  $i$  in year  $t-1$  divided by the sum of the sum total of all five countries’ ODA to all countries in year  $t-1$ . In both cases the aid share variable ranges from 0 to 1.

## 5.2 Control Variables

Besides these variables of direct interest to my argument, I also include a number of additional predictors to control for potential confounding factors. Among these are standard macroeconomic controls like GDP and GDP per capital (both logged) but also several measures designed to capture the extent of the economic crisis facing borrower countries at the time of their loan request which could impact responsiveness. These include total debt service measured as a percentage of exports of goods and services, current account balance as a percentage of GDP, total foreign exchange reserves (excluding gold) as a percentage of GDP, and the annual GDP growth rate. I also control for country size in terms of population (logged) since large populations may correlate with increased aid flows. These data were all collected from the World Bank WDI database. I also control for borrower country regime type using Polity IV data. And, I include a covariate that accounts for the size of each loan request measured as the proposed loan’s share of the borrower’s quota. These data were collected by the author and assistants from Letters of Intent. Given the substantial change in IMF lending responsiveness over time (see Figure 2) I include year fixed effects to control for unobserved panel heterogeneity. In keeping with previous studies, all explanatory variables are lagged one year, reflecting the fact that most IMF programs are designed and approved based on information and data that lags behind the date of approval (see Knight

and Santaella 1997, 413).<sup>24</sup> Finally, because countries self-select into IMF programs, it is possible that requests for IMF assistance are non-random and, thus, this may bias my results. In order to address these concerns, I generate propensity scores for each observation in the sample that account for the probability that a given country will approach the Fund for assistance in the first place and include it as an additional control in the model.<sup>25</sup> Summary statistics, propensity score estimates, and several robustness checks are discussed and presented in the appendix.

### 5.3 Model Specifications

I fit Cox proportional hazards models of IMF loan request approval duration periods to estimate the effect of U.S. and G5 interests—geopolitical and financial—on IMF lending responsiveness.<sup>26</sup> Models are fitted using the **R** package `Zelig`. A request becomes “at risk” for approval when a country submits a Letter of Intent to the Fund’s Executive Board and subsequently “fails” when the request is approved. I model the expected duration in days between request and approval as a function of a baseline hazard rate and list of covariates that change this baseline rate. Since all loan requests in the sample were approved, there are no censored observations.<sup>27</sup> I compute robust standard errors clustered by country since residuals may be correlated across observations. I also test that the covariates in each model do not violate the proportional hazard assumption.<sup>28</sup>

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<sup>24</sup>UNSC membership is not lagged, however, since this information would have been available to the Executive Board at the time of each loan request.

<sup>25</sup>Propensity scores were generate using the PSMATCH2 module in STATA. See the appendix for a discussion on how I to estimate these. Table 2 presents the specifications used to estimate the propensity scores. As a robustness check, I also ran all models without the propensity scores and the results were substantively unchanged. These results are presented in Table 4

<sup>26</sup>For handling ties, I use the Efron method.

<sup>27</sup>In my data collection efforts at the IMF archives, there were a total of three Letters of Intent filed for SBAs that I was unable to locate a corresponding approval date. In chronological order, these are: Malawi (8/11/1986), Brazil (9/13/1990), and Paraguay (1/9/1991). I was unable to determine whether these requests were rejected by the Executive Board or withdrawn by the borrower countries. Because of this uncertainty and their rarity, I opted to exclude these cases from the analysis.

<sup>28</sup>Specifically, I calculate Schoenfeld residuals as described in Box-Steffensmeier and Zorn (2001).

## 6 Results

My results are displayed in Table 1. The estimates are presented in the log hazard (non-exponentiated) metric. Coefficient estimates greater than 0 mean the covariate is associated with a higher hazard rate, hence, swifter approval. Conversely, coefficient estimates less than 0 mean the covariate is associated with a lower hazard rate, hence, a longer wait for approval. In other words, factors correlated with with faster approval times display positive coefficients while those correlated with slower approval times are negative. I estimate four separate specifications. Models 1 and 2 report results for the sample restricted to concerted lending years (1984-1987) while models 3 and 4 report results for the remainder of the years in the sample (1988-2009).<sup>29</sup>

Looking first to the results for the sample restricted to the concerted lending years (Models 1 and 2) as expected by *H2*, increased U.S. and G5 bank exposure to borrowers is in fact associated with a *slower* process of loan approval at statistically significant levels. These results suggest the concerted lending strategy implemented by the IMF during this period had a more deleterious effect on the institution's lending responsiveness in cases where commercial banks in industrialized countries were heavily involved in balance of payments financing. Furthermore, the negative and statistically significant coefficient on the debt service variable suggests that heavy debt burdens *in general* were linked to a longer waits for approval during the LDC crisis years. Notably, *H1* is not supported in this restricted sample as increased geopolitical importance, as measured here, is not associated with swifter Executive Board approvals during the concerted lending years. In fact, surprisingly both UNSC temporary membership and closer UNGA voting alignment to the U.S. are associated with *longer* waits for approval based on Model 1. These results are not robust to the G5 specification, however. Thus, counter to my expectations, for this exceptionally turbulent period of time the Fund does not appear to have behaved as an agent for major shareholders in terms of serving

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<sup>29</sup>As a robustness check, I also rerun the models with a pooled sample including all observations regardless of year. These results are presented in Table 3 the appendix.



Table 1: Cox Proportional Hazards Estimates - Loan Approval Period

	(1) 1984-1987	(2) 1984-1987	(3) 1988-2009	(4) 1988-2009
GDP growth	0.132 (0.064)	0.034 (0.037)	-0.065** (0.029)	-0.080*** (0.033)
Debt service/exports	-0.385** (0.137)	0.146 (0.147)	0.004 (0.008)	-0.004 (0.009)
Reserves/GDP	25.361* (11.009)	-21.193 (13.720)	-0.751 (1.654)	-2.127 (1.891)
Current acct bal/GDP	12.529 (7.019)	-6.252 (5.193)	3.449* (1.925)	3.245 (1.989)
GDP (log)	1.760 (4.217)	2.022 (5.480)	-7.518 (6.134)	-9.626** (6.163)
GDP per capita (log)	-0.099 (3.946)	-1.906 (5.489)	7.307 (6.128)	9.459** (6.161)
Population (log)	0.939 (3.906)	-3.866 (6.488)	7.407 (6.143)	9.431** (6.175)
US bank exposure	-39.212*** (11.888)		-0.231 (3.578)	
G5 bank exposure		-19.597*** (10.914)		3.874 (5.430)
Polity IV	0.079 (0.059)	-0.131 (0.085)	0.014 (0.025)	0.019 (0.027)
US aid share	-28.293 (15.649)		6.610*** (4.296)	
US UN vote	-161.132** (62.450)		5.311*** (2.007)	
G5 aid share		51.658 (40.035)		24.373*** (11.219)
G5 UN vote		92.363 (61.423)		6.169*** (1.892)
UNSC	-6.402** (2.579)	3.189 (2.305)	-0.034 (0.318)	0.089 (0.327)
Quota share	0.014* (0.008)	0.001 (0.008)	0.002** (0.001)	0.003*** (0.001)
pscore1	35.841* (14.914)			
pscore2		-18.641 (13.872)		
pscore3			-2.573 (2.067)	
pscore4				-4.038** (2.443)
Observations	67	62	191	174
Number of countries	39	39	62	60
R <sup>2</sup>	0.489	0.458	0.489	0.494
Log Likelihood	-195.232	-177.873	-751.542	-667.892
Wald Test	179.460***	83.130***	1,020.350***	514.260***
LR Test	45.009***	37.986***	128.375***	118.566***

Robust standard errors clustered by country in “( )”; \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01

their geopolitical interests. For at least these four years, the IMF lending responsiveness does not appear to be systematically impacted by geopolitical factors. Rather, the strategy developed by Fund management appears to have made borrower countries where its major shareholders' banks were most significantly exposed wait longer for loan approval in order to round-up more financing from those same banks, ostensibly increasing the probability of program success.

Figure 3 presents estimated survival and first difference curves based on Model 1 as *US bank exposure* changes from its mean during the concerted lending years (0.0094, about the level of Nigeria in 1986) to two standard deviations above its mean (0.0579, about the level of Argentina in 1984), holding all other covariates at their means.<sup>30</sup> The first difference curve on the right displays the substantive effect of increased U.S. bank exposure on loan approval periods. I estimate that after 30 days, the higher level of U.S. bank exposure is associated with a 7.8 percent increase in the probability of survival (non-approval). This difference in survival increases to a maximum of 61 percent at 84 days before it begins to decline. In other words, after nearly 3 months, requests from borrower countries where American banks were more heavily exposed were about 60 percent more likely to still be waiting on loan approval when compared to countries where American banks were only exposed at the mean level.

Figure 4 plots the same curves for G5 bank exposure varying from its sample mean (0.0093) to one standard deviation above its mean (0.0505) based on Model 2 estimations. Generally speaking, the magnitude of the effect of G5 bank exposure on loan approval periods is weaker than U.S. exposure alone with a 5.8 percent increase in survival after 30 days at the higher level of exposure and a maximum of 29.3 percent after 81 days. Moreover, the 95 percent confidence interval overlaps with zero with the exception of the period between 58 and 116 days. The difference in the magnitude of the effect here is, perhaps, not that surprising

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<sup>30</sup>Based on the Model 1 sample, I generated simulations using the R package `Zelig` to replicate estimates of survival rates at levels specified for covariates of interest while holding all other covariates at their means. Point estimates displayed are the median observation from the simulation at each day after the loan request based on 1000 sample replications. Confidence intervals are the 2.5 percent and 97.5 percent observations for each day. The same process was used to generate all other post-estimation figures.

given the nature of bank exposure in the U.S. compared to the rest of the G5 countries. In the major European countries and Japan, the vast majority of LDC bank exposure was concentrated among a few large financial institutions. In the U.S., while the majority of LDC exposure was in the big money center banks, a substantial portion of the exposure involved scores of smaller American banks. This was problematic for swift approvals since, as Boughton (2001) notes, over time small banks became increasingly reluctant to participate in concerted lending which had the effect of “seriously delaying the completion of financing arrangements” (417). This may help explain why U.S. bank exposure seems to have the most deleterious effect on IMF lending responsiveness during this period.

Moving to models 3 and 4 which restrict the sample to the post-concerted lending years, the results are largely consistent with *H1*: The duration of approval periods is reduced for borrower countries that are geopolitical friends of or strategically important to the U.S. and G5 countries as measured here. In both specifications, an increased share of aid flows from the U.S. and the G5 to borrower countries is associated with more rapid loan approval at statistically significant levels. Additionally, borrower countries that exhibit greater UNGA voting similarity with the U.S. and G5 are more likely to receive swifter approval. However, in neither case does temporary membership on the UNSC seem to systematically impact Fund responsiveness. Finally, the results for models 3 and 4 do not support *H3* as neither U.S. nor G5 bank exposure have a statistically significant impact on approval duration during the post-concerted lending years.

Turning now to the magnitude of effects, Figure 5 and Figure 6 present survival curve and first difference estimates as the share of U.S. and G5 ODA flows vary from their respective means (0.0078 and 0.0076, about the level of Kazakhstan in 1998 and Honduras in 1989, respectively) to two standard deviations above their means (0.0595 and 0.0325 about the level of Haiti in 1994 and the Philippines in 1988 respectively). After 30 days, the point at which the difference is greatest, increased levels of U.S. aid flows are associated with an 11.4 percent decrease in the probability of survival (non-approval). Similarly, increased G5 aid

Figure 3: Survival Curves - U.S. Bank Exposure

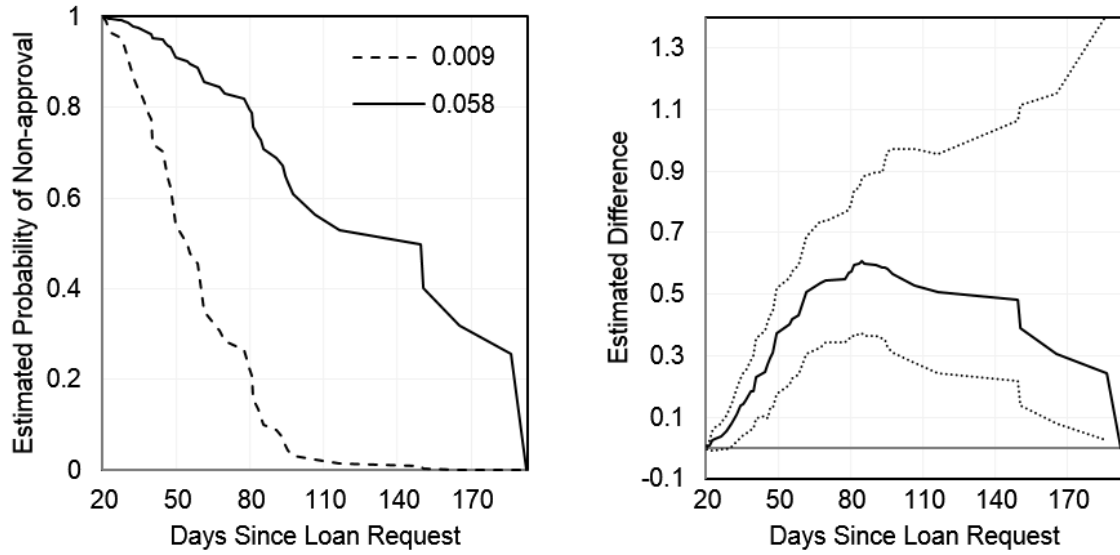
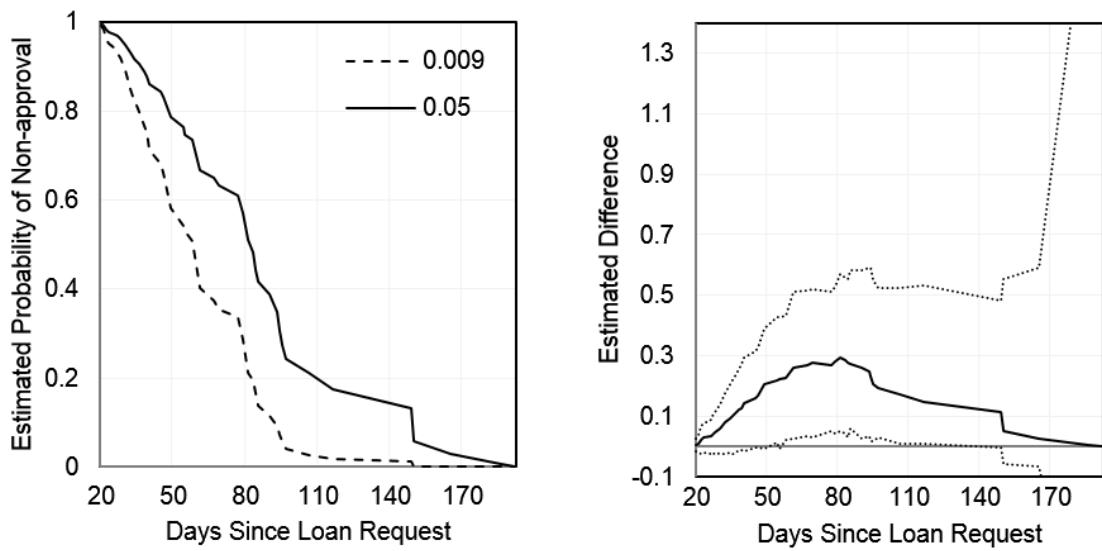


Figure 4: Survival Curves - G5 Bank Exposure



flows are also associated with swifter approvals: This difference is greatest at 28 days when the higher share of G5 aid leads to an estimated 21.7 percent reduction in the probability of non-approval. Put differently, after about one month, countries on the receiving end of a greater share of key shareholder ODA are about 10 to 20 percent more likely to have had their request approved compared to countries that receive the mean level of ODA. However, it is important to point out that in both cases, the upper limit of the first difference curve's 95 percent confidence interval is often greater than zero—exclusively so in the case of U.S. aid. Consequently, the interpretation of these results need to take this uncertainty into account.

Moving now to U.N. voting similarity, Figure 7 and Figure 8 display survival curve and first difference estimates for the U.S. and G5 covariates as they change from one standard deviation below their means (0.0938 and 0.3122, about the level of Uruguay in 1990 and Cameroon in 1988, respectively) to two standard deviations above their means (0.2755 to 0.5314, about the level of Romania in 1992 and Turkey in 2002). After 27 days, the point at which the difference is greatest, increased UNGA voting similarity with the U.S. is estimated to reduce the likelihood non-approval by a substantial 33.8 percent. Similarly, after 28 day, increased voting similarity with the G5 reduces non-approval probability by 46.1 percent. To put it differently, loan requests from countries that have UNGA voting records that are dissimilar to the IMF's major shareholders are about 34 to 46 percent more likely to still be waiting for Executive Board approval after about one month compared to countries with more similar UNGA voting records. Finally, unlike the aid share covariates, the upper-bound of the first difference curve's 95 percent confidence interval is almost entirely below zero, with minimal exceptions at the tails.<sup>31</sup>

In sum, in the years since the concerted lending strategy was abandoned, my empirical results show that that IMF systematically prioritizes approval of loan requests from countries

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<sup>31</sup>This result is robust to alternative ways of measuring UNGA voting similarity. As a robustness check, I reestimate each model substituting in UNGA voting similarity according to Thacker (1999) and Barro and Lee (2005). In every case, the covariate's coefficient remained positively signed and statistically significant at conventional levels. Results are presented in Table 5 in the appendix.

Figure 5: Survival and First Difference Estimates - U.S. Aid Share

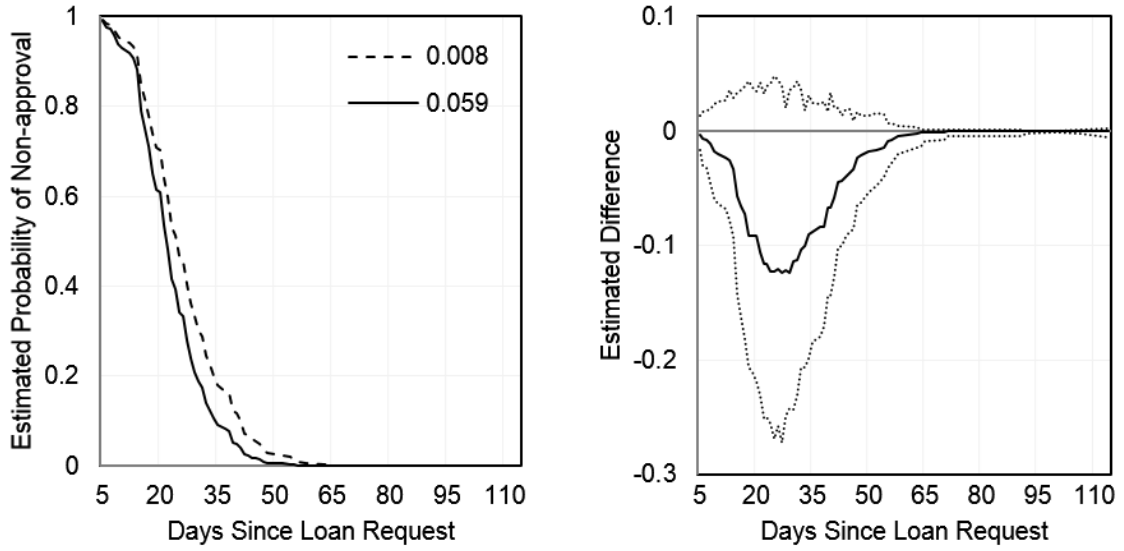


Figure 6: Survival and First Difference Estimates - G5 Aid Share

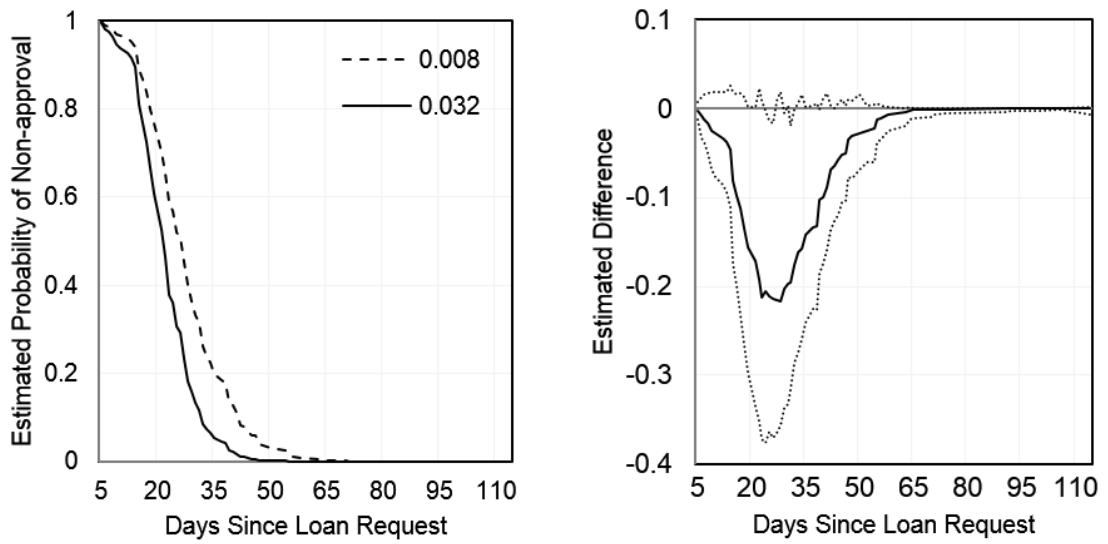


Figure 7: Survival and First Difference Estimates - UN Voting Similarity, U.S.

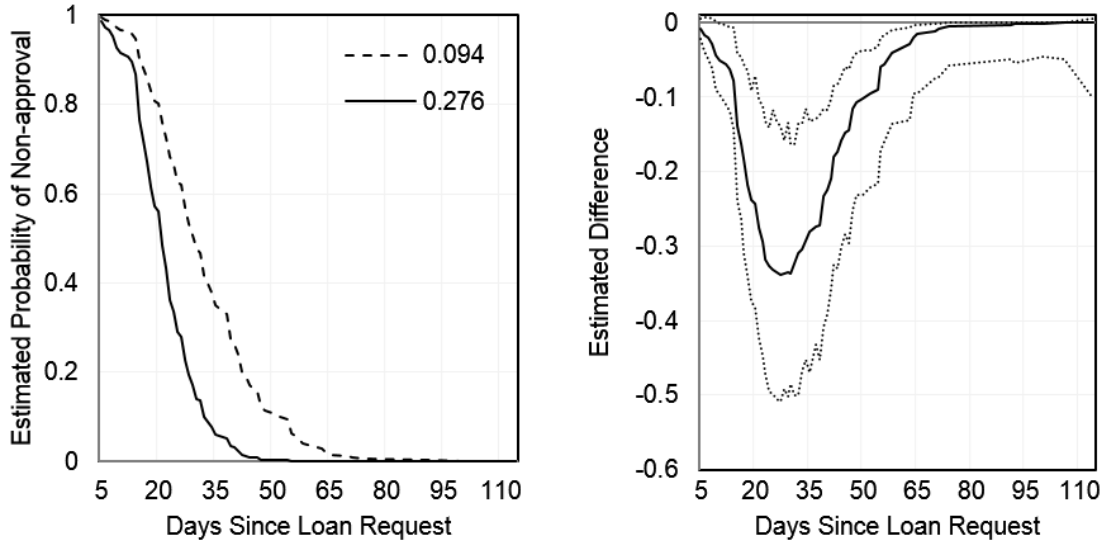
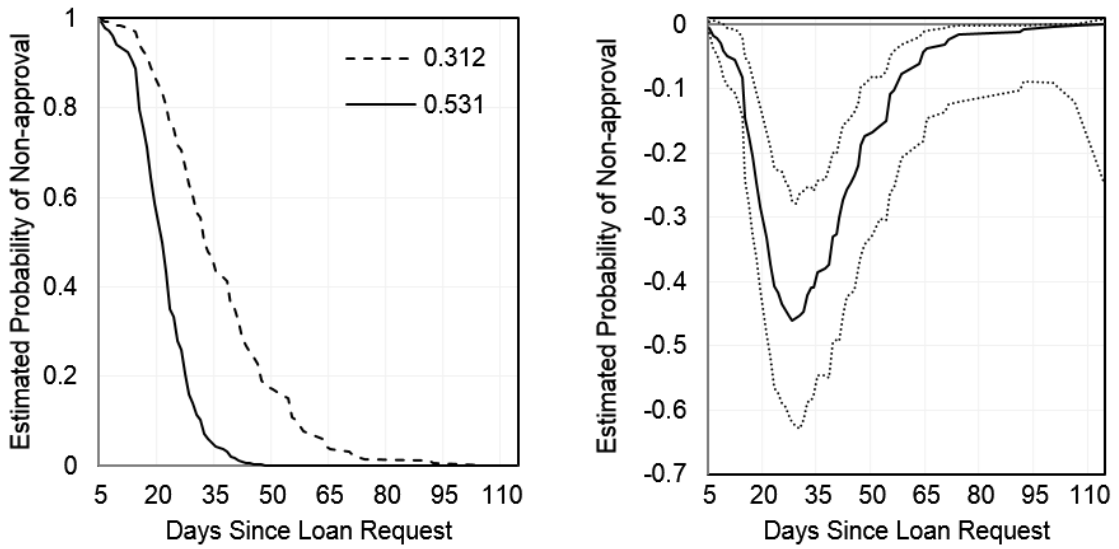


Figure 8: Survival and First Difference Estimates - Voting Similarity, G5



that are viewed as friends by or are of increased geopolitical import to its major shareholders. However, during the years associated with the Fund's concerted lending strategy, geopolitical factors did not have the same effect on IMF responsiveness. Instead, financial factors appear to have strongly influenced the Executive Board's decision-making about how quickly it should approve request. Finally, in the post-concerted lending years, major shareholder bank exposure is no longer associated with Fund responsiveness as I expected. Thus, there appear to be at least two distinct eras of IMF responsiveness: the concerted lending years where financial factors drive much of the variation in responsiveness and the years after where geopolitical factors were most influential.

## 7 Discussion and Conclusions

While there is no shortage of research on the political economy of IMF lending, no existing study has attempted to investigate or explain variation in the responsiveness of the Fund's loan approval procedures. As a step toward addressing this gap in our knowledge about IMF lending behavior, I introduced new data on the speed of the IMF's loan approval process. Specifically, I measured the number of days that transpired between the date and IMF member state formally submitted a Letter of Intent to the IMF Executive Board requesting a loan via a Stand-by Arrangement (SBA) or the Extended Fund Facility (EFF) the date the Executive Board approved that request between 1984 and 2009. These data reveal considerable variation in the duration of loan approval periods across both time and borrowers. For this study, my goal has been to identify factors that can help explain variation in IMF responsiveness across borrowers in two distinct historical periods: The years when the so-called concerted lending strategy was utilized by the Fund and the years after this technique was abandoned.

My argument draws from two prominent theoretical traditions examining the political



economy of IMF lending: the structural approach that emphasizes the influence of major shareholder interests on IMF lending and the public choice approach which focuses on bureaucratic incentives. Generally, I adopt a structural view of the IMF. That is, I do not assume the Fund is a fully autonomous institution; rather, its behavior tends to reflect the interests of its major shareholders: the U.S. individually and the G5 countries collectively. Consequently, I expected that borrower countries viewed as friends of or possessing strategic importance to key shareholders should have their requests prioritized by the Executive Board and experience swifter approvals.

Similarly, I expected that as U.S. and G5 banks become increasingly exposed to borrower country economies, loan approval periods should also fall. However, this relationship should only hold for a sample of observations since 1988. For the first four years of the sample—1984–1987—I expected the relationship between increased major shareholder bank exposure and approval duration to be in the opposite direction such that increased bank exposure should be linked to longer wait times for borrowers. This is because I expected that the Fund would be more likely to activate the concerted lending strategy in cases of increased exposure. Additionally, once activated, I expect that negotiations between banks and the IMF should take longer in such cases as the size of overall financing package and the total number of banks in the syndicate grows. The strategy, pioneered by Fund officials during the LDC debt crisis, was designed to forcibly catalyze private lending in the direction of the heavily indebted countries and ostensibly improved the likelihood of Fund program success by insuring a borrower’s financing gap was met. Yet, the strategy also came with a considerable number of drawbacks, including potentially costly delays. As early as 1983, some Executive Directors began to argue the strategy was unnecessary in most cases as private lending would have been catalyzed in the absence of an IMF ultimatum. Yet, the institution’s management, on the whole, was unwilling to risk giving up the strategy until after 1987, preferring instead to insure that private lending packages were in place *prior to* approving loan requests. Drawing from one wing of the public choice tradition exemplified by Willett (2002), I argue that this

expected relationship may reflect individual Fund officials' fear of blame and failure given their awareness that the institution would be judged according to how well they managed the debt crisis.

However, even though I argue that the results are indicative of this "soft core" public choice account, the results are not necessarily inconsistent with structural accounts. Even though I contend that concerted lending is exemplary of an IMF staff that is seeking out "excessive insurance" for program success, the fact that U.S. and G5 bank exposure are both associated with longer loan approval periods also indicates that the Fund was most willing to put strong pressure on banks to increase exposures in cases where major shareholder financial interests were greatest. To the extent that applying pressure on the commercial banks can be viewed as preferential treatment of those borrower countries, my results are equally consistent with a structural view of the Fund. However, somewhat counter-intuitively, it happens to be the case that during the early years of the LDC crisis, waiting longer for loan approval is actually evidence of preferential treatment by the Fund. In this case, borrowers and the Fund traded responsiveness for larger overall loan packages as there were fears they could not have both.

Moving to influence of geopolitics on responsiveness, my results are largely consistent with existing structural accounts of the IMF lending behavior. For the years 1988 through 2009, increasing a borrower country's share of foreign aid flows from both the U.S. and G5 is correlated with a speedier approval process, though there is a moderate level of uncertainty about this effect. Similarly, as a borrower country's UNGA voting record becomes more aligned with the Fund's major shareholders, its loan request is far more likely to be swiftly approved by the Executive Board. This result is quite robust. These findings contribute to an already large body of empirical evidence revealing major shareholder influence over IMF lending decisions and behavior. I show that borrower countries viewed as geopolitical friends or valued for strategic reasons by the U.S. and other major powers within the Fund are likely to experience a much more responsive loan approval process. However, what makes this study's findings especially interesting is the evidence that these factors do not

appear to matter during the concerted lending years. Neither U.S. nor G5 geopolitical interests are systematically associated with faster loan approvals when the sample is limited to observations from 1984-1987. In other words, for this short period defined by the LDC debt crisis, financial considerations drove variation in approval duration. On the other hand, there appears to be no systematic relationship between bank exposure and responsiveness in the post-concerted lending years. Hence, there appear to be two very distinct eras in IMF lending responsiveness: one defined by financial considerations and another defined by the geopolitical interests of its major shareholders.

Looking ahead, this paper paves the way for more research into the Fund's loan approval process. Historically, the Fund has been viewed as a relatively unresponsive lender which is something that renders it a less effective ILLR (Fischer 1999; Schwartz 2002; Munk 2010). However, my data reveal that the Fund's responsiveness has improved considerably over the 26 year period considered here. My empirical analysis reveals that one likely contributing factor for this responsiveness improvement is related to the decision to abandon the concerted lending strategy which led to long waits for Executive Board approval. The shift away from this strategy in the late-1980s likely contributed to the observed trend toward swifter approvals. Yet, this shift alone cannot explain the entire trend which continued throughout the subsequent decades. While it was not my goal in this study to explain the IMF's shift to a speedier loan approval processes, this is itself an interesting and important observation that should be carefully investigated in future studies.

## 8 Appendix

### 8.1 Propensity Score Estimates

Because requests for IMF assistance may be non-random, the probability of selection into an IMF program may depend on the same covariates that influence the duration of loan approval periods. In order to address potential concerns about selection bias in my estimations I estimate a propensity score for each observation ranging from 0 to 1 using the PSMATCH2 module in Stata (Leuven and Sianesi 2003). This score represents the predicted probability that country  $i$  will request IMF assistance in a year  $t$  given the observed values of the covariates (discussed more below). The basic idea is to match each “treated” observation (countries that request SBA or EFF assistance in a given year) with a “control” observation where the values are as close to the same as possible.<sup>32</sup> The inclusion of the propensity score in the analysis minimizes the potential for selection bias (Ho, Imai, King, and Stuart 2007).

Because the models I specify vary in terms of the time period under consideration (concerted lending or post-concerted lending) as well as their key covariates (U.S. interests or G5 collective interests) I calculate propensity scores specific to each model. In other words, the factors that increase the probability of seeking IMF assistance during the concerted lending years may differ from the factors that affect this during the post-concerted lending years. Additionally, propensity scores for the U.S. models are calculated using key covariates that proxy for U.S. interests; the same goes for the G5 models. The full sample for the concerted lending years consists of a maximum of 277 country years from 1984-1987. The full sample for the post-concerted lending years consists of a maximum of 1590 country years from 1988-2009. To calculate propensity scores, I include all of the covariates (lagged one year) used in the survival model including year and regional dummies with the exception of quota share which, for obvious reasons, should have no impact on the likelihood of a loan request.

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<sup>32</sup>This is referred to as the “nearest neighbor” approach.

I add one additional covariate: the 3-month dollar Libor (London Inter-Bank Offer Rate) which is the rate at which banks lend dollars to one another. Libor is a critically important benchmark in financial markets: As it rises and falls, debt service costs in global markets also tend to rise and fall. Thus, the propensity for a country to seek IMF assistance may be influenced by movements in the rate. Libor data were provided to the author by the Bank for International Settlements by request.

Table 2 presents the propensity score matching estimations. Models 1 and 2 present estimations for the concerted lending years. Perhaps not surprisingly, an increase in a country's debt service burden is associated with an increased likelihood of requesting SBA or EFF assistance from the Fund. Consistent with previous research, as countries' voting similarity with major IMF shareholders increases, so too does the probability of seeking Fund assistance. However, no other covariate—including either measure of bank exposure—is systematically associated with IMF loan requests during this four year period. In the post-concerted lending years estimations, model 3 and 4, debt servicing no longer appears to have a systematic effect on IMF requests. However, lower levels of GDP growth and foreign exchange reserves are now associated with IMF requests. Once again, geopolitical friends of the U.S. and G5 countries and an increased share of G5 ODA (though, not U.S. aid) appear more likely to seek the IMF's help. Finally, an elevated Libor rate appears to increase the likelihood of IMF requests.

Table 2: Propensity Score Estimates (Probit), SBA or EFF Request

	(1) 1984-1987	(2) 1984-1987	(3) 1988-2009	(4) 1988-2009
GDP growth	-0.012 (0.019)	0.002 (0.019)	-0.032*** (0.010)	-0.033*** (0.010)
Debt service/exports	0.025*** (0.009)	0.030*** (0.009)	0.002 (0.004)	0.0004 (0.004)
Reserves/GDP	-1.936 (1.586)	-2.681 (1.970)	-2.116*** (0.669)	-2.119*** (0.756)
Current acct bal/GDP	-1.191 (1.457)	-0.806 (1.688)	0.051 (0.734)	0.167 (0.849)
GDP (log)	0.144 (2.208)	0.826 (2.278)	-0.556 (1.647)	-0.522 (1.808)
GDP per capita (log)	-0.834 (2.230)	-0.834 (2.231)	0.839 (1.641)	0.752 (1.802)
Population (log)	0.067 (2.244)	-1.099 (2.272)	0.604 (1.652)	0.499 (1.815)
US bank exposure	1.929 (4.632)		-1.943 (1.789)	
G5 bank exposure		0.360 (6.007)		0.989 (3.205)
Polity IV	-0.005 (0.018)	-0.013 (0.019)	0.006 (0.011)	0.010 (0.011)
US aid share	1.926 (4.132)		3.878 (2.476)	
US UN vote	12.679*** (3.803)		2.399** (1.159)	
G5 aid share		6.156 (7.751)		9.957** (4.770)
G5 UN vote		12.765*** (4.079)		1.705* (0.943)
UNSC	0.501 (0.321)	0.461 (0.347)	0.068 (0.160)	0.096 (0.171)
Libor	0.107 (0.074)	0.165 (0.918)	0.245** (0.123)	0.207* (0.121)
Constant	-0.728 (6.400)	-2.555 (2.878)	-5.596*** (1.426)	-4.210*** (1.558)
Observations	277	255	1,590	1,278
Log Likelihood	-135.230	-123.778	-491.038	-432.452

Standard errors in “( )”; \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01

## 8.2 Robustness Checks

Given my small sample sizes, I also estimated two models using a pooled sample that includes all years (1984-2009). Table 3 presents these results. Due to the change in the sample, I reestimated propensity scores (models 1 and 2) using the full samples. Then, I reestimated two Cox proportional hazards models where I included a dummy variable (*conlend*) where a value of 1 indicates the request occurred during the concerted lending era and a value of 0 indicates it occurred afterward. I also interact *conlend* with each of the bank exposure measures. The negative and statistically significant result on the concerted lending dummy suggests that, as Figure 2 indicates, the concerted lending years were associated with longer wait times on their own, independent of bank exposure. However, the interaction between concerted lending and bank exposure is also negative and highly significant in both models supporting the results in Table 1: increased bank exposure to major share holders led to even longer waits for borrowers during the concerted lending era. Not surprisingly adding in the observations from the concerted lending years, where geopolitical and strategic interests did not systematically influence IMF lending responsiveness (and, in fact, in the case of U.S. aid and voting similarity, were linked to longer waits) largely eliminate the effects of those covariates on loan approval periods with the exception of U.S. aid share. In addition to the pooled sample, I reestimated all four models with the restricted samples but exclude the propensity scores as an additional robustness check. The results, presented in Table 4, are substantively unchanged. Finally, as an additional robustness check, I reestimate the post-concerted lending models using alternate measures of U.N. voting similarity. Specifically, I employ measures based on definitions by Barrow and Lee (2005) and Thacker (1999). As Table 5 reports, the results are robust to various measures of U.N. voting similarity.

Table 3: Full Sample Regression Results

	IMF request (PSMATCH2)		approval duration (Cox)	
	(1)	(2)	(3)	(4)
GDP growth	-0.032*** (0.010)	-0.033*** (0.010)	0.018 (0.031)	0.008 (0.034)
Debt service/exports	0.002 (0.004)	0.0004 (0.004)	-0.008 (0.007)	-0.011 (0.008)
Reserves/GDP	-2.116*** (0.678)	-2.119*** (0.767)	1.099 (1.665)	0.167 (2.086)
Current acct bal/GDP	0.051 (0.722)	0.167 (0.837)	1.548 (1.497)	1.612 (1.570)
GDP (log)	-0.556 (1.563)	-0.522 (1.712)	-5.358* (3.353)	-5.846** (3.494)
GDP per capita (log)	0.839 (1.556)	0.752 (1.706)	4.720* (3.349)	5.313* (3.477)
Population (log)	0.604 (1.568)	0.499 (1.719)	5.161* (3.356)	5.702** (3.498)
US bank exposure	-1.943 (1.771)		3.908 (3.370)	
G5 bank exposure		0.989 (3.236)		2.413 (4.660)
Polity IV	0.006 (0.011)	0.010 (0.011)	-0.0001 (0.019)	-0.012 (0.020)
US aid share	3.878 (2.508)		3.329* (3.575)	
US UN vote	2.399** (1.162)		-1.523 (3.310)	
G5 aid share		9.957** (4.770)		10.242 (10.084)
G5 UN vote		1.705* (0.944)		1.680 (2.978)
UNSC	0.068 (0.160)	0.096 (0.172)	-0.152 (0.281)	-0.083 (0.313)
Libor	-0.068 (0.067)	0.918 (20.028)		
Quota share			0.002*** (0.001)	0.003*** (0.001)
Conlend			-2.222*** (0.782)	-1.737** (0.969)
pscore5			3.490 (2.817)	
pscore6				2.162 (3.395)
US bank*Conlend			-11.949*** (6.159)	
G5 bank*Conlend				-14.470*** (7.556)
Constant	-3.874*** (1.093)	-8.131 (110.361)		
Observations	1,594	1,282	258	236
R <sup>2</sup>			0.584	0.557
Log Likelihood	-491.038	-432.452	-1,065.079	-965.373
Wald Test			1,976.110***	857.080***
LR Test		39	226.561***	192.147***

Robust standard errors clustered by country in "( )"; \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01



Table 4: Cox Proportional Hazards Estimates

	(1) 1984-1987	(2) 1984-1987	(3) 1988-2009	(4) 1988-2009
GDP growth	-0.009 (0.026)	0.012 (0.033)	-0.037** (0.018)	-0.035* (0.019)
Debt service/exports	-0.060*** (0.017)	-0.050*** (0.019)	0.001 (0.008)	-0.006 (0.008)
Reserves/GDP	-0.024 (3.091)	-3.368 (3.635)	0.466 (1.291)	-0.059 (1.361)
Current acct bal/GDP	-2.393 (3.216)	-1.291 (3.562)	3.259 (1.935)	3.068 (2.028)
GDP (log)	-2.224 (3.953)	-2.835 (4.093)	-7.539 (6.084)	-9.647** (6.165)
GDP per capita (log)	2.350 (3.895)	3.022 (4.047)	7.150 (6.074)	9.254** (6.159)
Population (log)	2.370 (3.939)	2.882 (4.082)	7.388 (6.092)	9.480** (6.174)
US bank exposure	-19.595** (8.857)		1.024 (3.424)	
G5 bank exposure		-20.495*** (10.545)		1.142 (5.139)
Polity IV	-0.028 (0.042)	-0.036 (0.048)	0.007 (0.024)	0.005 (0.025)
US aid share	3.502 (8.852)		3.888** (3.473)	
US UN vote	-14.778 (12.745)		3.891** (2.039)	
G5 aid share		6.064 (20.574)		13.066** (8.355)
g5 UN vote		11.622 (12.536)		4.580*** (1.849)
UNSC	-0.322 (0.553)	0.191 (0.537)	-0.034 (0.318)	0.043 (0.326)
Quota share	0.008 (0.007)	0.005 (0.008)	0.002** (0.001)	0.003*** (0.001)
Observations	67	62	191	174
R <sup>2</sup>	0.443	0.442	0.486	0.487
Log Likelihood	-198.130	-178.804	-752.123	-669.105
Wald Test	119.830***	101.500***	1,324.580***	676.280***
LR Test	39.215***	36.124**	127.214***	116.140***

Robust standard errors clustered by country in “( )”; \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01

Table 5: Cox Proportional Hazards Estimates, 1988-2009

	(1)	(2)	(3)	(4)
GDP Growth	-0.061** (0.031)	-0.077** (0.035)	-0.043* (0.028)	-0.051* (0.032)
Debt service/exports	0.003 (0.008)	-0.005 (0.008)	0.002 (0.008)	-0.003 (0.008)
Reserves/GDP	-0.505 (1.678)	-1.723 (1.915)	0.538 (1.519)	-0.324 (1.674)
Current acct bal/GDP	3.159 (1.893)	2.951 (1.968)	2.971 (1.870)	2.920 (1.960)
GDP (log)	-8.094 (6.173)	-10.709** (6.250)	-7.831 (6.145)	-10.497** (6.249)
GDP per capita (log)	7.892 (6.168)	10.495** (6.248)	7.535 (6.137)	10.123** (6.243)
Population (log)	7.986 (6.182)	10.512** (6.258)	7.707 (6.152)	10.324** (6.257)
US bank exposure	-0.381 (3.607)		0.355 (3.583)	
G5 bank exposure		4.127 (5.540)		3.218 (5.452)
Polity IV	0.016 (0.025)	0.023 (0.027)	0.018 (0.025)	0.016 (0.026)
US aid share	7.050*** (4.397)		5.472** (4.230)	
US UN (Barro and Lee)	4.162** (2.068)			
G5 aid share		26.954*** (11.720)		20.905*** (10.776)
G5 UN (Barro and Lee)		4.030*** (1.541)		
US UN (Thacker)			1.811* (1.467)	
G5 UN (Thacker)				4.345*** (1.825)
UNSC	-0.049 (0.320)	0.122 (0.329)	-0.033 (0.318)	0.094 (0.325)
Quota share	0.002** (0.001)	0.003*** (0.001)	0.002** (0.001)	0.003*** (0.001)
pscore3	-2.526 (2.328)		-0.954 (2.068)	
pscore4		-4.004* (2.711)		-1.812 (2.300)
Observations	191	174	191	174
R <sup>2</sup>	0.487	0.488	0.480	0.485
Log Likelihood	-751.923	-668.877	-753.219	-669.490
Wald Test	1,059.990***	575.330***	1,260.220***	711.280***
LR Test	127.613***	116.595***	125.022***	115.369***

Robust standard errors clustered by country in “( )”; \*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01

Table 6: Summary Statistics

	obs	mean	SD	min	max
GDP growth	1590	4.034	4.588	-23	35
Debt service/exports	1590	3.11e+09	7.72e+09	1389000	6.82e+10
Current acct bal/GDP	1590	-0.037	0.094	-2.094	0.438
Reserves/GDP	1590	0.124	0.127	0.00004	1.144
GDP (log)	1590	23.201	1.675	19.069	27.478
GDP per capita (log)	1590	6.889	1.054	4.745	9.073
PolityIV	1590	2.584	6.150	-10	10
Population (log)	1590	16.311	1.411	12.735	20.884
US bank exposure	1590	.0102	0.029	0	.283
US UN vote	1590	0.152	0.080	0	0.434
US aid share	1590	0.005	0.015	-0.045	0.269
UNSC	1590	0.0779	0.268	0	1
pscore3	1590	0.124	0.125	0.00005	0.770
Libor	1590	4.638	2.175	0.69	9.28
G5 bank exposure	1246	0.009	0.020	0	0.135
G5 UN vote	1246	0.405	0.099	0	0.659
G5 aid share	1246	0.007	0.011	-0.027	0.180
pscore4	1246	0.145	0.131	0.0001	0.769
pscore1	275	0.246	0.156	0.156	0.755
pscore2	253	0.247	0.162	0.00009	0.751
GDP growth	191	2.324	5.407	-23	14
Debt service/exports	191	3.64e+09	7.85e+09	3898000	5.86e+10
Current acct bal/GDP	191	-0.034	0.055	-0.307	0.127
Reserves/GDP	191	0.071	0.0002	0.0002	0.350
GDP (log)	191	23.723	1.532	20.150	27.205
GDP per capita (log)	191	7.361	0.899	4.927	8.967
PolityIV	191	4.089	6.054	-9	10
Population (log)	191	16.363	1.415	13.406	20.582
US bank exposure	191	0.016	0.035	0	0.197
US UN vote	191	0.184	0.091	-0.012	0.269
US aid share	191	0.007	0.026	0	0.833
UNSC	191	0.099	0.300	0	1
Quota share	191	111.900	166.122	4.7	1330
G5 bank exposure	174	0.014	0.025	0	0.135
G5 UN vote	174	0.422	0.109	0.161	0.659
G5 aid share	174	0.007	0.011	-0.027	0.180
GDP growth	67	1.791	5.389	-17	12
Debt service/exports	67	1.10e+09	2.27e+09	8963000	1.53e+10
Current acct bal/GDP	67	-0.054	0.055	-0.237	0.092
Reserves/GDP	67	0.052	0.064	0.0007	0.389
GDP (log)	67	23.723	1.532	20.150	27.205
GDP per capita (log)	67	22.418	1.569	19.928	26.664
PolityIV	67	-2.522	6.922	-9	10
Population (log)	67	15.799	1.184	13.419	18.335
US bank exposure	67	0.009	0.024	0	0.170
US UN vote	67	0.130	0.029	0.053	0.258
US aid share	67	0.009	0.019	-0.002	0.151
UNSC	67	0.099	0.300	0	1
Quota share	67	61.42	29.012	25	170.3
G5 bank exposure	62	0.009	0.021	0.00002	0.139
G5 UN vote	62	0.306	0.041	0.229	0.392
G5 aid share	62	0.009	0.011	0.00007	0.081

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