

# Too much of a good thing? China, the IMF, and Sovereign Debt Crises

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## Abstract

How effective are international institutions in light of the diverging preferences of major economies? The landscape of official finance has changed dramatically over the last two decades. Whereas the advanced economies of the OECD once dominated state-to-state lending, China has rapidly expanded its loan portfolio, occupying an ever greater share of borrowing countries' debt stocks. We argue that because China has different preferences on official lending and debt restructuring than other bilateral creditors, it has disrupted the IMF's operations in responding to sovereign debt crises. We use original data on the timing and intensity of IMF negotiations to investigate whether countries' exposure to Chinese debt leads to longer, drawn-out negotiations during debt crises. We find that countries in debt crisis with larger shares of official debt owed to China undergo more rounds of negotiation with the IMF before they receive an IMF program. Once an IMF program has been negotiated, however, borrowers with larger debts to China receive more rapid approval of their programs. Our findings shed light on how the international architecture for sovereign debt is functioning in an era of more diversified official debt.<sup>1</sup>

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# 1 Introduction

Increasing multipolarity can place pressure on international institutions, especially when they operate on the basis of long-established norms and practices that do not incorporate the preferences of rising powers. A growing literature examines how multilateral institutions respond to the diverging interests of emerging powers (Lipsy, 2018; Pratt, 2021; Güven, 2017; Bunte, Gertz and Zeitz, 2021). In this paper, we focus on how the landscape of official finance has changed dramatically over the last two decades. Once a marginal player in sovereign debt, China has emerged as the world’s largest bilateral lender, with consequences for the functioning of the sovereign debt regime. In particular, we investigate whether borrowing countries’ exposure to China impedes the work of the International Monetary Fund (IMF), which sits at center of the piecemeal international regime governing debt crisis resolution. We argue that China’s global loan footprint, paired with its divergent practices and preferences, directly impacts the operations of the IMF in debt-distressed countries.

At first glance, it may be surprising that increased volumes of Chinese lending should impact the IMF’s activities. After all, like the advanced economies that have traditionally been major bilateral creditors, China is a sizable shareholder of the IMF, and might be expected to coordinate with the IMF’s crisis resolution efforts in a debt-distressed borrower.<sup>2</sup> However, interviews conducted with senior officials in the debt restructuring regime suggest that China’s approach to both lending and crisis resolution diverges substantially from the practices of the OECD countries with which the IMF has traditionally coordinated, which has caused difficulties for the IMF’s operations. For one, China emphasizes confidentiality and discretion in its lending and crisis resolution, making it difficult to assess how Chinese lenders will treat a borrower’s outstanding debts in a crisis. For another, China routinely adopts a bilateral approach to crisis resolution, eschewing the coordination mechanisms established by other official creditors.

These features of Chinese debt crisis resolution directly impact the IMF’s operations

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<sup>2</sup>As of June 2021, China’s IMF voting share is 6.08%, the third largest share after the United States and Japan.

when a country is in debt distress. One of the most important functions that the IMF performs in crisis resolution is to assess the sustainability of a country's debt burden. This assessment determines the size and structure of an IMF program, as well as the actions of other creditors, both private and official. China's bilateral and intransparent approach makes it difficult for IMF staffers to establish whether the borrower's debt burden will be reduced to more sustainable levels in the near term. Therefore, we expect that greater volumes of debt to China will impede the IMF's work in debt-distressed countries, leading to more protracted and challenging negotiations.

To ascertain whether IMF negotiations are impeded when borrowers owe larger amounts of debt to China, we use original data on the negotiation of IMF programs (Ferry and Zeitz, 2021). We measure negotiating difficulty using information on the dates, length, and frequency of IMF negotiation missions taken from IMF program documents for all available IMF programs approved 2000-2018. Systematic data on the duration and intensity of negotiations between IMF staff and borrowing governments allows us to investigate whether negotiations become more difficult and protracted when borrowers owe a larger share of their debt stock to China.

We find that borrowing governments with a larger share of debt owed to China do have *more protracted negotiations* with the IMF, but only if they are in debt distress at the time of negotiation. By contrast, we find that once negotiations have concluded, programs in countries with a larger share of debt stock owed to China receive *more rapid approval* from the IMF Board. We interpret this combination of evidence to mean that in the negotiation stage, a lack of coordination with Chinese creditors makes it difficult to agree on the size and terms of an IMF program. However, once a program has been agreed, members of the IMF Board do not seem inclined to slow down the programs of China's major borrowers.

This paper makes three contributions to the literature in international political economy on sovereign debt and global economic governance. First, we contribute to debates about multipolarity and fragmentation in international institutions, demonstrating how differences in official creditors' approach to debt crises affects the operations of the IMF. This case

points to potential limitations in addressing multipolarity simply by expanding voting rights in existing international institutions. Without incentives for coordination and convergence, institutions may struggle to resolve the divergences among their shareholders. Second, we add to the growing literature on Chinese lending by investigating the effect of Chinese loans in instances of debt distress and crisis. Most work on China's prominent role in official finance has examined allocation decisions or the effects of Chinese loans. By contrast, we look at what happens when borrowing government can no longer meet their debt obligations. Finally, we demonstrate the utility of new data on the timing, duration, and intensity of IMF negotiations, which allows us to shed light on how diverse debt stocks affect the work of the IMF during the crucial phase in which programs are designed.

The remainder of the paper proceeds as follows. In section 2, we map how the rise of new creditors has altered borrowing countries' outstanding debt stocks. Section 3 explains why the operations of the IMF are likely to be sensitive to fragmentation among official creditors and explains why Chinese loans, in particular, are likely to affect coordination in debt crisis resolution. In section 4 we explain how we measure delays in the IMF negotiation process. Section 5 describes our research design, section 6 presents our results, and section 7 concludes.

## 2 The rise in new official creditors

Over the last decades, the landscape of bilateral lending has fundamentally changed. Whereas advanced economies of the OECD once dominated global flows of bilateral loans, emerging economies have increased their lending with their expanding economies and rising stature in the global economy. China has been the most prominent among these new lenders, extending loans to developing countries around the world. China's lending has attracted considerable attention, with scholars examining how China allocates its development finance, why developing countries choose to borrow from China, or the effects of Chinese loans on developing countries' relationship with other creditors and donors (Blair, Marty and Roessler, 2021;

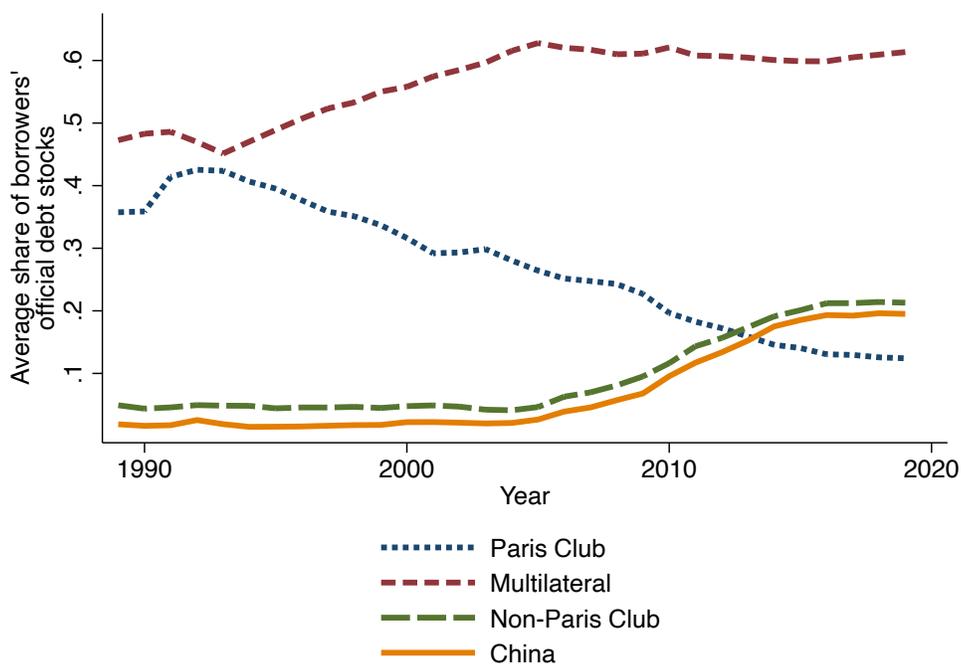
Bunte, 2019; Dreher et al., 2018, 2020; Hernandez, 2017; Ping, Wang and Chang, 2020; Zeitz, 2020). Recently, especially as the 2020 COVID-19 crisis has raised fears about developing countries' debt sustainability, research has considered what China does when borrowers are unable to honor their debt obligations (Acker, Brautigam and Huang, 2020; Bon and Cheng, 2020*a,b*).

However, research has yet to consider how Chinese lending affects the international regime for addressing debt crises. To do so, we first map how exactly the composition of borrowing countries' debt stocks has changed over time. After all, when a country becomes unable to satisfy its debt obligations, the resolution of the crisis depends on who a country's creditors are and how their debts are distributed. In particular, we focus on debt from non-private creditors. The role of private creditors in resolving sovereign debt crises, particularly the challenges in reaching agreement among disperse bondholders, has been well analyzed in the literature (Trebesch, 2010; Ferry, 2021; Wright, 2012). It is in the case of public, non-private lenders where the growing multipolarity in the world economy has had the biggest effect on the composition of sovereign lending.

Lenders that are neither private banks or bondholders are referred to as "official creditors" and can be divided into a number of categories. The first important distinction is between multilateral and bilateral creditors. The main multilateral creditors are the Bretton Woods institutions (the IMF and the World Bank) and regional development banks such as the African Development Bank or the Inter-American Development Bank. Bilateral creditors, by contrast, are state agencies, such as export credit agencies or the treasury, which extend loans directly to borrowing governments. This bilateral state-to-state lending is usually distinguished from foreign aid, which is concessional and extended for development purposes. For the purposes of crisis resolution, the difference between bilateral and multilateral creditors matters because most multilateral creditors enjoy "preferred creditors treatment," meaning that borrowers prioritize repayment of their multilateral creditors when they face payment difficulties (Schlegl, Trebesch and Wright, 2019). Moreover, since bilateral official creditors are government agencies, their engagement in crisis resolution is likely

Figure 1: Average composition of borrowers' official debt stocks, 1989-2019

Note: This data covers 120 low- and middle-income countries in the World Bank's International Debt Statistics dataset.



to be shaped by political considerations.

Among bilateral creditors, lenders can further be distinguished by their membership in the Paris Club. The distinction between Paris Club and non-Paris Club creditors is important because it reflects official creditors' adherence to certain principles when a borrower faces a debt crisis. Paris Club creditors agree to share information with one another about their exposure to borrowing countries, to take a unified position on debt relief, and to coordinate closely with the IMF. As of 2021, the Paris Club includes 22 members, most of which are also members of the OECD.<sup>3</sup> Notably, China remains outside of the Paris Club, having declined several invitations to join the creditor group.

Newly released data allows us to ascertain how the composition of borrowing countries' debt stocks has changed over time. Since 1951, the World Bank has collected data from

<sup>3</sup>As of March 2021, the permanent members of the Paris Club are Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Netherlands, Norway, Russia, South Korea, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

all low- and middle-income countries on each of their public or publicly guaranteed loans.<sup>4</sup> Until recently, the World Bank released data from its internal loan-by-loan dataset only in a highly aggregated fashion or in response to special requests (Bunte, 2019). In late 2020, to satisfy demands for greater debt transparency given fears about a looming developing country debt crisis, the World Bank released, for the first time, dyadic data on debt flows and debt stocks that reports borrowing countries' debt disaggregated by creditor. We use this data to trace how countries' official debt stocks have changed in the last three decades (see Figure 1).

Historically, the Paris Club's membership covered the vast majority of official bilateral debt. However, with the growth in lending by emerging economies, an increasing share of borrowing countries' debt has come to be owed to non-Paris Club creditors (see Figure 1). While Paris Club lenders made up, on average, 35% of borrowing countries' official debt stocks in 1990, by 2020 debt owed to Paris Club lenders accounted for only 12% of borrowers' official debt stocks. The initial decline in the Paris Club's share of borrowers' official debt was driven by debt relief initiatives in the early 2000s, when large volumes of the Paris Club's outstanding debts were forgiven. With bilateral debts forgiven, multilateral debts mechanically came to take up a larger share of borrowing countries' debt stocks. From the mid-2000s onward, the main driver of the changing composition of borrowers' debt stocks became the increasing volumes of debt owed to creditors outside the Paris Club. Almost all of the growth in non-Paris Club debt is due to Chinese lending. Whereas Chinese debts were a negligible 3% of borrowers' official debt stocks in 2005, by 2019 China alone made up 20% of the debt that governments owed to official creditors. Since 2014, the average share of borrowers' outstanding debt owed to China, a single bilateral lender, has surpassed the share of debt borrowers owed to all Paris Club members combined. The international arrangements for sovereign debt crises have not kept pace with these changes in developing countries' debt stocks.

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<sup>4</sup>As of 2019, there were at least 120 countries included in the World Bank International Debt Statistics dataset.

### 3 The IMF, debt crises, and Chinese debt

Sovereign default is the closest international parallel to corporate or personal bankruptcy. Unlike their domestic analogues, however, sovereign default and debt restructuring unfold without an overarching legal structure to govern default, repayment, and debt relief. Instead, the international regime for managing sovereign debt crises is a patchwork of institutions and international legal instruments, with the IMF at its center (Hagan, 2020; Buchheit et al., 2019). We argue that growing amounts of public debt owed to China make it more challenging for these institutions, and particularly the IMF, to carry out their roles in debt crisis resolution. The IMF’s expectations of coordination and transparency are different from China’s approach to lending and debt relief (Acker, Brautigam and Huang, 2020; Bon and Cheng, 2020a; Gelpern et al., 2021). Without information exchange and trust between Fund staffers and Chinese lenders, it can be challenging for the IMF to establish what is necessary for a borrowing country to return to debt sustainability. We first explain the IMF’s role in debt crisis resolution and then outline why we expect a country’s debt exposure to China to impede the IMF’s work. Our account draws on secondary literature on the IMF and China’s approach to debt restructuring, as well as a number of interviews with senior IMF and Paris Club officials.<sup>5</sup>

One of the IMF’s most important roles in debt crisis resolution is to assess the sustainability of a country’s debt. When a country faces a balance of payments crisis, the IMF’s Debt Sustainability Analysis (DSA) provides crucial input into the design of an eventual IMF program and informs creditors’ understanding of whether a debt restructuring is necessary.<sup>6</sup> As Guzman and Heymann observe, the IMF’s DSA “can also influence substantially the workings of sovereign lending markets. Its assessments are critical for determining whether a country will enter into a phase of debt restructuring” (Guzman and Heymann, 2015, 389). The DSA indicates whether IMF funding will simply bridge a period of illiquidity and allow

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<sup>5</sup>Since the officials we interviewed were not authorized to speak publicly on behalf of their institutions, we cite them anonymously.

<sup>6</sup>Of course, given the substantial economic and political costs involved in a restructuring, the IMF occasionally faces pressure from its shareholders to make “heroic” assumptions about a country’s debt sustainability to avoid debt restructuring, as in the case of Greece in 2010 (Hagan, 2020, 4).

the country to regain access to international markets, or whether the debts are unsustainable and some form of debt relief is necessary (Hagan, 2020, 3). In those cases where the IMF deems a country's debt unsustainable, the Fund must next establish how likely it is that the country will receive debt relief from its creditors in order to accurately project the country's funding shortfall in the coming years. Any debt relief will enter into the IMF's calculation of the funding gap, allowing the IMF and the borrowing country to subsequently negotiate over the amount of financing and structural adjustments deemed necessary to restore economic stability.

To know whether the borrower is likely to receive debt relief, the IMF relies on close collaboration with creditors. In particular, the Fund depends on its long-standing relationship with the Paris Club. Though not a full member, the IMF is very closely involved in the work of the Paris Club. An IMF representative participates in all meetings of the Paris Club as an observer, the head of the IMF's Strategy, Policy, and Review department provides monthly reports to the Paris Club creditors, and when the Paris Club is considering a restructuring it asks the IMF to provide data on the borrower.<sup>7</sup> Most importantly, the Paris Club requires a debtor country to agree to an IMF program as a condition for extending debt relief, to provide assurance that debt relief will form part of a broader return to economic stability.

The close relationship between the IMF and the Paris Club performs an important function for both institutions. For the Paris Club, IMF programs are an insurance against the moral hazard of debt relief, while for the IMF, the Paris Club provides a single point for communicating with official creditors and anticipating a borrowing country's future debt relief, allowing the Fund to estimate a borrowing country's future financing needs. The trust between the IMF and the Paris Club is such that Paris Club members' informal assurance that they will provide debt relief is often sufficient to allow the Fund to conclude a program with a borrowing country, even before the final details of a Paris Club restructuring are negotiated and agreed. As one senior IMF official explained, "official bilateral creditors are the critical piece in a restructuring. They have real money they can put on the table, they have

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<sup>7</sup>Interviews with IMF staffers (June 12, 2020; May 28, 2021)

real leverage through their diplomatic relations, and they can influence the multilaterals”.<sup>8</sup>

The IMF’s engagement with official creditors is further determined by internal Fund policies. Until the 1980s, internal IMF policies prohibited the IMF from “lending into arrears,” meaning that it was unable to extend financing to countries that had fallen behind on their payments to any lenders, unless these countries had reached a restructuring agreement with their creditors. To avoid the risk of private holdout creditors imposing painful delays on an IMF program, the IMF relaxed this policy in 1989, but was still unable to lend if a borrower was in arrears to official creditors. Until well into the 2010s, the IMF was unable to lend to a country that had fallen into arrears on its payments to official bilateral creditors, *unless* the country had reached an agreement with the Paris Club. As Hagan notes, “For many years, this...did not actually have an adverse impact on the ability of the IMF to move rapidly when debt was judged unsustainable...because the restructuring of official bilateral claims took place under the auspices of the Paris Club, which generally made commitments of debt relief at the outset of the program” (Hagan, 2020, 7).

The IMF’s lending into official arrears policy indicates the close and cooperative relationship with the Paris Club. However, with the growing heterogeneity among official creditors, the IMF revised its policy in 2015 to encourage countries in arrears to reach an agreement with *all* creditors, including non-Paris Club creditors. More importantly, the revised policy allows the IMF to lend to borrowers even if they are in arrears, if a restructuring agreement with major creditors proves impossible to reach. A 2015 IMF staff report proposing the policy change noted that allowing lending into arrears would “reduc[e] the risk that the Fund would be prevented from assisting a member in need because certain official bilateral creditors are seeking more favorable treatment of their claims at the expense of other contributing creditors” (IMF, 2015, 2). The policy shift is a sign that IMF expected, and had already experienced, difficulties due to non-Paris Club creditors “holding out” during debt crises. Since the large majority of non-Paris Club official debt consists of loans from Chinese state-backed lenders, the concern about hold-out creditors stymieing an IMF program is

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<sup>8</sup>Interview with IMF staffer (May 28, 2021)

largely directed at China.

We argue that Chinese loans are disruptive to the IMF’s debt crisis resolution work for two reasons: (1) the lack of transparency and (2) China’s preference for bilateral (rather than multilateral) crisis resolution. Unlike most other official bilateral lenders, China does not publish systematic data on its loan or aid programs (Strange et al., 2017; Brautigam, 2011). Recent work by Horn et al. suggests that approximately half of China’s bilateral loans are not publicly reported (Horn, Reinhart and Trebesch, 2019). Hidden debts make it challenging for the public in borrowing countries to hold governments to account. They also make it difficult for other creditors to know the true financial position of a borrowing country. However, uncertainty about the *amount* of debt is not likely to be a problem for the IMF. During negotiations with the IMF, the borrowing country must make available its confidential balance-of-payments statistics to the Fund, which reveal the extent of the country’s Chinese debt stocks. In fact, IMF officials can come under informal pressure from other creditors to divulge information about a borrowing country’s exposure to China.<sup>9</sup> Though public attention has recently focused on the lack of transparency in the amounts of Chinese lending, for the IMF the most important area of opacity about Chinese debt stocks is uncertainty about the *terms* of outstanding loans and whether China will extend debt relief.

Uncertainty about the terms of Chinese loans can make it challenging for the IMF to estimate a borrowing country’s debt burden and establish the size of the IMF loan package. Secrecy about the terms of Chinese loans is particularly problematic because of idiosyncrasies of Chinese loan contracts that make it easier for Chinese lenders to collect on their debt. Gelpern et al.’s (2021) detailed analysis of the terms of Chinese loan contracts reveals that many loans contain clauses that enhance the seniority of Chinese lenders’ claims.<sup>10</sup> In particular, many Chinese loans require the borrower to set up a special account, funded either with revenues from the project financed by the loan or with unrelated funds, which can

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<sup>9</sup>Interview with IMF staffer (May 28, 2021)

<sup>10</sup>In debt, seniority refers to the ranking of creditors’ claims on a debtor; more senior creditors are paid first and are therefore more likely to be paid in the event of a default.

be used to settle the borrower’s debt obligations. As Gelpern et al. note, “If a substantial portion of a country’s revenue streams is earmarked for the benefit of a single creditor [i.e. China] ... this *can undermine IMF programs*, adding to the effective adjustment burden of the country and deepening haircuts for other creditors in the event of a debt restructuring” (Gelpern et al., 2021, 30-31, emphasis added).

If loan terms such as special accounts or collateralization are undisclosed, this can increase uncertainty about the borrowing country’s future liquidity, making it harder for other creditors to agree to debt relief and for the IMF to agree to a program. Uncertainty about China’s loan terms appears to have delayed negotiations between the Zambian government and its private creditors in late 2020 and early 2021, in turn delaying negotiations with the IMF. As one member of the private creditor group observed, “We ... have no clarity on how they [Zambia] intend to treat bilateral creditors, especially China” (Bavier and Strohecker, 2021). While the opacity of China’s lending and treatment of debt crises might make the work of the IMF more difficult, it is important to note that it is not always counter to the interests of borrowing governments. Observers recount that, in some cases, borrowing governments may prefer to quietly and bilaterally negotiate a rescheduling of their Chinese debts without a public disclosure that might trigger a credit rating downgrade.<sup>11</sup> Moreover, borrowing governments may hope that generous future financing from China will allow them to avoid a painful restructuring with private and other official creditors.<sup>12</sup>

These difficulties posed by the opacity of Chinese lending point to the second and closely related challenge associated with Chinese debts, namely China’s lack of coordination with other creditors. Despite invitations to join, China has to date refused to become a permanent member of the Paris Club, with analysts noting that “membership in this quintessential ‘rich countries’ club’ could cast a shadow on China’s much cherished identity as a developing country” (Wang, 2014, 9). Though China occasionally takes part in monthly Paris Club meetings as an observer, it has to date not participated in any Paris Club restructuring agreement as an Ad Hoc participant, instead preferring to settle borrowers’ debt problems

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<sup>11</sup>Interview with an infrastructure finance expert (May 26, 2021)

<sup>12</sup>Interview with IMF staffer (May 28, 2021)

“quietly, on a bilateral basis” ([Acker, Brautigam and Huang, 2020](#), 3). Not only does China not participate in Paris Club negotiations, Chinese loans also often include clauses that seek to exempt the debt from inclusion in any Paris Club restructuring or from treatment comparable to debt restructuring agreed with the Paris Club. As Gelpern et al. explain, these clauses introduce significant tension into the international system for resolving debt crises, since “A debtor that flouts the comparability principle and follows through on its preferential treatment promise to CDB [China Development Bank] or China Eximbank would be in serious breach of Paris Club norms, and would likely damage its relationships with the IMF, the World Bank, and other official and commercial creditors” ([Gelpern et al., 2021](#), 35). Case studies of Chinese restructuring find that Chinese lenders usually negotiated directly with the borrowing government, eschewing coordination with other creditors. ([Acker, Brautigam and Huang, 2020](#); [Bon and Cheng, 2020b](#)).

In part, China’s reluctance to coordinate with other official creditors comes from a diverging interpretation of what constitutes an official creditor. While the IMF does not have a formal definition of an official claim, it has relied on the Paris Club approach and treated official credit as “(concessional and non-concessional) lending by either creditor governments or, alternatively, by an agency of the government that is acting on behalf of the government” ([IMF, 2015](#), 16). The vast majority of Chinese loans are extended by China’s two main policy banks, China Development Bank (CDB) and the Chinese export credit agency, China Eximbank. According to the Paris Club and IMF definitions of an official creditor, both CDB and China Eximbank qualify as official creditors. However, China classifies CDB as a state-owned commercial bank, rather than a policy bank, arguing that CDB should not count as an official creditor ([Brautigam, 2020](#)). This classification of CDB as a commercial creditor appears inconsistent with the fact that most CDB loan contracts require the borrower to maintain diplomatic relations with China, suggesting that CDB lending is connected to China’s political objectives ([Gelpern et al., 2021](#), 41). While it is beyond the scope of this paper to adjudicate whether CDB’s claims to be a commercial bank are genuine or an instrumental means of avoiding inclusion in initiatives aimed at official creditors,

the disagreement is indicative of the diverging definitions and norms in sovereign lending between China and other official creditors.

Aside from declining to coordinate with other creditors, China's particular approach to debt relief may also make it difficult for the IMF to assess whether a borrower will return to debt sustainability over the course of a program. To date, China has offered debt forgiveness only on interest-free bilateral loans (which were often extended with the implicit expectation that they would be forgiven) (Lui, 2020).<sup>13</sup> For the concessional and commercial loans that make up the vast majority of China's loan portfolio, Chinese lenders have so far preferred to offer extensions to the repayment period, rather than outright forgiveness (Acker, Brautigam and Huang, 2020). This repayment extension, known as rescheduling, does not reduce the total amount of a borrowing country's debt, but simply lowers the annual debt service payments by extending the repayment timeline, and may be insufficient to restore a country's debt sustainability. Moreover, Chinese lenders may be slower than other official lenders to offer some form of debt relief. In the eight cases of debt restructuring they analyzed, Bon and Cheng found that Chinese restructuring often took place "three to five years after" the intervention of the Paris Club, and that "Chinese debt restructurings offered generally smaller relief than Paris Club agreements" (Bon and Cheng, 2020b, 23). This echoes the assessment of a senior IMF official, who observed that China is "sometimes slow to come to the understanding that restructuring is necessary".<sup>14</sup>

China's approach to official lending and debt restructuring diverges from that of the countries that long dominated official lending. The differences in norms and contractual obligations introduce tensions into the international regime for resolving debt crises. These tensions can undermine the IMF's ability to negotiate country programs through a number of channels. Chinese delays in restructuring may cause Paris Club creditors to be reluctant to offer restructuring, making it harder for a borrower to meet the debt sustainability

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<sup>13</sup>Creditors can offer borrowers different forms of debt relief. They can cancel parts or the entirety of the outstanding principal (known as a "haircut"), lower the interest rate on future debt, or extend the period for repayment (Buchheit et al., 2019, 343). Reductions in the principal are the most costly to the creditor, but may be necessary to restore a country's debt to sustainable levels.

<sup>14</sup>Interview with IMF staffer (May 28, 2021)

thresholds required for an IMF program. Or, if China is the largest lender, Chinese delays in restructuring might directly hold up the IMF program. Alternately, a debtor government might negotiate more aggressively with the IMF if it expects that it will be able to work out a bilateral, favorable deal with China. These mechanisms are observationally equivalent, underpinning our main hypothesis that:

*Borrowing countries with higher stocks of debt owed to China will experience more protracted negotiations with the IMF during a debt crisis*

We focus on the length of negotiations between the borrower and the IMF since this indicates how difficult it is for the IMF and the debtor government to reach an agreement and to resolve outstanding issues prior to the program. This is consistent with anecdotal evidence that Chinese debt has extended the negotiations between borrowers and the IMF, as in the Republic of the Congo in 2017. IMF staff visited the Congo three times that year to attempt to arrange a loan, but concluded that Congolese debts to China were unsustainable. To enable an IMF program, the Congolese government negotiated with China over restructuring for over a year, until China agreed to lengthen the timeline for repayment in spring 2019. Only then did the IMF approve an Extended Credit Facility.

Delays to IMF negotiations can be enormously costly to an indebted country. Often, having an IMF program in place is a first step to restoring market access and economic stability. Moreover, in the time until the country gains access to IMF financing, it is likely falling further into arrears with its creditors and deepening the economic crisis, making ultimate recovery more difficult and painful. If exposure to Chinese debt leads to delays in the negotiation of IMF programs, this imposes meaningful costs on debtor countries. More broadly, delays and inefficiencies in the IMF's operation are indicative of the health of the international debt regime. As the central part in the piecemeal global regime for resolving debt crises, the IMF's responsiveness and efficacy are important. If fragmentation in the universe of official creditors is undermining the activities of the IMF, this is indicative of broader fragilities in the system. Furthermore, it is suggestive of how international regimes that are largely held together by consensus on a set of norms and practices are vulnerable

to the rise of states with different preferences on those norms and practices.<sup>15</sup>

## 4 Measuring difficulties in IMF negotiations

To test our argument about the effects of Chinese loan stocks on IMF negotiations we use original data on the length and timing of the negotiation over IMF programs. We introduce this dataset in greater detail in [Ferry and Zeitz \(2021\)](#). In brief, we collect data on the dates of negotiation and approval of IMF programs. When a country approaches the IMF in a crisis, IMF staff prepare for negotiations by devising a “mission brief,” which sets out the Fund’s negotiation position on the parameters of a potential IMF loan. After this is prepared (or after the staff concludes that additional information needs to be gathered to prepare it) the IMF deploys a “mission,” where IMF staff travel to meet with representatives from the borrower government. Once on the ground, the mission team engages in data collection and, more importantly, negotiation with the borrowing government on the size of a loan and the conditions the government must fulfill to access the loan. If debt levels are deemed unsustainable, this is the stage at which the IMF must receive assurances from all major creditors that comparable debt relief will be forthcoming. Sometimes, a single mission might suffice to reach an agreement. At other times, multiple missions might be required to agree on the terms of an IMF program. Negotiations end when the borrower submits a formal “letter of intent” (LOI) to the IMF and the staff file their staff report, which the Executive Board of the IMF consults when deciding whether to approve the program. After the Letter of Intent and Staff Report are received, the Managing Director places the agreement on the Board’s agenda for approval on a future date. The Executive Board approves almost all programs that it considers, since the controversial details of the program are usually resolved during the negotiations, prior to consideration by the Board.

We use staff reports found in the IMF’s digital archives to compile data on the dates of negotiation for more than 600 programs approved 1985-2020 in our complete dataset. In

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<sup>15</sup>On China’s effect on the norms in the international regime on export finance, see [Bunte, Gertz and Zeitz \(2021\)](#); [Hopewell \(2019\)](#)

this analysis, we focus on programs approved 2000-2018, when Chinese debt became a larger share of borrowers' debt stocks. Of the 336 programs approved during this time, we have usable data on more than 260. From the IMF staff reports, we collect the specific dates of IMF-deployed missions. Sometime there is only one mission,<sup>16</sup> and sometimes there are several.<sup>17</sup> Most of the time precise dates are available for each mission; however, there are a several cases where the month of negotiations is recorded without the exact day.<sup>18</sup> Our data collection effort builds on [McDowell \(2017\)](#), who provides original data on the time between the Letter of Intent and Board Approval, which he uses as a measure of the IMF's responsiveness, since this phase is under the direct control of the IMF staff and Executive Board. We expand beyond this earlier data collection effort to provide systematic data on the negotiation stage, which is jointly controlled by the IMF staff and the borrowing government. Since this is the stage at which details of the program are agreed, it is the stage at which difficulties from incompatible creditor preferences are likely to affect the IMF's work.

## 4.1 Dependent Variables

We use the dates collected from the staff reports to calculate several dependent variables that capture the negotiations. The primary dependent variable is the *Number of Missions*, which is recorded as a count variable of separate trips taken by the IMF staff to negotiate with a borrower country. This measure illuminates the difficulty and intractability of negotiations between IMF staff and the borrower country. Counting the number of missions allows us to speak directly to the costliness of negotiating time. If the IMF and a borrower country fail to reach an agreement during a first mission, the IMF must incur significant costs to send a staff team back to the borrower country a second (or third, fourth, etc.) time. Unlike duration measures, described below, we are also more confident that this indicator strictly captures

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<sup>16</sup>For example, in Afghanistan's 2016 program, "discussions were held in Delhi during May 18-26, 2016" (IMF Country Report No. 16/252 2016).

<sup>17</sup>For example, in Gabon's 2017 program, "discussions were held in Washington DC during January 26-27, in Libreville during February 14-28, and in Washington DC during March 29-April 7 (IMF Country Report No. 17/205 2017)

<sup>18</sup>For example, in Egypt's 2016 program, "discussions were held in Washington DC in May, in London in June, and in Cairo in August" (IMF Country Report No. 17/17 2017).

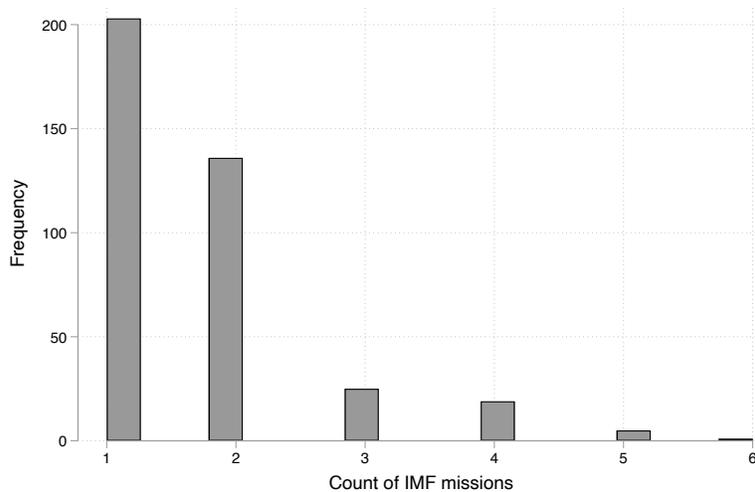


Figure 2: Number of IMF Staff Missions

active negotiation time and is not a byproduct of bureaucratic delays or holidays. Relying on the number of missions allows us to incorporate information on a wider sample of cases, specifically those where the the dates of individual missions are recorded imprecisely. While there does not appear to be a systematic pattern in the availability of mission dates, this allows us to minimize any potential biases. Variation in the count of negotiation missions is displayed in Figure 2. The average IMF program is negotiated in one or two missions; however, the data suggests there are a significant number of programs that take three or more missions to conclude. For example, Madagascar’s 2006 program took five missions to negotiate, beginning in June 2005 and ending in May 2006.

We also take a more fine-grained approach and code additional dependent variables using the dates of specific negotiation milestones. Specifically, we calculate *First Mission to Board Approval*, which measures the full length of time from the first day of the first mission to the eventual board approval of a program. Second, we calculate *Between Missions* as the difference between the first day of the first mission and the last day of the final mission. Finally, we count the number of days from *LOI to Board Approval*. This is the closest to the measure in McDowell (2017), and captures the IMF’s institutional responsiveness to a borrower. The mean length of time from when negotiations begin to when a program is

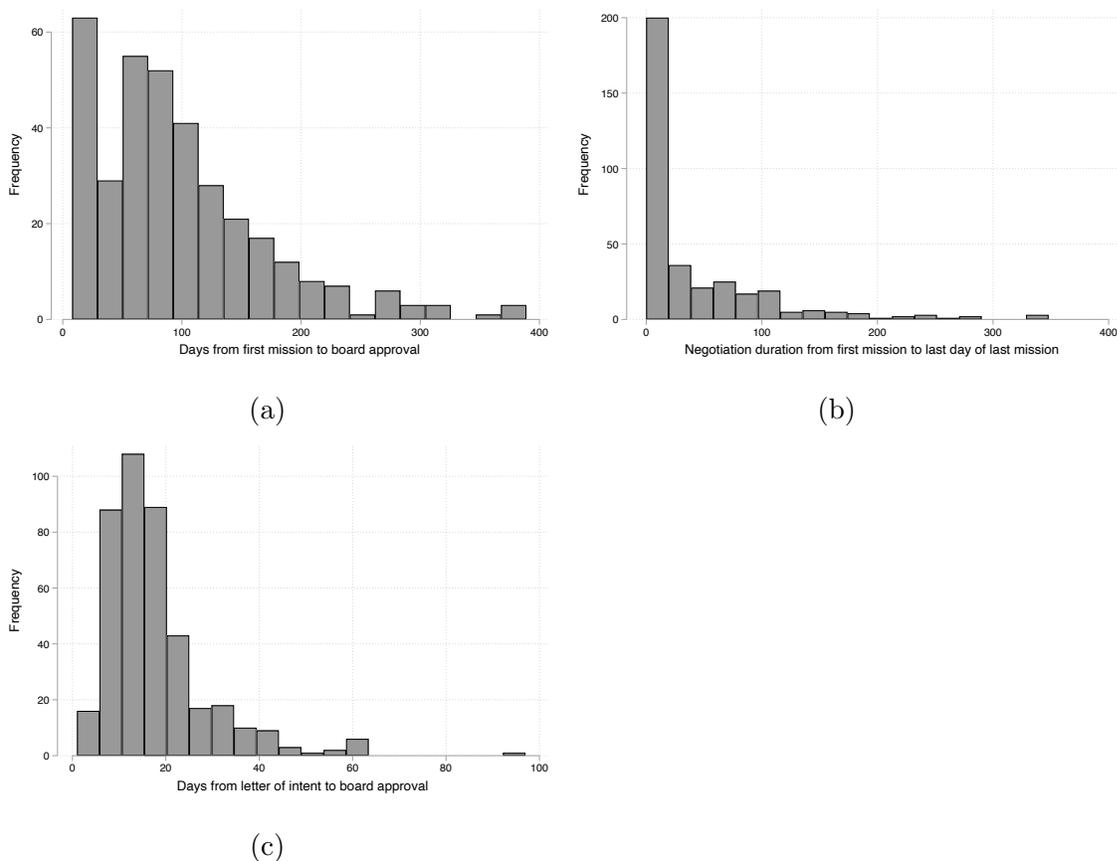


Figure 3: Duration of Negotiation Stages (Days)

approved is 115 days. Of that time, an average of 52 days are spent in the negotiation phase, between the first and last mission. By contrast, the time from formal request to Board approval is much shorter, on average only 20 days.<sup>19</sup>

## 5 Research design

To test our theoretical arguments, we pair our original measures of IMF negotiations with data on Chinese debt stocks to conduct a quantitative analysis for the period 2000-2018.<sup>20</sup>

In all our analyses the unit of analysis is the IMF program and programs can take a few

<sup>19</sup>IMF Staffers suggest that this is because most of the negotiating is concluded before the program moves to the board approval stage (Interview of IMF Staffer, May 28, 2021).

<sup>20</sup>While we initially collected data on all IMF missions through July 2020, our analysis is limited by the availability of other measures. This also eliminates potential biases driven by IMF programs negotiated under the COVID-19 pandemic. These programs appear to have experienced faster and less contentious negotiation processes with little in-person interaction.

months to a few years to negotiate. Because of this potential disjuncture between program-level and annual-level data, we chose to measure our covariates, described below, in the year negotiations begin, as identified by the first IMF mission date. This also follows convention, where IMF programs are negotiated based on information that lags behind the date of approval. Our data includes programs for more than 110 borrower countries.

## 5.1 Independent Variables

Our expectation is that as Chinese exposure to a borrowing country in debt distress increases, IMF negotiations will be more protracted. We measure *Chinese Debt Stocks* as a borrower country’s public and publicly guaranteed debt owed to the Chinese government (including the central bank, export credit agencies and other government bodies). We standardize this measure both as a share of the borrower country’s GDP, and report additional results in the appendix in which we measure debt stocks owed to China as a share of the borrower country’s total official debt. Notably, both operationalizations exclude borrowing by private actors in borrower countries and lending by private actors in China.<sup>21</sup> Data comes from the World Bank’s International Debt Statistics (IDS) database, where official claims disaggregated by creditor country were made publicly available for the first time in late 2020. We choose to rely on the IDS data for because it offers the most comprehensive temporal and cross-sectional coverage and since it represents the closest approximation to the data the IMF Staff and Executive Board would have at their disposal during negotiations.

However, these benefits do not negate the fact that Chinese lending remains opaque.<sup>22</sup> In fact, this lack of transparency is part of our theoretical argument about why Chinese lending impedes the IMF’s operations. [Horn, Reinhart and Trebesch \(2019\)](#) estimate that because a sizable portion of Chinese obligations are from Chinese state-owned enterprises (SOEs) to borrower country SOEs, it may not get recorded in official reports. As much as

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<sup>21</sup>Although the line between public and private lending is blurred in the case of Chinese SOEs. Horn et al (2017) claim that because of this, most Chinese lending should be classified as official.

<sup>22</sup>For example, in the IDS reporting countries are not required to distinguish between 0 values and missing data. To avoid making assumptions and replicate the information the IMF Staff has available, we continue to treat this information as missing in our main analyses.

50% of Chinese obligations may be hidden or misclassified. While this is a limitation of any effort to analyze Chinese debt, we believe that this underreporting does not negate robust empirical examination. In part, underreporting is minimized because the IDS releases debt stock data as it is reported by borrower states, meaning the data does not come from China itself. And even where underreporting is likely to exist, measurement error is likely to bias against our findings.

Additionally, we acknowledge that the IMF responds to many different types of borrowing country circumstances. It lends as a response to financial crises and to promote longer-term economic development. Because of its dual function, countries approach the IMF for a variety of reasons, not all of which are related to debt. Borrowers facing urgent balance-of-payments circumstances might be facing exchange rate, inflation, banking or debt crises. While these are certainly related (Reinhart and Rogoff, 2009), the role of sovereign debt and official finance varies across IMF cases. Because our theory is about changes in the landscape of official bilateral finance, it stands to reason that we should only see Chinese lending matter in IMF negotiations when external debt is a significant cause of a borrower’s financial distress. To address this, we include an indicator variable to account for whether or not a borrower country is in *Default*. We code this variable dichotomously based on the Bank of Canada’s Credit Reporting Assessment Group’s (CRAG) database on sovereign default. Years in which a borrower country has a positive amount of debt in default (to any creditor) we code as 1. Our main variable of interest is the interaction between *Chinese Debt Stocks* and *Default*.<sup>23</sup>

## 5.2 Control Variables

We control for a number of economic and political factors that could affect both Chinese lending and the duration of IMF negotiations. As one of existing few studies on IMF responsiveness, we follow the model proposed by McDowell (2017) where appropriate.

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<sup>23</sup>We obtain largely similar results using *Debt Service (as a % of exports)* as a more continuous measure of debt distress

First, geopolitics plays an important role for both IMF programs and Chinese lenders. Just as key shareholders in the IMF use their influence to affect the size and conditionality of IMF programs (Oatley and Yackee, 2004; Barro and Lee, 2005; Dreher and Jensen, 2007; Copelovitch, 2010), they might also use their influence to speed up the negotiation process. To account for a borrower country’s strategic importance, we include four measures: the sum of official development assistance from the G5 (as a % of the G5’s GDP) (*G5 Foreign Aid*), the sum of G5 commercial bank exposure (as a % of the G5’s GDP) (*G5 Bank Exposure*), voting alignment with the G5 in the United Nations General Assembly (UNGA) (*G5 UNGA Agreement*) and membership on the United Nations Security Council (UNSC) (*UNSC Member*). Data on foreign aid comes from the OECD, data on bank exposure comes from the IDS, data on UNGA ideal points come from Bailey, Strezhnev and Voeten (2017) and data on UNSC membership comes from Dreher, Sturm and Vreeland (2009).

Second, recipient characteristics also matter. For example, a borrower country’s political institutions might affect negotiations if mainly democratic principals favor democratic recipients. Democratic institutions are also correlated with increased transparency, and IMF staffers specifically mention that gathering data from autocratic recipients can be more challenging.<sup>24</sup> Therefore, we include a measure of *Polyarchy* from the Varieties of Democracy Project (V-Dem). We also control for the borrower’s *GDP* (constant USD, log) and *Population* (log) from the World Development Indicators as general measures of economic size.

Third, it is possible that China is lending to countries that might be “riskier” ex ante. If this is the case, then this could impact both the level of Chinese debt and the IMF’s urgency to respond to financial crises. We therefore control for the urgency of a program request in several ways. First, we control for a borrower’s total *Public Debt to GDP* ratio. Data is from Abbas et al. (2010).<sup>25</sup> Second, we control for a borrower’s *Short-term Debt* obligations (as a % of total external debt).<sup>26</sup> Data is from the World Development Indicators and should

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<sup>24</sup>Interview with IMF Staffer (June 12, 2020).

<sup>25</sup>By combining multiple sources, this dataset represents the most extensive historical coverage for all IMF members.

<sup>26</sup>Short-term debt is defined as all debt with an original maturity or less than one year and interest in arrears on long-term debt.

signify a more imminent crisis.

### 5.3 Model Estimation

Our dependent variables have two forms. Therefore, we present two sets of empirical models. Because our main dependent variable (*Number of Missions*) is a nonnegative count variable, which records the number of IMF missions deployed to a borrower country during negotiations, we estimate our first set of models using negative binomial regression. The results are robust to modeling the relationship with an Ordinary Least Squares (OLS) estimator instead (see Table B1).

Our additional dependent variables are all duration measures. Therefore, we use Cox proportional hazard models to estimate our second set of results for the time between negotiation stages (*First Mission to Board Approval*, *Between Missions*, *LOI to Board Approval*). Because our unit of analysis is the IMF program, there are no censored observations. An observation becomes “at risk” on the first day of the stage, and “fails” when it reaches the milestone designated as the end of the stage. The Cox proportional hazard model does not assume a specific form for the underlying hazard and estimates the hazard rate of failure (reaching the next negotiation milestone) as the function of a baseline hazard and the covariates (Box-Steffensmeier and Jones, 2004). One of the limitations of the Cox model is the requirement that the proportional hazards assumption is met. If it is not, estimates are likely to be biased (Box-Steffensmeier and Zorn, 2001). To address this concern, we use Schoenfeld residuals to test the proportional hazard assumption in each specification. We follow standard practice and interact any offending variables with the natural log of time.

As McDowell (2017) shows and our own data collection efforts confirm, there are important temporal trends in IMF negotiation timing. More recent IMF programs are approved more quickly than programs at the beginning of our sample. To account for this temporal variation we include a year time trend. Finally, to account for potential correlation across observations, we use robust standard errors clustered at the country level in all our models.

## 6 Results

### 6.1 IMF negotiating missions

In the first step of our analysis, we examine how Chinese debt stocks affect the number of discrete negotiating trips that are required to reach agreement on an IMF loan program. Table 1 reports the results of models estimating the relationship between a borrower's *Chinese Debt Stocks* (as the % of borrower country's GDP) and the number of negotiating missions per IMF program. As explained above, the preparation of an IMF agreement involves IMF staff traveling to the borrowing country to gather information about the economic conditions in the borrowing country and to reach an agreement on the conditions that will be attached to the IMF's loan. If it is difficult for IMF staff to locate the necessary economic data, receive reassurances, or to reach an agreement with their counterparts in the borrowing country, IMF staff may go back to headquarters without having reached an agreement and instead return to the borrowing country for a follow-up mission at a later date. We find that countries with higher amounts of outstanding Chinese debt require *more* negotiating missions from the IMF before concluding an IMF program, but *only* if they are in default at the time that the program is being negotiated. In other words, the IMF has more protracted negotiations with countries that have higher amounts of Chinese debt, but only if those borrowers are facing debt distress at the time.

Column 1 in Table 1 reports the effect of *Chinese Debt Stocks* on the number of IMF negotiating missions. Model 2 adds the interaction with *Default* and Model 3 includes a set of control variables. In Model 1, *Chinese Debt Stocks* fails to reach conventional levels of statistical significance. However, in the conditional models (Models 2 and 3), the interaction between Chinese debt and default is positive and statistically significant. For borrowers in default, higher levels of Chinese debt are associated with more negotiating missions to reach an IMF agreement, compared to borrowers that are not in default. Using coefficient estimates from Model 3, Figure 4 reports predictions for the number of missions by *Chinese debt stock*, comparing borrowers that are in default and those that are not. At low levels

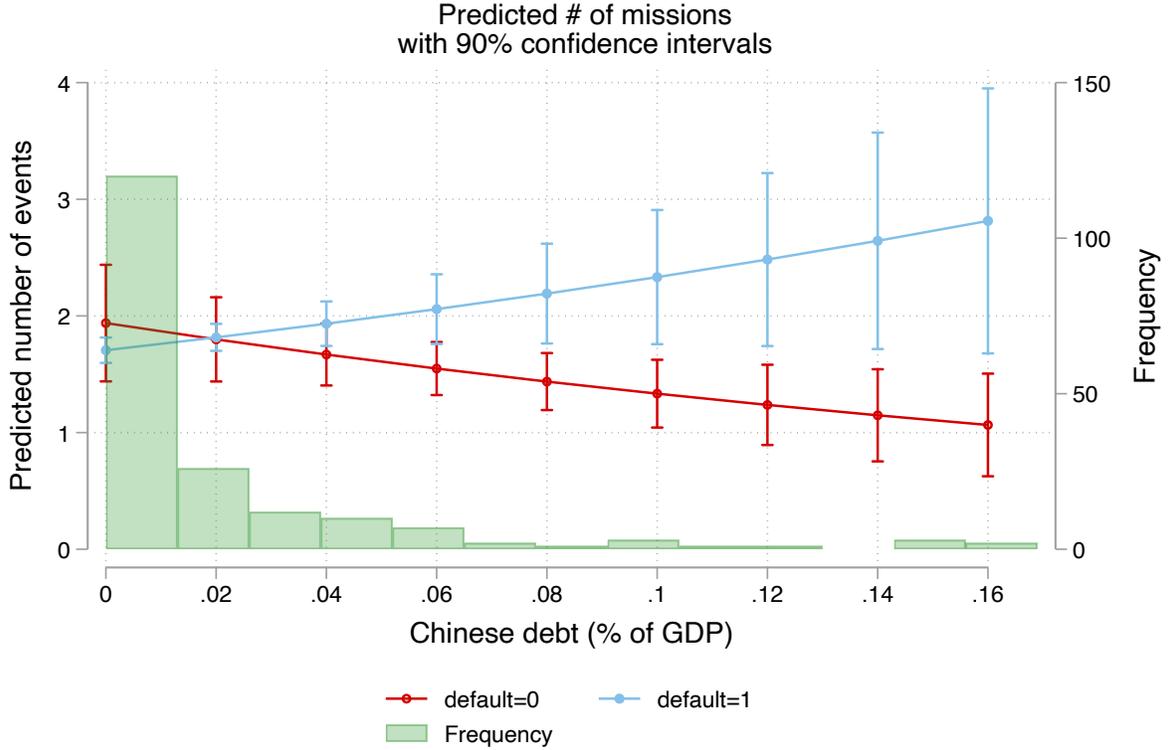
Table 1: Effect of Chinese debt stocks on number of IMF missions, negative binomial estimation

	(1)	(2)	(3)
Default=1 × Chinese debt (% of GDP)		6.464**	6.870**
		(2.004)	(2.623)
Chinese debt (% of GDP)	1.813	-3.535**	-3.741
	(1.597)	(1.291)	(2.274)
Default=1	-0.00335	-0.167	-0.128
	(0.140)	(0.139)	(0.164)
GDP (log)			0.0606
			(0.0453)
Population (log)			0.0296
			(0.0488)
Polyarchy index			-0.0342
			(0.234)
G5 foreign aid (% of G5 GDP)			-7160.9*
			(3124.2)
G5 bank exposure (% of G5 GDP)			-343.9
			(267.1)
G5 UNGA Distance			0.0121
			(0.0723)
Temporary UNSC member (0,1)			-0.0828
			(0.193)
Public debt (% of GDP)			0.00124
			(0.00106)
Short-term debt (% ext debt)			0.000384
			(0.00456)
Year	-0.0217***	-0.0234***	-0.0202**
	(0.00630)	(0.00625)	(0.00749)
Observations	209	209	188

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Figure 4: Predicted number of missions



of *Chinese debt stock*, there is no statistically significant difference in the predicted number of IMF negotiating missions for countries in default and those that are not. However, at higher levels of *Chinese debt stock*, borrowers that are in default can expect more protracted negotiations than those that are not. Using estimates from Model 3 and holding all other values at their means, a borrower at the 90th percentile of *Chinese debt stock* that is not in default can expect 1.5 missions to negotiate an IMF program, while a borrower with similar levels of debt that is in default can expect 2.05 negotiating missions to conclude an IMF program.

These results provide some confirmation of our expectation that borrowers with higher levels of Chinese debt face more protracted processes to resolve their debt crises. Our results do not allow us to ascertain what exactly causes initial IMF missions to be unsuccessful, leading to subsequent missions for those borrowers that are in debt distress and owe a large share of their debt to China. As we mention in Section 3, delays may reflect data

issues, China’s reluctance to restructure, the Paris Club’s reluctance to restructure without Chinese involvement, or debtor governments using the potential for a Chinese bilateral deal as bargaining leverage. Regardless of whether these results are driven by transparency issues or China acting as a “hold-out creditor” they indicate that the diversification of official finance can impede the IMF’s rapid responses to borrowers in debt crisis.

## 6.2 Phases of IMF program approval

In the second step of our analysis, we examine specific phases of the IMF’s process. Table 2 presents the main results for our duration measures. All models rely on the interaction between *Chinese Debt Stocks*, as a percentage of the borrower’s GDP, and *Default* as the main independent variable.<sup>27</sup> Hazard estimates are shown in non-exponentiated (coefficient) form rather than as hazard ratios, such that positive coefficients mean that negotiations are proceeding faster and negative coefficients mean that negotiations are proceeding slower.

Results indicate that the impact of Chinese lending on IMF negotiations depends on which stage of negotiations is considered. Different stages of IMF negotiations are driven by different considerations. The rise in Chinese commitments does not affect the aggregate length of time from negotiation onset to approval (Model 1), nor does it affect the time between first and last mission (Model 2). Both *Chinese Debt Stocks* and its interaction with *Default* fail to reach conventional levels of statistical significance in the early stages of IMF negotiations.

Chinese loan stocks do appear to matter in the final stage of program preparation, the time between a borrowing country’s formal submission of an LOI and Board Approval. However, China’s rise does not affect the duration of negotiations in the way we expected. The interaction between *Chinese Debt Stocks* and *Default* is positive and significant, meaning that programs where borrower countries are in default are approved more quickly when Chinese debt stocks are higher.

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<sup>27</sup>Due to space constraints, uninteracted models for each period of negotiation are presented in Tables B3-B5 in the Appendix.

Table 2: Effect of Chinese debt stocks on negotiation duration, Cox proportional hazard model

	(1)	(2)	(3)
	First to BA	Btw. Missions	LOI to BA
Default=1 × Chinese debt (% of GDP)	4.034 (20.98)	-0.112 (17.17)	14.66*** (3.955)
Chinese debt (% of GDP)	-7.309 (20.99)	-0.108 (17.11)	-10.14** (3.600)
Default=1	-0.199 (0.577)	-0.0472 (0.531)	-1.031** (0.340)
GDP (log)	0.0540 (0.105)	-0.0827 (0.119)	0.113 (0.122)
Population (log)	-0.187 (0.117)	-0.160 (0.123)	-0.0274 (0.121)
Polyarchy index	-0.334 (0.459)	0.0980 (0.517)	-0.495 (0.418)
G5 foreign aid (% of G5 GDP)	14516.6* (7262.6)	21780.0*** (4431.8)	-3798.4 (9768.1)
G5 bank exposure (% of G5 GDP)	51.93 (825.3)	422.3 (657.5)	-1104.4 (606.9)
G5 UNGA Distance	-0.0290 (0.150)	-0.0419 (0.169)	-0.381* (0.159)
Temporary UNSC member (0,1)	0.527 (0.272)	0.648 (0.351)	0.517 (0.524)
Public debt (% of GDP)	-0.00214 (0.00226)	0.000754 (0.00264)	-0.00230 (0.00188)
Short-term debt (% ext debt)	0.000486 (0.0101)	0.000544 (0.0104)	0.0106 (0.00967)
Year	0.0554*** (0.0142)	0.0372** (0.0138)	0.0520** (0.0161)
Observations	169	169	186

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

It is possible to interpret the faster agreement of IMF programs as evidence of logrolling if other IMF Executive Board members support expediency for IMF loans to major Chinese borrowers in hopes that the China will return the favor when other creditors are highly exposed (Copelovitch, 2010). However, given our interviews and other qualitative evidence about the tension between China and traditional Paris Club creditors, we believe this unlikely to be the case. Instead, our interviews with IMF staff suggest that expediency in the final stage of negotiations is more likely driven by increased effort in earlier stages of negotiation. According to one official, the “interesting” part of negotiations occurs while the IMF is putting together balance of payments calculations and conducting its debt sustainability analysis. This stage of the process can be dragged out by missing information, a lack of trust, or where any individual creditor fails to provide assurances that debt relief will be forthcoming. In cases where Chinese debt is high, this assurance can be difficult to achieve because of uncertainty over Chinese creditors’ intentions. Before the program can move forward, IMF staff must establish whether or not Chinese lenders see the crisis as a solvency problem and whether or not they will provide debt relief. Once a tentative agreement is in place and a program is submitted to the Executive Board, “the interesting part is over.” IMF Staff depict the final stage of multilateral negotiations as relatively straightforward, because most of the pertinent details have already been worked out.<sup>28</sup>

This interpretation fits with our first set of findings on IMF missions. For countries in debt distress, high levels of Chinese debt require more IMF missions to gather information, negotiate details, and receive assurances from other creditors. Once this has been achieved, the rest of the process is expedited. However, while the coefficient for time *Between Missions* is negatively signed, implying a slower process, it fails to reach significance. Future research should further probe what is happening during this stage, both at Fund headquarters and in the recipient country. For now we note that our duration measures are noisy and that the time *Between Missions* is particularly noisy. While the average IMF program requires 16 days of active mission negotiations, the average time from the first day of the first mission

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<sup>28</sup>Interview with IMF Staffer (May 28, 2021)

to the last day of the last mission is 44 days. We do not have a good understanding of what happens during this time. The time between missions could involve active negotiations and it could also involve unrelated events at IMF headquarters or in borrower countries.

### 6.3 Robustness

To ensure that our results are not dependent on empirical modeling choices, we conduct additional robustness tests for both our count and duration measures. We briefly describe them here and present full results in the appendix. Tables B1-B2 provide results based on the *Number of Missions* and Appendices B3-B5 provide results based on our four duration measures *First Mission to Board Approval*, *Between Missions*, and *LOI to Board Approval*.

First, Table B1 in the Appendix addresses specification and for ease of interpretation replicates our main results (Table 1) for *Number of Missions* using OLS estimation. The results are consistent, giving some confirmation that our main result is not an artifact of estimator choice. Second, in Appendix Table B2 we introduce additional operationalizations of our independent variables. We present results utilizing *Chinese Debt Stocks* as a share of the borrower country's official debt stocks. We also interact Chinese debt with *Debt service* (as a % of annual exports), in lieu of default, as a more continuous measure of debt distress. The results are broadly consistent with our main findings. We find that the interaction between *Chinese Debt Stocks* as a share of borrower GDP and *Debt service* as a more continuous measure of debt distress is positive and statistically significant. This suggests that substantial debt stocks to China become more of an impediment to negotiations as the borrower's debt distress increases, even outside of a binary threshold such as default. However, while the coefficient on the interaction with *Chinese Debt Stocks* as a share of official debt stocks is still positive, it does not attain standard levels of statistical significance. This suggests that IMF negotiations are more likely to become protracted when Chinese debt stocks are large in absolute terms, rather than simply as a share of total debt. Even if Chinese lenders' approaches to debt restructuring are different from other official creditors, this is only likely to matter if the borrower is highly in debt.

The patterns in the extended models with various duration measures largely replicate the patterns in the main results reported in Table 2. There appears to be no statistically significant effect of Chinese debt stocks on the total duration of program preparation (*First Mission to Board Approval*) or the duration of the total negotiation window (*Between Missions*). However, in the final phase, between receiving a formal request and issuing Board Approval, various robustness checks in Table B5 in the Appendix support the finding that borrowers with higher levels of Chinese debt receive *faster* approval, if they are also experiencing debt distress.

## 7 Conclusion

How durable are international institutions to the fragmentation and greater diversity of preferences implied by economic multipolarity? Recent research casts doubts on China's smooth integration into the liberal international order, highlighting that China's domestic preferences are at odds with certain core tenets of that order (Weiss and Wallace, 2021). In the case of sovereign debt, China's preference for bilateral and case-by-case approaches to crisis resolution appears in keeping with a broader prioritization of sovereignty and discretion over coordination and transparency in China's foreign policy. Chinese lenders' approach to their borrowers' payment difficulties has to date emphasized discretion, secrecy, and bilateral arrangements, a notable divergence from the practices and norms of the creditors that previously dominated official bilateral lending.

We demonstrated that higher exposure to Chinese debt impedes borrowing countries' negotiations with the IMF. Returning to IMF headquarters without an agreed program at the end of a mission is costly and is a sign that negotiations have proven intractable. The fact that countries that have higher levels of Chinese debt are more likely to require multiple missions to agree a program is a sign that these negotiations are more difficult to conclude. Additionally, we find that once the negotiation stage is complete, the IMF Executive Board does not appear to slow down the approval process for borrowers in default

with high Chinese exposure. In fact, the approval process is concluded more quickly. We interpret this as evidence that (1) Chinese lending has a significant impact on crisis resolution and (2) that Chinese lending seems to interrupt crisis resolution most during the negotiation stage. This is consistent with the interpretation that the greatest challenge posed by Chinese loans are opaque loan terms and uncertainty about potential debt relief forthcoming from Chinese lenders. Negotiations may be stalled while IMF staff gather data on borrowers' loan contracts or while borrowers negotiate with their Chinese lenders to receive debt rescheduling assurances.

Our findings have implications for the scholarly literature on international cooperation and sovereign debt, as well as the policies on the governance of sovereign debt crises. First, we provide evidence of an area of global governance that is being brought under strain by greater multipolarity, contributing to debates about the durability of the existing international order. Second, we highlight how China's rise as a creditor has affected the architecture for sovereign debt, providing new data on IMF negotiations that sheds light on the institution's key role in debt crisis resolution.

Furthermore, our results give credence to the policy concerns of those monitoring and resolving debt crises. In January 2021, the World Bank observed in its annual Global Economic Outlook report that a "fragmented creditor base" has made developing countries' high indebtedness during the pandemic even more dangerous, since "the importance of bilateral non-Paris Club lenders has increased significantly" and "resolution will likely be more complex than earlier crises since there are many creditors with diverse motivations" ([World Bank, 2021](#), 17). Our findings suggest that greater heterogeneity among official creditors has already introduced strain into the system for resolving debt crises.

Of course, it is conceivable that China's approach to creditor coordination will shift. If it is the case that debtors prefer to privately reschedule their debts with China rather than a public restructuring with market repercussions, Chinese lenders may come to fear that they are subsidizing the repayment of other creditors and develop a preference for coordinated action. Moreover, the COVID-19 crisis has brought greater public awareness

to the vulnerability of the international debt regime to deadlocks among diverse creditors, prompting efforts to more fully internationalize the regime. In November 2020, the Finance Ministers of all G20 members, including China, agreed to a “Common Framework for Debt Treatments” for low-income countries. The Common Framework includes a commitment for all G20 and Paris Club creditors to “coordinate their engagement with the debtor country and finalize jointly the key parameters of the debt treatment,” implying a growing coordination and exchange among creditors in- and outside the Paris Club (G20, 2020). The results of our analysis indicate how, over the last twenty years, a system established among one group of creditors has functioned in light of the rise of new creditors. It is possible that the next twenty years will see the emergence of a new regime for crisis management that more fully incorporates the universe of official creditors, both old and new.

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## A Sample and descriptive statistics

Table A1: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Count of missions	1.819	0.919	1	6	188
Chinese debt (% of GDP)	0.02	0.032	0	0.169	188
Default	0.926	0.263	0	1	188
Debt service (% exports)	8.625	8.215	0.544	60.804	167
GDP (log)	23.281	1.44	18.742	27.137	188
Population (log)	16.116	1.289	11.943	19.173	188
Polyarchy index	0.479	0.173	0.093	0.906	188
G5 foreign aid (% of G5 GDP)	0	0	0	0	188
G5 bank exposure (% of G5 GDP)	0	0	0	0.001	188
G5 UNGA Distance	2.049	0.506	0.586	2.987	188
Temporary UNSC member (0,1)	0.037	0.19	0	1	188
Public debt (% of GDP)	61.243	39.406	14.718	326.882	188
Short-term debt (% ext debt)	10.433	10.154	0	52.641	188
Year (of first mission)	2008.574	5.699	1999	2018	188

## B Robustness checks

Table B1: Effect of Chinese debt stocks on number of IMF missions, OLS estimation

	(1)	(2)	(3)
Default=1 × Chinese debt (% of GDP)		10.71*	11.66*
		(4.080)	(5.033)
Chinese debt (% of GDP)	3.369	-5.077*	-5.600
	(3.225)	(2.172)	(3.698)
Default=1	-0.0108	-0.308	-0.224
	(0.251)	(0.274)	(0.319)
GDP (log)			0.108
			(0.0882)
Population (log)			0.0558
			(0.0918)
Polyarchy index			-0.0622
			(0.454)
G5 foreign aid (% of G5 GDP)			-12837.9*
			(5603.4)
G5 bank exposure (% of G5 GDP)			-521.3
			(550.2)
G5 UNGA Distance			0.0213
			(0.135)
Temporary UNSC member (0,1)			-0.151
			(0.344)
Public debt (% of GDP)			0.00249
			(0.00239)
Short-term debt (% ext debt)			0.000762
			(0.00855)
Year	-0.0398**	-0.0432***	-0.0363*
	(0.0120)	(0.0120)	(0.0143)
Debt service (% exports)			
Observations	209	209	188

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table B2: Effect of Chinese debt stocks on number of IMF missions, alternate measures

	(1)	(2)	(3)
Default=1 × Chinese debt (% of official)	1.405 (0.902)		
Debt service (% exports) × Chinese debt (% of GDP)		0.187** (0.0717)	
Debt service (% exports) × Chinese debt (% of official)			0.0227 (0.0295)
Chinese debt (% of official)	-0.861 (0.850)		-0.128 (0.405)
Chinese debt (% of GDP)		-1.292 (1.317)	
Default=1	-0.119 (0.171)		
Debt service (% exports)		-0.00823 (0.00506)	-0.00467 (0.00443)
GDP (log)	0.0569 (0.0463)	0.0383 (0.0489)	0.0260 (0.0514)
Population (log)	0.0109 (0.0526)	0.0441 (0.0605)	0.0361 (0.0590)
Polyarchy index	-0.00407 (0.238)	0.150 (0.201)	0.189 (0.204)
G5 foreign aid (% of G5 GDP)	-6303.4* (3018.1)	-5869.7* (2613.6)	-5109.9* (2590.5)
G5 bank exposure (% of G5 GDP)	-257.5 (268.4)	-12.56 (201.1)	35.35 (205.2)
G5 UNGA Distance	0.0304 (0.0731)	0.0395 (0.0793)	0.0426 (0.0791)
Temporary UNSC member (0,1)	-0.0753 (0.189)	-0.226 (0.203)	-0.210 (0.195)
Public debt (% of GDP)	0.00179 (0.00124)	0.00113 (0.00158)	0.00189 (0.00162)
Short-term debt (% ext debt)	-0.000526 (0.00465)	0.00279 (0.00491)	0.00246 (0.00511)
Year	-0.0184* (0.00775)	-0.0199** (0.00680)	-0.0186* (0.00731)
Observations	188	173	173

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table B3: Robustness checks - Time first mission to Board approval, Cox proportional hazard model

	(1)	(2)	(3)	(4)
Default=1 × Chinese debt (% of GDP)		-8.025 (6.971)		
Default=1 × Chinese debt (% of official)			1.785 (3.247)	
Debt service (% exports) × Chinese debt (% of GDP)				-0.245 (0.237)
Chinese debt (% of GDP)	-3.610 (2.266)	3.905 (6.765)		-0.789 (3.545)
Chinese debt (% of official)			-3.155 (3.302)	
Default=1	-4.727 (2.589)	0.0365 (0.384)	-4.215 (2.795)	
Debt service (% exports)				0.0241 (0.0179)
GDP (log)			0.0788 (0.116)	0.0556 (0.125)
Population (log)			-0.158 (0.123)	-0.206 (0.149)
Polyarchy index			-0.437 (0.453)	-0.527 (0.481)
G5 foreign aid (% of G5 GDP)			11699.8 (8147.8)	9676.7 (9324.0)
G5 bank exposure (% of G5 GDP)			11.78 (689.4)	201.2 (536.9)
G5 UNGA Distance			-0.0726 (0.150)	0.0113 (0.152)
Temporary UNSC member (0,1)			0.432 (0.247)	0.821* (0.339)
Public debt (% of GDP)			-0.00240 (0.00216)	-0.00422 (0.00306)
Short-term debt (% ext debt)			0.000716 (0.0103)	-0.00630 (0.0114)
Year	0.0523*** (0.0119)	0.393** (0.132)	0.0686*** (0.0156)	0.0495*** (0.0133)
Default	1.006 (0.530)		0.872 (0.575)	
Year		-0.0739** (0.0279)		
Observations	186	186	169	155

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table B4: Robustness checks - Time between missions, Cox proportional hazard model

	(1)	(2)	(3)	(4)
Default=1 × Chinese debt (% of GDP)		-8.547 (7.578)		
Default=1 × Chinese debt (% of official)			1.238 (3.642)	
Debt service (% exports) × Chinese debt (% of GDP)				-0.0906 (0.308)
Chinese debt (% of GDP)	1.717 (2.887)	9.447 (7.347)		0.217 (3.295)
Chinese debt (% of official)			-1.892 (3.684)	
Default=1	0.0519 (0.321)	0.264 (0.382)	-0.134 (0.524)	
Debt service (% exports)				0.00960 (0.0122)
GDP (log)			-0.0658 (0.127)	-0.243 (0.275)
Population (log)			-0.161 (0.127)	-0.188 (0.143)
Polyarchy index			0.0635 (0.518)	-0.0966 (0.499)
G5 foreign aid (% of G5 GDP)			21484.5*** (4384.7)	16884.1** (5434.9)
G5 bank exposure (% of G5 GDP)			292.3 (662.5)	-64.34 (561.1)
G5 UNGA Distance			-0.0487 (0.166)	-0.0314 (0.169)
Temporary UNSC member (0,1)			0.626 (0.354)	1.040* (0.445)
Public debt (% of GDP)			0.00109 (0.00267)	-0.000942 (0.00338)
Short-term debt (% ext debt)			-0.000442 (0.0105)	-0.00647 (0.0103)
Year	0.0224 (0.0135)	0.0220 (0.0133)	0.0472** (0.0146)	0.0284* (0.0128)
GDP (log)				0.0650 (0.0709)
Observations	186	186	169	155

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table B5: Robustness checks - Letter of intent to Board Approval, Cox proportional hazard model

	(1)	(2)	(3)	(4)
Default=1 × Chinese debt (% of GDP)		7.456** (2.680)		
Default=1 × Chinese debt (% of official)			4.454*** (1.347)	
Debt service (% exports) × Chinese debt (% of GDP)				-0.132 (0.184)
Chinese debt (% of GDP)	-2.109 (1.497)	-7.379*** (1.836)		4.700* (2.339)
Chinese debt (% of official)			-3.098** (1.195)	
Default=1	-0.740*** (0.195)	-1.008*** (0.234)	-1.146** (0.357)	
Debt service (% exports)				0.00298 (0.0107)
GDP (log)			0.0974 (0.122)	0.187 (0.107)
Population (log)			-0.0374 (0.119)	-0.0739 (0.118)
Polyarchy index			-0.399 (0.416)	-0.114 (0.439)
G5 foreign aid (% of G5 GDP)			-2148.3 (9531.4)	3984.8 (8273.5)
G5 bank exposure (% of G5 GDP)			-1250.7* (637.0)	-30.65 (482.9)
G5 UNGA Distance			-0.374* (0.152)	-0.316 (0.163)
Temporary UNSC member (0,1)			0.552 (0.527)	0.460 (0.510)
Public debt (% of GDP)			-0.00154 (0.00190)	-0.0000459 (0.00277)
Short-term debt (% ext debt)			0.0104 (0.00938)	0.00657 (0.00859)
Year	0.154 (0.0877)	0.0536*** (0.0141)	0.0488** (0.0158)	0.0493*** (0.0136)
Year	-0.0341 (0.0301)			
Observations	206	206	186	171

Standard errors in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$