The Political Economy of Chinese Debt and IMF Conditionality

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Abstract

China has become the main lender to sovereigns in developing and emerging market economies. Despite a substantial literature on IMF programs, little is known about whether and to what extent Chinese loan exposure shapes IMF conditionality? We hypothesize that countries turn to the IMF when their governments desperately need to mobilize funds to avert a situation of severe financial distress and Chinese loan concessions are not sufficient to avoid deep-seated structural reforms that are needed to create sufficient fiscal space to put their financial house back in order. Against the background of existing anti-Chinese sentiments, the IMF becomes the politically most viable option to secure a government's survival while maintaining good relations with Beijing. Using cross-country time series analysis for up to 162 countries in 2000-2018, we show that IMF programs only happen after defaults on non-Chinese but not after default on Chinese debt. We further show that defaults on Chinese debt trigger IMF programs only when a country experiences a severe adverse shock. To rule out competing mechanisms, we perform a series of robustness checks. From a policy perspective, our findings underscore the urgency to design and deploy targeted governance reform measures that go beyond program safeguards and loan conditions fostering sovereign debt transparency.

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1 Introduction

The recent pandemic has set in motion a wave of sovereign debt woes. In contrast to prior eras of sovereign financial distress, 'this time is different' (Reinhart and Rogoff, 2009). Whereas historically countries were borrowing from 'Western' lenders, emerging merging market and developing countries have increasingly been relying on non-traditional investors and in particular on Chinese funding (Horn, Reinhart and Trebesch, 2020; Kaaresvirta and Laakkonen, 2021; Gelpern et al., 2021).

It is an undeniable fact that China has risen to an important financier of the developing world. As Horn, Reinhart and Trebesch (2020) estimate "*the Chinese state and its subsidiaries have lent about $1.5 trillion in direct loans and trade credits to more than 150 countries around the globe.*" At the same time—struggling to keep their economies afloat—numerous Chinese borrowers have enlisted on the IMF's client list and seek financial bailouts from the international financial community. Despite a substantial literature on the importance of debt composition for IMF programs (Copelovitch, 2010*a*; Dreher, Sturm and Vreeland, 2015; Stubbs et al., 2018), it remains unclear how increased Chinese borrowing translates into IMF program design?

Several competing views exist. On the one hand, recent scholarship emphasizes the 'crowding-out' effect which emerges through governments' ability to tap Chinese lenders for bailout funding (Broz, Zhang and Wang, 2020). And, indeed, several countries have shunned the IMF upon the arrival of China in the sovereign lending business and replaced it as a lender of last resort (Arias, Mosley and Rosendorff, 2020; Qian et al., 2021; Sundquist, 2021).[1] Nevertheless, the recent application wave for bailout funds with the IMF indicates that these countries eventually return to the Fund, which hints to the temporary nature of such a 'crowding-out' effect. It remains unclear as to why these Chinese clients do not ramp up further seemingly 'easy' Chinese credit to refinance their debt but instead choose to return to the bargaining table at the Fund?

On the other hand, fractions of Washington's political establishment believe that China has

[1] Expanding on this view, Arias, Mosley and Rosendorff (2020, 34) believe that this crowding-out effect will negate the effectiveness of IFIs and bondholders to demand further economic policy reform. Qian et al. (2021) find evidence for the functioning of such a mechanism for World Bank lending/projects for country contexts where it has to compete with the AIIB.

lured developing countries into a 'debt-trap' as a means to challenge U.S. hegemony. According to this view, IMF bailouts constitute an enabling force for hazardous Chinese lending as financial downside risks can be rolled over to the U.S. (and international) taxpayers whereas China can pocket the profits (Singh, 2020). Following this logic, China would purposefully override red flags in its lending practices "*to bend unwitting countries through their economic exploitation and 'debt-trap' diplomacy.*"[2] As a consequence, U.S. Secretary of State even went as far to warn the IMF that any "*bailout for Pakistans new government should not provide funds to pay off Chinese lenders.*"[3] However, we believe that this logic is fatally flawed.[4] If China's purpose was to exploit this 'debt-trap' diplomacy and use it as a vehicle to expand its political leverage over countries, it might be even in its best interest to hinder a country's leadership to enter into an IMF agreement to maintain its advantageous bargaining position in exchange for further political concessions.

Our goal is to decipher these competing mechanisms. In particular, we are interested in providing an explanation as to why it is optimal for borrowers of Chinese loans to enter into IMF programs, even when this (potentially) comes with strings attached. We hypothesize that countries turn to the IMF when their governments desperately need to mobilize funds to avert a situation of severe financial distress and Chinese loan concessions are not sufficient to avoid deep seated structural reforms that are needed to create sufficient fiscal space to put their financial house back in order. In these situations, governments—fearing for their political survival—need to find a financier that has the effective fire-power to rescue them but not the ability to endanger future Chinese loans. A distinct advantage of using the IMF is that the Fund concentrates on domestic policy reform but does not have a direct handle on elites' kickback schemes engrained in Chinese loan agreements (Bluhm et al., 2018; Ofstad and Tjonneland, 2019; Dollar, 2019). Thus, a Fund-sponsored program allows a government to shift blame for required structural reforms, deflect from its potential own misdealing, and effectively protect the interests/profits of key elites while steering popular anger towards the Fund away from Chinese loan deals (for a related argument, see Vreeland (2006)).

[2] Remarks by Senator Cornyn during the Hearing before The Subcommittee on International Trade, Customs, and Global Competitiveness of The Committee on Finance United States Senate, 116 Congress, First Session, June 12, 2019.

[3] "U.S.' Pompeo warns against IMF bailout for Pakistan that aids China." Reuters. July 30, 2018.

[4] for a related argument, see: "The Chinese 'Debt Trap' Is a Myth," The Atlantic, February 6, 2021.

Turning to the IMF—even when this implies accepting 'harsher' loan conditions—reflects a government's willingness to literally throw its citizens under the bus to shield the interests (or profits) of a hand-picked elite that benefits from Beijing's goodwill. Put differently, anticipating fierce domestic resistance against painful structural reforms in light of existing anti-Chinese sentiments, the IMF becomes the politically most viable option to shield elite profits (even if it is just for the short-run).

To test these predictions, we employ a dataset comprising 162 countries between 2000 and 2018. Using probit and fixed-effects models, we find evidence for the viability of our proposed mechanism: IMF programs only happen after defaults on non-Chinese debt but not after default on Chinese debt. We further show that defaults on Chinese debt trigger IMF programs only when a country experiences a severe adverse shock. Similar to a collateralized lending scheme, almost the entire universe of Chinese loans is tied into projects that promise to generate sufficient government revenue to pay-off these loans (Horn, Reinhart and Trebesch, 2020; Brautigam, Huang and Acker, 2020; Gelpern et al., 2021). Another key feature of these schemes is that they often entail kickback schemes so that a country's elites can siphon money out for private gain. Mirroring prevailing sentiments in policy circles, Thornton (2020, 2) argues that Chinese lending is widely believed to "*foster corruption and bad local governance through the construction of political vanity projects and kickback schemes.*" We expect that governments turn to the IMF for bailout funding when a severe shock erodes of value of the underlying loan collateral, threatening the viability of these loan and kickback schemes. In these situations, revenues from other government operations need to be mobilized to compensate for this loss. To this end, it becomes viable for a government to tap the IMF for gaining access to additional funds and for putting in necessary reforms to free up additional fiscal space. To capture such instances, we isolate shock events that threaten the viability of these projects and construct a novel 'crisis index' that we obtain from latent factor analysis of a range of variables including economic shocks and political crises. Our findings confirm the notion that borrowers turn to the Fund when projects go under water and no fiscal breathing space is left to salvage these projects. In addition, we show that if Chinese debtors turn to the Fund, they receive loan packages with a significant number of strings attached, involving a higher number of binding conditions. A one-standard deviation increase in Chinese loans increases the

number of IMF conditions by 2.58 ($p<0.05$).

We contribute to several strands of the literature. First, we complement and extend IMF-related research in several ways(Vreeland, 2006; Steinwand and Stone, 2008; Stubbs et al., 2020). Similar to previous research, our findings support the notion concerning the Fund's role in 'accidentally' shielding a government's misdealing while levying the bailout tax on the population at large. Insofar, we also complement existing research that analyzes the role of traditional sovereign creditors and its impact on IMF program design (Stone, 2004; Copelovitch, 2010*a*; McDowell, 2016). Here, we take a different perspective and emphasize the role of China as an important sovereign lender that does not necessarily compete with the IMF and/or pressures the Fund to hand out bailouts but as a player that indirectly benefits from a country's ability to tap IMF programs. An important insight emerging from our analysis is that the Fund's transparency prescriptions and program safeguards might not be sufficiently powerful to address the central political/structural driving forces underlying the built-up of unsustainable public indebtedness (for a survey, see Kern, Reinsberg and Rau-Göhring (2019)).

Second, our analysis resonates with the increased interest in analyzing China's role as international lender for developing and emerging markets (Brautigam, Huang and Acker, 2020; Broz, Zhang and Wang, 2020; Qian et al., 2021).[5] Complementing existing approaches that analyze Beijing's geo-strategic motives and its impact on borrowing nations (Singh, 2020; Rolland, 2020; Usman, 2021), our findings highlight the importance of Chinese loan products for recipient governments' international political maneuvering. Although China has been unsuccessfully pushing for an overhaul of IMF quota allocations (Wang, 2018), enhanced Chinese lending is creating a situation in which Beijing is increasingly exercising substantial *de facto* influence over sovereign debt markets in developing countries and thus has a first order impact on IMF engagements.

Finally, from a policy perspective, our findings underscore the urgency to design and deploy targeted governance reform measures that go beyond program safeguards and loan conditions fostering debt transparency. Being able to exploit regulatory loopholes and hiding behind a network of offshore corporations, international lenders are in a position to reap the benefits of investing

[5]Insofar, we are also complementing a substantial political economy literature on sovereign debt markets and crises (Ballard-Rosa, Mosley and Wellhausen, 2019; Bunte, 2019).

in high-risk countries while socializing the costs of their dealings. Against this background, our research findings are a call for greater international collaboration and cooperation with the aim to enhance transparency and close regulatory loopholes of existing lending practices, independent of where the money is coming from.

2 Theory

China has become a major player in development finance. In 2018, the Director of U.S. National Intelligence, Dan Coates estimated that "China will spend about $8 trillion in 68 different nations."[6] Even if these figures appear to be blown out of proportion, critical voices in Washington fear that this prominent role of China in sovereign lending represents a new form of 'colonialism.'[7] Although recent scholarship emphasizes this 'crowding-out' effect, which emerges through governments' ability to tap Chinese lenders for bailout funding (Broz, Zhang and Wang, 2020; Arias, Mosley and Rosendorff, 2020; Qian et al., 2021), the outbreak of the COVID-19 pandemic provoked a wave of applications to the IMF's client list for short-term financial relief from Chinese borrowers. Despite China's initial reluctance to join the G-20 Debt Service Suspension Initiative (DSSI), the administration in Beijing promotes the notion that it "*has extended debt relief to developing countries worth a combined $2.1 billion.*"[8] In light of these observations, it remains unclear as to why these Chinese clients do not ramp up further seemingly 'easy' Chinese credit to refinance their debt but instead choose to return to the bargaining table at the Fund? Furthermore, it is unclear how increased Chinese borrowing translates into IMF program design?

Contrary to traditional lenders, there exist several key characteristics that make Chinese lending unique. We believe it is these key features that will also determine a country's decision to turn to the Fund in a situation of financial distress. To decipher competing mechanisms, we start highlighting these key features of Chinese lending.

First, instead of investing into government bonds, wiring concessional loans into a nation's

[6] "Worldwide Threats" — Hearing before the Committee on Armed Services United States Senate 115th Congress Second Session, March 6, 2018.

[7] Hearing before The Subcommittee on International Trade, Customs, and Global Competitiveness of The Committee on Finance United States Senate, 116 Congress, First Session, June 12, 2019

[8] "China Says Has Given $2.1 billion of Debt Relief to Poor Countries." Reuters, November 19, 2020.

treasury and culminating in a rapid influx of foreign investment into equity and asset markets, Chinese financial engagement typically takes the form of loans for infrastructure projects, loans in exchange for (or collateralized by) resource exports, and/or comes in the form of direct financial support (Bandiera and Tsiropoulos, 2020; Zajontz, 2021; Brautigam, Huang and Acker, 2020). As the administration in Beijing promotes the idea of its foreign lending operations as a 'win-win' policy that arguably comes without political strings attached (Gelpern et al., 2021), commentators concentrate on the role of these new lending products as challenge the position of traditional investors and international financial institutions in replenishing borrowing countries' treasuries.[9] And, indeed, numerous traditional loan recipients of the World Bank and the IMF have even shunned these institutions upon the arrival of China in the international lending business. Take, for instance, the case of Ecuador. Coming to power on an anti-capitalism platform in 2007, the Correia administration in Ecuador was quick in repaying loans to its 'Western' donors, opting for 'easy' credit from Beijing in exchange for pawning the country's natural resource revenues (Herrera-Vinelli and Bonilla, 2019). Whereas resource-rich countries such as Ecuador, Zambia, and Angola have put their nation's resource endowment as collateral for accessing Chinese loans, resource-poor nations have tried to benefit from project based funding schemes to modernize their physical and digital infrastructure and in return pledged the revenue from these investments (Dollar, 2019; Brautigam, Huang and Acker, 2020; Horn, Reinhart and Trebesch, 2020). Despite its attractiveness, the viability of these deals relies on a government's ability to mobilize sufficient revenue from this 'collateral' to service debt payments.

Second, whereas traditional bond issuances, loans from international financial institutions, and international investors' engagements arrive with substantial positive spill-overs benefiting the domestic economy (at least in the short-run),[10] enhanced collaboration with China has increasingly been criticized for a lack of producing tangible outcomes for a borrowing country's population

[9] Furthermore, in many instances, heavily-indebted countries that were cut-off from international financial markets but still wanted to modernize their infrastructure have increasingly been relying on Chinese loans. This is to say: these countries turned to Beijing's support because there was no one there to invest and implement desired infrastructure projects, given a country's financial risk profile (Gallagher and Irwin, 2014; Dollar, 2019; Niczyporuk and Urpelainen, 2021).

[10] A substantial literature documents the positive effects of short-run capital inflow surges in terms of greater consumption and employment (Kern and Amri, 2021).

(Wegenast et al., 2019; Zajontz, 2021). Funding large-scale infrastructure projects through its vast network of public-sector banks, the administration in Beijing explicitly relies on Chinese contractors for the implementation of projects and thereby minimizes the economic spill-over effects on the local economy (Gallagher and Irwin, 2014; Bluhm et al., 2018; Gelpern et al., 2021). As a result, a country's engagement with Chinese investment has been inviting popular protests. Besides reports on creating less local employment opportunities (Wegenast et al., 2019), recent cases in Zambia and elsewhere indicate that local hires suffer from abysmal working conditions (Isaksson and Kotsadam, 2018). Furthermore, Chinese investors and hosting governments do not seem to care about the adverse environmental consequences and local displacement effects when making investments (Balding, 2018; Iacoella et al., 2021). The low quality of infrastructure projects in combination with the influx of Chinese immigrants in borrowing countries tops this seemingly endless list of complaints. Against this background, it is hardly surprising that Anti-Chinese sentiments put governments under political pressure.

Third, given the opaqueness of Chinese lending operations—the terms of these financial instruments are usually not disclosed (and lend themselves to substantial speculation) (Horn, Reinhart and Trebesch, 2020)—evidence from several country cases indicate that Chinese loan deals entail kickback schemes which benefit a selected group of elites in a borrowing country (Bluhm et al., 2018; Ofstad and Tjonneland, 2019). To illustrate this mechanism, consider the case of Congo where "*$1.163 billion in loans from China to Congo in exchange for minerals, a project dubbed Sicomines, had gone missing, with no evidence that the money had been disbursed for infrastructure projects.*"[11] A distinct advantage of these schemes is that a handpicked group of elites can pocket the profits whereas debt payments are made out a nation's treasury and are ultimately born by a borrowing country's citizens. Furthermore, governments can direct investments to benefit their key constituents and/or use these for the realization of prestige projects.[12] From this perspective, it is in the best interest of a country's elite to ensure that a government can shoulder the payments

[11] "Corruption Is Wasting Chinese Money in Africa." Foreign Policy. September 13, 2018.

[12] For instance, Dreher et al. (2021) find that Chinese investment projects benefit regions where a country's leader and/or their spouses were born. Similarly, Chinese funds have been used to build soccer stadiums (e.g., Zambia), presidential office complexes (e.g., Uganda), and a parliamentary building (e.g., Congo) to name a few projects that do not necessarily benefit the population at large.

and mobilize a sufficient funds to keep these projects alive, even when revenue collection falls short of repayment duties. Given these engrained private gains, we believe it is of utmost importance to free up additional fiscal space for debt service and maintain amicable ties with the administration in Beijing.

Finally, a common feature of Chinese lending seems to be its 'patient' nature. Despite the fact that Chinese loan contracts tend to include collateral foreclosure clauses, only in one documented case, Hambantota port in Sri Lanka, has China ever 'arguably' foreclosed a borrowing country or attempted to seize control over collateral when a country could not service its outstanding debt (Kratz, Feng and Wright, 2019; Dollar, 2019; Bon and Cheng, 2020). Existing rumors that Chinese companies would seize assets and take over joint ventures in the event a borrowing government's default appear to be based on eye-witnesses, media leaks, and external expert assessments. However, they often might not reflect the actual situation at hand.[13] Take, for instance, the case of Zambia. Whereas popular media reports argued that the airport would be foreclosed and fall into the hands of the Chinese in the event of default (Ofstad and Tjonneland, 2019), taking a closer look at the financial cooperation partners of the airport management group, reveals that not a single Chinese or China-affiliated financial group is involved in its financial dealings.[14] Inspecting existing evidence, our reading is that China is trying to build its reputation as global financial player and thus is inclined to frequently offer refinancing options to reschedule existing debt positions, grant extensions on loan repayments, hand out debt write-offs, and/or to lesser extent offer bailout funding (even for bankrupt nations) (McDowell, 2019; Bon and Cheng, 2020).

Against this background, it is unclear as to why borrowers of Chinese loans do not ramp up further seemingly 'easy' Chinese credit to refinance their debt but instead choose to return to the bargaining table at the Fund? Whereas in sovereign defaults involving traditional international creditors, an IMF program was put in place as a precondition for debt restructuring (Josselin, 2009), this is not the case with respect to Chinese sovereign debt. To illustrate this point. Take, for instance, the case of Zambia. It was the country's default on its Eurobond obligations to an undisclosed consortium of investors and not its Chinese loan servicing costs that forced the

[13] "The Chinese 'Debt Trap' Is a Myth," The Atlantic, February 6, 2021.
[14] Zambia Airports Corporation Limited

government to the negotiating table with the IMF in late 2020.[15] We believe that the Zambian case is not an exception but reflects a common pattern among borrowers of Chinese loans. Synthesizing these insights, we formulate our first hypothesis:

> *Hypothesis I*: A country will enter into an IMF program when it defaults on outstanding international debt but will not do so if it defaults on its Chinese loan obligations.

As Chinese loans are tied into projects and/or to revenues from natural resources, we expect defaulting Chinese debtors to tap the Fund only if a government finds itself in a situation in which revenues from Chinese loan projects tank for the foreseeable future, and Chinese loan concessions are not sufficient to cope. Given the greatly varying nature of the *de facto* underlying collateral and subsequent revenue stream to fund repayment across countries, we expect that governments turn to the IMF for bailout funding when a severe shock erodes of value of the underlying loan collateral. Whereas for commodity-exporting economies (e.g., Ecuador, Zambia), the plummeting of global commodity prices is the most salient threat, for small island developing countries, extreme weather events may pose the biggest threat (e.g., Madagascar) to their ability to service their Chinese loans. Yet, other countries might face a combination of economic and political threats endangering the repayment of loans (e.g., Ukraine). Put differently, a government will approach the Fund if it finds itself in a position in which repayment of Chinese loans becomes impossible unless fiscal cuts are being made in other areas of the budget but these are politically not feasible. In these situations the viability of these loans and kickback schemes is on the line. In these instances, it becomes viable for a government to tap the IMF for gaining access to additional funds and for putting in necessary reforms to free up additional fiscal space. We argue that borrowers defaulting on Chinese loans turn to the IMF for political rather than financial reasons. Considering these insights, we formulate our second hypothesis:

> *Hypothesis II*: A country defaulting on its Chinese loan obligations will enter into an IMF program when an adverse shock erodes of value of the underlying loan collateral.

[15] Interestingly, despite the international policy communities push for greater transparency, Eurobond investors refused to conceal their identity during the debt negotiations with the Zambian government.

A distinct advantage of tapping the IMF for bailout funds is that the Fund concentrates on domestic policy reform but does not have a direct handle on elites' kickback schemes engrained in Chinese loan agreements. Thus, a Fund-sponsored program allows a government to shift blame for required structural reforms, deflect from its own misdealing, and effectively protect the interests/profits of key elites while steering popular anger towards the Fund (Vreeland, 2006). This feature of IMF programs is important as it steers the popular debate away from Chinese loan deals and makes available a sufficient amount of resources to retain the viability of kickback schemes. Turning to the IMF—even when this implies accepting 'harsher' loan conditions—reflects a government's willingness to literally throw its citizens under the bus to shield the interests (or profits) of a hand-picked elite that benefits from Beijing's goodwill. Put differently, anticipating fierce domestic resistance against painful structural reforms in light of existing anti-Chinese sentiments, the IMF becomes the politically most viable option to shield elite profits while maintaining a good standing with Chinese investors (even if it is for the short-run). Thus, the Fund unwillingly becomes a 'white knight' that can mitigate the adverse political effects of any default on Chinese debt in its role as the ultimate lender of last resort.

3 Research design

3.1 Data

To test our hypotheses, we employ a dataset comprising 162 countries between 2000 and 2018. The dataset includes countries below the high-income threshold of $12,695, given our interest in crisis lending as a phenomenon largely confined to developing countries. Due to missing values in our core predictors, the effective dataset covers up to 105 countries between 2000 and 2018.

Our outcome is a binary variable indicating whether a country is under an IMF program. In addition, we count the total number of binding conditions, which includes prior actions, quantitative performance criteria, and structural performance criteria. Both pieces of information are available from the IMF Monitor Database (Kentikelenis, Stubbs and King, 2016).[16]

[16]We were able to gain access to updated IMF Monitor data which extends information on conditionality from 1980 to 2018.

Our key predictors capture debt exposure as well as sovereign debt defaults from different official creditors. For debt exposure, we use the estimated total external debt stock owed to China in percent of debtor GDP (Horn, Reinhart and Trebesch, 2020).[17] To remove skewness, we take the natural logarithm. We complement this variable with the external debt stock owed to creditors other than China, using recently available data from the International Debt Statistics (Mihalyi, 2020). We scale these debt stocks by debtor GDP and take the natural logarithm. For sovereign debt defaults, we turn to the 'CRAG database', which provides disaggregated information on sovereign defaults on all major creditors (Beers et al., 2021). We distinguish between defaults on Chinese debts and defaults on other debt. Other debt includes official debt (owed to Paris club members and other bilateral lenders) and private debt (owed to private creditors and foreign-currency denominated bank loans). Since we are most interested in the event of default, we dichotomize these variables such that a value of one indicates a default in a given year by a given debtor.[18]

Our theoretical discussion also requires us to operationalize situations in which the value of the collateral experiences an adverse shock. A key challenge for our analysis is that the nature of the collateral for Chinese loans varies across countries (Bandiera and Tsiropoulos, 2020). For example, for oil-rich economies, the plummeting of global oil prices is the most salient threat. For small island developing countries, extreme weather events may pose the biggest threat. Yet, other countries face a combination of potential downside risks. To combine various sources of adverse shocks, we develop a measure—a (latent) crisis index—applying confirmatory factor analysis to a diverse set of six crisis indicators. These indicators measure the incidence of natural disasters (CRED, 2020), adverse resource revenue shocks (ICTD, 2021), economic recessions,[19]. We confirm that all these indicators load onto a common factor. This enables us to construct a continuous crisis index, with higher values indicating more adverse shocks threatening the economic value of

[17]This variable includes all debt owed to Chinese state-owned creditors in the form of direct loans, excluding short-term trade debt, swap debt, and portfolio debt.

[18]No such disaggregation is possible for Chinese loans. While it is true that China often extends loans through state-owned enterprises, these enterprises invest state funds and are directly controlled by the Chinese Communist Party (Stone, Wang and Yu, 2021). Under 'state capitalism', the distinction between creditor categories is therefore not meaningful.

[19]We use the rate of economic growth available from the World Development Indicators (World Bank, 2019), financial crises for which we combine data from two sources (Laeven and Valencia, 2013; Reinhart and Rogoff, 2009), civil war (Sarkees and Wayman, 2010), and coups d'etat (Powell and Thyne, 2011)

a country's collateral. To test our conditional hypotheses about debt default and IMF programs, we include this index along with the multiplicative interactions with relevant default indicators in our model.

Because our panels are relatively short, we use control variables sparingly to minimize loss of observations due to missing data and to mitigate concerns about post-treatment bias. Besides baseline models with various fixed effects, we estimate models that include important potential confounding variables. In terms of macroeconomic fundamentals, we include (logged) population, (logged) GDP per capita, and services as a percentage of total output—available from the World Development Indicators (World Bank, 2019). These variables capture the tendency for more populated countries with low per-capita incomes and low levels of industrialization to be more frequently under IMF programs (Barro and Lee, 2005), while potentially being attractive to China as a borrower (Dreher et al., 2021). In addition, we include the KOF index of *de jure* financial globalization (Gygli et al., 2018). Besides capturing a country's exposure to international financial markets, financial openness is an adequate proxy measure for a country's overall degree of financial liberalization and its susceptibility to experiencing financial crises (Aklin and Kern, 2019). Finally, we include well-known predictors of IMF program lending following the existing literature. For models where the dependent variable is being under IMF programs, we include the fraction of years over the past five years in which a country has been under a program (Moser and Sturm, 2011), capturing the tendency of IMF borrowers for recidivism. We also include the average UN General Assembly voting distance of a debtor with respect to the G7 countries, building on political economy literature showing that IMF lending is a function of geopolitical alignment with major creditors (Copelovitch, 2010*b*; Dreher, Sturm and Vreeland, 2009; Vreeland, 2003).

Descriptive statistics and data sources of all variables can be found in the supplemental appendix (Table A1). To mitigate potential simultaneity bias, we lag all right-hand side variables by one year. All models include year-fixed effects. For linear models, we further include country-fixed effects, thereby controlling for time-invariant country heterogeneity. In non-linear models, we are unable to include country-fixed effects due to the well-known incidental-parameter problem (Greene, 2002). We address this issue by using multi-level random-effects estimation.

3.2 Empirical model

We utilize two alternative statistical models to test the relationship between Chinese debt exposure and IMF programs. The first is a multi-level random-effect probit model—mirroring the binary nature of the dependent variable. We address the main drawback of such model—the inability to include country-fixed effects—by augmenting the model with the country-specific means of all predictors to allay concerns about non-zero covariance between the predictors and the random intercept (Wooldridge, 2005; Skrondal and Rabe-Hesketh, 2014; Albarran, Carrasco and Carro, 2019). Our empirical model is an advancement over simple probit models as the predominant choice in the related literature (Nooruddin, 2010; Moser and Sturm, 2011; Vreeland, 2003). Following common practice in IMF program research, we also specify a linear probability model with country-fixed effects for the likelihood of being under an IMF program. We present results of both models side-by-side, noting that results are qualitatively similar.

$$Pr(y_{it}|y_{i,t-1}, k_{it}, X_{it}, u_i) = \Phi(y_{i,t-1}\alpha + k_{it}\beta + X_{it}\gamma + u_i + \phi_t + \varepsilon_{it}) \tag{1}$$

where $Pr(y_{it})$ is the probability that a country is under an IMF program, as a function of whether it has been under a program last year ($y_{i,t-1}$), elite capital flight (k_{it}), a vector of control variables (X_{it}), country-specific effects (u_i), and year effects (ϕ_t). All other terms are estimable parameters, except the idiosyncratic error term (ε_{it}).

For models involving IMF program conditionality, we linearize all equations and include both year-fixed effects and country-fixed effects. The simplest system includes two equations. The first equation models selection into IMF program. Here we draw on a recently popularized instrumentation strategy using the interaction between the IMF liquidity ratio and the long-run probability of a country of IMF assistance (Lang, 2021). The second equation is defined only for countries under IMF programs and has as its outcome the total number of binding conditions. For all estimations, we compute robust standard errors clustered on countries to account for temporal dependence.[20]

[20]Where tests of serial correlation indicate autocorrelation, we estimate an error-correction model with a differenced dependent variable controlling for the lagged level (De Boef and Keele, 2008; Beck and Katz, 2011; Grant and Lebo,

4 Results

In the following section, we present results from multivariate regression analysis. We show that countries generally conclude IMF programs only after defaults on non-Chinese debt but not after default on Chinese debt. We further show that defaults on Chinese debt trigger IMF programs only when the value of the collateral of a borrower collapses. If Chinese debtors turn to the Fund, they receive loan packages with a significantly larger number of strings attached, involving a higher number of binding conditions. In addition, we find that China is more likely to mobilize swap lines and provide debt forgiveness following default on its loans. We interpret these results as evidence for the role of the Fund as a lender of last resort that countries draw upon when Chinese debt forgiveness is not enough to address economic troubles. Under such circumstances, governments have limited choice but to bring in the Fund and rely on its political cover to push through unpleasant reforms. In line with this interpretation, we show that IMF programs are related to subsequent increases in competitiveness. Additional analyses demonstrate that Chinese loans—due to their collateralized nature—have limited effects on a borrowing country's financial markets and thereby cannot plausibly trigger financial crises that would present an alternative trigger for Fund entry.

4.1 Sovereign defaults and IMF program participation

In Table 1, we show that defaults on loans of non-Chinese creditors predict IMF programs, whereas defaults on Chinese loans do not. Substantively, the probability of being under an IMF program increases from 29.3% (95%-CI: 23.7%-34.9%) to at least 39.1% (95%-CI: 33.8%-44.3%) in the event of a non-Chinese loan default. The relationship between non-Chinese loan defaults and IMF programs is not statistically significant at conventional levels when considering only within-country variation. However, in the supplemental appendix, we demonstrate that this is likely driven by over-aggregation, recovering consistently positive relationships between both official loan defaults and private loan defaults with respect to IMF programs (Table A2). Importantly, there is no

2016). This applies to all auxiliary outcomes discussed in the empirical results below.

Chinese defaults, other defaults, and IMF programs

	(1)		(2)		(3)		(4)	
IMF program								
Chinese loan default	0.035	(0.142)	-0.020	(0.154)	0.023	(0.033)	0.007	(0.039)
Other loan default	0.475***	(0.089)	0.425***	(0.100)	0.047	(0.029)	0.041	(0.036)
Past programs	2.220***	(0.119)	2.089***	(0.114)	0.481***	(0.034)	0.427***	(0.038)
Population			0.029	(0.027)			-0.187	(0.151)
GDP growth			-0.217***	(0.061)			-0.420***	(0.094)
Services (% GDP)			0.014**	(0.006)			0.008***	(0.003)
Financial globalization			-0.004	(0.003)			-0.001	(0.002)
UNGA vote distance			0.206***	(0.072)			0.022	(0.035)
Year FE	Yes		Yes		Yes		Yes	
Country FE	No		No		Yes		Yes	
Observations	3189		2742		3189		2742	
(Pseudo) R2	0.400		0.391		0.166		0.195	

Table 1: Models in Column (1) and (2) are estimated using correlated random-effects probit regressions with year-fixed effects and included predictor means. The results reported in Column (3) and (4) are based on nonlinear probability models including country- and year-fixed effects. Robust standard errors clustered on countries in parentheses. Significance levels: $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.

relationship between defaults on Chinese loans and the likelihood of an IMF program.[21]

The results reported in Table 2 further qualify the above result, indicating that defaults on Chinese loans trigger IMF programs in the event of an adverse shock that diminishes the value of the collateral. First, we find an unconditional positive relationship between our crisis index and the likelihood of IMF programs—underscoring the face validity of our latent crisis index. More importantly, we find that IMF programs are more likely following default on Chinese debt if and only if the crisis index increases—representing situations in which the value of the collateral has collapsed.

Substantively, given default, the likelihood of an IMF program changes from 29.2% (95%-CI: 18.7%-39.6%) at the mean of the index to 42.3% (95%-CI: 27.9%-56.8%) for a standard-deviation increase. In contrast, sensitivity to the crisis index tends to be lower in cases of defaults on non-Chinese debts—suggesting shocks to the value of the collateral are less important in such context. The joint conclusion from this analysis is that in situations in which the underlying collateral remains intact, countries do not need to turn to the Fund for fresh credit because China continues to support borrowers by extending credit, forgiving portions of the debt, and using complementary instruments such as swap lines (Bon and Cheng, 2020).

[21] This even holds when using the restricted sample of those observations for which our crisis index is defined (Table A3).

Chinese defaults, domestic crisis, and IMF programs

	(1)		(2)		(3)		(4)	
IMF program								
Chinese loan default	0.118	(0.224)	0.056	(0.237)	0.046	(0.054)	0.006	(0.071)
X CI	0.876**	(0.393)	0.988**	(0.409)	0.185*	(0.094)	0.181*	(0.038)
Other loan default	0.583***	(0.161)	0.582***	(0.177)	0.129***	(0.046)	0.167***	(0.053)
X CI	-0.539**	(0.229)	-0.576**	(0.259)	-0.084	(0.053)	-0.095	(0.059)
Crisis index (CI)	0.645***	(0.199)	0.686***	(0.225)	0.104**	(0.040)	0.080**	(0.184)
Past programs	2.329***	(0.197)	2.223***	(0.212)	0.433***	(0.065)	0.344***	(0.099)
Population			-0.041	(0.061)			-0.809**	(0.346)
GDP growth			-0.226*	(0.120)			-0.701***	(0.168)
Services (% GDP)			0.014	(0.011)			0.007	(0.006)
Financial globalization			-0.002	(0.006)			-0.001	(0.002)
UNGA vote distance			0.282**	(0.140)			-0.040	(0.044)
Year FE	Yes		Yes		Yes		Yes	
Country FE	No		No		Yes		Yes	
Observations	1142		1077		1142		1077	
(Pseudo) R2	0.403		0.411		0.149		0.210	

Table 2: Models in Column (1) and (2) are estimated using correlated random-effects probit regressions with year-fixed effects and included predictor means. The results reported in Column (3) and (4) are based on nonlinear probability models including country- and year-fixed effects. Robust standard errors clustered on countries in parentheses. Significance levels: $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.

In the supplemental appendix, we demonstrate robustness of these results to varying modeling assumptions and specifications. In particular, our results are unaffected when we account for the possibility that debt-fueled credit booms could induce financial stress requiring subsequent IMF intervention. The inclusion of total credit and private credit (in percent of total output) do not change our results (Table A4). We also show that our results hold for an imputed dataset of control variables. Specifically, we impute missing values for using the software program 'Amelia' assuming that the data follow a multivariate normal distribution (Honaker, King and Blackwell, 2011). Because our initial sample is short, imputation could remedy efficiency losses while addressing concerns about non-random missingness patterns (Lall, 2016). Our core result remains unaffected (Table A5). Finally, we address potential endogeneity of a default on Chinese loans using an instrumental-variable design. Our instrument is the interaction between the country-specific probability of a Chinese default and the time-varying global probability of defaults on Chinese loans. This two-way decomposition removes idiosyncratic drivers of Chinese loan defaults by predicting them through the global economic climate intuition and the long-term likelihood of default. Equipped with this moderately strong instrument, we confirm that Chinese loan default increases the likelihood of an IMF program when a country faces a deep-seated crisis (Table A6).

Chinese lending, other lending, and IMF program conditionality

	(1)		(2)	
IMF conditions				
Chinese loans (% GDP)	1.401**	(0.677)	1.399**	(0.681)
Other loans (% GDP)	0.147	(1.693)	1.137	(1.651)
Population			-3.812	(12.595)
GDP growth			-12.429	(8.653)
Services (% GDP)			0.021	(0.189)
Financial globalization			-0.244**	(0.103)
UNGA vote distance			0.777	(2.111)
IMF program				
Compound instrument	-0.144**	(0.070)	-0.228***	(0.069)
IMF liquidity ratio	-0.037	(0.038)	0.064	(0.043)
Probability of IMF program	0.002	(0.020)	-0.009	(0.018)
Other loans (% GDP)	0.083**	(0.042)	0.114**	(0.051)
Population			0.633	(0.547)
GDP growth			-0.834***	(0.204)
Services (% GDP)			0.013***	(0.005)
Financial globalization			-0.003	(0.003)
UNGA vote distance			-0.007	(0.050)
Year FE	Yes		Yes	
Country FE	Yes		Yes	
Observations (Equation 1)	707		659	
Within-R2	0.372		0.402	
Observations (Equation 2)	1281		1203	
Within-R2	0.496		0.532	
F-statistic	4.215		10.974	

Table 3: IMF program is instrumented using the interaction between the IMF liquidity ratio and the long-run probability of IMF programs (Lang, 2021). Robust standard errors clustered on countries in parentheses. Significance levels: $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.

4.2 Sovereign defaults and IMF conditionality

Do these Fund-sponsored bailouts come with more strings attached. We report the results of our analysis in Table 3 and show that countries with greater exposure to Chinese lending—if they need to turn to the Fund for fresh credit—face more binding policy conditions. Substantively, the number of binding conditions increases by at least 2.58 (95%-CI: 1.33-3.84) for an increase in Chinese loans by a standard deviation.

In the supplemental appendix, we show a weakly positive relationship between default on Chinese loans under circumstances of deep-seated crisis ($p<0.1$), mirroring our earlier setup for the determinants of IMF program lending (Table A7). The lack of significance here is likely due to the limited number of observations in the model. Indeed, the interaction effect is significantly positive under a single-equation linear fixed-effects model for the number of conditions using only IMF

program observations (p<0.05), which supports our interpretation.

4.3 Observable implications

We now establish how China as a lender behaves in the event of default on its debt. Table 4 shows that the likelihood of any concessions from China is higher in the event of a loan default if a country faces a deep-seated crisis. The result holds strongly for the multi-level probit model (p<0.01) and for within-country regression analysis (p<0.05).

Chinese default, domestic crisis, and Chinese loan concessions

	(1)		(2)		(3)		(4)	
Any concessions								
Chinese loan default	-0.536	(0.381)	-0.680*	(0.385)	-0.084***	(0.031)	-0.103***	(0.033)
Crisis index (CI)	-0.407*	(0.216)	-0.516**	(0.244)	-0.011	(0.014)	-0.027*	(0.015)
X CI	1.336***	(0.451)	1.408***	(0.471)	0.176**	(0.080)	0.189**	(0.083)
Population			0.120	(0.105)			-0.398***	(0.109)
GDP growth			-0.493***	(0.158)			-0.062	(0.046)
Services (% GDP)			-0.013	(0.017)			0.000	(0.002)
Financial globalization			-0.028**	(0.013)			-0.002***	(0.001)
UNGA vote distance			-0.369	(0.241)			-0.006	(0.034)
Year FE	Yes		Yes		Yes		Yes	
Country FE	No		No		Yes		Yes	
Observations	795		748		1142		1077	
(Pseudo) R2	0.125		0.290		0.081		0.103	

Table 4: Models in Column (1) and (2) are estimated using correlated random-effects probit regressions with year-fixed effects and included predictor means. The results reported in Column (3) and (4) are based on linear probability models including country- and year-fixed effects. Robust standard errors clustered on countries in parentheses. Significance levels: $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.

In the supplementary appendix, we show that this result is driven by debt forgiveness events—rather than the less frequent debt renegotiations and debt rescheduling which provide only limited relief (Table A8). We also find robustness against using debt forgiveness amounts instead of debt forgiveness events (Table A9). Finally, we find evidence of unconditional Chinese support for defaulting borrowers, given that China is significantly more likely to extend a swap line in the year after default on its loans (Table A10). These results cast doubt on the view of China as a "rogue lender"—highlighting instead its willingness to ease debt burdens and to deploy alternative financial instruments to ensure that the borrower can resolve its debt crisis (Kratz, Feng and Wright, 2019; Dollar, 2019; Bon and Cheng, 2020).

To further test our intuition about why governments go to the Fund, we examine whether

indicators of market-liberalizing reforms respond positively to IMF program support. This would be evidence for the role of the Fund as political cover for governments to push through unpleasant structural reforms that correct structural economic weaknesses (Vreeland, 2003).[22] In Table 5 we report a positive relationship between IMF programs and both the KOF index of *de jure* financial globalization (p<0.05) and the Ease of Doing Business index (p<0.01). However, these effects are unconditional, which suggests that IMF involvement can catalyze reform beyond situations of debt default discussed here.

Chinese defaults, IMF involvement, and competitiveness

	(1) Financial deregulation		(2) Ease of doing business index	
Chinese loan default	-1.018	(0.714)	0.190	(0.324)
IMF program	0.348**	(0.175)	0.427***	(0.148)
Chinese loan default X IMF program	0.488	(1.087)	-0.489	(0.456)
Lagged dependent variable	-0.135***	(0.009)	-0.090***	(0.015)
Population	0.875*	(0.498)	2.260*	(1.251)
GDP growth	0.882**	(0.366)	2.613***	(0.691)
Services (% GDP)	0.028**	(0.014)	0.004	(0.017)
Financial globalization	-0.343**	(0.169)	0.492*	(0.267)
UNGA vote distance	-1.145***	(0.247)	-0.240	(0.150)
Period dummy	Yes		Yes	
Country FE	Yes		Yes	
Observations	4398		925	
Within-R2	0.075		0.054	

Table 5: The results reported in Column (1) and (2) are based on OLS models including country- and year-fixed effects. *Financial deregulation* refers to the KOF index of *de jure* financial globalization (Gygli et al., 2018). *Ease of doing business index* captures a country's (World Bank, 2019). Robust standard errors clustered on countries in parentheses. Significance levels: $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.

In the remainder, we present evidence to dismiss an alternative explanation for IMF programs in the context of Chinese lending, which would hold that Chinese lending induces a credit boom that necessitates IMF financial rescues. To that end, we show that Chinese debt works in isolation from other loans and does not trigger moral hazard behavior on the part of borrowing governments.[23] This is because Chinese lending is highly collateralized—without being transmitted through the

[22] Assuming that market-liberal reforms are unpopular with broad segments of the population due to their regressive income effects, governments can nonetheless implement them with less popular punishment by shifting the blame for reforms upon the Fund.

[23] For the analysis of different mechanisms indicating moral hazard, we rely on a similar analytical framework as proposed in Aklin and Kern (2019).

domestic financial system.

Table 6 shows how Chinese loans affect key economic aggregates in borrowing countries. We find that Chinese loans significantly increase capital formation ($p<0.05$). At the same time, Chinese lending has no relationship with private consumption which we interpret as an indication that positive economic spill-over effects are minimal. Furthermore, it is an indication that additional Chinese funding does not prominently enter a country's financial system and does not seem to free up additional resources for consumer lending. Given that it also does not affect productivity growth—measured by the within-country growth of total factor productivity—Chinese lending is best characterized as pure accumulation of production factors. This finding chimes with existing evidence on Chinese lending as supporting infrastructure projects (Dreher et al., 2021; Gelpern et al., 2021). Furthermore, we verify that Chinese loans are not transmitted through the domestic financial system. This is evident from null results on three financial indicators—an index of financial freedom (Teorell et al., 2018), the domestic interest rate spread (World Bank, 2019), and the share of non-performing loans (World Bank, 2019). These results suggest that Chinese debt does not seem to increase financial vulnerabilities in borrowing countries while at the same time leaving regulatory policies unaffected.

Chinese defaults, IMF involvement, and competitiveness

	(1) Capital formation	(2) Private consumption	(3) TFP growth	(4) Financial freedom	(5) Interest rate spread	(6) Financial crisis
Chinese loans (% GDP)	0.392***	-0.217	0.001	-0.340*	0.004	0.002
	(0.136)	(0.166)	(0.002)	(0.194)	(0.012)	(0.002)
Other loans (% GDP)	-0.958***	0.466	-0.005	-0.480	-0.063**	0.556***
	(0.350)	(0.603)	(0.006)	(0.317)	(0.031)	(0.048)
Lagged dependent variable	-0.348***	-0.335***	-0.073**	-0.336***	-0.461***	-0.005
	(0.041)	(0.032)	(0.029)	(0.026)	(0.051)	(0.007)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1341	1282	1583	1519	1116	1776
Within-R2	0.205	0.172	0.195	0.209	0.089	0.372

Table 6: The results reported in are based on OLS models including country- and year-fixed effects. To mitigate serial correlation (as suggested by Wooldridge tests), all outcome variables except financial crisis are differenced and the lagged levels included on the right-hand side. Robust standard errors clustered on countries in parentheses. Significance levels: $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.

In the supplementary appendix, we report results from additional analyses addressing poten-

tial endogeneity of Chinese loans. Following recent advances in International Political Economy literature, we use the interaction between Chinese dollar reserves and the probability of a country of getting a Chinese loan to predict the amount of Chinese lending (Lang, 2021; Stubbs et al., 2020; Nunn and Qian, 2014). The intuition is that when China is more liquid—as proxied by its total dollar reserves—any country should be more likely to obtain fresh Chinese credit, specifically if it is a regular borrower. The exclusion restriction would be violated only if omitted variables driving this endogeneity were to affect economic outcomes in regular borrowers differently than in non-regular borrowers (Lang, 2021). Using this instrument, we continue to find a positive effect of Chinese loans on capital formation but no effect on any other outcome (Table A11).

While the economic effects of Chinese lending are limited, its political effects may be significant. Where countries hold IMF debt, a sovereign debt crisis would require them to undergo painful internal adjustment to restore their balance of payments and to repay IMF loans (Reinsberg, Kern and Rau-Göhring, 2020). Where they have Chinese debt, however, repayment does not have to be in hard currency, but may involve natural resources and political favors (Sundquist, 2021). For country authorities, handing over the collateral may inflict even greater disutility than undergoing adjustment reforms, given that the latter can be distributed widely across the population whereas the former directly threatens the long-term flow of rents into the pockets of country elites. Where Chinese creditors succeed to monetize the collateral, we should thus observe more riots (to the extent that regimes allow them to occur in principle). In contrast, where countries benefit from the Fund as 'white knight', they can mitigate the adverse political effects of any default on Chinese debt. To substantiate the existence of such a mechanism, we are using the (change in the) number of protests as outcome variable (Salehyan et al., 2021), as a function of Chinese debt defaults with IMF involvement and without IMF involvement. We report the results in Table 7

Chinese defaults, IMF involvement, and protests in democratic countries

	(1)		(2)	
SCAD protests				
Chinese loan default without IMF program	0.460**	(0.191)	0.528**	(0.226)
Chinese loan default with IMF program	0.022	(0.149)	0.050	(0.165)
Lagged dependent variable	-0.595***	(0.089)	-0.631***	(0.081)
Population			1.899**	(0.857)
GDP growth			0.240	(0.469)
Services (% GDP)			-0.006	(0.010)
Financial globalization			-0.008	(0.005)
UNGA vote distance			-0.012	(0.067)
Year FE	Yes		Yes	
Country FE	Yes		Yes	
Observations	503		488	
Within-R2	0.347		0.367	

Table 7: The results reported in Column (1) and (2) are based on OLS models including country- and year-fixed effects. *SCAD protests* refers to the (change in the) number of protests as reported in Salehyan et al. (2021). Robust standard errors clustered on countries in parentheses. Significance levels: $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$.

We find that Chinese foreclosure leads to more protests where countries have no access to the IMF safety net, but not when they default on Chinese debt with access to an IMF program. Substantively, the number of protests increases by 58.4% (95%-CI: 30.9%-91.7%) in the short run in the former case, while being unaffected in the latter.[24]

5 Conclusion

Despite a recent surge of literature on analyzing the different aspects of enhanced Chinese lending to developing and emerging market economies, comparably little is known about how increased exposure to Chinese debt shapes IMF program design. Even less is known about what it takes for borrowers of Chinese loans to return to the bargaining table with the Fund? We hypothesize that—contrary to conventional wisdom—a default on Chinese loan obligations is not sufficient to seek bailout funding from the IMF. Similar to a collateralized lending scheme, almost the entire universe of Chinese loans is tied into projects whereas revenues from these are used to pay-off loans (Gelpern et al., 2021). Although China has proven to be a patient lender, our results show that

[24]Note that we have restricted the analysis to democratic countries—with a polity score of at least three—given that protests are likely suppressed in non-democratic countries. Our specification of an error-correction model implies that the long-run effect on protest may be higher.

if a default on Chinese loans coincides with an adverse shock event—effectively pushing Chinese investment projects underwater and eroding the collateral value of the investment—countries will come running to the IMF. In these situations, we believe that governments are willing to accept a 'whatever-it-takes' to be rescued to limit the adverse political repercussions and avert an outfall with Beijing.

To test these claims, we rely on a panel dataset of up to 162 countries in 2000-2018. We show that IMF programs only happen after defaults on non-Chinese but not after default on Chinese debt. Our results indicate that defaults on Chinese debt trigger IMF programs only when a country experiences a severe adverse shock. To rule out competing mechanisms, we perform a series of robustness checks. For example, we find no evidence of Chinese loans themselves being the source of financial instability that would trigger IMF lending. Furthermore, our results are robust to using instrumental variables that seek to account for potentially endogenous Chinese lending and borrower defaults on Chinese loans. Our findings also underscores the importance of an IMF rescue in reducing the likelihood of popular revolts around Chinese loan defaults. This is consistent with our expectation that the IMF's involvement fulfills a political role—as a blame-shifting device to take Beijing out of the line—rather than a financial role. We complement existing research on the role of Chinese lending substituting the need for an IMF program. Our findings indicate that the initial 'shunning' of the Fund is short-lived as countries—crushing under Chinese debt—eventually return. Concentrating on Chinese lending, we open the pathway for future research on the role of non-traditional lenders and its implications for IMF program design.

From a policy perspective, a recent op-ed in the New York Times asked "Is China the World's Loan Shark?"[25] Although China's motives might be of a geopolitical nature, our findings do not align well with the notion of China being a rogue lender. China has been filling in loopholes that international investors have left open for years and to the day provides concessions when a country cannot service its debt obligations. It is the lack of safeguards reflecting Beijing's appetite for economic and political expansion that allowed governments pile up so much debt so they see their budgets steering off an insurmountable fiscal cliff today. And, it is these countries that

[25] "Is China the Worlds Loan Shark?" The New York Times, April 26, 2019.

enlist in record numbers on the client list of the Fund. Although existing research emphasizes the lack of transparency in Chinese lending and development assistance, we believe that the rapid rollout of financial innovations—such as e-payment systems (Dziwok, 2021), Panda bonds (Liang, 2020), RMB swaps (McDowell, 2019) and endless possibilities to hide behind an entire network of offshore financial firms (Sharman, 2017)—hide the true size of borrowing countries' financial exposure towards Beijing. Insofar, current financial distress in developing countries underscores the urgency to design and deploy targeted governance reform measures that go beyond program safeguards and loan conditions fostering debt transparency. Whereas international commentators are calling for greater transparency in Chinese loan dealings (Zajontz, 2021; Gelpern et al., 2021), existing regulatory loopholes and investor's ability to hide behind a network of offshore corporations, allows them to reap the benefits of investing in high-risk countries and benefit from generous IMF bailouts while socializing the costs of their dealings. Against this background, our research findings are a call for greater international collaboration and cooperation with the aim to enhance transparency and close regulatory loopholes, independent of where the money is coming from.

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