Paris Club Restructuring and the Rise of China*

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Abstract

How does the presence of new and diverse creditors affect the occurrence of sovereign debt restructurings? We posit that China's presence as a creditor renders Paris Club (bilateral official) restructurings less likely. This occurs, in part, because China offers an alternative source of credit, providing more fiscal space to countries in distress. Geopolitical rivalries and failure to coordinate burden sharing between China and Paris Club members heighten this effect: countries that are less aligned with the United States, and those who have yet to reschedule Chinese debts, are even less likely to experience a Paris Club restructuring. Moreover, this pattern is most evident for countries with higher levels of transparency, allowing other creditors an awareness of their borrowing relationships and fiscal policy. We test, and find support for, these expectations using data for the 2000-2017. We also find no evidence that the presence of China as a creditor during this period is related to the completion of private debt restructurings.

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As sovereign debt crises become a more prominent feature of the global economic landscape, the number of countries seeking to restructure their debts has expanded. The G20's Common Framework, created in 2020, is the most recent attempt at a multilateral mechanism for debt restructuring, but has thus far yielded few results. Its approach is to have the debtor countries negotiate with groups of, rather than individual, creditors. For bilateral official debt (government to government lending), the Paris Club has long served as the forum at which debtor countries seek to reduce the principal, lengthen the maturities, or lower the interest rates on their obligations.[1] Its permanent members now include twenty-two nations, including the longest-running official creditor countries, such as France, the United Kingdom and the United States. The Paris Club's creditor country members often work closely with the IMF (Ferry and Zeitz 2021), sharing information about debtor governments' obligations and intended economic reforms.

The 75 low-income countries the World Bank currently deems IDA-eligible[2] owed 58 percent of their external bilateral debt to Paris Club creditors in 2010. Restructuring agreements with the Paris Club therefore were essential to developing countries' efforts toward debt relief. Currently the effectiveness of contemporary debt restructuring efforts is potentially undermined by the increased diversity of creditors, at both the bilateral official level and at a broader level. By 2021, Paris Club creditors represented only 32 percent of IDA-eligible countries' external debt, due in large part to the increased role of China – not a member of the Paris Club – as an official bilateral lender. China's share of low-income country debt grew from 18 percent in 2010 to 49 percent in 2021 (World Bank 2022).

The last decade also has witnessed an increased ability of low and middle income countries to access capital from private, rather than official, sources. This reflects greater global

[1] From its beginnings in 1956 and until 1988, the Paris Club's rules did not permit a reduction of principal; rather, restructurings lengthened the maturity of obligations.

[2] The International Development Association branch of the Word Bank offers loans, usually on concessional terms, and grants for basic social services to the world's poorest countries.

capital market liquidity and lower risk aversion after the global financial crisis, as well as the domestic incentives of some sovereigns to avoid multilateral official creditors (Bunte 2019*b*, Ballard-Rosa, Mosley and Wellhausen 2021, Zeitz 2021). The share of long-term public and publicly-guaranteed external debt of low and middle income countries owed to private creditors grew from 46 percent in 2010 to 61 percent at the end of 2021. Even among IDA-eligible countries, which often have been deemed too risky by private investors, this share grew from five percent in 2010 to 21 percent in 2021 (World Bank 2022). IDA-eligible countries also saw their debt service burdens rise from 0.7 percent of gross national income in 2010 to 1.8 percent in 2021. This rise was partly due to an expansion of the amount of debt, and partly the result of greater reliance on more expensive commercial and Chinese credit.[3]

As global market conditions have shifted and credit has become more expensive for low and middle-income countries, the coordination challenges associated with restructuring have become more salient. The governments of Ghana, Sri Lanka, and Zambia (among others) have recently found themselves in protracted negotiations over their existing debts; such delays often have profound domestic economic and political consequences. Even in the 1980s, when crisis-ridden developing countries owed much of their debt to a concentrated and coordinated set of private commercial banks, resolving debt crises was challenging. Indeed, debt restructurings often do not go far enough, resulting in the need to restructure multiple times (Asonuma and Trebesch 2016).

Observers attribute the current difficulties in restructuring countries' sovereign debts to a variety of causes, including the absence of a comprehensive international mechanism (see, e.g. Brooks and Helleiner (2017)); uneven burden-sharing between official and private sector creditors (Schlegl, Trebesch and Wright 2019); governments' concerns with imposing

[3]https://www.worldbank.org/en/news/press-release/2022/12/06/debt-service-payments-put-biggest-squeeze-on-poor-countries-since-2000

harms on various domestic constituencies (Mosley and Rosendorff 2023*b*); and the growing rivalry between the United States and China. Officials from the Biden administration have asserted, for instance, that Chinese lenders are "free riding on the debt forgiveness extended by others."[4] While we note that China in fact has sometimes been willing to work in concert with other official creditors,[5] we agree that China's presence as a bilateral creditor may affect the prospects for restructuring sovereign debt.

Indeed, China's role as a bilateral creditor may be the most important element of contemporary patterns of creditor diversity (Bräutigam 2022). In this paper, we theorize about how China's presence influences the likelihood of a borrowing government reaching a Paris Club restructuring agreement. We find that, all else equal, outstanding debt to China is associated with a decreased likelihood of relief of debt to Paris Club creditors. We consider two broad channels by which China's presence as a creditor could affect the conclusion of debt restructurings. First, higher levels of debt to China could indicate China's willingness to extend new credit and to roll over existing debts. This could ease a country's concerns about its obligations to other creditors, making engagement with traditional international financial institutions (which work closely with Paris Club creditors) less necessary (Alfaro and Kanczuk 2019). We label this the "fiscal stress" channel – Chinese funds ease the stress faced by debtors, so that they seek adjustment from Paris Club bilateral creditors less frequently.

Second, outstanding obligations to China could affect the willingness of Paris Club creditors to offer debt relief, as they worry that such relief might be used to fund continued repayment of (typically higher-priced) obligations to China. We label this the "contentious bargaining" channel. We note that, via either channel, we should observe that higher levels of debt to China are associated with a lower probability of Paris Club restructuring. However, as we detail further below, while each channel has equivalent predictions for an

[4]https://www.nytimes.com/2023/06/26/business/suriname-china-imf.html?smid=url-share

[5]https://www.reuters.com/markets/china-calls-zambias-creditors-take-fair-burden-debt-restructuring-2023-11-13/

unconditional negative relationship between Chinese debts and Paris Club restructurings, the two hypotheses do vary in a set of conditional expectations.

Using data on debt restructurings for the 1980-2017 period (and focused especially on 2000-2017, when China emerged as a major source of bilateral lending), we examine the correlates of Paris Club, as well as private sector, debt restructurings. For highly-indebted countries, a higher level of bilateral debt to China is associated with a lower likelihood of concluding a Paris Club restructuring.[6] This is, of course, consistent with both channels: that is, countries with more outstanding debt overall might be better able to avoid the need for restructuring at the Paris Club with the presence of an outside lender. Alternately, other (primarily Western) bilateral lenders may be especially unwilling to write down larger volumes of debt when a government also owes significant sums to China.

We find stronger evidence, however, for the contentious bargaining channel. The effect of Chinese debt on Paris Club restructuring is especially pronounced in the presence of economic and geopolitical differences between Paris Club members and China. Similarly, the effect of debt to China on Paris Club restructuring is less pronounced when China has not already offered its own adjustment to debt terms. We also find that geostrategic alignments are linked with Paris Club restructurings: indebted countries that are more distant from the United States are less likely to reach a Paris Club restructuring agreement. Moreover, this pattern is most evident where transparency is greatest: that is, when creditors are better able to observe a sovereign's patterns of debt obligations and economic policy, they are most likely to act in ways consistent with the contentious bargaining channel.

[6]Given the variety of agencies associated with Chinese official lending (Bräutigam 2011), as well as a lack of transparency around some debt reporting (Brown 2023, Cormier 2023), measuring debt to China is a difficult task. We use the measure constructed by Horn, Reinhart and Trebesch (2021) and based on loan-level data. In keeping with the OECD's definition of official (versus private) credit, this measure includes loans from China's central government, government ministries, China's state-owned policy banks (especially China Export-Import bank and China Development Bank), and China's state-owned commercial banks (Bank of China, Industrial and Commercial Bank of China). Figure A2 in Horn, Reinhart and Trebesch (2021) maps the universe of official creditors in China.

Furthermore, to the extent that restructuring dynamics are largely political and strategic, rather than economic, they ought to affect the restructuring of official, but not of private sector, obligations. Indeed, we find little evidence of an effect of Chinese lending on the completion of private debt restructurings during the 2000-2017 period, either unconditionally or when interacted with a set of economic or geopolitical factors.

Our findings offer some evidence that contemporary efforts to address debt crises are complicated not only by general concerns about inter-creditor equity, but also by the specific role of China as a creditor.[7] Our analyses also highlight the joint effect of transparency over economic policy and geopolitical ties in reducing the effectiveness (and perhaps the relevance) of the Paris Club process.

1 The Paris Club and China

Sovereign debt crises are a persistent feature of the global financial landscape. Such crises are especially common when global capital flow cycles ebb, as well as when commodity prices collapse (Reinhart, Reinhart and Trebesch 2016). Despite the functional appeal of a comprehensive global mechanism for addressing debt crises, efforts to create such a process have long fallen short, as both major governments (especially the United States) and private creditors often register opposition to such proposals (Brooks and Helleiner 2017). Resolving unsustainable debt burdens, either preemptively (Asonuma and Trebesch 2016) or after formal default, requires creditors as well as borrowing governments to agree on a plan for resolution, typically with involvement from the International Monetary Fund.

Creditor coordination has a long history: in the pre-World War I era of financial globalization, for instance, the London-based Corporation of Foreign Bondholders negotiated many

[7] For instance, Reuters (March 2, 2023) notes that "these delays (in finalizing deals for IMF bailout assistance) have been caused by a number of reasons, but debt experts mainly point to the fact that China is still reluctant to offer debt relief on comparable terms..." https://www.reuters.com/business/finance/cash-strapped-countries-face-imf-bailout-delays-debt-talks-drag-2023-03-02/

debt restructurings; although it did not always strike a deal with defaulting governments, its representation of a large share of private bondholders facilitated its success (Tomz 2007). The Paris Club, which represents official bilateral leaders, had its beginnings in 1956, as part of efforts to address Argentina's debt burden. Two decades later, in response to Zaire's repayment difficulties, commercial banks formed the London Club. Private sector creditors also have sought to improve their capacity for coordination. For instance, in the late 1990s and early 2000s, and in response to concerns about holdout creditors, underwriters began to include collective action clauses in bond contracts. These clauses aimed to ease coordination among bondholders, generating voting thresholds above which a restructuring could proceed, and reducing the ability of small groups of private creditors (sometimes referred to as "vulture funds") to block restructurings (Weidemaier and Gulati 2014). Of note is that various creditor groups also must coordinate among themselves: to the extent that debtor governments have borrowed using a wide range of instruments (Bunte 2019*b*, Mosley and Rosendorff 2023*a*), this becomes a more difficult task.

The Paris Club originated as a mechanism to address coordination problems among official bilateral creditors. At the time of its creation, low and middle income countries had little access to private (versus official) sources of finance. The Paris Club initially included eleven creditor countries; its membership has expanded over time, reflecting the growing involvement of countries in the provision of bilateral official credit. It now counts twenty-two countries as permanent members, with another fourteen countries sometimes participating in an ad hoc fashion (depending on a country's debt profile). The Paris Club has no international legal foundation; its members commit to a set of six principles related to debt resolution. It remains "informal" in its operations.[8]

The Paris Club offers a single point of negotiation, a clearing house for relevant data, and a commitment among its members to cooperate with any restructuring deal. For debtor

[8]See https://clubdeparis.org/

countries, the Paris Club reduces the transaction costs of renegotiation, obviating the need to negotiate with each creditor separately. For creditors, the Paris Club eliminates the possibility that debtor governments will play governments off against one another. During the sixty-six years of its existence—and especially from the 1980s—the Paris Club has reached 478 agreements, with 102 different debtor countries.

During the last two decades, and especially since 2013, China (usually via its policy banks) has become a major bilateral lender (Dreher et al. 2022). China is one of the Paris Club's ad hoc participants. In terms of loans outstanding, China now surpasses all other individual Paris Club creditors (Horn, Reinhart and Trebesch 2021). China has repeatedly declined invitations to join the Paris Club as a full member. Its unwillingness to participate in a multilateral debt rescheduling process, even an informal one like the Paris Club, is perhaps consistent with its approach to sovereign finance.

Although China is a member of the G-20, and therefore played a role in the 2020 creation of the Common Framework for Debt Treatment (intended to improve the resolution of sovereign debt crises for low income countries, by creating a standard process for debt restructuring), it has often opted for a bilateral approach to debt resolution. In some instances, China's government has asserted that loans from its policy banks are commercial, rather than official, in nature; at other times, however, it has suggested treating policy bank loans as official sector credit, consistent with the OECD's approach to such loans (Horn, Reinhart and Trebesch 2021). Many (but not all) of China's loans to sovereigns fund specific projects and are securitized by revenues from those projects; this could reduce the capacity of debtor governments to service other, non-securitized obligations (Kaplan 2021). Others have noted that some Chinese loan contracts contain non-disclosure provisions (Gelpern et al. 2021); while this practice is not necessarily unique to China as an official creditor, it nonetheless raises concerns about the ability of other creditors to gain an accurate picture of debt countries' debt exposure. Although recent research documents China's willingness

to provide emergency loans as well as swap lines to governments facing debt distress (Horn et al. 2023), some other creditors have expressed worries about how governments will use the proceeds of debt relief (Horn, Reinhart and Trebesch 2022). Most recently, China has insisted, as a condition of participation in broader restructuring efforts, that multilateral financial institutions also accept losses on their sovereign loans.

While China's government may be softening in its attitude toward coordinated approaches,[9] China's longer-standing resistance to harmonized debt relief is likely to affect the Paris Club process. In negotiating with sovereigns, creditor groups often look to the International Monetary Fund to assess the sustainability of a sovereign's obligations (sometimes in conjunction with the World Bank), detail a program of economic reforms, and offer a "seal of approval" for other creditors.[10] Ferry and Zeitz (2021) argue that China's lack of engagement in traditional creditor clubs reduces the effectiveness of long-standing information-sharing channels. As a result, significant levels of Chinese debt are linked with delays in the conclusion of IMF programs.

Similarly, we expect that countries with significant debts to China will face a more complicated Paris Club restructuring process. Such countries will potentially experience delays in coordinating with the IMF and World Bank to address debt sustainability and develop conditional lending programs. Moreover, Paris Club bilateral creditors also may worry that the proceeds of debt relief they provide may be used to service debts to other creditors, including China. This leads to our first hypothesis:

Hypothesis 1. *Countries with more Chinese debt (all else equal) are less likely to restructure their debts with the Paris Club.*

[9] See, for instance, https://www.washingtonpost.com/business/2023/04/13/imf-world-bank-us-china/.

[10] A long literature details the various ways in which the IMF's actions are influenced by the strategic and economic interests of major shareholders, as well as by the beliefs and biases of its staff members. See, for instance, Copelovitch (2010), Lang and Presbitero (2018), Nelson (2017), Stone (2011), Vreeland (2003).

2 Mechanisms - Heterogeneous Effects

While we expect that the presence of China as a sovereign creditor is negatively linked with the restructuring of Paris Club debts, we also acknowledge that this pattern could result from multiple causal mechanisms.

2.1 Fiscal Need

First, we hypothesize that fiscal constraints moderate the effects of debt to China on restructuring outcomes. Borrowing governments always face a choice about whether to service and repay their obligations to creditors. Interest payments and principal repayments substitute for other budgetary outlays, such as domestic social programs or subsidies to industries and consumers. For countries with high debt servicing burdens, these trade-offs appear starker, as servicing debt requires larger cuts or greater increases in taxation. At the same time, deciding not to service debt obligations – that is, to default – also generates losses, not only for foreign (and perhaps domestic) creditors, but also for domestic actors who rely on access to foreign credit (Connell 2019, Curtis, Jupille and Leblang 2014).

Given these contending distributional pressures – suggesting losses for recipients of government spending (with debt servicing), or losses for firms and households seeking access to (foreign) credit (with default), governments may decide to opt for a third pathway, restructuring their debts to Paris Club and/or private sector creditors. In some instances, debt restructuring occurs after a default; in other cases, governments preemptively negotiate a debt restructuring, hoping to avoid the specter of default while also reducing their debt servicing burden (Asonuma and Trebesch 2016). For governments with greater concerns about their stability, the incentives to delay restructuring (in hopes that domestic as well as external conditions will improve) are often significant.

Private western creditors as well as Paris Club official creditors often premise restruc-

turing agreements on the negotiation of a reform program with the IMF. Governments considering restructuring then do so with an eye to the anticipated effects of structural reform on their domestic audiences and, ultimately, their survival in office (DiGiuseppe and Shea 2016, Ballard-Rosa 2020). IMF programs impose costs unevenly across the domestic polity (Rickard and Caraway 2014, Saiegh 2009, Walter 2016).

China's presence not only as a creditor, but also as a potential source of bailouts, may alter the nature of debtor governments' calculations. Indeed, China's rise as a lender—and as an economic power more broadly—has disrupted global financial governance. Especially for countries that are frustrated with the IMF and the influence of its major shareholders within the organization, China offers an alternative source of financial support, such as swap lines (Broz, Zhang and Wang 2020). China's presence also offers an additional route for project financing, a function that is arguably easier to duplicate than that of crisis lending and management (Lipscy 2015, Clark 2023). The presence of China as a creditor is associated empirically with fewer World Bank loan conditions (Hernandez 2017); the creation of the Asia Infrastructure and Investment Bank (AIIB) has similarly reduced the use (and influence) of the World Bank as a source of project finance (Qian, Vreeland and Zhao 2023). To the extent that the features of Chinese lending align with domestic political incentives, some governments now view China as a more attractive source of finance, even if the terms on Chinese loans are less concessional (Bunte 2019*a*, Horn, Reinhart and Trebesch 2022, Kaplan 2021, Zeitz 2021).[11]

With respect to governments' options when facing debt distress, China also represents an attractive outside option (Alfaro and Kanczuk 2019). Governments may perceive a Chinese-financed bailout as less politically disruptive at home than a restructuring that involves debt sustainability analyses and conditional lending programs. As Horn et al. (2023) have recently

[11]There is a similar literature on the differential consequences of Chinese foreign aid, which is often contrasted against Western aid's insistence on sociopolitical conditionality that governments may find onerous. For a recent summary of this literature, see Dreher et al. (2022).

documented, China has been active in emergency lending, as well as the provision of swap lines. China also has often been willing (see Figure 1 below) to agree to restructure existing debts. For instance, in 2020—and already facing substantial debt servicing challenges—Sri Lanka received emergency bilateral loans from China. These loans allowed the Rajapaksa government to avoid seeking IMF assistance (at least for a time). For countries seeking relief from or restructuring of debt, the Paris Club is no longer the only game in town.

We therefore expect that the effect of debt to China on restructuring outcomes will be especially pronounced for governments facing strong fiscal constraints – and related hard choices regarding debt servicing. Such governments will be particularly disinclined to seek, and receive, Paris Club restructurings.[12]

Hypothesis 2. *The effect of Chinese debt on lowering the incidence of Paris Club restructurings is greater for those states facing greater fiscal stress.*

2.2 Contentious Bargaining

Second, we expect that China's presence as a bilateral official creditor will generally reduce the willingness of other bilateral creditors (including Paris Club members) to restructuring the terms of sovereign obligations. Creditors frequently worry, especially in the absence of an effective international mechanism for bankruptcy-style proceedings, about how they will be treated relative to one another. An enduring feature of many unsecured sovereign debt obligations (commercial bank loans and bond issues) has been the *pari passu* clause, which suggests that the debtor country is obligated to treat all such debts "on an equal footing." In practice, sovereign creditors are often treated differently. One longstanding principle is that multilateral official creditors do not modify the terms of their debt, having already offered loans on concessional terms. Indeed, in their analyses of the de facto treatment of creditors

[12] In recent work, Kern and Reinsberg (2022) finds that countries with more Chinese loans are more likely to face IMF conditionality only when also facing some form of crisis. Kern, Reinsberg and Shea (2023) suggest that IMF conditionality with large Chinese debt reduces leader survival especially in corrupt regimes.

with respect to repayment and haircuts (losses), Schlegl, Trebesch and Wright (2019) find that multilateral official debt is treated as senior (repaid more often) to bilateral official debt. They also find that private sovereign debt, including bonds and bank loans, are typically treated as senior to bilateral official debt.[13]

Bilateral official creditors therefore may worry about the losses they will face, relative to other creditors, when debtor countries face debt distress. In an earlier era, when Paris Club countries accounted for the vast majority of bilateral lending, coordinated debt relief quelled worries about comparable treatment of bilateral official creditors, by offering the same treatment to participating governments. With the growth of Chinese (and other non-Paris Club) lending, however, bilateral creditors find themselves competing for repayment.

Worries among Paris Club creditors about comparable treatment may be especially pronounced in the case of Chinese debt, which tends to feature terms that are non-concessional (and closer to what a borrowing country might pay in private markets). To the extent that (some) Chinese loan contracts contain explicit "no Paris Club treatment" clauses, meant to reduce exposure to negotiated debt write-downs, burden-sharing across Paris Club and Chinese lenders is particularly difficult to achieve (Dielmann 2021). More broadly, Paris Club countries may worry that any debt relief they provide will simply fund the continued servicing of obligations to China (or other non-Paris Club bilateral creditors). As an example of this phenomenon, a recent New York Times article argued that "as strapped governments negotiate with creditors to diminish their debt burdens, the IMF and the Biden administration have balked at providing relief until Chinese financial institutions participate. Otherwise, they assert, Chinese lenders are free-riding on debt forgiveness extended by others."[14]

Moreover, Paris Club processes—like IMF lending or debt sustainability analyses (Lang

[13]The analysis by Schlegl, Trebesch and Wright (2019) does not distinguish among bilateral official creditors, nor among bondholders. In practice, different groups within creditor categories also have sometimes received different treatment.

[14]https://www.nytimes.com/2023/06/26/business/suriname-china-imf.html

and Presbitero 2018)—are influenced by the strategic considerations of powerful members, especially the United States. We expect that the impact of bilaterals' concerns about "common pool" problems among bilateral creditors are greater where geopolitical concerns loom larger.[15] That is, influential members of the Paris Club may worry especially about China's intentions for countries that are seen to be within China's geopolitical influence; alternately, for states already more closely allied with major Paris Club members, these concerns about loss sharing may be less pronounced. To the extent, for instance, that Zambia's debt negotiations have become a locus for US-China rivalry, reaching an agreement may be even more challenging.[16] At the same time, we expect that the United States might pressure its Paris Club counterparts to offer assistance to countries that are indebted to China, but that are currently aligned with the United States. Such countries would benefit from, and might respond politically to, Paris Club debt relief; but also are likely viewed as "at risk" of moving closer to China in response to Chinese offers of assistance.

Hypothesis 3. *The negative association between Chinese debt and Paris Club restructuring is more pronounced when relations among Paris Club creditors and China are more contentious.*

We operationalize contention among creditors in several ways, considering in each instance how tensions between Paris Club members and China might condition the effect of Chinese debt on restructurings. More precisely, we consider the effect of (a) when the debtor country is more politically distant from western (Paris Club) countries; and, (b) whether Chinese debts have been previously rescheduled. We find strong support for the inter-creditor contention mechanism.

Of course, creditors are likely most affected by these dynamics when they have a more accurate picture of debtor countries' obligations. Scholars have devoted significant time and

[15] For evidence on the role of geopolitics in the realm of international finance, see, e.g., Stone (2011), Vreeland (2003), Vreeland and Dreher (2014).

[16] For a discussion of the coordination problems related to China's lending in Zambia, see Bräutigam (2022)

effort to compiling accurate statistics on debt exposures to China, using a range of official and non-official sources (Horn, Reinhart and Trebesch 2021). In the real-time in which restructuring is considered, however, creditors may be less able to observe accurate information on governments' debt profiles (Brown 2023, Cormier 2023). In our empirical analyses, we therefore also consider how borrowing governments' degree of economic transparency might condition the effect of debt to China on the likelihood of a Paris Club restructuring.

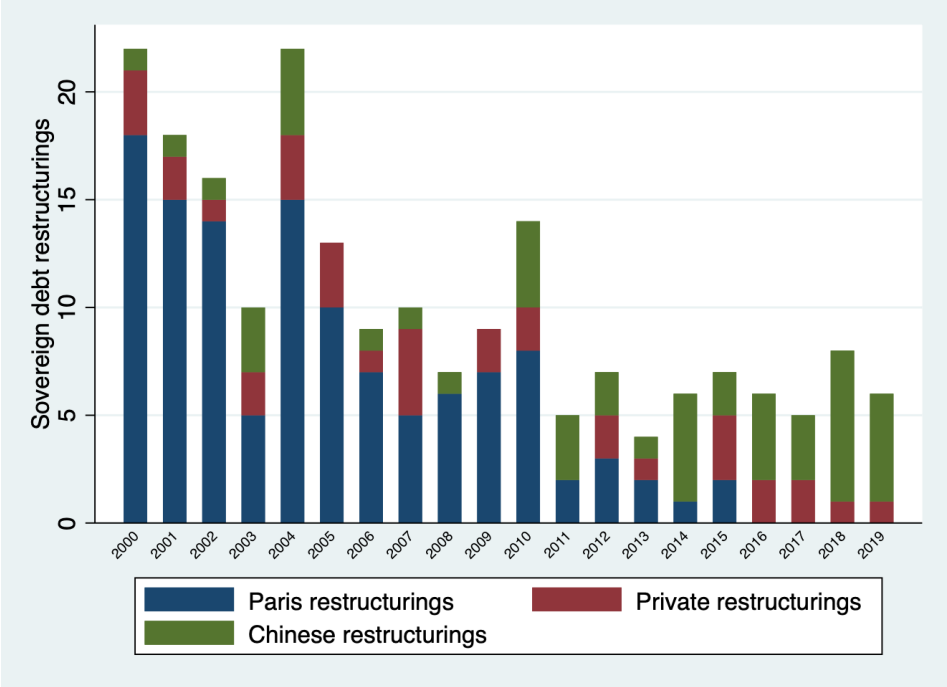
3 Data

Our analyses focus on debt restructuring in non-OECD countries. OECD countries typically are considered low-risk and, as such, receive the vast majority of their credit from private, rather than official, sources. As such, they act as creditors at the Paris Club, rather than as potential recipients of restructuring. We measure debt restructuring using data from Horn, Reinhart and Trebesch (2022).[17] They code restructuring with Paris Club creditors, private creditors, and Chinese creditors. We use a dichotomous measure of restructuring, coded as a one in country-years where a restructuring with the corresponding creditor group occurs. Figure 1 reports the yearly distribution of each type of restructuring.

To construct our measure of a state's exposure to Chinese lending, we begin with data on each country's amount of outstanding Chinese debt from Horn, Reinhart and Trebesch (2021).[18] They draw on loan-level lending data to estimate outstanding debt stocks owed to China for more than 100 developing and emerging economies from 2000-2017. To capture the importance of Chinese debts relative to other sources of external financing, we divide this measure of outstanding Chinese debt by a measure of the total amount of external debts,[19] which provides us with our primary independent variable *Chinese debt (as % total external*

[17]Data available at https://sites.google.com/site/christophtrebesch/data
[18]Data available at https://sites.google.com/site/christophtrebesch/data.
[19]Data on total external debt drawn from Abbas et al. (2010) and the WDI.

Figure 1: Sovereign Debt Restructuring, 1980-2019



Source: Horn, Reinhart and Trebesch (2022)

debt).[20] The cross-sample average amount of Chinese debt over the panel is reported in Figure 2, which clearly documents the dramatic rise in Chinese lending beginning in the early 2000s, as has been identified elsewhere (e.g., Dreher et al. 2022, Horn, Reinhart and Trebesch 2021).[21]

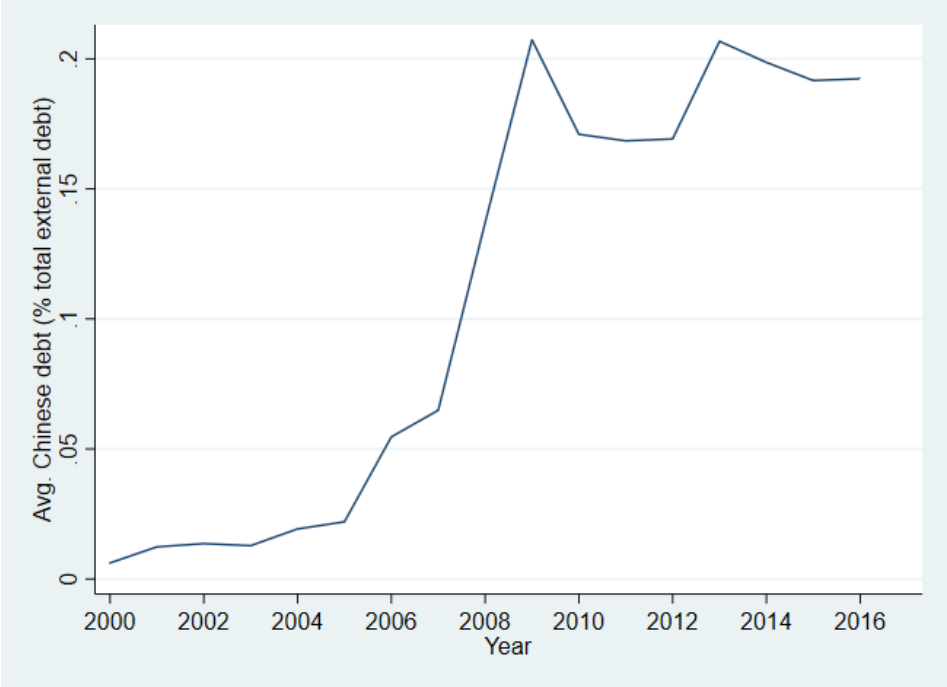
Our primary estimation approach takes the following form, in which we estimate the effect of outstanding Chinese debt in a country i in year $t-1$ on the likelihood of a Paris Club restructuring in that country in year t, along with a vector of potential control variables X_{it-1} as well as with country fixed effects μ_i and controls for temporal effects $f(t)$.[22] Standard

[20] Visual inspection of the data indicated that they were clearly log-normally distributed, and so we follow standard practice in employing the log of Chinese debts (as % total external debt) in our analyses below. In order to avoid dropping observations with zero Chinese lending in a year, we add the minimum value of this measure (0.005) to all observations before applying the logarithmic transformation.

[21] More precisely, Figure 2 reports the annual sample mean level of Chinese debt for countries with non-zero amounts of Chinese lending.

[22] Given recent discussion on the potential for bias in the traditional two-way fixed effects framework (Imai

Figure 2: Outstanding Debt to Chinese Official Creditors, 2000-2017.



Source: Horn, Reinhart and Trebesch (2021), Abbas et al. (2010)

errors are clustered by country to account for potential within-country correlations including serial autocorrelation in the data:[23]

$$Restructuring_{it} = \beta ChineseDebt(\%totaldebt)_{it-1} + \gamma X_{it-1} + \mu_i + f(t) + \epsilon_{it} \quad (1)$$

4 Results

We first report a bivariate OLS regression of each restructuring type on outstanding Chinese debt.[24] As can be seen in Table 1, while countries that owe more debt to China are signif-

and Kim 2021, Liu, Wang and Xu 2022), we employ cubic polynomials in time to account for the possibility of temporal effects (Carter and Signorino 2010); in unreported further analysis, our primary results remain robust to the inclusion of year fixed effects instead.

[23]Following standard practice, we lag our independent variables by one year to avoid simultaneity bias.

[24]As reported in Tables 10 and 11 in the Appendix, we find similar results when instead estimating using maximum likelihood estimators such as conditional logit or fixed effects probit.

icantly less likely to restructure their Paris Club debts, there is no systematic association between Chinese debt and private market restructuring. Perhaps more surprisingly, countries with more outstanding debt to China also do not appear unconditionally more likely to conclude a restructuring of debts to China.

Table 1: Chinese Lending and Debt Restructuring

VARIABLES	(1) Paris restr.	(2) Private restr.	(3) Chinese restr.
Chinese debt (% total external debt)	-0.012***	0.000	0.002
	(0.002)	(0.001)	(0.001)
Observations	1,664	1,664	1,664
R-squared	0.026	0.000	0.002
Number of countries	99	99	99

OLS regressions of Paris Club restructuring (Column 1), private market restructuring (Column 2), or Chinese restructuring (Column 3), on Chinese debts. Robust standard errors clustered by country in parentheses.*** p<0.01, ** p<0.05, * p<0.1.

Of course, these bivariate associations may be driven by a host of potential omitted variables; to account for this, we re-estimate our regression of Paris Club restructuring on Chinese debt after including controls in Table 2. Column 1 replicates our bivariate regression for comparison, while Column 2 adds a sparse set of macroeconomic covariates that maximizes our sample size; more precisely, we introduce measures of *GDP per capita*, *GDP growth*, *trade*, *oil rents*, *inflows of foreign direct investment*, and *government military spending*.[25] Column 3 introduces a fuller set of covariates that, while potentially important, result in significant attrition in our sample:[26] here, we include additional controls for *foreign reserves*, *interest payments on external debt*, whether the country is currently under an *IMF program*, the size of a country's *population*, as well as a measure capturing the extent to

[25]Data all drawn from the World Bank's World Development Indicators. All covariates are lagged by one year to prevent simultaneity bias. On the potential linkage between government debt and military spending, see, e.g., DiGiuseppe (2015).

[26]Our number of observations falls by about 300 from Column 2 to Column 3, and we also lose approximately 20 countries in this specification.

which a country is an *electoral democracy*.[27] As reported in Table 2, the negative association between Chinese debt and Paris Club restructuring remains remarkably stable and robust, even with the introduction of a wide variety of controls.[28] In terms of substantive magnitude, the implied effect size of these results is also quite pronounced: a two-standard deviation increase in the percentage of debt owed to China decreases the likelihood of observing a Paris Club restructuring by approximately 5.7 percentage points; given that we only observe Paris Club restructuring in approximately 7.7% of cases, this is a large and meaningful substantive effect.

4.1 Fiscal Constraints?

We have documented a robust negative association between outstanding Chinese debts and Paris Club restructuring. This finding could potentially be consistent with fewer fiscal constraints for debtor states leading to less need to seek restructuring at the Paris Club, or instead could arise due to breakdown in creditor negotiations when Western creditors worry that restructuring their own debts may be used to pay back Chinese loans. While this unconditional expectation is observationally equivalent across both hypotheses, we argue that each implies a differing set of conditional relationships between Chinese debt and Paris Club restructuring. To begin, if the fiscal stress hypothesis is correct, we might expect to see the relationship between Chinese debt and Paris Club restructuring to be most pronounced for those states that are already facing some sort of fiscal strain (Kern and Reinsberg 2022). To assess this hypothesis, in Table 3 we re-estimate our main specification after adding an interaction term between Chinese debts and either a measure of the presence of an *IMF*

[27] Data on foreign reserves drawn from the WDI. Data on interest payments on debt from the World Bank's International Debt Statistics. Data on IMF program status from the update to Vreeland (2003). Data on population from the WDI. Data on electoral democracy from VDem.

[28] Note that, as our primary independent variable of interest *Chinese debt (% total external debt)* is calculated by dividing Chinese debts by total external debt for a given country, we do not explicitly also include a control for total external debts. However, as we report in Column 5 of Appendix Table 18, the inclusion of this measure does not affect our primary effect of interest appreciably.

Table 2: Chinese Debt and Paris Club Restructuring, with Controls

VARIABLES	(1) Paris	(2) Paris	(3) Paris
Chinese debt (% total external debt)	-0.012***	-0.008***	-0.008**
	(0.002)	(0.003)	(0.003)
GDP per capita (log)		-0.001	0.018
		(0.034)	(0.038)
GDP growth (annual %)		-0.003	-0.002
		(0.002)	(0.002)
Trade (% of GDP)		-0.000	-0.000
		(0.000)	(0.001)
Oil rents (% of GDP)		-0.002	-0.001
		(0.002)	(0.002)
Foreign direct investment, net inflows (% of GDP)		-0.003***	-0.001*
		(0.001)	(0.001)
Military expenditure (% of GDP)		-0.006	-0.001
		(0.009)	(0.015)
Foreign reserves (months of imports)			-0.000
			(0.003)
Interest payments on external debt (% of GNI)			0.016***
			(0.004)
IMF program			0.000
			(0.014)
Population, total			0.000
			(0.000)
Electoral democracy index			-0.074
			(0.138)
Observations	1,664	1,303	1,027
R-squared	0.026	0.057	0.071
Number of countries	99	87	70

OLS regressions of Paris Club restructuring on Chinese debt, as well as additional controls. Country fixed effects are suppressed for presentation, as are temporal cubic polynomials. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

program in Column 1, *interest payments on foreign debts* in Column 2, or an ongoing *debt crisis* in Column 3.[29]

While we do find that countries with greater interest burdens are indeed (unconditionally) associated with greater likelihood of Paris Club restructuring, there is little evidence of systematic differences in the effect of Chinese debt on restructuring when interacted with any of these measures of acute fiscal distress. While not firmly dispositive, this does suggest

[29]Data on debt crises come from Nguyen, Castro and Wood (2022).

that evidence for the fiscal need hypothesis is less clear. Of course, it might be possible that states with more access to Chinese lending are less likely to seek IMF assistance, or are less likely to fall into debt distress in the first place (Ferry and Zeitz 2021, Kern and Reinsberg 2022); we return to this possibility in our additional results section below.

Table 3: Fiscal Constraints?

VARIABLES	(1) Paris	(2) Paris	(3) Paris
Chinese debt (% total external debt)	-0.005	-0.011**	-0.004
	(0.003)	(0.004)	(0.003)
IMF program	-0.035	0.000	-0.000
	(0.022)	(0.014)	(0.014)
Interest payments on external debt (% of GNI)	0.015***	0.029**	0.015***
	(0.004)	(0.012)	(0.004)
Debt Crisis			-0.021
			(0.055)
Chinese debt x IMF prog.	-0.006		
	(0.004)		
Chinese debt x Interest payment		0.002	
		(0.002)	
Chinese debt x Debt crisis			-0.011
			(0.007)
Controls	✓	✓	✓
Observations	1,027	1,027	1,027
R-squared	0.073	0.073	0.079
Number of countries	70	70	70

OLS regressions of Paris Club restructuring on Chinese debt and its interaction with IMF program (column 1), interest payments (column 2), or debt crisis (column 3), along with additional controls. Country fixed effects are suppressed for presentation, as are temporal cubic polynomials. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

4.2 Contentious Bargaining?

4.2.1 Geopolitics as a source of contention

If the negative association between Chinese debts and Paris Club restructuring is related to conflict between Chinese and Paris Club creditors, then we should be most likely to observe the relationship when geopolitical tensions between Paris Club creditors and China

are greater. We rely on a state's voting record at the United Nations to identify the proximity of one state to another in terms of geopolitical preferences (Bailey, Strezhnev and Voeten 2017, Stone 2011, Vreeland 2003, Vreeland and Dreher 2014). We expect that, for states that are closely aligned with US priorities, the presence of Chinese debt may be less of an impediment to Paris Club restructuring; however, as states move away from the US's position (and, potentially, closer to China's position) in global affairs, we expect such states to face greater friction in establishing Paris Club restructuring.

To assess this possibility, we construct a measure of the distance between a country's ideal point in UN voting and that of either China or the United States.[30] Intuitively, as the distance between two countries' ideal points grows, this can be seen as capturing greater divergence between the geopolitical aims of the two states. As reported in Table 4, we recover strong evidence that the "penalty" for Chinese debt on the likelihood of Paris Club restructuring is larger for states that are more geopolitically distant (on the basis of UN voting outcomes) from the US.[31]

To visualize these conditional marginal effects, Figure 3 plots the effect of additional Chinese debt as a function of distance between a country's ideal point at the UN and that of the United States. As can be seen, for states most closely allied with the US in global affairs, we find that if anything a greater amount of Chinese debts is associated with an increased likelihood of Paris Club restructuring, as might be expected if concerns about Chinese influence are muted and so the process of debt restructuring can occur unimpeded. On the other hand, for states that are more geopolitically distant from the US, we observe an increasingly negative (and statistically significant) relationship between outstanding Chinese debts and the likelihood of Paris Club restructuring. Column 2 of Table 4 documents that the inverse effect holds if we instead consider a state's alignment with Chinese international

[30]Data on UN ideal points come from Bailey, Strezhnev and Voeten (2017).

[31]In unreported additional results, we find similar evidence if we instead estimate geopolitical distance from other major Western creditors, including Japan, the U.K., France, or Germany.

priorities: for those state closely aligned with China, there exists a significant negative correlation between the presence of Chinese debts and Paris Club restructuring, but this effect is attenuated as a state's geopolitical distance from China increases.[32] We take this as strong evidence for the contentious bargaining explanation for a negative association between exposure to Chinese lending and ability to restructure with other (primarily Western) creditors at the Paris Club.

Table 4: Geopolitics

VARIABLES	(1) Paris	(2) Paris
Chinese debt (% total external debt)	0.028***	-0.014***
	(0.009)	(0.005)
UN vote distance from US	-0.001	
	(0.032)	
Chinese debt x UN vote distance from US	-0.013***	
	(0.004)	
UN vote distance from China		-0.000
		(0.023)
Chinese debt x UN vote distance from China		0.009**
		(0.004)
Controls	✓	✓
Observations	1,026	1,026
R-squared	0.081	0.074
Number of countries	70	70

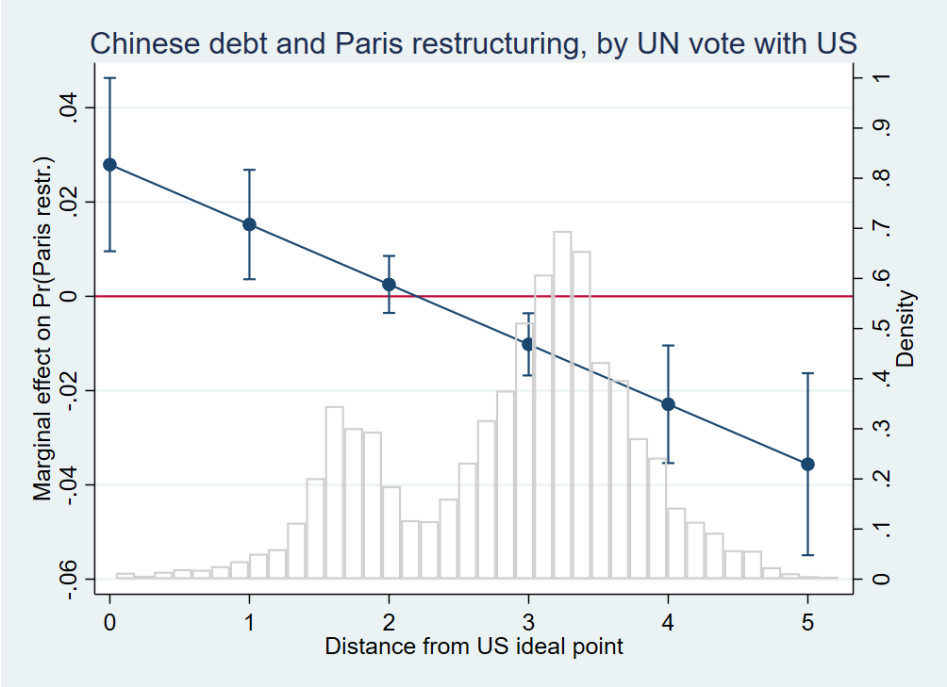
OLS regressions of Paris Club restructuring on Chinese debt and its interaction with the distance between a country's own UN voting profile and UN votes by the US (Column 1) or UN votes by China (Column 2), and additional controls. Country fixed effects are suppressed for presentation, as are temporal cubic splines. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

4.2.2 Prior restructuring

Alternatively, Paris Club creditors could be concerned that the Chinese creditors are "free-riding" on any PC debt forgiveness. If, however, existing Chinese debts have already been rescheduled, then such an issue ought to no longer be of primary concern for Western cred-

[32]Marginal effects plot provided in Appendix Figure 5.

Figure 3: Geopolitics, Chinese Debt, and Paris Club Restructuring.



The marginal effect of Chinese debt on probability of Paris Club restructuring, conditional on the distance between a country's ideal point at the UNGA and that of the US. 95% confidence intervals reported. Grey bars correspond to the empirical distribution of the distance from US ideal point measure.

itors. In Table 5, we interact our measure of Chinese debt with the estimate of *Chinese restructuring* (in the prior year) from Horn, Reinhart and Trebesch (2022). As seen in Column 1, there is significant evidence that the "penalty" of outstanding Chinese debt on Paris Club restructuring is primarily evident for countries that have not yet secured Chinese restructuring. To better represent this, we report the marginal effect of Chinese debt on Paris Club restructuring in Figure 4 which documents that, among countries that have previously restructured their Chinese loans, if anything there is an increased likelihood of securing restructuring at the Paris Club as well. Given that a major source of contention in wrangling over debt bailouts tends to focus on a worry about using additional fiscal space granted by Western writedowns to instead finance existing debt obligations to Beijing, the reversal of the association between Chinese debts and Paris Club restructuring among states that have

previously restructured their Chinese loans is again suggestive of Chinese debt in such cases being treated as simply another source of bilateral loans.[33]

Table 5: Prior Restructuring

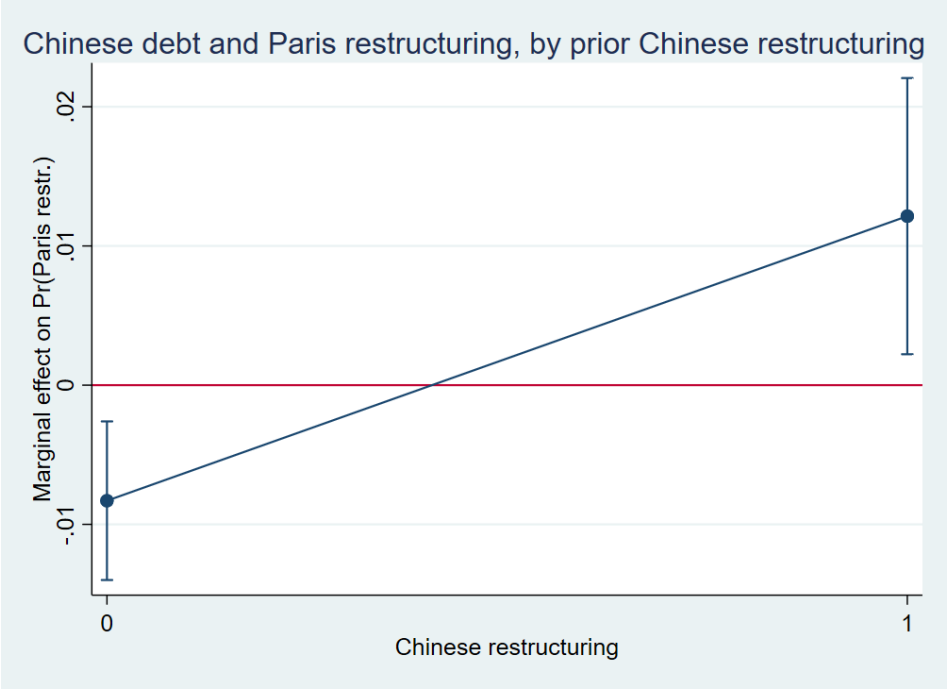
VARIABLES	(1) Paris	(2) Paris
Chinese debt (% total external debt)	-0.008***	-0.008***
	(0.003)	(0.003)
Chinese restructuring	0.030	
	(0.025)	
Chinese debt * Chinese restr.	0.020***	
	(0.005)	
Private restructuring		0.224
		(0.150)
Chinese debt * Private restr.		0.024
		(0.018)
Controls	✓	✓
Observations	1,303	1,303
R-squared	0.060	0.061
Number of countries	87	87

OLS regressions of Paris Club restructuring on Chinese debt and its interaction with a dummy for restructuring of Chinese debts (Column 1) or private debts (Column 2) in the prior year, as well as additional controls. Country fixed effects are suppressed for presentation, as are temporal cubic splines. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Were the primary driver of the negative relationship between Chinese debts and Paris Club restructuring due primarily to additional fiscal space, we might expect that private market restructuring would also generate equivalent room in the budget. However, in sharp contrast the conditional effects of Chinese debts as a function of prior Chinese restructuring demonstrated here, we note (as reported in Column 2 of Table 5) that the relationship between Chinese debts and Paris Club restructuring appears completely unrelated to whether

[33]Outside of the Chinese context, an alternative major source of debt reduction was the Heavily Indebted Poor Countries (HIPC) initiative spearheaded by the World Bank and IMF in the wake of waves of debt crises in the developing world. While we do not have strong reason to suspect that this initiative should necessarily moderate the consequences of Chinese debts for restructuring at the Paris Club, to assess this possibility we collected original data on the dates of HIPC decisions and completion, by country-year, and added these covariates to our baseline analysis. As reported in Appendix Table 13, our primary findings are unchanged by the inclusion of these measures of alternative sources of debt reduction.

Figure 4: Marginal Effect of Chinese Debt on Paris Restructuring, by Prior Chinese Restructuring



The marginal effect of Chinese debt on the probability of PC restructuring, conditional on whether a state had experienced restructuring on its Chinese debts in the prior year. 95% confidence intervals reported.

a state instead achieved prior restructuring of its private market debts.[34]

4.2.3 The opacity of debt

Finally, as noted above, an almost definitional characteristic of many Chinese loans over the past two decades has been their secrecy (Cormier 2023). Although researchers have been able to compile estimates of Chinese lending activity retrospectively, and drawing on a wide

[34]As documented in Appendix Table 14, we find no evidence that countries that have received Chinese bailout lending (as identified in Horn et al. (2023)) are systematically more or less likely to restructure their Paris Club obligations, nor does this seem to condition the relationship between existing Chinese debts and Paris Club restructuring. While it might seem reasonable to assume that the same regimes would receive both Chinese emergency loans as well as restructured Chinese debts, we find that these two outcomes are actually almost perfectly uncorrelated with one another, with a pairwise correlation coefficient of 0.046. This accords with the discussion in Horn et al. (2023) who also suggest that China's approach to emergency lending is quite distinct from its approach to loan renegotiation.

range of sources (as in Horn, Reinhart and Trebesch (2021, 2022)), Chinese debt exposure is often not known in real time (Alfaro and Kanczuk 2019, Brown 2023). Above, we argue that Western creditors may be more likely to oppose restructuring for states that owe heavily to China, for fear that these Paris Club haircuts may simply be used to honor existing Chinese debts.

Yet, for this mechanism to operate, creditors must have some awareness of the amount of Chinese debt outstanding. To address this possibility, we consider whether the relationship of debt to China with Paris Club restructuring is conditional on borrowing countries' economic policy transparency. For this analysis, we draw on an extensive body of work documenting that countries vary systematically in their overall economic reporting. Hollyer, Rosendorff and Vreeland (2011) use this variation to generate a measure of transparency, constructed using an Item Response Theory (IRT) model. The HRV measure serves as an overall transparency (of government data) measure, versus a measure of debt transparency more specifically.[35] The correlation between the overall HRV measure and a more limited measure of economic and financial data transparency is very high (greater than .9); and the HRV transparency index correlates strongly (.62) with the Open Budget Partnership's more specific (but available for fewer years) measures of debt transparency (Mosley and Rosendorff 2023*a*).

As expected, when we interact outstanding Chinese debt with the HRV measure of transparency, we indeed find that the negative association between Chinese debts and Paris Club restructurings is most pronounced for governments that report more on economic, financial and social outcomes in their country.[36] While the HRV measure does not necessarily indicate

[35]While a specific measure of public debt transparency would be very useful for this analysis, efforts by scholars as well as multilateral financial institutions to measure debt transparency in a consistent, cross-national, time series fashion are still works in progress.

[36]Note that, unlike other findings reported here, this effect is sensitive to the inclusion of a control for *foreign reserves (in months of imports)*, which is omitted from the controls presented in Table 6. We suspect that there are two ways to interpret this sensitivity: a standard "omitted variable bias" story which would suggest that it is not transparency that matters per se, but rather the importance of the presence of sufficient

the reporting on existing debts to China, the strength of this conditional relationship suggests that opaque countries are less likely to face difficulties restructuring Paris Club debts, simply because creditors may be unaware of the role played by China as a creditor.[37]

Relatedly, a broader literature on audience costs in international relations suggests that political regime type also may matter for information provision, with a standard expectation that more democratic states are more likely to provide transparent information to international actors (e.g., Schultz 1999). Perhaps, then, the association between the HRV transparency indicator and the likelihood of debt restructuring is ultimately about regime type (Beaulieu, Cox and Saiegh 2012, Ballard-Rosa, Mosley and Wellhausen 2021). Column 2 of Table 6, however, does not reveal a statistically significant interaction between Chinese debts and the degree of electoral democracy in a country.[38]

4.3 Creditor Diversity by Concentration

The evidence suggests that the negative association between Chinese debts and Paris Club restructurings results from conflictual bargaining, rather than from fiscal constraints. Perhaps, though, these findings are less about the presence of China specifically, and more about the increase over time in the number of sovereign bilateral creditors (World Bank 2022). One might imagine that, the more creditors there are, the greater the difficulty of finding a deal

foreign reserves in driving need for debt restructuring. Alternately, it may be that the approximately 200 observations and 12 countries we lose when including this measure are both (a) in greater fiscal trouble, explaining the lack of reporting, and (b) also less transparent, which is true by construction of the HRV measure when countries do not report data on foreign reserves (and hence are missing when including this covariate). While we cannot firmly differentiate between these two accounts, we do note that this second interpretation would be consistent with other recent work linking Chinese borrowing and lessened economic reporting (Cormier 2023).

[37] As reported in Appendix Table 17, in validation of our use of the HRV measure as a proxy for market information about Chinese debts at the time, we find that while states with higher Chinese debts tend to report somewhat lower total average external debts, this effect is primarily driven by those states with less economic transparency.

[38] Data on electoral democracy come from the "polyarchy" measure in the Varieties of Democracy dataset, available here: https://www.v-dem.net/data/the-v-dem-dataset/. In reported further results, we find similar (non)-effects if we instead employ the *Polity IV* measure of democracy.

Table 6: Economic Policy Transparency and Paris Club Restructuring

VARIABLES	(1) Paris	(2) Paris
Chinese debt (% total external debt)	0.003	-0.006
	(0.004)	(0.008)
HRV	-0.008	
	(0.007)	
Chinese debt x HRV	-0.003***	
	(0.001)	
Electoral democracy index		0.062
		(0.126)
Chinese debt x Democracy		0.003
		(0.014)
Controls	✓	✓
Observations	1,163	1,201
R-squared	0.113	0.099
Number of countries	78	81

OLS regressions of Paris Club restructuring on Chinese debt and its interaction with transparency (column 1) or democracy (column 2), along with additional controls. Country fixed effects are suppressed for presentation, as are temporal cubic polynomials. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

that is satisfactory to all parties.

We are not aware, however, of a similarly systematic source of cross-national coverage of total outstanding debt *stocks* owed to other individual (and especially non-OECD) creditor countries. The detailed data compiled by Horn, Reinhart and Trebesch (2021) are somewhat unique in this regard. However, the World Bank's International Debt Statistics (IDS) has recently made available information on annual dyadic bilateral debt *flows* for virtually all countries. While the IDS data do not allow us to generate a debt stock measure, as provided by Horn, Reinhart and Trebesch (2021), we are able to capture annual *flows* of debt by country pairs.

We take advantage of these data to gain some traction on the question of the uniqueness of Chinese debts in complicating official debt restructuring efforts. We generate, by country, a measure of bilateral debt (in dollars) borrowed from every other lender country in the IDS

dataset in a given year. We then scale this amount to the borrowing country's gross domestic product (GDP). We then construct, by country-year, a measure of $bilateral\ debt_{ijt}$ for each non-Paris Club member country that has provided lending; that is, we measure the amount of bilateral lending to borrower country i from lender country j in year t.

If China is but one of a growing set of alternative sources of finance to traditional Paris Club creditors, then we would expect to find similar (negative) links between aggregate non-Paris Club lending and restructuring efforts at the Paris Club. However, as Column 1 of Table 7 documents, while the coefficient on non-Paris Club lending is negative, it is not significant at conventional levels, nor does its inclusion remove the significance of greater amounts of Chinese bilateral debt.[39] We similarly create a measure of the share of bilateral debt flows in a given year that comes from Paris Club (versus non-Paris Club) countries. As the results in Column 2 demonstrate, countries that owe more of their (bilateral) debt to the Paris Club are indeed more likely to secure restructuring of Paris Club debts. The inclusion of this measure, however, does not affect our primary estimate of interest.

Alternatively, the concentration or dispersion of debt among bilateral creditors (whether new or old) is important to restructuring outcomes. Specifically, bargaining over creditor losses is presumably easier with greater creditor concentration. We construct a concentration index of bilateral debt at three distinct levels:[40] across all lenders; only across Paris Club lenders; and only among non-Paris Club lenders. As reported in Columns 3-5, we find little evidence that greater concentration of all bilateral debt flows, or greater concentration of non-Paris Club debt flows, are systematically related to Paris Club restructuring. We do find

[39] If we remove our measure of Chinese debt from the regression, we continue to find no significant relationship between total non-Paris Club bilateral debt flows and Paris Club restructuring, suggesting this non-finding is not merely the result of multicollinearity.

[40] That is, we calculate $\Sigma_{j \in G}(bilateral\ debt_{ijt}/total\ bilateral\ debt_{iGt})^2$, where $bilateral\ debt_{ijt}$ is all bilateral debt flows to country i from a country j in some relevant group G in year t, and $total\ bilateral\ debt_{iGt}$ is the total bilateral debt to country i from all countries in G in year t. At the extreme, if a country received all of its debt from a single lender in a given year, this measure would simply equal 1; as the number of creditor sources increases, this measure decreases in magnitude towards zero.

some evidence that countries with more concentrated Paris Club debt flows are somewhat less likely to secure a Paris Club restructuring. This could be consistent with a notion that restructuring is easier to accomplish when more Paris Club creditors have a stake in resolving a debt crisis; it is difficult, however, to firmly support this interpretation. Importantly, in no case do we find that inclusion of these measures of bilateral debt concentration affects our primary (China debt) effect of interest.

Table 7: Creditor Diversity and Concentration

VARIABLES	(1) Paris	(2) Paris	(3) Paris	(4) Paris	(5) Paris
Chinese debt (% total external debt)	-0.010***	-0.010***	-0.011***	-0.010***	-0.012***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)
Non-Paris Club bilateral debt (% GDP)	-26.125				
	(15.726)				
% Paris Club debt (of all bilateral)		0.111**			
		(0.042)			
Concentration of bilateral debt			-0.016		
			(0.040)		
Concentration of Paris Club debt				-0.071*	
				(0.041)	
Concentration of non-Paris Club bilateral debt					-0.020
					(0.026)
Controls	✓	✓	✓	✓	✓
Observations	1,026	1,006	1,027	968	861
R-squared	0.071	0.083	0.068	0.064	0.078
Number of countries	69	69	70	69	66

OLS regressions of Paris Club restructuring on outstanding Chinese debt, with a measure of the amount of annual bilateral debt flows from non-Paris Club countries (Column 1), the percentage of annual bilateral debt flows from the Paris Club countries (Column 2), and measures of the concentration of annual bilateral debt flows from all countries (Column 3), Paris Club countries (Column 4), and non-Paris Club countries (Column 5), along with additional controls. Country fixed effects are suppressed for presentation. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

4.4 Creditor Diversity by Lender

As an alternative to the baseline annual debt measure we have employed above, we also construct using the IDS dyadic dataset a measure of any recorded borrowing from China over the past 5 years (*Chinese bilateral debt (last 5 years)*) in place of our original measure.

We continue to find (in Column 1 of Table 8) a robust negative association between debts owed to China and Paris Club restructurings.

We do the same for several other potentially relevant lenders, computing the amount of bilateral debt flows from a given lender over the past 5 years. As reported in Column 2 of Table 8, we find no evidence of a significant association between debts owed to the US and the likelihood of Paris Club restructuring. If the negative effect for China is perhaps a function of region, then Japan should serve as an alternative prominent source of lending from East Asia, but Column 3 reports no significant effect of Japanese bilateral debts. Russia is an alternative country that is widely considered to be antagonistic to the Western geopolitical project; while the coefficient on Russian bilateral debts (in Column 4) is indeed negative, this relationship is far from being statistically significant. Alternately, perhaps it is China's position as an emerging market source of lending that drives the relationship we document; if true, India should serve as a reasonable point of comparison as an alternative developing country with increasingly ambitious international economic activity. However, Column 5 shows that there appears no significant relationship between bilateral Indian debts and Paris Club restructuring. Finally, in Column 6 we consider multiple bilateral lenders (including the UK, France, Germany, Saudi Arabia and Brazil) jointly; when we do so, the only country whose bilateral debts are found to be significantly associated with Paris Club restructurings is China. Given the continued strong negative relationship between Chinese bilateral lending and Paris Club restructuring, in contrast to little evidence of a systematic effect of other countries' bilateral debts, we take this alternative exercise as providing additional support to our main findings being evidence of the unique political consequences of the rise of China as a prominent international lender, rather than one of creditor diversity or concentration more generally.

Table 8: Dyadic bilateral debt flows and Paris Club Restructuring

VARIABLES	(1) Paris	(2) Paris	(3) Paris	(4) Paris	(5) Paris	(6) Paris
Chinese bilateral debt (last 5 yrs.)	-54.653**					-57.892***
	(21.638)					(19.526)
US bilateral debt (last 5 yrs.)		41.262				19.168
		(55.888)				(55.829)
Japanese bilateral debt (last 5 yrs.)			-3.217			-4.991
			(29.185)			(25.923)
Russian bilateral debt (last 5 yrs.)				-8.241		-13.694
				(6.385)		(9.904)
Indian bilateral debt (last 5 yrs.)					60.051	117.854
					(156.846)	(156.011)
UK bilateral debt (last 5 yrs.)						9.448
						(60.223)
French bilateral debt (last 5 yrs.)						-2.400
						(16.810)
German bilateral debt (last 5 yrs.)						38.912
						(81.306)
Saudi bilateral debt (last 5 yrs.)						-447.680
						(285.189)
Brazilian bilateral debt (last 5 yrs.)						-109.486
						(73.972)
Controls	✓	✓	✓	✓	✓	✓
Observations	1,324	1,324	1,324	1,324	1,324	1,384
R-squared	0.057	0.055	0.054	0.054	0.054	0.068
Number of countries	85	85	85	85	85	85

OLS regressions of Paris Club restructuring on a measure of 5-year average debt flows to multiple countries, along with additional controls. Country fixed effects are suppressed for presentation. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

5 Robustness

5.1 Heckman Selection Model

We have documented a consistent negative association between outstanding Chinese debts and restructuring with Paris Club creditors. Of course, lacking an explicit measure of countries that have approached the Paris Club, we cannot directly assess using these data whether this negative correlation is a result of countries with greater Chinese debts being less likely to *seek* renegotiation in the first place, or instead a result of countries that owe more to China

being less likely to successfully *negotiate* restructuring once requested. In other words, there exists a selection stage of country initiation of Paris Club discussion that clearly precedes any successful renegotiation being completed; our current results cannot disentangle where the negative association of Chinese debts on Paris restructuring arises.

Using a two-stage Heckman selection model, we separate out the effect of Chinese loans on the likelihood a state would need to seek restructuring, from the subsequent effect of Chinese lending on successful Paris renegotiation. More precisely, we begin by estimating a selection-stage equation identifying whether a given country was facing a *debt crisis* in a particular year,[41] and subsequently estimate a second-stage regression of Paris Club restructuring on Chinese debt (and other covariates) after adjusting for the potential effects of Chinese debt at the selection stage. In order to achieve identification, we require a first stage "instrument" that helps explain the selection stage but otherwise is orthogonal to the error of the outcome model; that is, we need some factor that should help predict whether a country is likely to face debt crisis but that is otherwise unrelated to Paris Club restructuring. Here, we use the weighted average number of other countries in the region that were in a debt crisis as our instrument. While the regional spillover effects are likely to affect market perceptions of a country's debt profile (Brooks, Cunha and Mosley 2015), we do not expect them to have a similar effect on a country's effort to achieve debt restructuring at the Paris Club.

Appendix Table 15 reports results from both stages of the Heckman estimation. Countries in regions experiencing greater debt distress are themselves also more likely to enter into debt crisis (bottom panel), which could arise either from sharing similar macro-economic conditions with neighboring economies, or from investor flight from regions in which debt distress grows. Interestingly, we note that there appears no systematic evidence that countries that have borrowed more from China are more (or less) likely to fall into debt crisis;[42]

[41] Data on debt crises drawn from Nguyen, Castro and Wood (2022).

[42] This is consistent with analysis in Dielmann (2021), which also finds little evidence that countries with greater debt exposure to China are more likely to face debt distress.

as mentioned above, while this might plausibly be an alternative channel for explaining a negative association between Chinese borrowing and Paris Club restructuring, the data here do not seem to support such a claim.[43]

After adjusting for the selection stage of which countries are currently in debt distress, we continue to find a robust and statistically significant negative association between greater outstanding Chinese debt burdens and Paris Club restructuring in the top panel of Table 15. While not definitive, we believe that this result provides additional evidence consistent with the argument that it is at the negotiation stage—rather than at the stage of seeking debt relief in the first place—that the effect of Chinese debt on Paris Club restructuring is most apparent.

5.2 Seemingly Unrelated Regressions

So far we have argued that Chinese debt is a significant impediment to the restructuring of other bilateral debts with Paris Club members and there appears to be no systematic association between greater Chinese debts and other forms of debt restructuring. This negative association between Chinese debts and Paris Club restructuring is conditioned on whether a state has secured debt concessions from Chinese lenders previously.

States may, however attempt restructurings with different creditors *simultaneously*. We re-estimate our primary finding in a seemingly unrelated regression (SUR) framework to take account of this potential simultaneity. The SUR framework allows us to estimate a series of regressions with differing dependent variables, under the assumption that the error term of each equation is (potentially) correlated. In our setting, we set up a system of three

[43]While our emphasis to this point has been on the consequences of Chinese debts for country success at renegotiating western bilateral debts at the Paris Club, other recent work has similarly suggested that the rise of China as a creditor outside the Paris Club may have consequences for debt restructuring efforts more broadly. For instance, Ferry and Zeitz (2021) identifies that countries with greater debt exposure to China tend to take longer to successfully strike a deal with the International Monetary Fund (IMF). However, as reported in Appendix Table 12, we do not find that countries with larger outstanding Chinese debts are less likely to be under an IMF program.

equations, with each type of debt restructuring (Paris Club, private market, and Chinese debt) as a dependent variable in its own equation. As reported in Appendix Table 16, estimation under the SUR framework does not change our primary results: we continue to find that states with more Chinese debts are less likely to restructure the Paris Club debts, but are no more or less likely to observe private market or Chinese restructuring.[44]

6 Conclusion

China is currently actively engaged in some debt renegotiation efforts (for instance, co-chairing Zambia's bilateral creditor committee under the G-20's Common Framework for Debt Treatments process). But China also has taken issue with the way in which sovereign debts to multilateral financial institutions are typically treated (as senior); and many Chinese loan contracts make it difficult for other creditors, intergovernmental organizations and domestic groups to know the true extent of a government's debts to Chinese lenders.

The potentially disruptive effects of China's presence as a creditor likely have existed for some time, prior to the current round of difficult debt restructurings. Indeed, drawing on data from 2000-2017, we find that higher levels of outstanding debt to China are associated with fewer Paris Club restructurings, as well as with more frequent restructurings by China. This pattern may, we note, be explained by demand (debtor government) as well as by supply (creditor country) mechanisms. On the demand side, debtors may appeal to non-Chinese bilateral creditors for relief less frequently if they have access to Chinese (and other non-traditional) sources of debt finance and debt relief (Alfaro and Kanczuk 2019). China's presence as a lender can ease the fiscal stress debtors experience, providing swap lines, loans with fewer conditions, and access to alternative pools of resources.[45] Our empirical analyses

[44] In unreported additional results, we find very similar effects of Chinese debt on Paris Club restructuring when we control directly for a lagged dependent variable, to account for the possibility that there might be serial correlation in factors affecting multiple instances of restructuring.

[45] Were such a pattern present, we might expect it to fade in 2020 and after, as China dramatically slowed

offer limited support for this view, however: tighter fiscal constraints do not appear to moderate the effect of Chinese debt obligations on Paris Club restructurings.

On the supply side, the presence of large outstanding Chinese debt may reduce the willingness of Paris Club creditors to offer restructuring agreements. We find strong evidence that contentious politics, geopolitical rivalry, and informational deficits reduce the incidence of Paris Club restructurings. Interestingly, if a country has already restructured its debts to China, there appears to be no effect of Chinese debt levels on the likelihood of a Paris Club restructuring. In such cases, we might imagine that Paris Club members are aware that China has taken losses, and therefore worry less about burden sharing among official creditors.

Debtors whose "affinity" with the US (as measured by similarity in UNGA voting patterns) is low receive fewer Paris Club restructurings when they owe more to Chinese lenders. Similarly, countries that are more transparent – and presumably more likely to make their Chinese debt publicly known – appear to have a tougher time reaching a Paris Club restructuring agreement when their Chinese debts are greater. On the one hand these states appear to be punished for offering more information to their creditors, and this may explain the reticence by debtors to increase the transparency of their debt reporting (Brown 2023, Cormier 2023). On the other hand, it may be that those states with a lot of Chinese debt are already under or have been under an IMF program which mandates more information disclosure (Kern and Reinsberg 2022).

China is the largest official bilateral creditor and not a full member of the Paris Club. This has important consequences for debt restructuring processes and outcomes among non-OECD states in debt distress, especially for those that are geopolitically distant from the US. Sovereign debt restructurings and resolutions are not merely matters of a debtor's ability or willingness to repay; contentious international politics plays a crucial role.

the pace of new lending. Our data, however, do not allow us to test this expectation.

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Appendices

A Data Summary

Table 9: Summary Statistics

	Obs	Mean	Std Dev	Min	Max
Chinese debt (% total external debt)	1771	-5.48	3.39	-9.90	2.18
GDP per capita (log)	6996	8.00	1.61	3.13	12.16
GDP growth (annual %)	6872	3.31	6.24	-64.05	149.97
Trade (% of GDP)	6233	81.89	49.88	0.02	437.33
Oil rents (% of GDP)	6622	3.67	9.33	0.00	71.49
Foreign direct investment, net inflows (% of GDP)	6544	5.20	38.95	-1275.19	1282.63
Military expenditure (% of GDP)	5549	2.52	3.09	0.00	117.35
Foreign reserves (months of imports)	5664	4.32	4.45	0.00	79.24
Interest payments on external debt (% of GNI)	4314	1.69	2.08	0.00	41.62
IMF program	6758	0.31	0.46	0.00	1.00
Population, total	7396	3.27e+07	1.25e+08	7631.00	1.40e+09
Electoral democracy index	6626	0.48	0.28	0.01	0.92
Debt Crises	7023	0.31	0.46	0.00	1.00
Distance from US ideal point (UN votes)	7358	2.88	0.87	0.04	5.22
Distance from Chinese ideal point (UN votes)	7358	0.82	0.75	0.00	4.66
HRV	5305	1.47	2.24	-11.00	9.25
Bilateral debt from China, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.01
Bilateral debt from US, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.00
Bilateral debt from Japan, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.00
Bilateral debt from Russia, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.01
Bilateral debt from India, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.01
Bilateral debt from UK, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.00
Bilateral debt from France, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.01
Bilateral debt from Germany, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.00
Bilateral debt from Saudi, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.00
Bilateral debt from Brazil, past 5 yrs. (% GDP)	2956	0.00	0.00	0.00	0.00
External debt (% GDP)	5904	59.41	57.10	0.00	2092.90
Bilateral debt (% GDP)	4131	0.01	0.01	0.00	0.17
Multilateral debt (% GDP)	4209	0.01	0.01	0.00	0.21
Commercial bank debt (% GDP)	2866	0.00	0.01	0.00	0.24
Bond market debt (% GDP)	1223	0.01	0.02	0.00	0.39

B Additional Results

B.1 Alternative Estimating Models

Table 10: Fixed-effects Probit.

VARIABLES	(1) Paris	(2) Paris	(3) Paris
Chinese debt (% total external debt)	-0.154***	-0.103**	-0.170***
	(0.022)	(0.043)	(0.066)
GDP per capita (log)		-0.645**	-0.316
		(0.323)	(0.374)
GDP growth (annual %)		-0.027*	-0.027
		(0.015)	(0.022)
Trade (% of GDP)		-0.002	-0.005
		(0.005)	(0.005)
Oil rents (% of GDP)		-0.006	-0.007
		(0.020)	(0.031)
Foreign direct investment, net inflows (% of GDP)		-0.032	-0.020
		(0.023)	(0.025)
Military expenditure (% of GDP)		0.012	-0.066
		(0.111)	(0.184)
Foreign reserves (months of imports)			0.005
			(0.080)
Interest payments on external debt (% of GNI)			0.049
			(0.035)
IMF program			-0.241
			(0.290)
Population, total			-0.000*
			(0.000)
Electoral democracy index			2.223
			(1.757)
Observations	714	562	358

Probit regression of whether a country has restructured with the Paris Club on Chinese outstanding debts, as well as a set of controls. Country fixed effects are included but suppressed here for presentational purposes. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 11: Conditional Logit.

VARIABLES	(1) Paris	(2) Paris	(3) Paris
Chinese debt (% total external debt)	-0.259***	-0.158*	-0.291**
	(0.046)	(0.089)	(0.143)
GDP per capita (log)		-1.285**	-0.712
		(0.580)	(0.719)
GDP growth (annual %)		-0.042	-0.044
		(0.032)	(0.046)
Trade (% of GDP)		-0.005	-0.007
		(0.008)	(0.010)
Oil rents (% of GDP)		-0.003	-0.016
		(0.041)	(0.064)
Foreign direct investment, net inflows (% of GDP)		-0.053	-0.027
		(0.042)	(0.046)
Military expenditure (% of GDP)		-0.013	-0.145
		(0.245)	(0.359)
Foreign reserves (months of imports)			0.047
			(0.157)
Interest payments on external debt (% of GNI)			0.065
			(0.054)
IMF program			-0.342
			(0.615)
Population, total			-0.000
			(0.000)
Electoral democracy index			3.758
			(3.549)
Observations	714	562	358
Number of countries	42	37	24

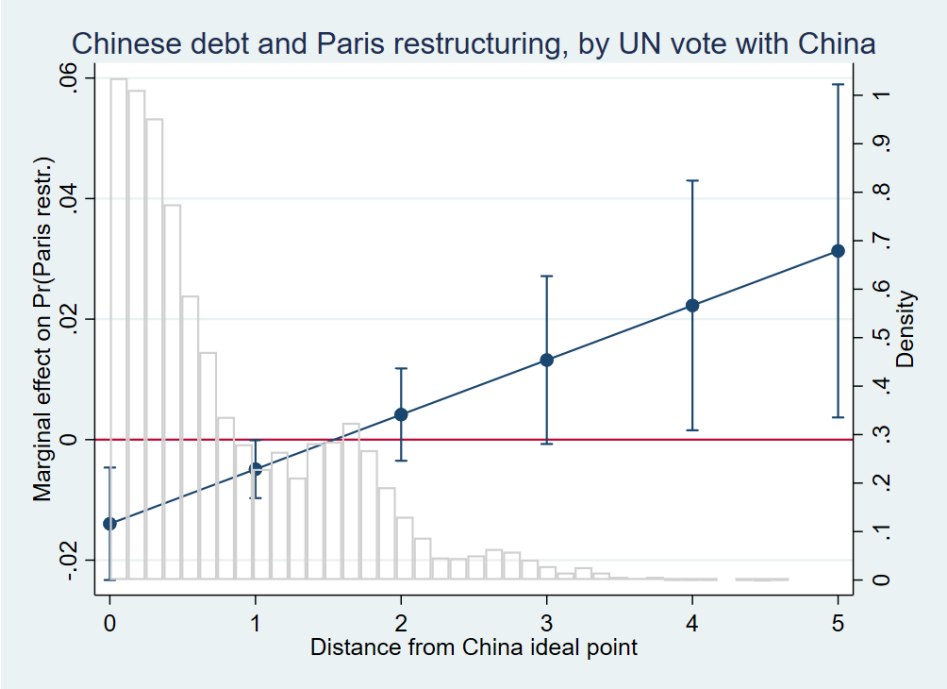
Conditional logit regression of whether a country has restructured with the Paris Club on Chinese outstanding debts, as well as a set of controls. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 12: IMF Program

VARIABLES	(1) IMF program	(2) IMF program
Chinese debt (% total external debt)	-0.001	-0.002
	(0.011)	(0.006)
GDP per capita (log)	-0.231***	-0.091***
	(0.051)	(0.031)
GDP growth (annual %)	-0.004*	-0.006**
	(0.002)	(0.002)
Trade (% of GDP)	-0.003**	-0.001*
	(0.001)	(0.001)
Oil rents (% of GDP)	0.007**	0.004
	(0.003)	(0.004)
Foreign direct investment, net inflows (% of GDP)	0.000	-0.000
	(0.002)	(0.001)
Military expenditure (% of GDP)	-0.001	0.027
	(0.025)	(0.020)
Foreign reserves (months of imports)		-0.010*
		(0.005)
Interest payments on external debt (% of GNI)		0.013***
		(0.003)
IMF program		0.575***
		(0.035)
Population, total		0.000**
		(0.000)
Electoral democracy index		0.497**
		(0.247)
Observations	1,373	1,027
R-squared	0.100	0.448
Number of countries	91	70

OLS regressions of whether a country is under an IMF program on Chinese outstanding debts, as well as a set of controls. Country fixed effects are suppressed for presentation. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Figure 5: Geopolitics, Chinese Debt, and Paris Club Restructuring.



Marginal effects of additional Chinese debt on probability of Paris Club restructuring, conditional on the distance between a country's ideal point at the UN and that of China. 95% confidence intervals reported. Grey bars correspond to the empirical distribution of the distance from China's ideal point measure.

Table 13: HIPC

VARIABLES	(1) Paris	(2) Paris	(3) Paris	(4) Paris
Chinese debt (% total external debt)	-0.011***	-0.011***	-0.011***	-0.011***
	(0.003)	(0.003)	(0.003)	(0.003)
HIPC decision	-0.018	0.213		
	(0.103)	(0.286)		
Chinese debt x HIPC decision		0.045		
		(0.038)		
HIPC completion			-0.133***	-0.099***
			(0.016)	(0.036)
Chinese debt x HIPC completion				0.006
				(0.005)
GDP per capita (log)	-0.031	-0.031	-0.032	-0.032
	(0.020)	(0.020)	(0.020)	(0.020)
GDP growth (annual %)	-0.003	-0.002	-0.003	-0.003
	(0.002)	(0.002)	(0.002)	(0.002)
Trade (% of GDP)	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Oil rents (% of GDP)	-0.001	-0.002	-0.001	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)
Foreign direct investment, net inflows (% of GDP)	-0.002***	-0.003***	-0.002***	-0.002***
	(0.001)	(0.001)	(0.001)	(0.001)
Military expenditure (% of GDP)	-0.004	-0.002	-0.004	-0.004
	(0.009)	(0.010)	(0.010)	(0.010)
Observations	1,303	1,303	1,303	1,303
R-squared	0.050	0.054	0.057	0.058
Number of countries	87	87	87	87

OLS regression of whether a country has restructured its PC debts on Chinese outstanding debts, along with a measure of either the announcement of an HIPC decision (Columns 1 and 2) or the completion of an HIPC program (Columns 3 and 4), as well as a set of controls. Country fixed effects are suppressed for presentation, as are temporal cubic splines. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 14: Chinese Bailouts

VARIABLES	(1) Paris restr.	(2) Chinese restr.
Chinese debt (% total external debt)	-0.011***	0.003
	(0.003)	(0.002)
Received Chinese emergency lending	0.023	-0.024
	(0.026)	(0.020)
GDP per capita (log)	-0.015	0.000
	(0.024)	(0.007)
GDP growth (annual %)	-0.002	0.001
	(0.002)	(0.001)
Trade (% of GDP)	-0.000	-0.001*
	(0.001)	(0.000)
Oil rents (% of GDP)	-0.000	-0.003
	(0.002)	(0.002)
Foreign direct investment, net inflows (% of GDP)	-0.001*	-0.000
	(0.001)	(0.000)
Military expenditure (% of GDP)	0.002	-0.007
	(0.015)	(0.007)
Foreign reserves (months of imports)	-0.000	-0.000
	(0.003)	(0.001)
Interest payments on external debt (% of GNI)	0.016***	0.000
	(0.004)	(0.001)
IMF program	-0.002	-0.005
	(0.014)	(0.005)
Population, total	-0.000	-0.000
	(0.000)	(0.000)
Electoral democracy index	-0.073	0.037
	(0.140)	(0.073)
Observations	1,027	1,027
R-squared	0.068	0.021
Number of countries	70	70

OLS regression of whether a country has restructured its PC debts (Column 1) or Chinese debts (Column 2) on Chinese outstanding debts, along with a measure of whether the country has received emergency Chinese bailout lending, as well as a set of controls. Country fixed effects are suppressed for presentation, as are temporal cubic splines. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 15: Heckman Selection Model

EQUATION	VARIABLES	(1) Paris
PC restructuring	Chinese debt (% total external debt)	-0.012**
		(0.005)
	GDP per capita (log)	-0.035
		(0.028)
	GDP growth (annual %)	-0.005
		(0.003)
	Trade (% of GDP)	0.000
		(0.000)
	Oil rents (% of GDP)	0.003
		(0.002)
	Foreign direct investment, net inflows (% of GDP)	-0.003**
		(0.001)
	Military expenditure (% of GDP)	-0.009*
		(0.005)
Debt crisis	Chinese debt (% total external debt)	-0.007
		(0.028)
	Electoral democracy index	-0.502
		(0.603)
	Regional debt crises	2.104***
		(0.485)
	GDP per capita (log)	-0.493***
		(0.150)
	GDP growth (annual %)	-0.033**
		(0.013)
	Trade (% of GDP)	0.003
		(0.004)
	Oil rents (% of GDP)	-0.004
		(0.012)
	Foreign direct investment, net inflows (% of GDP)	0.038**
		(0.016)
	Military expenditure (% of GDP)	-0.033
		(0.035)
	ρ	-0.096
		(0.170)
	Observations	1,369

Results from a two-stage Heckman selection model. The first stage (bottom half) estimates the likelihood a country is facing debt distress; the second stage (top half) then subsequently estimates the likelihood a country restructures with the Paris Club, after accounting for potential effects at the selection stage. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 16: Seemingly Unrelated Regression

VARIABLES	(1) PC restr.	(2) Private restr.	(3) Chinese restr.
Chinese debt (% total external debt)	-0.008**	0.000	0.003
	(0.003)	(0.002)	(0.002)
GDP per capita (log)	0.018	0.005	0.003
	(0.028)	(0.015)	(0.016)
GDP growth (annual %)	-0.002	-0.000	0.001
	(0.002)	(0.001)	(0.001)
Trade (% of GDP)	-0.000	-0.000**	-0.000**
	(0.000)	(0.000)	(0.000)
Oil rents (% of GDP)	-0.001	0.004***	-0.003**
	(0.002)	(0.001)	(0.001)
Foreign direct investment, net inflows (% of GDP)	-0.001	-0.001**	-0.000
	(0.001)	(0.001)	(0.001)
Military expenditure (% of GDP)	-0.001	0.004	-0.007
	(0.011)	(0.006)	(0.007)
Foreign reserves (months of imports)	-0.000	-0.002	-0.000
	(0.003)	(0.002)	(0.002)
Interest payments on external debt (% of GNI)	0.016***	0.016***	0.000
	(0.004)	(0.002)	(0.002)
IMF program	0.000	0.015*	-0.006
	(0.015)	(0.008)	(0.009)
Population, total	0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)
Electoral democracy index	-0.074	-0.040	0.041
	(0.093)	(0.051)	(0.055)
Observations	1,027	1,027	1,027
R-squared	0.162	0.161	0.111

SUR regression of whether a country has restructured its PC debts (column 1), private market debts (column 2), or Chinese debts (column 3) on Chinese outstanding debts, as well as a set of controls. Country fixed effects are suppressed for presentation, as are temporal cubic splines. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1

B.2 Total Debt, Chinese Debt, and Transparency

We find above that the effect of Chinese debt on Paris restructuring appears to be conditional on a country's level of economic transparency. We argue that this is consistent with a notion that these debts should only prove a barrier to negotiations when such loans are actually known to western actors, particularly given frequent mention by policymakers of concerns over the opacity of Chinese debts. As validating evidence for this interpretation, we first document a potentially puzzling empirical association between a country's total reported external debts[46] and its amount of Chinese debts: as documented in Column 1 of Table 17, we find a *negative* and significant association between the two measures of debt. Clearly, if all Chinese debts were reported fully, we should expect the opposite sign: countries with more debt from China should also therefore have more overall debt. After including an interaction between Chinese debts and transparency in Column 2, however, we identify that this negative association between Chinese debt and total debt disappears for countries that are more transparent in their economic reporting. We argue that this is consistent with the notion that it is in these more transparent countries where public information about existing Chinese debts is likely to be found. If reduced fiscal stress were the driving force behind the negative association between Chinese debts and Paris Club restructuring, it should not particularly matter whether the extra fiscal space provided by Chinese loans was public knowledge; on the other hand, if reduced creditor cooperation is at play, then information about the extent of Chinese debts should play a central role. While acknowledging again the limitations of making causal claims with observational data such as our own, we suggest that the preponderance of evidence across our multiple tests paints a picture more consistent with the idea that western creditors have become increasingly unwilling to make sacrifices on their own debts when concerned about the presence of China as an alternative source of sovereign finance.

[46] Here, drawing on total external debt data from Abbas et al. (2010) and the World Bank's WDI.

Table 17: Average Debt on PC Restructuring

VARIABLES	(1) Avg. debt	(2) Avg. debt
Chinese debt (% total external debt)	-1.275**	-3.254***
	(0.552)	(1.114)
HRV	1.107	4.460**
	(1.277)	(2.151)
Chinese debt x HRV		0.716**
		(0.324)
Controls	✓	✓
Observations	1,230	1,230
R-squared	0.370	0.395
Number of ccode	86	86

OLS regressions of average external debt on Chinese debts, as well as its interaction with economic transparency (in Column 2), along with a set of controls. Country fixed effects suppressed for presentation, as are temporal cubic polynomials. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

B.3 Results by Creditor Type

If the negative association between Chinese debts and Paris Club restructuring is related to conflict between Chinese and Paris Club creditors, then we should be most likely to see this effect pronounced when a given debtor country owes more money to bilateral lenders other than China (who, presumably, should by and large be the traditional members of the Paris Club). However, as reported in Table 18, there is no evidence that the effect of Chinese debt on restructuring is systematically different for debtor states that owe more either to *bilateral creditors* in column 1, *multilateral creditors* in column 2, to *commercial banks* in Column 3, or to *bond markets* in Column 4.[47] Finally, we also document in Column 5 that an explicit inclusion of total external debt (and its interaction with Chinese debts) does not affect our main results, although we note that interpretation of this effect is complicated by the fact that our main independent variable *Chinese debt (% total external debt)* is calculated by dividing Chinese external debts by total external debts.

[47]Due to high missingness in the IDS on bond market debts, this last result should be taken with caution.

Table 18: Debt Composition

VARIABLES	(1) Paris	(2) Paris	(3) Paris	(4) Paris	(5) Paris
Chinese debt (% total external debt)	-0.011***	-0.013***	-0.011**	-0.005	-0.011**
	(0.003)	(0.005)	(0.005)	(0.003)	(0.005)
Bilateral debt (% GDP)	-0.398				
	(1.674)				
Chinese debt x Bilateral debt	-0.038				
	(0.188)				
Multilateral debt (% GDP)		8.360**			
		(4.148)			
Chinese debt x Multilateral debt		0.424			
		(0.566)			
Commercial bank debt (% GDP)			0.111		
			(1.244)		
Chinese debt x Commercial debt			0.125		
			(0.139)		
Bond market debt				0.071	
				(0.383)	
Chinese debt x Bond debt				0.094	
				(0.110)	
Total external debt (% GDP)					0.001
					(0.001)
Chinese debt x Total debt					0.000
					(0.000)
Controls	✓	✓	✓	✓	✓
Observations	1,006	1,027	758	387	1,027
R-squared	0.067	0.097	0.051	0.076	0.077
Number of countries	69	70	60	42	70

OLS regression of Paris Club restructuring on Chinese debt and its interaction with bilateral debts (Column 1), multilateral debts (Column 2), commercial bank debts (Column 3), bond market debts (Column 4), or total external debt (Column 5), as well as additional controls. Country fixed effects are suppressed for presentation, as are temporal cubic polynomials. Robust standard errors clustered by country in parentheses. *** p<0.01, ** p<0.05, * p<0.1