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Shifting political influence? UN General Assembly behavior during debt crisis

Martin C. Steinwand University of Essex

Abstract

This paper looks at the political influence that China and Western official creditors exert on how debtor countries vote at the United Nations General Assembly. The theoretical framework emphasizes the common agency problem that both China and the West face. Starting from the premise that countries that owe more debt to China than the West are more aligned with Chinese positions at the UNGA, we argue that debt crisis changes voting behavior to be more in line with the West. Empirically, we construct a dataset of debt exposure and UNGA voting behavior covering 1990 to 2020 and perform panel analysis with two-way fixed effects. Identification is addressed by a) arguing that omitted variable bias resulting from political proximity to China likely has a conservative direction, b) a formal sensitivity analysis, and c) an additional instrumental variables regression that leverages exchange rate shocks driven by US domestic policies as excludable instrument. We find that countries with a high debt exposure to China move away from China's UNGA policy positions when they default on their sovereign debt obligations, indicating lowered political Chinese influence.

Author Information

Martin C. Steinwand Department of Government University of Essex martin.steinwand@essex.ac.uk. ORCID: 0000–0002–4218–0164

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1 Introduction

Highly indebted countries of the Global South are experiencing a debt crisis that risks economic hardship and political unrest, jeopardizing gains from economic liberalization. Driven by high global inflation, a strong US dollar and increasing efforts to 're-shore' supply chains among advanced economies, there have been huge capital outflows. By October 2022, international investors had pulled 70 billion US dollars from emerging market bond funds, the worst reversal in 17 years.¹ Many of the economic gains of the Global South were accompanied by the rise of China to the top of international development finance - China is now the biggest single creditor to low- and middle-income countries (The World Bank, 2023). The crisis has the potential to reveal how China's rise to the top has affected its political influence in debtor countries. During past debt crises, it was Western governments who acted as lender of last resort and coordinated their responses through the Paris Club.². In contrast, Chinese bailouts are opaque, combine high interest rates with a lack of debt write-downs (Brautigam, Acker and Huang, 2020; Horn et al., 2023), and are poorly coordinated with other debtors. As vulnerable countries are seeking to avoid the worst effects of financial destabilization, Western aid is set to play a more important role again (albeit likely short lived). Along with it, Western donors might be better able to impose their policy preferences.

This project uses debt default in the context of adverse macro-economic shocks to explore how the rise of Chinese development finance reshapes power relationships between the West, China and countries of the Global South, looking at voting behavior at the United Nations General Assembly (UNGA). It builds on previous works that have demonstrated that official loans and aid flows are associated with greater alignment in voting for UNGA resolutions between donor and recipient countries. This has been shown for US aid flows (Dreher, Nunnenkamp and Thiele, 2008), World Bank and IMF loans (Dreher and Sturm, 2012) and recently also for Chinese development finance (Raess, Ren and Wagner, 2022). The increasingly important role of Chinese credit for countries

¹*Financial Times*, 2 October 2022.

²Paris Club club members include Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Netherlands, Norway, Russia, South Korea, Spain, Sweden, Switzerland, the United Kingdom and the US



Figure 1: Top 10 countries in default, by size of arrears, exposure to Chinese vs Western debt expressed as debt share of public & publicly guaranteed debt(Western debt: Paris Club & multilateral lenders), Sources: World Bank International Development Statistics, BoC-BoE Sovereign Default Database.

in debt distress is illustrated in figure 1. The panels show the top ten countries who have defaulted on their sovereign debt (by size of arrears) for each decade since 2000. For these countries, the share of sovereign debt owed to China relative to Western creditors has been rising steadily in each decade.

The paper innovates on two counts: It casts the relationship between multiple donors and a recipient country in terms of a common agency problem. While the insight that foreign aid buys political influence is important, the rise of providers of development finance with competing political agendas raises the question which donor retains the upper hand in terms of political influence and when. We argue that during debt crisis, debtor governments that have heavily relied on borrowing from China update their beliefs about China's unyielding posture regarding debt relief and coop-

eration with other creditors. Since western creditors are reluctant to provide liquidity if their debt is treated less favorable than Chinese debt, debtor governments move closer to Western policy positions in the hope of unlocking Western aid.

The second innovation addresses the challenge of making causal inferences about the effects of debt owed to China and Western donors on political alignment. It arises because of endogeneity, i.e. reverse causality, of loan provision and political influence: For example, China provides more funds to countries that support its foreign policy objectives such as the One-China policy (Dreher et al., 2018; Hoeffler and Sterck, 2022). We tackle this challenge with a multi-pronged strategy. First, we argue that the timing of sovereign debt crises is strongly driven by exogenous factors, such as macro-economic shocks tied to domestic US economic developments and transmitted though currency markets and investment flows (Obstfeld and Zhou, 2023). Political proximity to China will only bias the effects of debt crisis on UN voting behavior in the direction that we predict if this proximity decreases the risk of default. Insights about Chinese debt-refinancing practices and its inability to coordinate with other creditors (Brautigam, Acker and Huang, 2020; Horn et al., 2023; Setser, 2023) suggests this is not the case. Second, we use two-way fixed effects that capture non-time varying country-level voting patterns and year-on-year changes to the overall voting agenda. Third, we perform formal sensitivity analysis to demonstrate that even if political proximity to China made debt crisis less likely, the bias from omitting a variable that fully captures political proximity (which can't be directly measured) would have to be unrealistically strong to overturn our results (Cinelli and Hazlett, 2020). Finally, our results persist when instrumenting debt crisis with an interaction of indicators of US dollar strength with the share of a country's debt that is denominated in US dollars, though with caveats. This analysis also suggests that potential omitted variable bias runs in a conservative direction.

This paper contributes to a range of research agendas. It adds an important facet to works that explore the implications of China's rise as development finance provider for its political influence (e.g. Blair, Marty and Roessler, 2022; Dreher et al., 2022; Gelpern et al., 2022). It speaks to a larger literature on South-South aid (e.g. Amanor and Chichava, 2016; Kinyondo, 2019; Mawdsley, 2019) and adds a systematic empirical perspective to the important case studies that look at the

agency of emerging market governments (Winters, 2012; Wethal, 2017). Not least, it provides a lens through which to analyze some of the political implications of the current debt crisis, which is still unfolding.

2 Literature

Scholars have long argued about the role of North-South flows of aid and loans in buying political influence. Theoretical and empirical works have variously focused on the role of promoting domestic economies of donors (Lancaster, 2007; Younas, 2008; Fuchs, Nunnenkamp and Öhler, 2015), the relative size of donors' and recipient governments' winning coalitions (Bueno de Mesquita and Smith, 2009), geo-political interests and post-colonial ties (Alesina and Dollar, 2000; Schraeder, Hook and Taylor, 1998; Lee, 2022), and voting in line with donor countries at the UN General Assembly (Dreher, Nunnenkamp and Thiele, 2008; Carter and Stone, 2015). At the same time, large geo-political shifts such as the end of the Cold War or the US 'War on Terror' have had measurable effects on the relative weight assigned to these motives (Bearce and Tirone, 2010; Fleck and Kilby, 2010).

While this early scholarship exclusively focused on the role of Western aid flows, the rise of China as preeminent provider of development finance since the late 2000s has led to a reevaluation of the same questions. Would Western influence in the Global South be replaced with – similarly motivated – Chinese aid, or would the rise of South-South development cooperation herald an era where the interests of recipient countries (or at least their governments) would take center stage (Lancaster, 2007; Lum et al., 2009; Bräutigam, 2011)? The answer, based on painstakingly collected information on Chinese aid projects (China does not publish or centrally collect statistics on its development finance; Dreher et al., 2022) is that Chinese aid is motivated similar to Western aid efforts. China's concessional aid, comparable to Official Development Aid (ODA), follows foreign policy imperatives (in particular support for China's policy towards Taiwan, Hoeffler and Sterck, 2022), while the larger share (comparable to Other Financial Flows, OFF) is more commercial in nature and driven by economic interests (Dreher et al., 2018). It is this latter type of funds that has

resulted in high indebtedness of recipient countries to China.

Given these similarities, it is not surprising that Chinese aid has been found to exert similar effects as its Western counterpart. For example, there is evidence of local political capture, with aid projects clustering in birth-regions of African rulers (Dreher et al., 2019), comparable to capture of Western aid projects observed in contexts varying from single countries (e.g. Kenya; Briggs, 2014; Jablonski, 2014) to large-*n* studies (Winters, 2014; Andersen, Johannesen and Rijkers, 2022). Perhaps normatively more desirable, Chinese aid is associated with an improved image among local populations, though this effect is also conditional on the domestic politics of recipient countries, with positive image gains limited to government supporters (Chen and Han, 2021).

This paper concentrates on the influence of donor countries on recipient country behavior at the UN General Assembly (UNGA). Starting with Voeten (2000), scholars have used voting records on UNGA resolutions to study which countries align in their voting behavior. These studies typically have relied on ideal point estimation to order states in one political dimensions, reflecting support for the Western international institutional and economic order (Bailey, Strezhnev and Voeten, 2017). Ideal point estimates result from a multi-dimensional unfolding procedure that maps binary vote choices onto a policy space with endogenous dimensionality. Bailey, Strezhnev and Voeten (2017) show that for UNGA voting, ideal points can be captured mainly by a single policy dimension, with the US and other western countries on one end of the spectrum and, especially since the mid 1990s, China on the other end. The procedure does not reveal a country's 'true' ideal point, i.e. underlying preferences, but recovers a behavioral manifestation of a policy position. This position might be influenced by outside actors or a function of strategic considerations, thus possibly deviating from underlying preferences. Note that for simplicity, we still refer to the empirical measure of policy position as 'ideal point' going forward.

There have been various efforts to link foreign aid flows and Western economic influence to alignment with Western positions at the UNGA. Dreher, Nunnenkamp and Thiele (2008) find a strong connection between US aid flows in the form of budget aid and recipient alignment with US positions, but don't find comparable evidence for other western donors. Dreher and Sturm (2012)

find a similar alignment for countries with IMF adjustment or World Bank non-concessional loans and average Western voting positions. Looking at an important domestic source of variation in the strength of alignment, Carter and Stone (2015) attribute support for US positions by democratic aid recipients to more credible US threats of withholding aid when interacting with democratic governments.

The question whether China's development finance activities resemble Western aid giving extends to vote buying at the UNGA. China's public engagement for a multi-polar international order and its attempts at international institution building (the most prominent example being the Asian Infrastructure Investment Bank; Ren, 2016) suggests that it could use its own aid flows to influence recipient countries in a similar fashion as Western donors. Raess, Ren and Wagner (2022) are the first to show such a relationship. They find that Chinese aid flows are associated with increased voting alignment of recipient countries with China (though only for democracies), despite the more commercial, OOF-like character of those flows, compared to Western ODA.

3 Theory

The starting point of our theoretical discussion is that Chinese development finance influences alignment with China in UNGA voting. Given the prominent role of Chinese development finance in countries of the Global South, this raises the question to what extent Chinese and Western political influence interact. Where Chinese funding heavily outweighs other finance flows, its lead donorship should provide the Chinese government with increased political clout across a range of issues, including UNGA voting behavior. A similar relationship should exist for Western lead donorship (Steinwand, 2015).

What happens if aid contributions and finance flows are more evenly balanced? Given that Western and Chinese preferences regularly clash, this sets up a common agency problem (Grossman and Helpman, 1994; Schneider and Tobin, 2013). At the UNGA, China and Western countries regularly vote in opposite ways, with ideal points at the opposite ends of the political spectrum. Equal finance flows from both China and Western institutions are therefore a poor predictor of

recipient country voting behavior. As the influence of the two sides balances each other out, ie. they compete as principals, recipient governments have more discretion to vote in line with their own preferences (Woo and Chung, 2018).

Given this theoretical indeterminacy for evenly exposed countries, predictions about the effect of debt crisis apply only to countries with high debt exposure to China (and to a lesser extent to those exposed only to the West, as discussed below). Our central argument is that these countries increasingly vote in line with Western positions at the UNGA during debt crisis. This happens for the following reasons. High exposure to Chinese relative to Western debt is arguably a result of the attractive relative lack of conditionality attached to Chinese loans, including fewer political conditions and transparency requirements (Bräutigam, 2011; Hernandez, 2017; Cormier, 2023). Once governments with high Chinese loans struggle to make repayments on their debts, they find that China is less generous when it comes to providing debt relief and to restructuring repayment schedules. For example, Acker, Bräutigam and Huang (2020) show that in Africa, China typically does not offer write-downs on debt (except for relatively unimportant zero-interest loans) or other concessions such as reduced interest rates or refinancing. Horn et al. (2023) confirm that Chinese rescue loans are not transparent and carry high interest rates. In the quest for additional finance, there is only one obvious source that debtor governments can turn to. Kern and Reinsberg (2022) demonstrate that countries turn to the IMF if they default on Chinese debt during times of economic distress.

The Paris Club member countries and the IMF have long-standing institutionalized procedures that are designed to provide liquidity in the case of debt crisis, restore access to financial markets and spreading the burden of debt relief among involved creditors, in exchange for structural reforms meant to ensure that a debtor country can service the restructured debt load. The IMF in particular plays a key role in debt restructuring, as program participation is usually a precondition for agreement with bilateral creditors. However, Western institutions are reluctant to engage when China as a major creditor. China does not automatically participate in the Western debt restructuring process, raising the risk that fresh money is used to service Chinese claims, while Western creditors take losses. Even under the G20's 'Common Framework', an agreement from November 2021

in which China promised closer cooperation, debt negotiations have been acrimonious (Setser, 2023). For debtor governments, this means they have to win over Paris Club member states and Western multilateral institutions to alleviate liquidity constraints and secure additional funding. Because of this, we expect that the political influence of China on UNGA voting is weakened. During debt crisis, debtor governments need to win over Western governments and therefore align more closely with their positions.

Does our argument about debtor governments with uneven debt exposure also extend to debt owed mostly to Western countries and institutions? There are instances in which Chinese loans have been used to service Western debt in situations of distress. For example, in 2023 Argentina drew on a swap line with the Chinese central bank in order to pay off maturing IMF debt.³ However, Argentina is more exposed to Chinese debt than Western debt, and remaining in good standing with the IMF is a key priority to avoid outright debt crisis and also ensure that the country can service is debts owed to China.⁴ Generally, countries that are highly indebted to the West can draw on the existing Western institutional framework to restructure their debt. Since the Paris Club and the IMF provide a collaborative approach to addressing debt crises, pressures to turn to China for liquidity help should be much lower than if debt is owed primarily to China, which means that debt crisis should have a much smaller or no effect on UNGA voting.

Turning to causal identification, we next discuss a likely major source of endogeneity and how it affects our ability to uncover the theorized effect. Below we address the issue empirically via a formal sensitivity analysis and in the appendix via instrumental variable regression. We have predicted that sovereign debt crisis induces debtors whose debt balance heavily skews towards Chinese to vote less in line with China at the UNGA. One important confounder that is hard to control for is political proximity to China. High debt exposure to China itself is arguably a function of political proximity: China provides more development finance to countries that are politically aligned (or likely to be influenced to align with its positions) in the first place. An example of

³Source: https://som.yale.edu/story/2023/argentina-emergency-liquidity-support-through-chinesecentral-bank-swap-line-and-qatari, accessed 16 July 2024.

⁴Arguably Argentina along with countries such as Pakistan are 'too big to fail' from the perspective of Chinese lenders, which is why China has acted as lender of last resort to these countries (Horn et al., 2023).

this is an increase in Chinese development finance flows to African countries after switching their recognition of Taiwan to the People's Republic (Hoeffler and Sterck, 2022).

How will this political relationship affect inferences about the effect of defaulting on sovereign debt on UNGA voting? Figure 2 schematically summarizes the causal relationships to help evaluate this question. Our central argument is represented by the causal arrow running from *Default* to *Voting with West* and carries a positive sign. Concerns about endogeneity arise because *Political Alignment with China* may act as confounder, but since it is fundamentally unobservable, it can't be controlled for. Confounding occurs because the variable is negatively related to voting with West) and it also is likely related to default. The sign of the relationship between *Political Alignment with China* and *Default* determines the direction of bias introduced on the estimate for the relationship between *Default* and *Voting with West*. If it is positive, estimates will be biased downwards, i.e. in a conservative direction that would make it harder to find evidence for our proposition. If the relationship is negative instead, estimated effects will be biased upward in the direction of our hypothesis, threatening inference.



Figure 2: Causal relations, Political Alignment with China as confounder

We argue that the relationship between *Political Alignment with China* and *Default* is likely positive.

Higher total debt loads strongly and positively correlate with more debt owed to China (r = 0.69), and this in turn increases the risk of default (r = 0.56).⁵ Chinese loans are also structurally different from non-Chinese sources of development finance, with a higher share denominated in US dollars as opposed to loal currency.⁶ This in turn makes holders of Chinese debt more vulnerable to exchange rate pressures resulting from macroeconomic shocks, reinforcing the linkage between Chinese debt exposure and the risk of default. Accordingly, the political nature of Chinese lending should bias estimates of our main causal argument in a conservative direction. It should be noted however that China does provide hidden financial help to avoid outright default to some of its debtors (Horn et al., 2023). It is possible that this is done according to a similar political logic as the decision to provide credit, which in turn would reduce the risk of debt crisis for politically aligned countries. However, it seems unlikely that these relatively small and infrequent interventions are sufficient to fully overcome the positive relationship that political alignment has on debt levels and the ensuing risk of default. In the following empirical section, we further evaluate the risk that endogeneity inflates our effect estimates using formal sensitivity analysis.

4 Empirical analysis

Data

We collect data for 26 countries defined as low-income by the World Bank,⁷ covering the years 1990 to 2020.⁸ The question which countries to include is not trivial. We seek to capture how variation in economic influence via development finance translates into political influence. The World Bank's lower middle income threshold is a marker of eligibility for Western development finance (concretely World Bank IBRD programming), although Chinese development finance has been flowing to countries above the income threshold. One prominent case of debt default and difficult debt rescheduling negotiations involving China is Sri Lanka. However, the country is just

⁵In a sample of 26 low-income countries from 1990 to 2022.

⁶On average 36.5% of Chinese loans are dollar denominated vs. 27.8% for loans by multilateral development banks and 32.7% for Paris Club lenders.

⁷Source: https://datacatalogfiles.worldbank.org/ddh-published/0037712/DR0090754/OGHIST.xlsx, accessed 18.9.23

⁸For a complete list see table A1 in the Appendix.

above the lower middle income threshold and therefore excluded from our analysis. Zambia, another prominent case, is included. In general, we believe that the focus on low-income countries is justified because wealthier governments will be more isolated from political pressures. It should be noted that the World Bank's country classification results from a technocratic exercise subject to little political pressure, especially since it sets a uniform level for all countries. This removes the risk that the cutoff itself is a function of debt politics.

The dependent variable captures voting alignment at the UNGA. The voting data comes from an updated dataset (Fjelstul, Hug and Kilby, 2024), which corrects some under-reporting and inconsistencies in the data originally collected by Voeten (2000) and Bailey, Strezhnev and Voeten (2017). Fjelstul, Hug and Kilby (2024) reproduce the ideal point estimates from Bailey, Strezhnev and Voeten (2017) with their corrected data, and extend the series up to 2020. While ideal points have no inherent cardinal scale, positive values are associated with positions closer to western countries and negative values closer to non-western positions, including China.⁹

Data on debt crisis comes from the Bank of Canada–Bank of England Sovereign Default Database (Beers et al., N.d.).¹⁰ The database records arrears on sovereign debt owed to public and private creditors. To measure debt crisis intensity, we use the total value of arrears owed to all types of creditors in a given year (in constant US dollars), as defaulting on any part of sovereign debt usually triggers a crisis affecting all creditors. One major advantage of the BoC-BoE Sovereign Default Database is its comprehensive coverage and the continuous nature of the arrears data. One disadvantage is that it does not identify the dates of official declarations of default.

In our theory, the effect of debt crisis on voting behavior is conditioned on the relative exposure to Chinese vs. Western debt. To capture this, we use the World Bank's International Debt Statistics (IDS)¹¹ to identify outstanding debt stocks towards China on the one side, and members of the Paris Club plus the major Multilateral Development Banks on the other side. Although Horn,

⁹For example, the US ideal point in UNGA's 74th session ending in 2020 was 2.71 and China's -1.65. For summary statistics see table 1.

¹⁰Accessed on 4 January 2024 at https://www.bankofcanada.ca/wp-content/uploads/2023/07/BoC-BoE-Database-2023-08-29.xlsx.

¹¹https://databank.worldbank.org/source/international-debt-statistics, accessed 18.8.2023.

Reinhart and Trebesch (2021) show that the IDS systematically under-reports debt obligations towards China, we still rely on the IDS as best available data with the requisite temporal coverage. Under-reporting of Chinese debt introduces measurement error that leads to systematically lower values on our debt-balance variable that captures exposure to Chinese debt. Since our arguments apply to high levels of Chinese debt exposure, this type of attenuation should reduce our ability to identify the theorized effect and therefore does not cause concern for inference.

Casting the relationship between competing creditors and a debtor country as a multiple principal problem implies that there is a balance point or range of debt owed to China and the West at which the influence of both sides cancels each other out. The precise point at which this happens is difficult to determine ex-ante. Instead we use an empirical approach. Taking the position were debt stocks owed to both side are of equal size is a reasonable starting point. We then calculate a continuous measure that increases from 0 to 1 when moving from this midpoint to the extreme of the distribution, where the entire debt stock is owed to China. The resulting variable is called *debt* balance tilt. To smoothen the value of debt balance tilt as debt shares become more balanced, we borrow the functional form from a symmetric, unimodal *Beta* probability density function:

Debt balance tilt =
$$1 - \left(\frac{\alpha^{.5}(1-\alpha)^{.5}}{.5}\right)$$
, (1)

where α is the debt owed to China measured as share of total debt owed to China and western actors.¹² Our results do not substantively change if we replace the beta transformation with a linear transformation.¹³ Additionally, substituting the balance measure with the direct measure of aid share α still recovers the relationship.¹⁴

As controls, we include a country's total sovereign debt stock and the share of debt that is denominated in US dollars. Both variables are correlated with borrowing from China, as the country is the largest sources of official development finance and its loans tend to be denominated in US dol-

$$[\]label{eq:alpha} \begin{split} ^{12} \alpha &= \frac{\text{debt stock}_{to\ China}}{\text{debt stock}_{to\ China} + \text{debt stock}_{to\ West}}. \end{split}$$
 $^{13} \text{Table A3 in the Appendix}$

¹⁴Table A4 in the Appendix; note that model fit and statistical certainty suffer, which is in line with our assumption that agent discretion is highest when debt loads are evenly balanced.

Table 1: Summary of	of varial	oles			
Statistic	z	Mean	St. Dev.	Min	Max
Ideal Point	672	-0.535	0.381	-2.001	0.449
Debt balance, tilt towards China	672	0.041	0.143	0.000	1.000
Arrears, const USD 100 mil	672	0.230	0.693	0.000	4.856
Debt stocks, public and publicy guaranteed, const USD bil	672	8.346	9.865	0.093	67.119
Debt denominated in USD, percent	672	51.244	14.409	14.198	97.376
GDP per capita, const USD 1,000	672	0.698	0.465	0.190	2.548
Population, mil	672	18.648	19.569	0.994	117.191
US Federal Funds Rate	672	2.489	2.140	0.088	6.237
Nominal Broad US Dollar Index, Jan 2006 = 100	672	98.700	13.006	68.869	117.778

lars at an above average rate. The variables therefore act as plausible proxies for unobservable political proximity to the Chinese government. We also include GDP per capita (in ppp terms), and population (logged). The wealth measure is a proxy for government capacity, as having an reactive UNGA policy requires bureaucratic resources (Brazys and Panke, 2017). Both the wealth and population measures relate to a country's exposure to international policy issues, with smaller and poorer countries on average being less entangled in international issues. All variables in the analysis are summarized in table 1.

Model

We estimate a panel model of the following form:

Ideal Point_{it} =
$$\alpha_i + \zeta_t + \xi$$
Ideal Point_{it-1} + β_1 Arrears_{it} + β_2 Debt Balance Tilt_{it} + β_{12} Arrears_{it} × Debt Balance Tilt_{it} + $X_{it}\gamma + \varepsilon_{it}$,

where *i* denotes countries, *t* denotes years, α_i are country-fixed effects, ζ_t are year-fixed effects and *X* is a vector of control variables. The model also includes a lagged dependent variable to account for serial correlation. The coefficients of interest are β_1 and β_{12} , which together determine the marginal effect of *Arrears* on *Ideal Point*. Estimates are obtained via OLS.

We include two-way fixed effects to account for unmodeled unit-heterogeneity. Using a crosssection (N = 26) similar in size to the times series (T = 30) can introduce Nickell bias (Nickell, 1981). However, Beck, Katz and Mignozzetti (2014) show that this bias tends to be very small and hence substantively negligible in reasonably sized samples. In our setting, the advantages of controlling for unmodeled unit-heterogeneity justifies this trade-off.

Results

We start with some simple correlational statistics. Table 2 shows average *Ideal Points*, grouped by whether a country has arrears and a debt balance tilt below or above the sample mean. Recall that larger values of *Ideal Point* are closer to Western positions and smaller values to the Chinese position. A few interesting patterns stand out. Countries that have a greater debt exposure to China, relative to Western creditors, tend to vote more closely with Western positions, regardless of arrears. This is not in line with established findings in the literature that tie Chinese development finance to closer political alignment at the UNGA. However, the simple averages reported in the table are based on pooled data since 1990, and thus include a period in which China was not a large source of credit yet. In addition, they do not account for any dynamic aspects, exogenous variation in treatments, or strategic behavior.

Table 2: Mean ideal points, grouped by high vs low arrears and debt balance tilt towards China, higher values are closer to Western position.

	Low arrears	High arrears
Low debt balance tilt China	-0.561	-0.573
High debt balance tilt China	-0.420	-0.358

The comparison of interest for our theory is between low and high arrears. We can see that countries with a high debt balance tilt tend to vote more frequently with Western positions when they have high arrears compared to low arrears. This is in line with our expectations. For countries with low debt balance tilt, the relationship is much smaller and even slightly reversed. Again, this is not conclusive evidence, given the lack of controls and pooling across a range of decades. It is interesting to note that restricting the sample to 2020 onwards, the surprising relationship between low and high debt balance tilts disappears for countries with low arrears, and the theorized effect of high versus low arrears for high debt balance countries becomes much more pronounced. Both suggest that our theory more closely reflects current dynamics (see table A2 in the Appendix).

To account for dynamic factors and possible confounders in a systematic manner, we now turn to the panel analysis. Table 3 presents results from the OLS regression. Model 1 uses the pooled

	(1)	(2)	(3)
Arrears \times debt balance, tilt towards China	2.963^{**}	2.736^{*}	3.801**
	(1.479)	(1.370)	(1.459)
Arrears, const USD 100 mil	-0.003	0.052^{*}	0.036
	(0.012)	(0.028)	(0.024)
Debt balance, tilt towards China	-0.064	-0.146	-0.196
	(0.043)	(0.117)	(0.115)
Debt stocks, public and publicy guaranteed, const USD bil	0.000	-0.001	-0.000
	(0.001)	(0.001)	(0.001)
Debt denominated in USD, percent	0.001	-0.000	-0.001^{**}
	(0.000)	(0.001)	(0.000)
GDP per capita, const USD 1,000	-0.060^{***}	-0.036	-0.071
	(0.017)	(0.067)	(0.048)
Population, mil	-0.000	0.003^{*}	-0.001
	(0.000)	(0.001)	(0.001)
Lagged ideal point	0.871^{***}	0.699^{***}	0.684^{***}
	(0.019)	(0.036)	(0.035)
Constant	-0.045^{*}		
	(0.025)		
Num. obs.	672	672	672
Country intercepts		26	26
Year intercepts			30
Adjusted R ² , full model	0.855	0.872	0.885
Adjusted R ² , within		0.538	0.543

Table 3: OLS – Ideal point, absoluate value (Western positions positive) & arrears, conditional on debt balance

 $p^{***} p < 0.01; p^{**} p < 0.05; p^{*} < 0.1$

estimator without any fixed effects. Model 2 includes country-fixed effects and model 3 two-way fixed effects for country and year. Standard errors are clustered on the country for the fixed-effects specifications (models 2 and 3). The key parameter of interest is the interaction term between arrears and the debt balance tilt measures. Our theoretical expectation is that for countries highly indebted to China, debt crisis increases discretion at the UNGA. This implies a positive interaction term, though we are ultimately interested in the marginal effect of arrears conditional on debt balance tilt. The results show that the interaction term is positive and statistically significant across specifications, though in model 2 it falls just short of the 5 percent level (p = 0.057). These results are robust to different ways of measuring debt balance tilt and to using the distance between a country's and China's ideal point as dependent variable.¹⁵

To evaluate the marginal effect of arrears on ideal points, figure 3 plots the marginal effect condi-

¹⁵Tables A3, A4 and A5 in the Appendix.



Figure 3: Marginal effect of arrears on UNGA voting ideal points conditional on debt balance; twoway fixed effects; 95 percent confidence bands.

tional on debt balance tilt towards China, based on the two-way fixed effects model 3. The debt balance tilt on the x-axis ranges from zero (for Chinese shares of debt stock below 50 percent) to one (for the entire debt stock owed to China). The y-axis refers to the effect of a one-unit change in arrears on the ideal point position. Arrears are measured in million US dollars.¹⁶ For a debt balance tilt close to zero, increasing arrears by one million has a negligible effect, while for debt balance tilt at one, adding one million in arrears on average shifts the ideal point 0.38 units towards the Western position. In a typical scenario, for a country that owes more debt to China than the West, fixing the debt balance tilt at the sample median (0.11 for countries with non-zero debt balance tilt) and increasing arrears by one standard deviation (plus 69.3 mil USD) moves the ideal point on average by 0.31 units. This is equal to 0.52 standard deviations of the ideal point distribution of all UN member countries in the covered time period. Concretely, in 2020 China's ideal point was at -1.65 and the US was at 2.71. The induced shift therefore would have moved the affected country's ideal point 7.1 percent of the way from the Chinese to the US position. We therefore have strong and substantively meaningful evidence for our theory.

As additional robustness check, in the Appendix we report the results from an instrumental variables analysis that leverages drivers of US dollar exchange rate shocks (the US federal funds rate, the nominal broad dollar index) as exogenous determinants of debt crisis. The results confirm the patterns from the OLS analysis, albeit at lower levels of statistical confidence (table A7 and figure A2). A test for multiple weak instruments (leveraging the Cragg-Donald statistic, Stock and Yogo 2002) rejects the hypothesis that the bias from the instrumented 2SLS analysis exceeds 20 percent of the bias from the uninstrumented OLS. Since the point estimates of the marginal effect of *arrears* from 2SLS are larger than those obtained via OLS, we take this as confirmation that confounding from omitted variables biases the effect of *arrears* downwards, i.e. in a conservative direction.¹⁷

¹⁶Note that for table 3 this was rescaled to 100 million for readability of coefficient estimates.

¹⁷If the bias from 2SLS exceeded the bias from OLS, a larger 2SLS coefficient would be consistent with upwards biased estimates of *arrears* (Murray, 2006:p. 124).

Sensitivity Analysis

We have argued in the theory section that the main threat to inference, omitted variable bias from not properly controlling for political proximity to China, is likely to bias the effect of debt crisis on voting with the West downward, i.e. in a conservative direction. In this section we explore how sensitive our OLS results are to confounding by omitted variables if this reasoning is incorrect. We follow the approach developed by Cinelli and Hazlett (2020) and derive bounds for the marginal effect of arrears on ideal points in terms of known covariates that are included in the analysis. Fundamentally, bias arises if the omitted variable is correlated with both, the outcome and the included variable of interest (or the 'treatment').

Figure 4 features sensitivity contour plots that show how the estimated marginal effect of *arrears* would change if the omitted confounder was included in the analysis, as a function of different combinations of association between the omitted confounder and the dependent variable (y-axis), respectively the confounder and the treatment (x-axis). Instead of correlations, strength of association is expressed in terms of partial R^2 . The left panel looks at point estimates. For example, the contour line labeled 0.0034 shows which combinations of partial R^2 would bring the estimated point effect (0.004 for *debt balance tilt* set to 0.1) down to 0.0035. The right panel shows *t*-values. Here the red contour line identifies combinations of R^2 for the omitted confounder that would reduce statistical significance exactly to the 0.5 level (at t = 1.964).

To put the possible effect of confounding in perspective, Cinelli and Hazlett (2020) recommend to use a variable that is included in the regression analysis as a benchmark. The variable needs to be a credible driver of treatment assignment (i.e. correlated with debt crisis) and also have high explanatory power for the outcome. For our favorite model with two-way fixed effects (model 3), only the share of debt denominated in US dollars fits this bill, though its relationship with the dependent variable is quite weak (partial $R^2 = 0.004$). Two other candidates, total debt stock and GDP per capita, have even less explanatory power for *ideal point*. Conceptually, a high share of dollar denominated debt makes debt crisis more likely, because it exposes a country's ability to service its debt to the risk of exchange rate shocks. The red dots in both panels of figure 4



Figure 4: Sensitivity contour plots: Marginal effect of arrears, *debt denominated in USD* as benchmark bound, a) point estimate (left panel), b) t-statistic (right panel), marginal effect evaluated at *debt balance* = 0.1

show the resulting bounds. In the left panel, the upper right dot shows that even when including a confounder 5 times as strong as the share of US dollar denominated debt, the point estimate barely budges, going from 0.004 to 0.0037. Similarly, in the right panel, including a confounder 5 times as strong as US dollar debt share would reduce the *t*-value of the marginal effect of arrears only from 2.59 to 2.38. Clearly, these bounds suggest that confounding would not pose an issue if its influence was comparable to that of US dollar denominated debt share.

Given the low explanatory power of US dollar denominated debt share, what variable could serve as better benchmark? Arguably, the highly exogenous nature of debt crisis makes it difficult to find better observable predictors of voting behavior that are also correlated with the risk of debt crisis. In the Appendix, we show additional sensitivity contour plots for the lagged dependent variable (*ideal point*_{*i*,*t*-1}, figure A1). The lagged DV is clearly an excellent predictor of contemporary UNGA ideal points (partial $R^2 = 0.50$). It should be also highly correlated with political proximity to China, as past political allegiance at the UNGA can serve as predictor for current political proximity. However, its empirical association with current arrears, once fixed effects and control variables in

the model are taken into account, is very low (partial $R^2 = 0.002$). As a result, including an omitted variable as strong as the lagged DV would actually *increase* certainty in our marginal effect estimates, as the variance reduction factor (resulting from reduced residual variance from including the confounder) would outstrip the variance inflation factor.

Table 4: Sensitivity statistics for OLS results with two-way fixed effects, marginal effect conditional on debt balance tilt set to median (0.1).

Marginal effect	t-value	R^2 DV & Marg. Effect	Robustness Value	Robustness Value $\alpha = 0.05$
0.004	2.691	0.012	0.103	0.029

Cinelli and Hazlett (2020) recommend a range of additional metrics, which are reported in table 4.¹⁸ The robustness value of 0.103 indicates that unobserved confounders explaining at least 10.3 percent of the residual variance of the treatment and outcome would bring the estimated effect of *arrears* down to zero. Here the lagged DV offers a useful comparison. Its partial $R^2 = 0.50$ is about 5 times greater than the strength that confounders would need to wipe out our results. Given the exceptionally high explanatory power of the lagged DV, this is reassuring. To merely push the statistical significance of the treatment effect below 5 percent, confounders would have to explain 2.9 percent of the residual variance. We can compare this to the the partial R^2 of the estimated treatment with the outcome itself, which is 1.2 percent. This means that unobserved confounders would have to explain more than double the variance of the outcome, compared to the treatment, for our results to lose statistical significance.¹⁹

Overall, the sensitivity analysis has illustrated that the threat of confounding from variables that are similar in strength to *known* predictors of both debt crisis and UN voting behavior is very small. However, it also has highlighted the difficulty in identifying variables that could serve as good benchmarks. This is in line with our expectation that debt crisis is a plausible exogenous variable, and at most susceptible to conservative bias from omitted proximity to China. Taken together, the robustness of the results across a variety of specifications, the insights from reasoning about the

¹⁸For debt balance tilt set to 0.1; table A6 in the Appendix shows results for the whole range of the conditioning variable

¹⁹The R^2 value of the treatment with the outcome can also be used for an extreme bound interpretation. Confounders that explain *all* of the residual variance would have to have at least a relationship with the treatment of $R^2 = 1.2$ percent to reduce the treatment effect to zero.

direction of possible bias and the sensitivity analysis, make us confident that the findings strongly support our theory linking debt crisis to greater voting alignment with the West for countries that are highly exposed to Chinese debt.

5 Conclusion

In this paper we explored the effects of debt crisis on the political influence of China and Western creditors by looking at debtor government behavior at the UNGA. We placed policy influence in the context of a common agency problem, in which both the West and China compete for influence using development finance. Where this influence is evenly balanced, recipient governments enjoy policy discretion, and debt crisis is not a good predictor of UNGA voting. In contrast, countries highly indebted to China will need to secure greater cooperation from Western institutions during debt crisis, and hence shift their voting to fall more in line with Western creditors. To address identification, we a) argued that omitted variable bias from unmeasured political proximity to China would bias our results in a conservative direction, b) performed formal sensitivity analysis and c) reproduced our results using instrumental variables regression. The results from a two-way fixed effects panel analysis, together with the multi-pronged identification strategy, produce strong evidence for our proposition.

China's rise to the top of development finance has rightly sparked an important debate about agency of countries in the Global South. This has important implications for how Northern and Southern countries continue to reflect on the historic role of the West in colonization and for ongoing dependencies. While previous research has provided important evidence that Chinese aid indeed is targeted to achieve political objectives (Dreher et al., 2018; Gelpern et al., 2022; Lim and Kim, 2023) and does shift UNGA voting behavior (Raess, Ren and Wagner, 2022), little attention has been paid to the competitive nature of the relationship between Western creditors and China. There is evidence that China's presence has an effect on both Western aid practices, for example by reducing country's willingness to comply with World Bank conditions (Watkins, 2022), and the World Bank changing how it lends money in the presence of Chinese activity (Qian, Vreeland

and Zhao, 2023). But we need a more systematic understanding of the conditions under which Western or Chinese influence holds greater sway, and when the two cancel each other out. This paper has suggested government policy discretion as an important component for understanding how this competition plays out. Measuring policy discretion is difficult, as government preferences are inherently unobservable. Looking at UNGA voting behavior is just one of possible venue to study policy discretion. Fiscal policy volatility (Fatás and Mihov, 2003, 2013), sensitivity of foreign policies in response to changes in governing coalitions (Mattes, Leeds and Matsumura, 2016), and an ability to align foreign policies with domestic demands are all possible venues to study more systematically how and when Western and Chinese influence sways government actions, and when it doesn't. This paper hopes to provide an impulse towards the development of this important research agenda.

References

- Acker, Kevin, Deborah Bräutigam and Yufan Huang. 2020. "Debt relief with Chinese characteristics." *China Africa Research Initiative Working Paper* 39.
- Alesina, Alberto and David Dollar. 2000. "Who Gives Foreign Aid To Whom And Why?" *Journal of Economic Growth* 5(1):33–63.
- Amanor, Kojo S and Sérgio Chichava. 2016. "South–south cooperation, agribusiness, and African agricultural development: Brazil and China in Ghana and Mozambique." *World Development* 81:13–23.
- Andersen, Jørgen Juel, Niels Johannesen and Bob Rijkers. 2022. "Elite capture of foreign aid: Evidence from offshore bank accounts." *Journal of Political Economy* 130(2):388–425.
- Bailey, Michael A, Anton Strezhnev and Erik Voeten. 2017. "Estimating dynamic state preferences from United Nations voting data." *Journal of Conflict Resolution* 61(2):430–456.
- Bartik, Timothy J. 1991. Who benefits from state and local economic development policies? Kalamazoo, MI: WE Upjohn Institute for Employment Research.

- Bearce, David H and Daniel C Tirone. 2010. "Foreign aid effectiveness and the strategic goals of donor governments." *The Journal of Politics* 72(3):837–851.
- Beck, Nathaniel L, Jonathan N Katz and Umberto G Mignozzetti. 2014. "Of Nickell bias and its cures: Comment on Gaibulloev, Sandler, and Sul." *Political Analysis* 22(2):274–278.
- Beers, David, Obiager Ndukwe, Karim McDaniels and Alex Charron. N.d. "BoC-BoE Sovereign Default Database: Methodology and Assumptions." Bank of Canada Technical Report 124, https://www.bankofcanada.ca/wp-content/uploads/2023/07/tr125. pdf,accessedon4Jan2024.
- Blair, Robert A, Robert Marty and Philip Roessler. 2022. "Foreign aid and soft power: Great power competition in Africa in the early twenty-first century." *British Journal of Political Science* 52(3):1355–1376.
- Bräutigam, Deborah. 2011. "Aid 'With Chinese Characteristics': Chinese Foreign Aid and Development Finance Meet the OECD-DAC Aid Regime." *Journal of International Development* 23(5):752–764.
- Brautigam, Deborah, Kevin Acker and Yufan Huang. 2020. "Debt relief with Chinese characteristics." China-Africa Research Initiative Working Paper No. 39.
- Brazys, Samuel and Diana Panke. 2017. "Why do states change positions in the United Nations General Assembly?" *International Political Science Review* 38(1):70–84.
- Briggs, Ryan C. 2014. "Aiding and abetting: project aid and ethnic politics in Kenya." *World Development* 64:194–205.
- Bueno de Mesquita, Bruce and Alastair Smith. 2009. "A Political Economy of Aid." *International Organization* 63(1):309–340.
- Carter, David B. and Randall W. Stone. 2015. "Democracy and Multilateralism: The Case of Vote Buying in the UN General Assembly." *International Organization* 69(1):1–33.

- Chen, Jia and Sung Min Han. 2021. "Does Foreign Aid Bifurcate Donor Approval?: Patronage Politics, Winner–Loser Status, and Public Attitudes toward the Donor." *Studies in Comparative International Development* 56:536–559.
- Cinelli, Carlos and Chad Hazlett. 2020. "Making sense of sensitivity: Extending omitted variable bias." *Journal of the Royal Statistical Society Series B: Statistical Methodology* 82(1):39–67.
- Cormier, Ben. 2023. "Chinese or western finance? Transparency, official credit flows, and the international political economy of development." *The Review of International Organizations* 18(2):297–328.
- Dreher, Axel, Andreas Fuchs, Brad Parks, Austin M Strange and Michael J Tierney. 2018. "Apples and dragon fruits: The determinants of aid and other forms of state financing from China to Africa." *International Studies Quarterly* 62(1):182–194.
- Dreher, Axel, Andreas Fuchs, Bradley Parks, Austin Strange and Michael J Tierney. 2022. *Banking on Beijing: The aims and impacts of China's overseas development program.* Cambridge University Press.
- Dreher, Axel, Andreas Fuchs, Roland Hodler, Bradley C Parks, Paul A Raschky and Michael J Tierney. 2019. "African leaders and the geography of China's foreign assistance." *Journal of Development Economics* 140:44–71.
- Dreher, Axel and Jan-Egbert Sturm. 2012. "Do the IMF and the World Bank influence voting in the UN General Assembly?" *Public Choice* 151(1-2):363–397.
- Dreher, Axel, Peter Nunnenkamp and Rainer Thiele. 2008. "Does US Aid Buy UN General Assembly Votes? A Disaggregated Analysis." *Public Choice* 136(1-2):139–164.
- Fatás, Antonio and Ilian Mihov. 2003. "The case for restricting fiscal policy discretion." *The Quarterly Journal of Economics* 118(4):1419–1447.
- Fatás, Antonio and Ilian Mihov. 2013. "Policy volatility, institutions, and economic growth." *Review* of *Economics and Statistics* 95(2):362–376.

- Fjelstul, Joshua, Simon Hug and Christopher Kilby. 2024. "Decision-Making in the United Nations General Assembly: A Comprehensive Database of Resolution-related Decisions." Working paper, University of Geneva.
- Fleck, Robert K. and Christopher Kilby. 2010. "Changing Aid Regimes? US Foreign Aid from the Cold War to the War on Terror." *Journal of Development Economics* 91(2):185–197.
- Fuchs, Andreas, Peter Nunnenkamp and Hannes Ohler. 2015. "Why donors of foreign aid do not coordinate: The role of competition for export markets and political support." *The World Economy* 38(2):255–285.
- Gelpern, Anna, Sebastian Horn, Scott Morris, Brad Parks and Christoph Trebesch. 2022. "How China lends: A rare look into 100 debt contracts with foreign governments." *Economic Policy* p. eiac054.
- Grossman, Gene M. and Elhanan Helpman. 1994. "Protection for Sale." *American Economic Review* 84(4):833–850.
- Hernandez, Diego. 2017. "Are "new" donors challenging World Bank conditionality?" *World Development* 96:529–549.
- Hoeffler, Anke and Olivier Sterck. 2022. "Is Chinese aid different?" *World Development* 156:105908.
- Horn, Sebastian, Bradley C Parks, Carmen M Reinhart and Christoph Trebesch. 2023. "China as an international lender of last resort." AidData Working Paper No. 124.
- Horn, Sebastian, Carmen M Reinhart and Christoph Trebesch. 2021. "China's overseas lending." *Journal of International Economics* 133:103539.
- Jablonski, Ryan S. 2014. "How aid targets votes: the impact of electoral incentives on foreign aid distribution." *World Politics* 66(2):293–330.
- Kern, Andreas and Bernhard Reinsberg. 2022. "The political economy of Chinese debt and International Monetary Fund conditionality." *Global Studies Quarterly* 2(4):ksac062.

- Kinyondo, Abel. 2019. "Is China Recolonizing Africa? Some Views from Tanzania." *World Affairs* 182(2):128–164.
- Lancaster, Carol. 2007. Foreign Aid: Diplomacy, Development, Domestic Politics. Chicago, IL: University of Chicago Press.
- Lee, James. 2022. "Foreign Aid, Development, and US Strategic Interests in the Cold War." *International Studies Quarterly* 66(1):sqab090.
- Lim, Taegyun and Sung Eun Kim. 2023. "Buying influence? Rotating leadership in ASEAN and allocation of Chinese foreign aid." *International Relations of the Asia-Pacific* 23(2):351–377.
- Lum, Thumans, Hannah Fischer, Julissa Gomez-Granger and Anne Leland. 2009. "China's Foreign Aid Activities in Africa, Latin America, and Southeast Asia." *Congressional Research Service* (7-5700).
- Mattes, Michaela, Brett Ashley Leeds and Naoko Matsumura. 2016. "Measuring change in source of leader support: The CHISOLS dataset." *Journal of Peace Research* 53(2):259–267.
- Mawdsley, Emma. 2019. "South–South Cooperation 3.0? Managing the consequences of success in the decade ahead." *Oxford Development Studies* 47(3):259–274.
- Murray, Michael P. 2006. "Avoiding invalid instruments and coping with weak instruments." *Journal of economic Perspectives* 20(4):111–132.
- Nickell, Stephen. 1981. "Biases in dynamic models with fixed effects." *Econometrica: Journal of the econometric society* pp. 1417–1426.

Obstfeld, Maurice and Haonan Zhou. 2023. "The global dollar cycle." NBER working paper 31004.

- Qian, Jing, James Raymond Vreeland and Jianzhi Zhao. 2023. "The Impact of China's AIIB on the World Bank." *International Organization* 77(1):217–237.
- Raess, Damian, Wanlin Ren and Patrick Wagner. 2022. "Hidden strings attached? Chinese (commercially oriented) foreign aid and international political alignment." *Foreign Policy Analysis* 18(3):orac010.

- Ren, Xiao. 2016. "China as an institution-builder: the case of the AIIB." *The Pacific Review* 29(3):435–442.
- Schneider, Christina J and Jennifer L Tobin. 2013. "Interest coalitions and multilateral aid allocation in the European Union." *International Studies Quarterly* 57(1):103–114.
- Schraeder, Peter J., Steven W. Hook and Bruce Taylor. 1998. "Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French, and Swedish Aid Flows." *World Politics* 50(2):294–323.
- Setser, Brad W. 2023. "The Common Framework and its discontents." *Development and Change* 54(5):1065–1086.
- Steinwand, Martin C. 2015. "Compete or Coordinate? Aid Fragmentation and Lead Donorship." *International Organization* 69(2):443–472.
- Stock, James H and Motohiro Yogo. 2002. "Testing for Weak Instruments in Linear IV Regression." *NBER Working Paper* (t0284).
- The World Bank. 2023. "World Development Indicators." accessed on 12 February 2023 at https: //databank.worldbank.org/source/world-development-indicators.
- Voeten, Eric. 2000. "Clashes in the Assembly." International Organization 54(2):185-215.
- Watkins, Mitchell. 2022. "Undermining conditionality? The effect of Chinese development assistance on compliance with World Bank project agreements." *The Review of International Organizations* 17(4):667–690.
- Wethal, Ulrikke. 2017. "Passive hosts or demanding stakeholders? Understanding Mozambique's negotiating power in the face of China." *Forum for development studies* 44(3):493–516.
- Winters, Matthew S. 2012. "The Obstacles to Foreign Aid Harmonization: Lessons from Decentralization Support in Indonesia." *Studies in Comparative International Development* 47(3):1–26.
- Winters, Matthew S. 2014. "Targeting, accountability and capture in development projects." *International Studies Quarterly* 58(2):393–404.

- Woo, Byungwon and Eunbin Chung. 2018. "Aid for vote? United Nations General Assembly voting and American aid allocation." *Political Studies* 66(4):1002–1026.
- Younas, Javed. 2008. "Motivation for Bilateral Aid Allocation: Altruism or Trade Benefits." *European Journal of Political Economy* 24(3):661–674.

Appendix

Tables

Table A1: Countries included in analysis

Afghanistan Burundi **Burkina Faso Central African Republic** Congo, Dem. Rep. Eritrea Ethiopia Guinea Gambia, The Guinea-Bissau Liberia Madagascar Mali Mozambique Malawi Niger Rwanda Sudan Sierra Leone Somalia Syrian Arab Republic Chad Togo Uganda Yemen, Rep. Zambia

Table A2: Mean ideal points, 2020 onwards, grouped by high vs low arrears and debt balance tilt towards China, higher values are closer to Western position.

	Low arrears	High arrears
Low debt balance tilt China	-0.460	-0.466
High debt balance tilt China	-0.456	-0.229

Table A3: OLS – Ideal point, absoluate value (Western positions positive) & arrears, conditional on debt balance (linear)

	(1)	(2)	(3)
Arrears \times debt balance, tilt towards China	0.791	0.709^{*}	1.027^{**}
	(0.500)	(0.396)	(0.401)
Arrears, const USD 100 mil	-0.001	0.050^{*}	0.034
	(0.012)	(0.028)	(0.024)
Debt balance, tilt towards China	-0.006	-0.061	-0.103
	(0.028)	(0.072)	(0.065)
Debt stocks, public and publicy guaranteed, const USD bil	-0.000	-0.001	-0.001
	(0.001)	(0.001)	(0.001)
Debt denominated in USD, percent	0.001	-0.001	-0.001^{**}
	(0.000)	(0.000)	(0.000)
GDP per capita, const USD 1,000	-0.060^{***}	-0.036	-0.065
	(0.017)	(0.068)	(0.050)
Population, mil	-0.000	0.003^{**}	-0.000
	(0.000)	(0.001)	(0.001)
Lagged ideal point	0.871^{***}	0.705^{***}	0.690^{***}
	(0.019)	(0.038)	(0.040)
Constant	-0.043^{*}		
	(0.025)		
Num. obs.	672	672	672
Country intercepts		26	26
Year intercepts			30
Adjusted R ² , full model	0.854	0.871	0.884
Adjusted R ² , within		0.534	0.538

 $p^{***}p < 0.01; p^{**}p < 0.05; p^{*} < 0.1$

Table A4: OLS – Ideal point, absoluate value (Western positions positive) & arrears, conditional on debt share China

	(1)	(2)	(3)
Arrears \times debt share China	0.203**	0.159	0.200^{*}
	(0.087)	(0.126)	(0.113)
Arrears, const USD 100 mil	-0.047^{**}	0.002	-0.025
	(0.023)	(0.054)	(0.046)
Debt share China	0.022	-0.010	-0.057
	(0.023)	(0.060)	(0.051)
Debt stocks, public and publicy guaranteed, const USD bil	0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)
Debt denominated in USD, percent	0.001	-0.000	-0.001^{*}
	(0.000)	(0.000)	(0.000)
GDP per capita, const USD 1,000	-0.072^{***}	-0.063	-0.085^{*}
	(0.018)	(0.065)	(0.048)
Population, mil	-0.000	0.002	-0.001
	(0.000)	(0.002)	(0.001)
Lagged ideal point	0.861^{***}	0.709^{***}	0.695^{***}
	(0.020)	(0.040)	(0.043)
Constant	-0.044^{*}		
	(0.025)		
Num. obs.	672	672	672
Country intercepts		26	26
Year intercepts			30
Adjusted R ² , full model	0.856	0.870	0.883
Adjusted R ² , within		0.533	0.535

*** p < 0.01; ** p < 0.05; * p < 0.1

Table A5: OLS – Ideal point, distance to Chinese position & arrears, conditional on debt share China

	(1)	(2)	(3)
Arrears \times debt balance, tilt towards China	6.117^{**}	7.571***	3.801**
	(2.700)	(1.960)	(1.459)
Arrears, const USD 100 mil	-0.019	0.038^{*}	0.036
	(0.022)	(0.020)	(0.024)
Debt balance, tilt towards China	-0.160^{**}	-0.294^{**}	-0.196
	(0.079)	(0.116)	(0.115)
Debt stocks, public and publicy guaranteed, const USD bil	0.004^{*}	0.004^{**}	-0.000
	(0.002)	(0.002)	(0.001)
Debt denominated in USD, percent	-0.000	-0.002^{**}	-0.001^{**}
	(0.001)	(0.001)	(0.000)
GDP per capita, const USD 1,000	-0.170^{***}	-0.220^{***}	-0.071
	(0.031)	(0.056)	(0.048)
Population, mil	-0.002^{**}	-0.002	-0.001
	(0.001)	(0.001)	(0.001)
Lagged distance to Chinese position	0.719^{***}	0.581^{***}	0.684^{***}
	(0.025)	(0.024)	(0.035)
Constant	0.237^{***}		
	(0.044)		
Num. obs.	672	672	672
Country intercepts		26	26
Year intercepts			30
Adjusted R ² , full model	0.686	0.721	0.925
Adjusted R ² , within		0.458	0.543

*** p < 0.01; ** p < 0.05; * p < 0.1

Table A6: Sensitiv	vity statistics for OL	S results v	vith two-way fixed effects,	, marginal effects con	ditional on values of debt balance
Debt Balance	Marginal effect	t-value	R^2 DV & Marg. Effect	Robustness Value	Robustness Value $\alpha = 0.05$
0	0.0004	1.496	0.004	0.059	0
0.100	0.004	2.691	0.012	0.103	0.029
0.200	0.008	2.657	0.011	0.102	0.028
0.300	0.012	2.642	0.011	0.102	0.027
0.400	0.016	2.634	0.011	0.101	0.027
0.500	0.019	2.628	0.011	0.101	0.027
0.600	0.023	2.625	0.011	0.101	0.026
0.700	0.027	2.622	0.011	0.101	0.026
0.800	0.031	2.620	0.011	0.101	0.026
0.900	0.035	2.619	0.011	0.101	0.026
1	0.038	2.617	0.011	0.101	0.026

Figures



Figure A1: Sensitivity contour plots – Marginal effect of arrears, *lagged ideal point* as benchmark bound, a) point estimate (left panel), b) t-statistic (right panel), marginal effect evaluated at *debt* balance tilt = 0.1

Instrumental variables analysis

Rationale

The motivation for this paper is the observation that many highly indebted countries of the Global South struggle to service their debt in the current inflationary environment with high US interest rates and a strong US Dollar. Obstfeld and Zhou (2023) show that strong appreciation of the US dollar against a basket of currencies of *advanced economies* has adverse effects across a broad range of economic indicators for emerging markets. Causal links include higher yields on risk-free assets such as US treasuries causing investors to leave emerging markets and cost increases in commodities that serves as economic inputs and are traded in US dollars, such as oil. Moves in the US broad US exchange rate are plausibly exogenous, as the US Federal Reserve Bank sets interest rates primarily with an eye to domestic economic conditions. These decision also have no easily identifiable direct on UNGA voting. Concretely we use the nominal broad US dollar index

and the federal funds effective rate as exogenous variables. ²⁰

For countries with dollar-denominated debt, an adverse move in the country's exchange rate against the dollar directly increases the costs of servicing the debt. By themselves, variables capturing these global trends (we use the nominal broad US dollar index and the US federal fund rate) do not have a plausible direct effect on the decision of emerging market governments on how to vote or to initiate and endorse UNGA drafts. However, this variation in macroeconomic trends does not yet allow us to instrument for debt crisis in individual countries. To achieve this, we use a Bartik-like approach (Bartik, 1991) and interact the macro trends with the share of a country's debt that is denominated in US dollars. The impact of variation in macro-economic conditions is therefore conditioned on the actual exposure to changes in the dollar exchange rate.

There could be concerns that the share of dollar denominated debt is endogenous to UNGA voting and drafting behavior. In fact, the share of debt that is dollar denominated is markedly greater if the creditor is China (54 percent, 2022 average) compared to western creditors (Paris Club plus MDBs: 21 percent, all others: 35 percent). However, this endogeneity is likely less problematic, since a higher share of dollar-denominated debt increases the vulnerability of a debtor country to US policy decisions affecting the exchange rate. In addition, the idea of a shift-share instrument is that the *joined variation* of the exogenous and endogenous variable is still exogenous.

²⁰Sources: Nominal broad US dollar index & federal funds effective rate - Federal Reserve Bank of St. Louis, https: //fred.stlouisfed.org/series/DTWEXBGS and https://fred.stlouisfed.org/series/DFF, accessed August 24, 2023

We estimate over-identified panel models of the following form:

$$\begin{split} \text{Sponsorship}_{it} &= \alpha_i + \zeta_t + \beta_1 \widehat{\text{Arrears}}_{it} + \beta_2 \text{Debt Balance Tilt}_{it} \\ &+ \beta_{12} \text{Arrears}_{it} \times \widehat{\text{Debt Balance Tilt}}_{it} \\ &+ \chi_{it} \gamma + \varepsilon_{it}, \\ \text{Arrears}_{it} &= \pi_0 + \pi_{10} \text{Share Dollar Denominated}_t + \pi_{11} \text{Dollar Index}_t \\ &+ \pi_{12} \text{Dollar Index}_t \times \text{Share Dollar Denominated}_i \\ &+ \pi_{21} \text{Federal Fund Rate}_t + \pi_{22} \text{Federal Fund Rate}_t \times \text{Share Dollar Denominated}_i \\ &+ \omega_{it}, \\ \text{Arrears}_{it} \times \text{DB Tilt}_{it} &= \rho_0 + \rho_{10} \text{Share Dollar Denominated}_t + \rho_{11} \text{Dollar Index}_t \\ &+ \rho_{12} \text{Dollar Index}_t \times \text{Share Dollar Denominated}_i \end{split}$$

+ ρ_{21} Federal Fund Rate_t + ρ_{22} Federal Fund Rate_t × Share Dollar Denominated_i + ψ_{it} ,

where *i* denotes countries, *t* denotes years, α_i are country fixed effects, ζ_t are year fixed effects, *X* is a vector of control variables and $\widehat{\text{Arrears}}$ and $\widehat{\text{Arrears}} \times \widehat{\text{Debt Balance Tilt}}$ are the instrumented results from the first stage regression. Estimates are obtained via 2SLS.

Table A7: 2SLS – Ideal point, absoluate value (Western positions positive) & arrears, conditional on debt balance

	(1)	(2)	(3)
Arrears \times debt balance, tilt towards China	19.83^{**}	8.64	13.50^{*}
	(9.48)	(5.99)	(7.54)
Arrears, const USD 100 mil	-0.15	0.22	0.26
	(0.10)	(0.13)	(0.16)
Debt balance, tilt towards China	-0.23^{**}	-0.20	-0.29^{*}
	(0.11)	(0.14)	(0.15)
Debt stocks, public and publicy guaranteed, const USD bil	0.01	-0.00	-0.00
	(0.00)	(0.00)	(0.00)
GDP per capita, const USD 1,000	-0.02	-0.06	-0.10^{*}
	(0.04)	(0.06)	(0.05)
Population, mil	-0.00^{**}	0.00	-0.00
	(0.00)	(0.00)	(0.00)
Lagged ideal point	0.83^{***}	0.69^{***}	0.67^{***}
	(0.03)	(0.04)	(0.03)
Constant	-0.05		
	(0.04)		
Num. obs.	672	672	672
Country intercepts			26
Year intercepts		26	30
Weak instruments			
Arrears: F_1	2.87	5.05	8.04
Arrears $ imes$ debt balance, tilt towards China: F_2	4.82	9.00	10.69
Cragg-Donald statistic	2.73	4.77	5.46
Multiple instruments			
Sargan statistic	0.72	4.53	2.27
Sargan p-value	0.87	0.21	0.52
Endogeneity			
Wu-Hausman statistic	4.52	1.36	2.86
Wu-Hausman p-value	0.01	0.26	0.06

*** p < 0.01; ** p < 0.05; * p < 0.1



Figure A2: 2SLS – Marginal effect of arrears on UNGA ideal point, positive values closer to US position, 90% confidence band.