# Sovereign Risk, Creditor Heterogeneity and Chinese Capital: Bond Market Reactions to New Loans*

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November 2025

**Abstract**

When lending to sovereign governments, investors are especially attentive to default risk. We propose that investors react to the composition of existing debt, not just its overall level. We examine how bond markets respond to China's presence as a sovereign creditor, given features often associated with Chinese lending. Investors use news of Chinese loans as a heuristic, updating (and typically increasing) their risk assessments. Using event studies and text analysis of Standard & Poor's ratings rationales from 2007-2022, we show that announcements of Chinese loans raise borrowing costs, especially for liquidity and budget-support loans and for governments aligned with China. Comparable announcements of World Bank loans, other bilateral credits, and new bond issues have no similar effect. These findings reveal that sovereign risk pricing depends not only on debt levels but also on creditor identities, highlighting how China's rise as a major lender may constrain borrowers' access to bond-based finance.

Keywords: Sovereign debt, Chinese lending, bond market, credit risk, creditor identity

*We thank Anne Duong and Tejas Iyer for research assistance. For comments earlier versions of this research, we thank members of the Princeton Sovereign Finance Lab; participants in the 2024 International Political Economy Society meeting; the Comparative and International Political Economy workshop, NYU Abu Dhabi, January 2025; and attendees at the NYU Debt Network meeting, May 2025.

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# 1 Introduction

An important feature of contemporary sovereign finance is its diversity of creditors. The resolution of the 1980s debt crises and subsequent moves toward capital account openness expanded access to bond-based financing for many middle-income borrowers (Chwieroth 2007; Nelson 2017). Debt-relief initiatives for highly indebted low-income (HIPC) countries created additional fiscal space for those borrowers. Especially in the decade after the Global Financial Crisis, low yields in advanced economies drew private investors to emerging and frontier market sovereign bonds (Ballard-Rosa et al. 2021; S. M. Brooks et al. 2015). Some governments also tapped resource-backed loans from commodity firms (e.g., Glencore, Trafigura, Vitol).[1]

Against this backdrop, China became the most important bilateral official creditor, expanding overseas lending via its policy banks and related entities (Brautigam 2022; Chen 2023; Dreher et al. 2022; Lee et al. 2024; Parks et al. 2023; Kaplan 2021).[2] China's share of low-income country government debt grew markedly, from 18 percent in 2010 to 49 percent in 2021. China now stands as the developing world's largest bilateral creditor (World Bank 2022; World Bank 2023), despite a recent slowdown in its new lending activity (Horn, Carmen M. Reinhart, et al. 2025). The 75 low-income countries the World Bank currently deems IDA-eligible[3] owed 58 percent of their external bilateral debt to Paris Club creditors in 2010. By 2022, Paris Club

[1]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 in 2021, standing at 56 percent at the end of 2023. Even among IDA-eligible countries, which have often been deemed too risky by private investors, this share grew from five percent in 2010 to approximately one fifth in 2023(World Bank 2024).

[2]The causes of China's expanded lending activity are both domestic and international, and lending practices vary across the many Chinese financial institutions involved in foreign financing (Brautigam 2022; Chen 2024).

[3]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.

creditors represented only 27 percent of IDA-eligible countries' external debt, due in some significant part to the increased role of China – not a member of the Paris Club – as an official bilateral lender.

The increased diversity of creditors has provided borrowing governments with expanded choices, while also changing the ways in which private investors assess sovereign risk. While existing scholarship has established that investors focus on the overall debt burden when assessing default risk (for example, Ballard-Rosa et al. (2021) and S. M. Brooks et al. (2015)), we consider how the identity of creditors also may affect sovereign risk assessments. We focus specifically on how bond markets react to China's presence as a sovereign creditor. We argue that the presence of China as a creditor heightens investors' perceptions of risk.

Specifically, we propose that, when receiving information about new sovereign obligations, investors react differently – and more negatively – when the creditor is China or a Chinese state-connected lender. "China" represents a bundle of attributes that signal increased risk to sovereign bond investors. Our contribution therefore is to highlight the role of specific creditor identities in sovereign risk pricing. Existing work emphasizes macroeconomic fundamentals and global financial cycles (Mosley 2003; Ballard-Rosa et al. 2021; Rey 2015), while a parallel literature highlights how multilateral programs can catalyze or calm private markets (Gould 2003a; Krahnke 2023; Shim 2022). Investors do not simply update on economic fundamentals such as the overall amount of borrowing. They also respond to the identity of the lender. "China" serves as shorthand for a bundle of reputational, political, and debt sustainability concerns. Borrowers' choices over creditors (Bunte 2019; Mosley and Rosendorff 2023; Zeitz 2024) can therefore influence their current and future access to finance.

Our empirical analysis relies on information available to investors from the financial press. Using a daily, stacked event study centered on Bloomberg and Financial Times announcements of Chinese loans to emerging and frontier market sovereigns

(2007-2022), we show that sovereign spreads increase immediately following Chinese loan news. The effect we identify is comparable in size to a typical country bond index's annual standard deviation. The event study framework allows us to address a key empirical challenge: we aim to identify responses to the loan from China, rather than to the underlying economic and political fundamentals which lead governments to borrow from China. By focusing on a narrow window around the announcement day and removing cases with other major shocks, we isolate Chinese loan news as the only relevant information shock, allowing us to identify its causal effect on sovereign spreads.

We note that, consistent with a heuristic mechanism – in which investors are responding to information in their professional environment – it is loans covered in the financial press that generate these reactions. Many Chinese loans, of course, do not receive such coverage and, indeed, may remain hidden from investors' and international institutions' view for many years. The reaction we observe is also China-specific: markets do not respond similarly to news of World Bank loans, loans from other bilateral creditors, or new bond market issues from the same sovereign. Further, the effect is attenuated when China co-finances with non-Chinese partners. The largest effects on spreads are observed following announcements of liquidity and budget support, and reactions are larger for governments that are geopolitically closer to China; here, investors' associations between loans from China and politically-motivated borrowing and lending are strongest. We also find no evidence that investors' reactions to loans vary with loan size, suggesting that investors are responding to Chinese lending more generally, rather than making detailed calculations about added debt burdens. We supplement these findings with a text analysis of credit rating agency narratives, which often take China into account when assessing sovereign risk.

In Section 2, we develop our theoretical framework, situating the argument about creditor identity and investor heuristics within existing scholarship on sovereign risk.

Section 3 describes the data and empirical design. Section 4 presents the results from our event study, followed by a supplementary analysis of credit rating agency narratives. Section 5 discusses the broader implications of our findings for future research on creditor heterogeneity and the role of China in global finance.

## 2 Pricing Sovereign Risk

How do sovereign creditors price risk? Existing research on sovereign credit markets emphasizes the role of macroeconomic fundamentals, domestic institutions, and global conditions in shaping investors' assessments of default risk. Governments' ability to repay is linked to macroeconomic conditions, including debt levels, current account positions, and foreign currency reserves; willingness to repay typically depends on political institutions and incentives (Bodea and R. Hicks 2015; Copelovitch et al. 2018; Ballard-Rosa et al. 2021; Beaulieu et al. 2012; Schultz and Weingast 2003; Tomz and Wright 2013). Elections and partisan shifts can generate uncertainty over future policies, raising risk premiums (S. M. Brooks et al. 2022; Bernard et al. 2007; Campello 2014; Vaaler et al. 2006; Ballard-Rosa et al. 2021).[4] Broader global forces, such as liquidity cycles and the monetary stance of advanced economies, also shape sovereign borrowing costs (Bauerle Danzman et al. 2017; Longstaff et al. 2011; Rey 2015). Investors' attention to country-specific risk declines when global liquidity is high (Ballard-Rosa et al. 2021). Finally, investors' expectations are influenced by outcomes in peer countries (S. M. Brooks et al. 2015; Gray 2013).

Existing accounts of the pricing of sovereign risk have focused on overall levels of sovereign debt, and on how political events and institutions might be expected to

[4]Government partisanship also has been linked with sovereign credit ratings as well as with the currency denomination of debt(Barta and Johnston 2018; Ballard-Rosa et al. 2022). Cormier and Naqvi (2023) argue, however, that the increased importance of indexes to sovereign bond investment reduces investors' attention to country-specific factors.

affect debt accumulation and repayment (Ballard-Rosa 2020; Bernhard and Leblang 2006). We draw attention to another influence on bond investors' risk assessments: the reported actions of other creditors, in terms of the loans they provide. We suggest that news about other creditors' actions – especially when creditors have certain attributes – can serve as an information shortcut. It is well established that investors, faced with the need to allocate funds across a range of assets, often rely on heuristics (Calvo and Mendoza 2000; Mosley 2003; Bunte and Kinne 2018). Coarse signals, rather than comprehensive analyses, often are appealing to investors (Calvo and Mendoza 2000; Mosley 2003; Bunte and Kinne 2018). Categories such as "BRICS," "frontier markets" and "PIIGS" therefore can have outsize influence on investor behavior, even as they fail to capture many of the details of, or variation within, sovereign credit instruments (Brazys and Hardiman 2015; S. M. Brooks et al. 2015; Gray and R. P. Hicks 2014). We focus on creditor identity as a signal that is conveyed when new Chinese loans to a sovereign are announced. We expect that, even though these announcements often contain only limited information about the loan – perhaps its purpose and amount, but often not its terms or its potential collateral arrangements – investors use them to update their assessments of sovereign bond market risk. They do so because bond market investors, based mostly in New York, London and other Western financial capitals, link "China" (as a creditor) with a certain set of attributes which collectively imply greater sovereign risk.

While Chinese state-connected lenders and loan instruments vary, we expect investors to associate "loan from China" with attributes of many Chinese projects. These include the opacity of debt terms and collateralization; commercial versus concessional interest rates; potential difficulties in coordinating debt restructuring; and the possibility of politically (rather than financially) motivated lending (Cormier 2023; Horn, Carmen M Reinhart, et al. 2021; Gelpern, Horn, et al. 2021; Mosley and Rosendorff 2023). First, unlike loans from traditional bilateral official creditors,

such as those who are members of the Paris Club, Chinese loans are usually made on commercial terms, rather than concessional (Horn, Carmen M Reinhart, et al. 2021; Huang and Brautigam 2025; Mihalyi and Trebesch 2023). As China's share of low-income country debt has risen (World Bank 2022; World Bank 2023; Brautigam 2022), so too have borrowers' debt servicing costs. Indeed, debt service burdens for low-income borrowers quadrupled between 2012 and 2022, reaching record highs by 2022.[5] Loans from China also have tended to be denominated in U.S. dollars, creating greater pressures for borrowers to generate foreign exchange (Horn, Carmen M Reinhart, et al. 2021).

Second, borrowing from China also signals information about borrowers' domestic politics. Realizing new sovereign borrowing requires that governments seek financing and that creditors are willing to offer it. In a global financial system with diverse creditors and significant liquidity, governments often are able to choose credit instruments (and creditors) that align with their preferences. Some governments might avoid loans from multilateral development banks, because their good governance and transparency-related conditions are politically unpopular and their terms take significant time to negotiate (Bunte 2019; Pin et al. 2020; Zeitz 2024). Governments may instead prefer the relative opacity associated with other forms of finance (Brown 2023; Cormier 2023; Mosley and Rosendorff 2023), including loans from Chinese financial institutions (as well as AIIB led by China; see Qian et al. (2023)). Related, recent work by Shea et al. (2024) suggests that loans from Chinese creditors can facilitate political survival for some types of governments. Investors may therefore assume that governments seek borrowing from Chinese entities for reasons of domestic political expediency.

[5]"Debt-Service Payments Put Biggest Squeeze on Poor Countries Since 2000," World Bank, December 6 2022, retrieved from https://www.worldbank.org/en/news/press-release/2022/12/06/debt-service-payments-put-biggest-squeeze-on-poor-countries-since-2000.

Third, many investors view loans from Chinese state and state-connected entities as driven less by market-based risk assessment and more by an interest in cultivating strategic relationships or gaining access to natural resources. The "debt trap diplomacy" narrative (Bräutigam 2020) served to reinforce this view among many investors. Fourth, if borrowing countries find themselves in debt crises, a diverse creditor landscape complicates crisis management: the G-20's Common Framework was designed to coordinate restructuring for low-income borrowers, but inter-creditor tensions slowed progress in cases such as Chad, Ghana, Sri Lanka and Zambia, among others (Ballard-Rosa et al. 2024; Ferry and Zeitz 2024; Schlegl et al. 2019). Indeed, many of these tensions involved private bondholders' concerns about how much of the burden of debt restructuring would be borne by China [6]

While not every loan from China has all these attributes, we expect investors to use "China" as a heuristic. Especially when only limited information about loans is available, investors are likely to react to the creditor, rather than to fine-grained details of an announced loan. Their reactions will reflect a bundle of negative associations with China as a creditor. We expect, therefore, that announcements of Chinese loans will have positive effects on risk premiums – indicating an increase in perceived sovereign risk.

**Hypothesis 1.** *Announcements of new loans from China will generate increases in sovereign borrowers' risk premiums.*

We note a potential alternative account, implying the opposite effect: reports of new loans could, under some circumstances, signal lower risk and better prospects to bond market investors. That is, new loans might suggest that a sovereign has access to additional credit, beyond what is available via bond issuance. This also could generate

[6] As Huang and Brautigam (2025) describe, this also involved tensions among financial institutions in China, as loans are made by varying state-connected banks with different capacity for taking losses.

expectations of future economic growth (especially when used to fund infrastructure and other public goods), which ultimately improves debt servicing capacity. Investors also could reward the fact that other creditors have a positive assessment of the borrower's prospects.

Indeed, investors sometimes respond positively to the possibility of increased fiscal space for Global South countries. For instance, Lang et al. (2023) assess sovereign bond market responses to the temporary suspension of interest payments on bilateral official loans, granted in the context of the G-20's 2020 Debt Service Suspension Initiative. They find that, contrary to the concerns expressed by some governments at the time, bond markets did not punish eligible low-income countries that requested a suspension. Rather, countries that received greater temporary relief from debt servicing burdens experienced larger declines in bond market borrowing costs.

Another parallel might be the potential "catalytic effect" of International Monetary Fund (IMF) programs. Under some conditions, bond market investors view IMF loans and programs as a "seal of approval," indicating that a government is willing to engage in significant economic reforms. An IMF arrangement can therefore reassure markets about policy credibility and liquidity support (Gould 2003a; Krahnke 2023; Shim 2022). Empirical analyses of the catalytic effect (and accounting for selection into IMF lending) suggest that it exists, within limits: for instance, Krahnke (2023) reports that IMF programs are associated with a significant increase in private capital flows, as long as the IMF financing provided is less than five percent of gross domestic product.[7]

Yet this catalytic effect is limited: larger programs (the top 25 percent of IMF lending) are associated with no or even negative effects on private capital flows.[8].

[7]Creditors also may worry about governments' political will to implement the reforms included as part of IMF financing. Along these lines, Shim (2022) argues that sovereign bond investors respond positively to IMF programs when governments are popular at home.

[8]Large obligations to the IMF also increase a borrower's share of non-modifiable debt, given the

Even when it generates a catalytic effect, IMF lending is quite different from Chinese loans: the lending process is somewhat standardized, with letters of intent, terms and loan conditions typically made public. Even if IMF lending is sometimes affected by powerful countries' interests and staff members' awareness of those interests, the process is generally legible to private investors and other external audiences.

We therefore expect that loans from China are assumed to signal greater sovereign risk, resulting in larger spreads. We note that our hypothesized view is at odds with some recent analyses of Chinese bilateral finance which suggest that Chinese policy banks such as China Development Bank (CDB) and China Exim (The Export Import Bank of China) are attentive to market-based considerations, even as they also consider the central government's interests (Chen 2024).[9] Much of the finance these entities provide is tied to specific projects, which serve to generate revenues that can contribute to debt servicing (and reduce default risk concerns; see Queralt (2022)). Additionally, loans from Chinese entities typically are not considered senior or preferred, relative to sovereign bonds; borrowing governments' repayment obligations are likely similar for Chinese lending entities and for bondholders (also see Schlegl et al. (2019)).[10] Even so, we expect the negative interpretation to dominate among the largely Western investor base active in emerging and frontier sovereign debt markets, where Chinese lending is widely associated with opaque terms, political expediency, costly credit, and restructuring uncertainty.

We further expect that investors will respond most negatively when loans from China are described as providing budget support or general liquidity, rather than supporting a specific (often infrastructure) project. Financial press coverage of loans from

IMF's preferred creditor status.

[9] Also see Brautigam (2022) and Lee et al. (2024).

[10] Given the opacity of some Chinese loan contracts, however, some creditors worry that some loans contain priority repayment clauses. Also see Gelpern, Horn, et al. (2021) and Gelpern, Haddad, et al. (2025).

China usually specifies whether new financing provides general liquidity or supports a particular project. In the context of liquidity and budget support loans, the "China" heuristic aligns most closely with investors' existing risk associations—opaque terms, political expediency, costly credit, and restructuring uncertainty. Project loans, by contrast, are tied to infrastructure or longer-term investment and are more plausibly interpreted as possibly promoting longer-term growth. As such, they weaken the negative interpretation attached to Chinese lending and elicit a more modest market response.

**Hypothesis 2.** *Chinese loans that provide liquidity or budget support will generate increases in risk premiums, whereas project finance loans are less likely to have such effects.*

Our final expectation is that investors' reaction to the "China loan" signal varies with geopolitical context. When a borrowing government is closely aligned with China, investors may be especially inclined to assume that new loans are politically motivated or extended for strategic reasons. Alignment can also suggest that a borrower is more dependent on Chinese support and therefore less constrained by market or multilateral discipline, heightening perceptions of moral hazard.

At the same time, alignment could, in principle, create expectations of future assistance or debt restructuring. Yet such rescues are opaque, discretionary, and far from guaranteed (Horn, Carmen M Reinhart, et al. 2022). And even if China provides financial rescues to diplomatically aligned countries, there also are no assurances that it will coordinate with other sovereign creditors, including bondholders. We therefore expect that geopolitical proximity exacerbates, rather than reduces, concerns with sovereign risk.

**Hypothesis 3.** *Increases in risk premiums following loan announcements will be more pronounced for borrowers that are geopolitically aligned with China; such effects will be weaker for governments that are less aligned.*

In summary, we expect investors' assessments of sovereign risk to include responses to news of borrowing from China. Investors interpret borrowing from China through a preexisting bundle of negative associations, which leads them to assign a higher perceived risk. The effect is strongest when Chinese loans are announced in contexts that make these associations more credible, such as when the loan supports liquidity or the general budget, or when borrowers are closely aligned with China geopolitically. As we discuss below, and based on the typical attributes of loans from China, we do not expect (nor do we find evidence of) responses to news of loans from other types of creditors, established (such as the World Bank) or relatively new (such as Saudi Arabia). The next section tests our expectations using high-frequency event data.

# 3 Data and Methods

## 3.1 Overview

Our empirical analysis examines how investors in sovereign bond markets respond to news regarding Chinese lending. We assess the validity of our theoretical claim that investors respond to this news by updating their assessments of default risk. In doing so, creditor identity – specifically, a Chinese state-connected entity as creditor – signals heightened risk to investors. This is especially the case, we expect, when loans fund general budget support or liquidity purposes, and when the borrowing government is more closely aligned with China.

Testing our hypotheses using panel data on creditor composition, Chinese lending and sovereign creditworthiness would raise serious endogeneity concerns. Correlations between sovereign creditworthiness and borrowing from China may well reflect riskier borrowers seeking Chinese finance, rather than Chinese finance rendering borrowers less creditworthy.

We therefore rely on a high-frequency event-study design, based on daily data.

This allows us to separate the effect of new information (about loans from China) from pre-existing macroeconomic and political fundamentals. We track abnormal changes in sovereign bond spreads within narrow windows (20 trading days) before and after each announcement of Chinese lending reported in Bloomberg or the Financial Times. These outlets are the primary real-time information channels through which investors learn about sovereign borrowing, and the publication of such news marks the moment when new information becomes available to markets. The negotiation processes for loans from Chinese creditors are typically opaque (Gelpern, Horn, et al. 2021; Horn, Carmen M Reinhart, et al. 2021), making it very reasonable to assume that this coverage generates unexpected information. Using daily data and narrow windows enables us to capture investors' immediate pricing response to that information. Importantly, any pre-existing risk perceptions are already embedded in bond prices before the announcement. What our design measures is the incremental change that follows the arrival of new information. In this sense, the announcements function as information shocks because they represent discrete, time-stamped updates to the information set investors actually observe.

We further minimize confounding by removing any event windows that overlap with other market-moving developments. We exclude events in which the borrowing government experienced elections, IMF program announcements, sovereign credit rating changes, or domestic monetary policy decisions within one week of a loan announcement. We also verify that there are no systematic pre-trends in spreads before announcements, confirming that borrowers' risk trajectories were stable prior to the news event. These filters, combined with daily resolution, enable us to estimate the causal effect of information shocks about Chinese finance on secondary market prices. Remaining unobserved heterogeneity is addressed through country and day fixed effects.

By focusing on the immediate price response to information that market partici-

pants actually observe, this approach directly tests our core claim: if investors view borrowing from China as signaling important information about borrowers, then news of Chinese lending should produce rapid, China-specific adjustments in sovereign risk premiums.

One potential concern is how loans covered in the financial press compare to the full universe of Chinese lending, and whether media-reported loans disproportionately reflect particularly risky cases. To examine this, we compare pre-loan EMBI spreads, credit ratings, and debt-to-GDP ratios for news-reported loan events with all Chinese loans in AidData's database.[11] Across these dimensions, we find no meaningful differences in countries' financial conditions prior to the loan.[12] The only systematic difference is loan size: reported loans are substantially larger on average. Crucially, however, larger loans without significant media exposure do not produce any discernible change in spreads.[13] This pattern suggests that selection into reporting is driven partly by the salience of loan events, but not by underlying borrower risk or anticipated market movements. Thus, although loan reporting is selective, the selection mechanism is orthogonal to pre-loan fundamentals. This supports our assumption that we are capturing the effect of information arrival on market responses. Importantly, we will show that comparable announcements from other creditors do not generate similar effects.

### 3.2 Measuring Bond Market Reactions to Loans

We use daily sovereign spreads in secondary markets for government bonds to examine investor reactions. The EMBI Global index tracks the market valuation of US dollar–denominated debt issued by sovereign and quasi-sovereign entities in 56 emerging

[11] See Figure B2 and Table B4 in the Appendix.

[12] Debt-to-GDP ratio is measured in the event year.

[13] We subset to AidData loans larger than the average size of reported loans. See Figure B3 in the Appendix.

and frontier economies between 2007 and 2022.[14] The index aggregates instruments of varying maturities and liquidity. Because all bonds included in the index are denominated in dollars, their spreads capture perceptions of default risk rather than inflation or currency risk. The spread indicator is the country's difference from the overall EMBI index; it reflects changes in perceived risk relative to all other countries in the index.[15] As such, the spread indicator is country-specific, rather than driven as well by shifts in regional or global factors.

Importantly, the EMBI Global only includes governments in emerging and frontier economies with sufficient market access and liquidity to issue internationally traded, dollar-denominated bonds (Cormier and Naqvi 2023; Ballard-Rosa et al. 2021). These countries, therefore, face broadly comparable borrowing conditions and investor analysis, making them comparable for an event-study analysis of how markets process new information. Daily EMBI spread data allow us to observe, in real time, how markets update their assessments when new information about Chinese lending becomes available.

We then consider how information received by investors affects bond spreads for emerging market countries. Investors operate across multiple markets, meaning that they likely devote limited attention to any single sovereign (Mosley 2003; M. Brooks et al. 2015; Cormier and Naqvi 2023). Financial news sources, such as Bloomberg and the Financial Times, therefore serve as investors' principal real-time information source. We identify all Bloomberg and Financial Times reports announcing Chinese loans to sovereign borrowers included the EMBI Global index between 2007 and 2022.[16]

[14]Table B1 lists all countries in the EMBI Global index. Table B2 documents the data source for all variables used.

[15]The index does not include all sovereigns that issue bonds (Ballard-Rosa et al. 2021); but it nonetheless includes a wide range of emerging and frontier market countries from Latin America, Asia, the Middle East, Central and Eastern Europe, and sub-Saharan Africa.

[16]We use Bloomberg as the primary source of information and supplement with the Financial

We reviewed each article manually.[17] For each announcement, we record publication date (adjusted to the next trading day if released on a weekend or holiday); loan amount (if reported); loan purpose; and whether the news article refers to a new loan or to information about a previous loan. We code loan purposes into one of four categories: project finance, liquidity support, budget support, or unknown. Project loans explicitly tie funding to an identifiable investment (for example, a power plant or railway). Liquidity loans are described as short-term credits to governments in financial distress. Budget support loans are directed to general fiscal expenditures. We code reports without a stated purpose as unknown.

The resulting dataset contains 139 announcements: 70 new loans and 69 reports on prior loans. Thirty of the 56 EMBI countries appear in this dataset. The earliest event was on 19 October 2007 and the latest on 19 December 2022. After cleaning event windows for confounding shocks (present in 25 event windows), as we discuss in the next section, 114 events remain (62 new, 52 previous). Table B3 lists events by borrower and type; Figure B1 shows their temporal distribution. Because investors may learn about previously concluded loans only when they are covered in media reports – especially given the opacity of many loans from Chinese entities (Gelpern, Horn, et al. 2021; Horn, Carmen M Reinhart, et al. 2021) – both new and existing loans could shift investors' assessments.

### 3.3 Event Study Design

To estimate the effect of Chinese-loan announcements on market pricing, we implement a stacked event-study estimator following Rexer et al. (2022). Event studies are the standard method for identifying the immediate impact of discrete news events in financial markets. By restricting the analysis to short windows and using daily data, potential confounding is minimized and the resulting estimates can be interpreted

Times.

[17] We include only announcements that are explicitly loans to governments.

as the causal effect of the new information.[18] This estimator pools all events while permitting flexible estimation of dynamic treatment effects and explicit tests for the parallel trends assumption.

For our analyses, an additional challenge is that not all countries are included in the EMBI Global index, leaving us with a relatively small set of units. To enhance identification, we add a matching step before estimating the two-way fixed-effects model. Each treated episode is matched to up to 20 control units drawn from countries that never experienced a Chinese loan announcement during the sample period.[19] Matching is based on pre-treatment EMBI trends using Mahalanobis distance. This procedure substantially improves the balance between treated and control observations. Figure B4 and Figure B6 show that the distributions of EMBI indices for treated and control units are highly similar, indicating that countries without announcements are appropriate counterfactuals and valid controls. We further test the parallel trends assumption and conduct placebo tests when estimating the models. We address the remaining heterogeneity by including country and day fixed effects in all specifications.

While event studies focus on relatively short time windows, other market-moving shocks could occur near loan announcements and confound our estimates. To ensure that the event windows capture only the information effect of Chinese lending, we systematically clean each window by checking for concurrent shocks in the borrowing country one week before or after each announcement. We exclude episodes coinciding with national elections, central bank interest rate changes, sovereign credit rating

[18] In principle, multi-period difference-in-differences estimators such as Callaway and Sant'Anna (2021) could be employed, but this estimator does not work in this case for computational reasons caused by long time periods and high-frequency data (Rexer et al. 2022).

[19] Since we have 28 never-treated units when analyzing new loans (26 for previous loans), this removes a few controls that are "least like" our treated countries. For some supplemental analyses, we adjust the matching specifications to obtain good matches.

revisions, or IMF program announcements, which are events that are well known to affect sovereign bond spreads independently of new borrowing (Bernard et al. 2007; Campello 2014; Vaaler et al. 2006; Bredin et al. 2010; Afonso et al. 2019; R. Brooks et al. 2004; Gould 2003b; Krahnke 2023; Shim 2022). Because our analysis centers on the information available to investors, these shocks are also identified through contemporaneous news reports.[20]

After removing all episodes with these overlapping shocks, 114 events remain, including 62 announcements of new loans and 52 related to previously concluded loans. Classified by purpose, the cleaned sample includes 57 project loans, 12 liquidity loans, 9 budget-support loans, and 35 loans of unknown purpose.[21] To avoid carryover effects, we retain only the first treatment for each country when event windows overlap.

For country $c$ on day $t$ in event $e$, with treatment date $k_e$ and length $l$, $t \in [k_e - l, k_e + l]$, we estimate:

$$y_{cte} = \alpha + \sum_{k \neq -1} \tau_k \text{Treat}_{ce} \cdot \mathbb{1}\{k = t - k_e\} + \delta_{ce} + \delta_{te} + \mu_{tce}$$

, where $y_{cte}$ denotes the sovereign's EMBI spread, $\text{Treat}_{ce}$ equals one for the treated unit and zero otherwise, and $\delta_{ce}$ and $\delta_{te}$ are country and time (day) fixed effects. The coefficients $\tau_k$ capture the average treatment effect $k$ days relative to the announcement, with negative $k$s used to test for pre-treatment parallel trends. The window includes 20 trading days before and 20 after each event, approximately two months in total. Standard errors are clustered by country. The next section presents the results of the event study analysis and tests the expectations derived from the theoretical framework.

[20] Data sources for event-window cleaning are listed in Table B5.

[21] One announcement of a new loan for school construction mentioned a purpose but did not fit these categories.

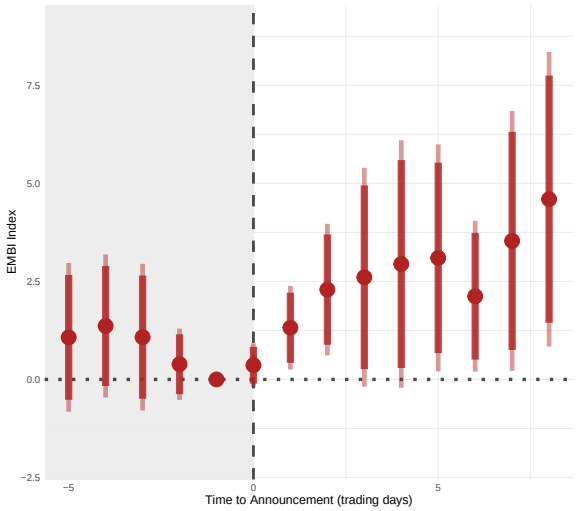
# 4 Bond Market Responses

## 4.1 Market Reactions and China-Specificity

Figure 1 plots the average movement in EMBI spreads around announcements of new Chinese loans. Spreads rise sharply in the days following publication and remain elevated throughout the post-event window. The increase is statistically significant at the 5 percent level for trading days 1 to 2 and 5 to 8. The effect size is roughly 2 to 5 basis points, equivalent to about one standard deviation of a typical borrower's annual EMBI volatility (4.7 points). For the average borrower, this corresponds to a roughly 2.3-point increase within two trading days and 4.6 points within ten, nearly a year's usual variation condensed into a single week. No systematic movement occurs before the event, confirming the absence of pre-trends. Removing Venezuela, the country with the largest number of announcements, yields nearly identical estimates (Appendix Figure C2). This substantially meaningful reaction supports **H1**: sovereign risk premiums increase substantially when new Chinese loans are announced. Because the analysis isolates daily spread movements around discrete news events and removes overlapping shocks, the effect reflects investors' response to new information rather than movements related to economic fundamentals.

The speed and persistence of this adjustment are consistent with our proposed theoretical mechanism. When information about a sovereign's external financing changes, investors rely on visible and easily interpretable signals. The identity of the creditor, China, serves as such a signal, activating a bundle of negative associations. Within this framework, announcements of Chinese loans function to immediately alter market expectations of default risk.

If investors were merely responding to an increase in debt or to new borrowing of any kind, similar announcements involving other creditors should trigger comparable reactions. The evidence shows that they do not. For 20 World Bank loan announce-



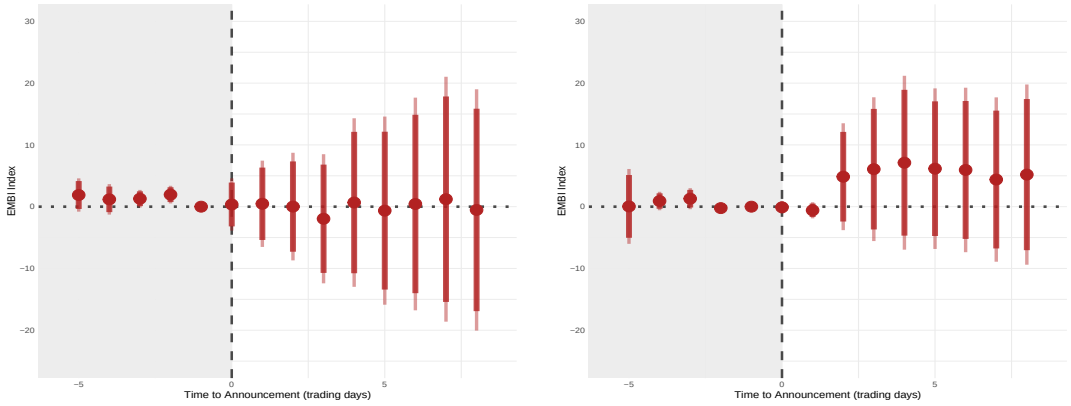

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure 1.** Investor reactions to all announcements of new Chinese loans

ments reported by Bloomberg and the Financial Times between 2007 and 2023, no discernible change in EMBI spreads appears for either project or non-project loans (Figure 2). Even during episodes of fiscal strain, our results suggest that multilateral lending—publicly disclosed, rule-based, and senior in repayment—is viewed by investors as stabilizing or neutral. Likewise, loans from other emerging official creditors such as Russia, Saudi Arabia, Brazil, or the UAE, and announcements of new sovereign bond issues in the primary private market, leave secondary-market spreads unchanged (Figure 3; Appendix Figure C5). Markets therefore appear to penalize additional borrowing specifically when the creditor is China.

We further confirm that this pattern is not driven by a general sensitivity to new borrowing among countries that have selected into Chinese lending. Restricting the sample to sovereigns that have ever announced Chinese loans, and then to borrower-year pairs in which those same countries issued bonds on the primary market, we find no change in secondary market spreads following their primary market bond issues (Appendix Figure C6). Even among the same set of borrowers and in years

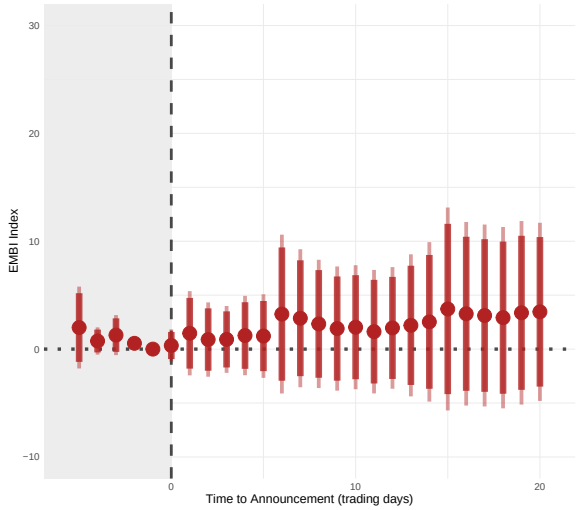
when Chinese lending was made, markets do not react to new bond issuance. These null effects reinforce that the penalty identified above is not a response to additional borrowing among those who selected into Chinese loans but rather one tied specifically to the signal sent by Chinese finance.




(a) Project Loans (b) Non-project Loans

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure 2.** Investor reactions to announcements of new World Bank loans




Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure 3.** Investor reactions to announcements of primary market bond issues

Taken together, these findings demonstrate that the bond market penalty is immediate and China-specific. Investors respond to the perceived negative features associated with receiving Chinese finance, not to debt accumulation itself. Investors do not systematically penalize countries for accessing other sources of finance—whether multilateral, bilateral, or private—but rather to announcements of Chinese lending. This asymmetry underscores the logic of the China heuristic: creditor identity functions as a salient signal of sovereign risk. The "China" signal encapsulates concerns about opacity, political motivation, financing costs, and uncertain restructuring terms. Sovereign bond markets price news of Chinese loans as an increase in perceived credit risk, whereas news of loans from other creditors leaves prices unchanged.

### 4.2 Conditional Effects: Loan Purpose, Geopolitical Alignment, and Borrower Risk

If investors use creditor identity as a signal of sovereign risk, its impact should be strongest in contexts that heighten the salience of the negative associations attached to Chinese finance. Two such contexts are especially relevant: the purpose of the loan and the borrower's political alignment with China. Across both dimensions, the evidence confirms that the market reaction intensifies when the heuristic "fits" investors' expectations about distress or political dependence.

News regarding Chinese loans typically notes the general purpose of the loan. New financing is described as providing general liquidity, offering budget support, or funding a particular project. Our data include 43 new project loans, four liquidity loans, eight budget-related loans, six unknown purpose loans, and one "other."[22]

These distinctions map directly onto how markets assess risk. Figure 4 shows that liquidity and budget support loans, which are likely concluded when governments face fiscal pressure or limited market access, produce the largest spread increases, typically

[22]One project loan was excluded due to missing data.

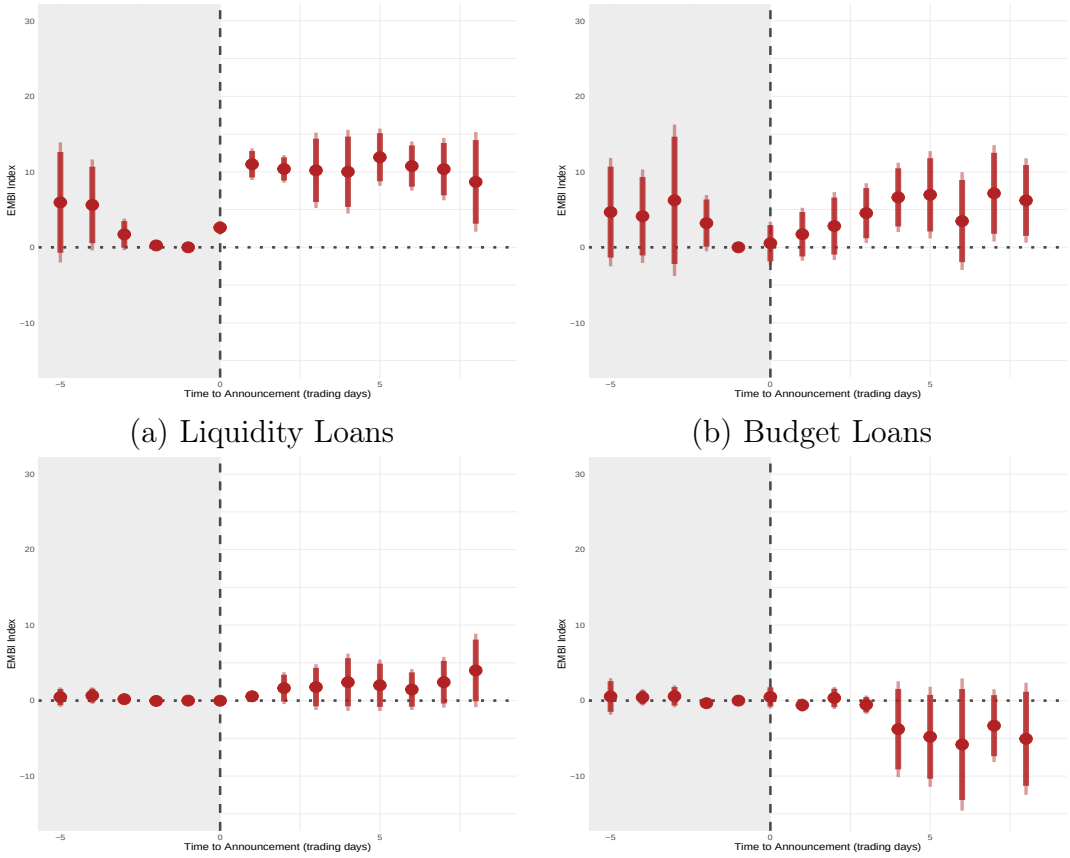
five to ten basis points.[23] These loans fit most closely with the negative bundle of associations surrounding Chinese lending, including opaque terms, political expediency, costly credit, and restructuring uncertainty. Project loans, by contrast, are typically tied to infrastructure investments that potentially generate long-term growth and are therefore considered less worrying for solvency. Indeed, announcements of project loans generate little or no change in spreads. This pattern supports **H2**: the penalty for Chinese loans is strongest when its negative attributes are most evident.[24]

Some financial news coverage discusses previously contracted Chinese loans, which can reveal hidden liabilities or renewed dependence on Chinese financing. Across 52 such events, the average effect on spreads is near zero (see Figure D1 in the Appendix), consistent with the fact that these loans were already in place. Yet, when disaggregated by purpose (Figure 5), a clear pattern emerges: announcements concerning previous liquidity loans result in significant spread increases, whereas those about previous project loans do not. Even information about earlier liquidity support refreshes investors' concerns about solvency and confirms that markets continue to interpret Chinese lending through the same lens.

We also expect that geopolitical alignment conditions how investors respond to Chinese lending. Investors may react more dramatically to loans to borrowers aligned

[23]For budget loans, there is a slight deviation eight trading days pre-treatment for budget loans (and also 15 to 17 trading days pre-treatment). This is likely due to the relatively small sample size. However, there is no clear time trend in the deviation, and the deviation is absent for more than one week prior to the treatment, making the deviation less likely to explain our findings. We also conduct placebo tests by artificially setting the treatment date to one week earlier; we observe no effect between this "fake treatment date" and the true treatment date. See Figure F1.

[24]We acknowledge the diversity of creditors within China. Among 62 announcements of new loans, 16 were made by Eximbank and 14 by China Development Bank. The remaining news stories were vague ("China", "Chinese banks", with a few mentioning other banks like the ICBC). We do not find meaningful differences in investor reactions after subsetting by specific Chinese creditors. This might be because this information is not sufficiently salient to investors.




(a) Liquidity Loans (b) Budget Loans

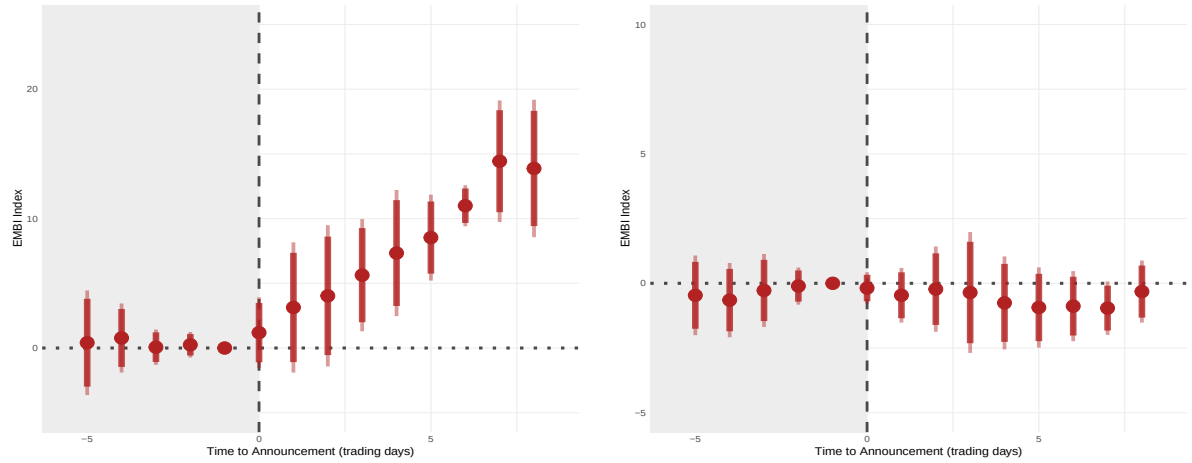
(c) Project Loans (d) Unknown Purposes

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure 4.** Investor reactions to announcements of new Chinese loans by loan purpose

with China, as investors assume that these governments are receiving loans for geopolitical reasons, even in the face of potentially higher sovereign risk. Using UN General Assembly ideal point distances in the year of each announcement, we classify borrowers as geopolitically aligned or less aligned with China.[25] Figure 6 shows that loan announcements for aligned governments produce persistent spread increases, whereas those for less-aligned borrowers have no measurable effect. For investors, political alignment reinforces the perception that lending is motivated by strategy rather than

[25]We split the ideal point distance data in half: those below the sample median are considered more aligned with China; otherwise, an observation is considered less aligned.

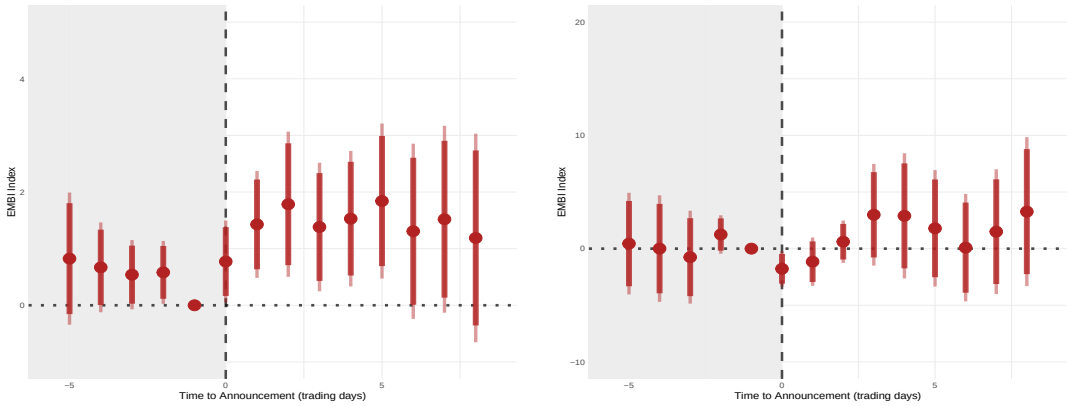



(a) Liquidity Loans (b) Project Loans

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure 5.** Investor reactions to announcements of previous Chinese loans

by market criteria, amplifying concerns about the lack of market-based evaluation, transparency, and moral hazard. As **H3** predicts, the risk interpretation dominates: political proximity magnifies the negative response from investors.




(a) Closer Alignment with China (b) Less Alignment with China

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure 6.** Investor reactions to announcements of new Chinese loans: Political Alignment

### 4.3 Evidence Consistent with Heuristic Processing

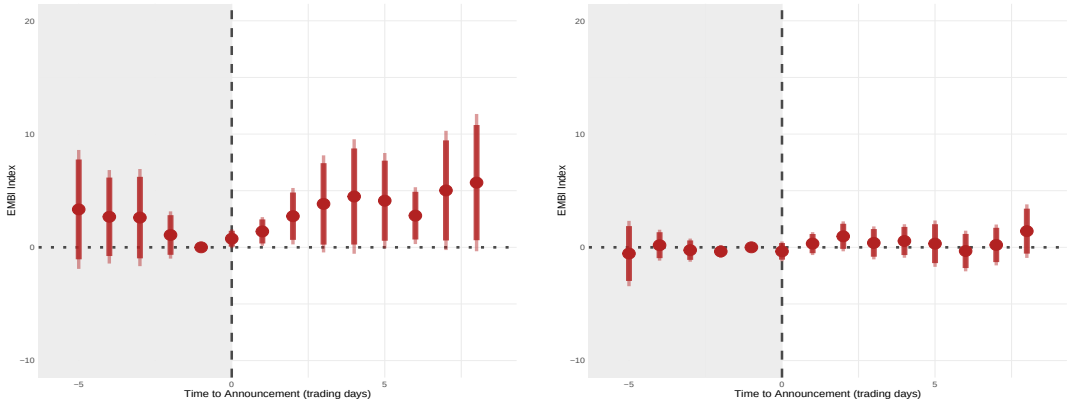
If investors treat “China" largely as a heuristic, rather than closely analyzing fundamentals related to Chinese loans, market reactions to Chinese lending news should depend on how visible and easily processed the information is. Contract-specific details that require close examination, such as loan size, should have little effect. The following analyses confirm this pattern, showing that the magnitude of the market response is shaped by informational salience and attention, rather than by loan details.

Using the daily “news pressure” measure from Eisensee and Strömberg (2007), we distinguish between days with dense global news coverage and those with relatively little competing information. Figure 7 shows that spreads rise when Chinese loans are announced on low news pressure days, yet show almost no response on busy news days. When markets face fewer competing stories, the attention attached to Chinese lending carries greater weight in investors' risk assessments. This result is consistent with limited-attention models of financial behavior: salient, readily interpretable information exerts a stronger influence when cognitive bandwidth is available.

A similar logic is evident when using the broader AidData sample, which includes 2,132 Chinese-loan commitments to EMBI countries, most of which were not reported contemporaneously in the financial press (Dreher et al. 2022; Custer et al. 2023).[26] Because these commitments often occurred without public disclosure, they are less likely to represent salient information shocks to investors. Consistent with this expectation, Figure 8 shows a small and less precise effect: spreads rise modestly, and also only for non-project loans.[27] The effect size is only around 0.5, which is much smaller than the 2.5 to 5 basis point increase following news announcements. The existence

[26] 3,348 of the AidData Chinese loans to sovereigns are included in the countries and years of the EMBI index. We remove 1,216 loan records without precise commitment dates.

[27] Figure C3 shows that project loans do not have the same effect.




(a) Low News Pressure (b) High News Pressure

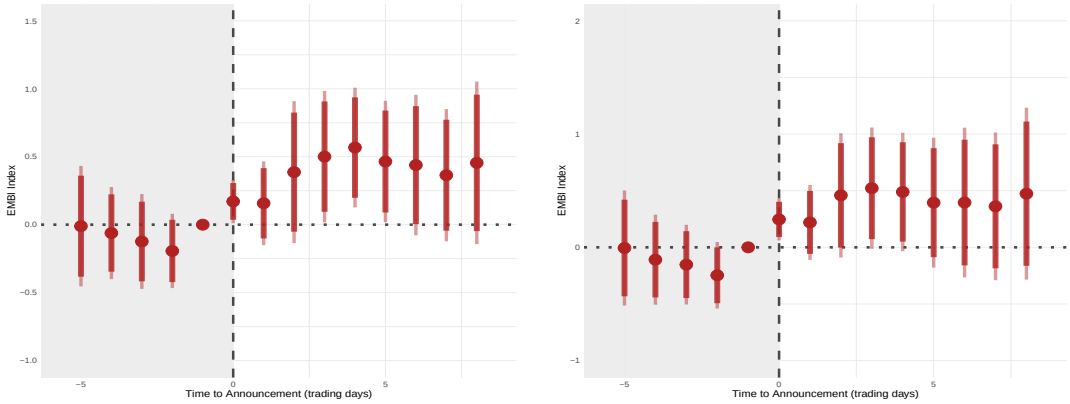
Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals. Daily news pressure is defined as the median number of minutes a news broadcast devotes to the top three news segments in a day. Among 62 new Chinese loan announcements in our analysis, 59 are covered in the news data. We calculate the median news pressure for the 59 announcement days (which is 228, close to 220, the median in the full data), and then separate the 59 events by whether they are published on a day with news pressure higher or lower than the median.

**Figure 7.** Investor reactions to Chinese loans: news pressure on announcement day

of a small effect may stem from fragmented and less significant information channels. Due to a lack of sufficient identifiers, we are unable to match AidData records to news reports. However, the attenuation in magnitude underscores the informational mechanism. Markets react most strongly when they learn about Chinese lending through visible, high-salience channels such as Bloomberg or the Financial Times, not when loans exist only in administrative records. Utilizing the AidData sample also reveals that when Chinese loans are co-financed with other partners, spreads remain unchanged, whereas loans financed solely by Chinese institutions continue to produce small but statistically significant increases.[28] These findings reinforce that the market response is driven by the visibility and interpretation of creditor identity rather than by the mere existence of new debt.

By contrast, we find no evidence of a systematic response to specific details about

[28]See Figure C4 in the Appendix.



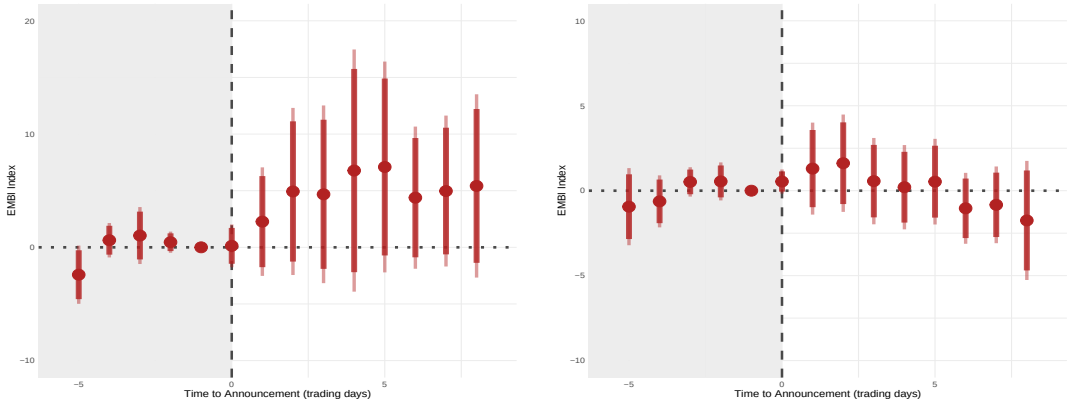

(a) All Loans (b) Non-project Loans

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure 8.** Investor reactions to all Chinese loans (AidData)

the loans, which may affect the debt burden but are unlikely to fundamentally shift investors' associations related to Chinese loans. Figure 9 focuses on announcements of large loans, those exceeding 5 billion USD or 5 percent of the borrower's GDP, and finds no significant increase in post-announcement spreads. If markets were reacting specifically to increased loan burdens, larger loans would produce larger changes in risk premiums. The absence of this effect suggests that investors are not evaluating contract-level characteristics, but rather are instead responding to the identity of the creditor itself as an easily processed signal of sovereign risk.

Together, these results provide strong evidence for a heuristic process. Investors respond most strongly when information about Chinese lending is visible and attention is unconstrained, but ignore detailed contractual features that would require deeper analysis, even if they are about the debt burden itself. The much weaker effects in the AidData sample suggest that it is the public revelation of Chinese lending that drives changes in sovereign risk pricing. Sovereign bond markets take Chinese loans as signals of sovereign risk, and the strength of their reaction depends on how clearly that signal enters investors' field of view.




(a) Greater than 5 Billion USD (b) Greater than 5% of GDP

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals. 5 billion USD is the 3rd quartile value of all new loan announcements, and 10 news announcements were made when the new loan-to-GDP ratio is greater than 5%.

**Figure 9.** Investor reactions to announcements of new Chinese loans: loan size

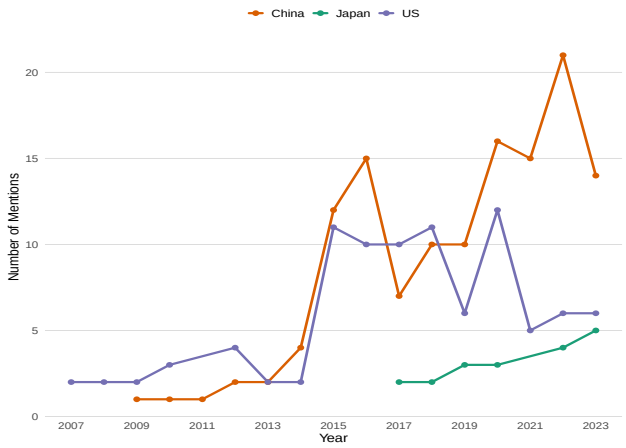
### 4.4 Supplementary Evidence: Ratings Agency Narratives

To complement the evidence from bond-market reactions, we examine how sovereign credit rating agencies describe Chinese lending in their assessments of borrowers. Ratings agencies' assessments include both objective and subjective criteria, focusing on the ability and willingness to repay sovereign obligations. We focus on the language of these assessments rather than on the rating or outlook changes themselves. Whereas bond markets respond immediately to new information, ratings changes are infrequent and reflect institutionalized, model-based reassessments that incorporate information only after it has been widely processed. The accompanying rationales, however, reveal how analysts explain and frame such information.[29] Because our interest lies in how the market interprets and communicates risk, the narratives provide a complementary view to our bond market analysis. If markets' negative reactions to

[29] We do not analyze changes in the rating or outlooks themselves, because these occur somewhat infrequently, and they reflect a wide range of macroeconomic and political factors as well, making it difficult to isolate the specific contribution of Chinese lending.

Chinese loans reflect a broader association between Chinese finance and risk, similar concerns should appear in the language of credit assessments (Slapnik and Lončarski 2023).

Standard & Poor's (S&P) is one of the three major credit rating agencies. We analyze 1,184 S&P's sovereign rating or outlook change rationales for 48 EMBI countries between 2007 and 2024.[30] Mentions of "China" appear in 11 percent of these reports and have grown sharply over time, surpassing mentions of the United States or Japan in recent years (Figure 10). This surge indicates that Chinese finance has become a central consideration in how credit analysts evaluate emerging-market borrowers.




Note: The x-axis is time, and the y-axis is the number of mentions of each creditor country in the credit rating reports by year.

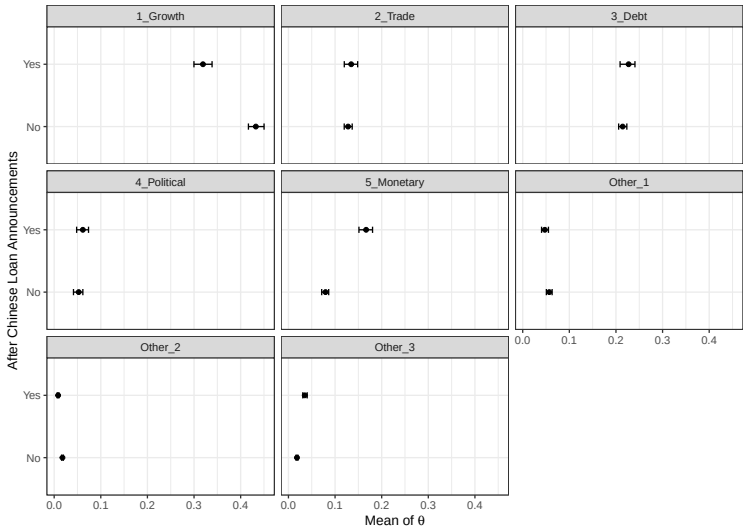
**Figure 10.** Mentions of major creditors in ratings reports

To assess the content of these mentions, we apply a semi-supervised topic model (keyATM) to the rationale sections of the reports (Eshima et al. 2023). The model identifies five interpretable topics: Growth, Trade, Debt, Political, and Monetary, alongside three residual topics to address concerns about misclassifications. Table A1 lists the keywords we specified.[31] Figure A3 shows that Growth is the most common

[30] We include countries that are included in the EMBI+ index used in the analysis in Section 4. We focus on reports from S&P because its full set of textual rationales is publicly available.

[31] Figure A1 shows the keyword proportions in the corpus. The model determines the usefulness

theme overall, but Debt and Political topics account for a substantial share of discussion. When we incorporate a variable marking reports issued after a Chinese loan announcement for that sovereign, the share of Debt and Political topics increases, while Growth declines after the announcement (Figure 11). This shift suggests that rating analysts associate new Chinese lending with debt burdens, liquidity risks, and political considerations rather than with growth prospects.



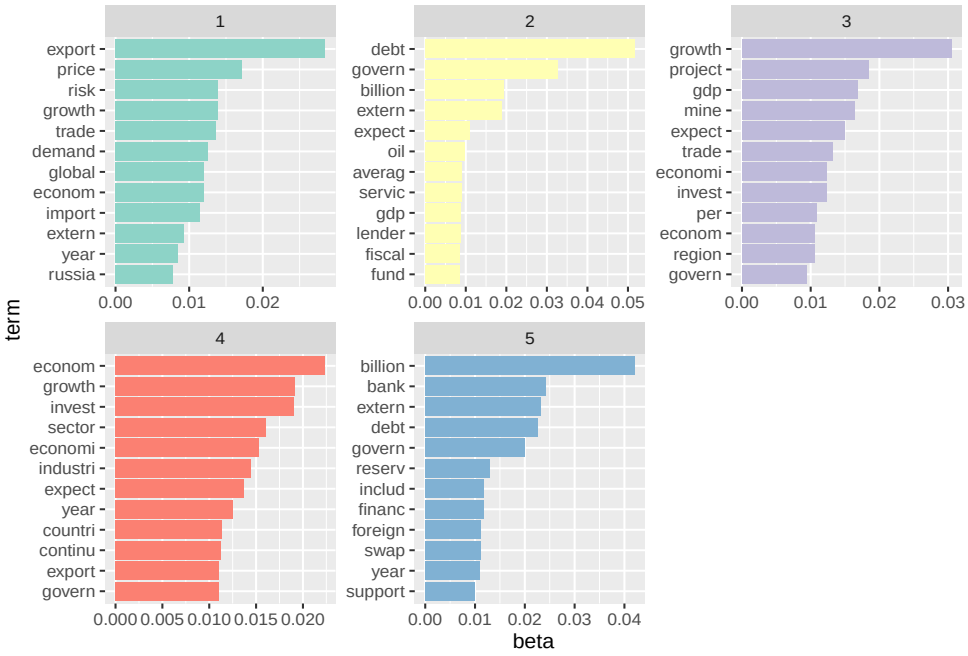

Note: The figure shows the marginal posterior means of document-topic distributions and the 90% credible intervals of them before and after a country experiences a Chinese loan announcement. Larger estimates indicate that the document is more likely to be about this topic.

**Figure 11.** Document-topic distribution changes after Chinese loan announcements

Zooming in on the 191 paragraphs that explicitly mention China or Chinese institutions, unsupervised topic modeling reveals two dominant clusters centered on debt and liquidity concerns (Figure 12). Topic 2 emphasizes fiscal conditions and the ability to service debt, with frequent references to government spending, GDP, and fiscal deficits. Topic 5 focuses on financing structures and liquidity, featuring terms such as bank, reserves, foreign, swaps, and support. The word cloud in Figure 13 confirms that debt is a dominant theme. Two representative excerpts in Table A2

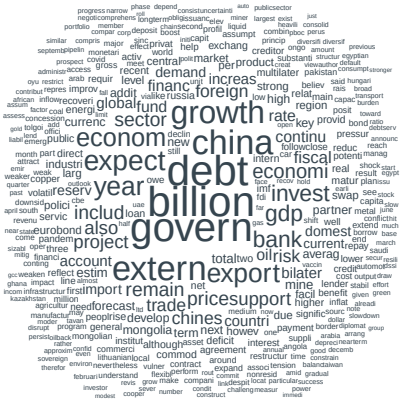
of keywords from the corpus, and diagnostics indicate a good model fit (Figure A2).

underscore these themes: one frames Chinese loans as contributing to debt accumulation and repayment pressure, while the other notes potential growth benefits from Chinese-financed infrastructure.




Note: This figure plots the top words in each topic within paragraphs that mention "China" or "Chinese."

**Figure 12.** Topics and top words in paragraphs including China (Chinese)




Note: The figure plots words in paragraphs including "China" and "Chinese," with word font sizes scaled by frequency.

**Figure 13.** Word cloud of paragraphs including China (Chinese)

Together, these findings confirm that investors do take Chinese lending into account when assessing sovereign risk. Chinese finance is often discussed as a factor heightening debt, liquidity, and political risks. Precisely because of these associations, investors react immediately when they see a country borrowing from China.

# 5 Conclusion

This study examines how private investors interpret information about new sovereign loans from Chinese creditors. Our analyses using event studies of bond market reactions demonstrate that markets treat Chinese lending as a distinct signal of risk. Announcements of new loans lead to higher sovereign spreads, particularly when the financing provides general budget or liquidity support and when borrowers are geopolitically aligned with China. These effects are specific to Chinese lending: comparable announcements involving the World Bank, other bilateral creditors, or new bond issues do not move markets.

The results show that investors rely on heuristic reasoning when processing information about sovereign borrowing. Under limited information and attention, the identity of the creditor becomes a visible and cognitively efficient signal for updating risk assessments. The label "China" can activate a bundle of pre-existing associations like opacity, political expediency, costly credit, and restructuring uncertainty that influence market assessments. This mechanism is evident not only in daily bond pricing but also in the language of professional credit assessments, where Chinese finance is consistently linked to debt and governance concerns.

These findings speak to broader questions about how China, as an emerging creditor, affects governments' ability to borrow. They suggest that the consequences of Chinese loans are not confined to their direct effects but extend to how markets reassess the borrowers. As the creditor landscape becomes more complex, investors'

dependence on heuristics may increase. In this sense, China's emergence as a major sovereign creditor has not only transformed the actual composition of debt but also reshaped the informational environment in which sovereign risk is judged.

Future research should investigate how creditor composition affects governments' borrowing capacity and access to capital. A diverse creditor profile may complicate expectations about debt restructuring and, in turn, raise the cost of new borrowing for already indebted sovereigns. This might be especially the case when a significant portion of a sovereign's obligations is owed to entities with preferred creditor status, such as multilateral development banks. Similarly, a heavy concentration of obligations to China could limit refinancing options and slow collective restructuring efforts, as recent cases under the G20 Common Framework suggest (Ferry and Zeitz 2024; Ballard-Rosa et al. 2024). To the extent that composition interferes with generating new borrowing, this may represent another way in which the financing boom of the 2010s ultimately had negative consequences for sovereigns in the Global South.

## Data Availability Statement

Replication data will be made available on the BJPolS Dataverse site after acceptance.

## Competing Interests

The authors declare none.

## Funding

There is no external funding to declare.

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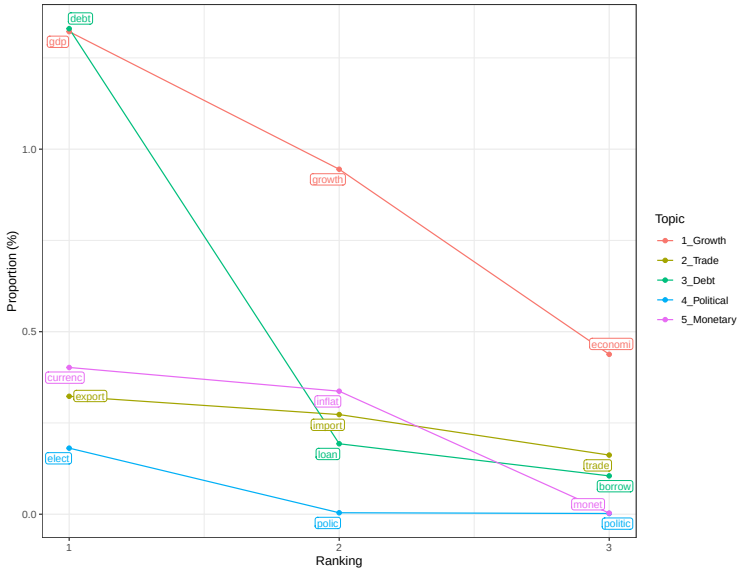
# Appendices

## A Text Analysis on Credit Ratings Reports

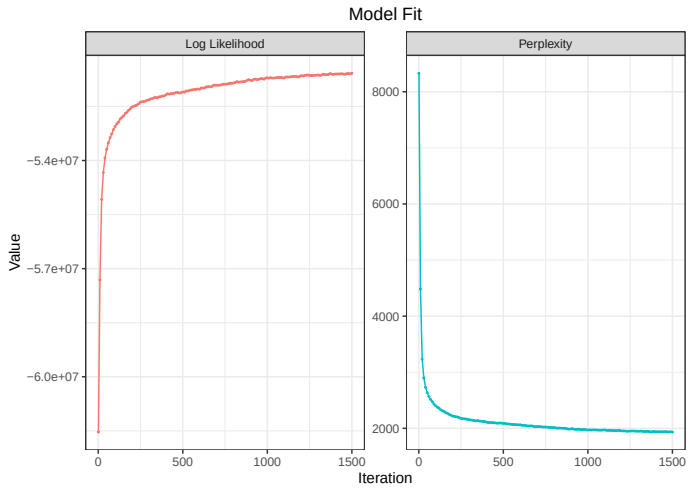
**Table A1.** Specified keywords and word roots for keyATM

| **Category** | **Keywords (Word Roots)** |
|---|---|
| Growth | growth, economi, GDP |
| Trade | trade, export, import |
| Debt | debt, loan, borrow |
| Political | polic, elect, politic |
| Monetary | inflat, curren, monet |



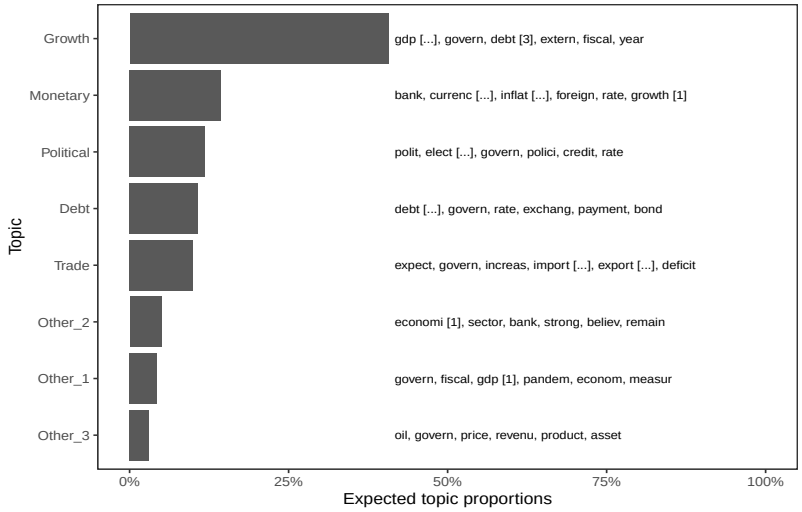

Note: This plot summarizes the pre-specified keywords used in the model and how frequently they appear in this corpus. The y-axis is the proportion of the pre-specified keywords in the corpus. They are sorted along the x-axis by their prevalence within each specified topic.

**Figure A1.** Raw keyword proportions in the corpus




Note: The increasing trend for the log-likelihood and a decreasing trend for the perplexity show a good fit of the model.

**Figure A2.** Model fit for keyATM




Note: This plot shows the overall topic distribution in the corpus. Words next to the bars are the top words under each topic. Words with brackets are pre-specified keywords. The top words for each topic also suggest that the model successfully captures the key topics. For example, *gdp* is the most popular word in *Growth*, and *debt* is the most popular in *Debt*. The three no-keyword topics account for very small proportions, suggesting that we do a good job labeling keyword-assisted topics. For non-keyword topics, *Other_ 2* is related to banks, *Other_ 1* seems to be specific to the pandemic, and *Other_ 3* is related to oil.

**Figure A3.** Topic distributions in the corpus

**Table A2.** Examples of rating agency report paragraphs involving China

| Country | Excerpt |
|---|---|
| Ghana | *The Multilateral Debt Relief Initiative (MDRI) contributed to a significant reduction in Ghana's net external debt in 2006, but the public sector has been re-leveraging ever since; general government debt reached 38% of GDP at year-end 2010. A bilateral loan from* ***China*** *may lead to a further ramp up in debt over the next few years.* |
| Jordan | *However, the largest contributor to growth has been an uptick in finance and insurance services activity, which can also be seen in increased credit growth. ...In addition, Jordan has recently signed agreements with* ***Chinese*** *companies worth $7 billion (mainly based on infrastructure projects, such as the construction of new power stations and expanding the national railway network) which should also support growth. ...* |

# B News Announcements Data

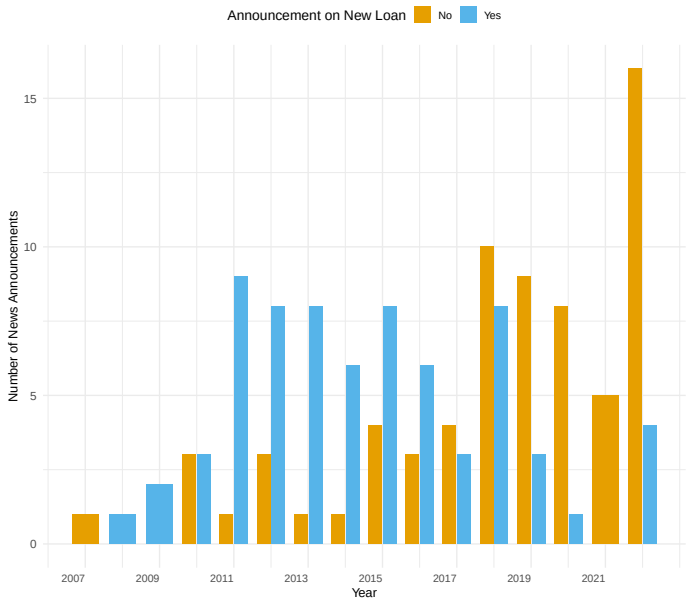



**Figure B1.** Distribution of news announcements over time

**Table B1.** Countries included in J.P. Morgan EMBI Global Index

| | | | |
|---|---|---|---|
| Vietnam | Venezuela | Uruguay | Ukraine |
| Turkey | Tunisia | Trinidad and Tobago | Sri Lanka |
| South Africa | Serbia | Russia | Poland |
| Philippines | Peru | Panama | Pakistan |
| Nigeria | Namibia | Morocco | Mexico |
| Malaysia | Lithuania | Lebanon | Kazakhstan |
| Jordan | Jamaica | Iraq | Indonesia |
| Hungary | Ghana | Georgia | Gabon |
| El Salvador | Egypt | Ecuador | Dominican Republic |
| Croatia | Cote D' Ivoire | Colombia | China |
| Chile | Brazil | Belize | Belarus |
| Argentina | Zambia | Romania | Paraguay |
| Mongolia | Latvia | India | Honduras |
| Costa Rica | Bolivia | Angola | Armenia |

**Table B2.** Variable sources

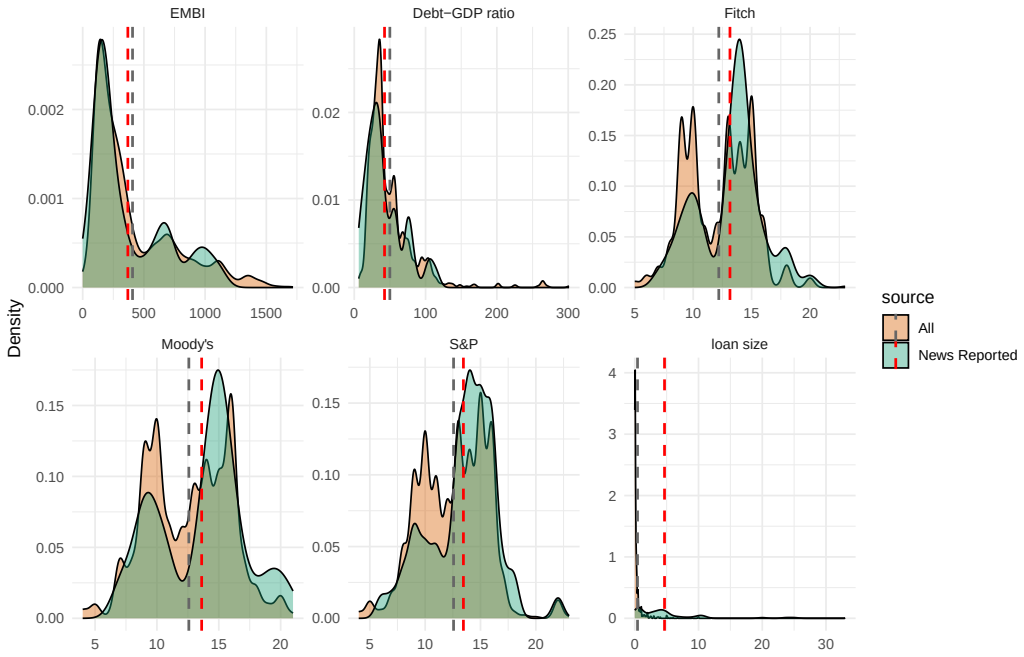
| **Variable** | **Source** |
|---|---|
| EMBI Global Index | JP Morgan, EMBI Global Index (accessed via Refinitiv Datastream) |
| UNGA Voting Distance | Bailey et al. (2017) |
| Daily News Salience | Eisensee and Strömberg (2007). Data available at: https://davidstro.github.io/files/Vanderbilt_1968_June2022.dta |
| GDP | World Bank World Development Indicators (https://databank.worldbank.org/source/world-development-indicators) |

**Table B3.** Loan announcements by borrower and loan type

| Borrower | New Loans | | Previous Loans | |
|---|---|---|---|---|
| | All | Clean Event Windows | All | Clean Event Windows |
| Angola | 2 | 2 | 12 | 11 |
| Argentina | 4 | 2 | 1 | 1 |
| Belarus | 1 | 1 | 0 | 0 |
| Bolivia | 1 | 1 | 2 | 2 |
| Brazil | 3 | 2 | 2 | 2 |
| Costa Rica | 1 | 1 | 0 | 0 |
| Cote d'Ivoire | 4 | 4 | 0 | 0 |
| Egypt Arab Rep. | 2 | 1 | 0 | 0 |
| Gabon | 1 | 1 | 0 | 0 |
| Ghana | 3 | 3 | 1 | 0 |
| Honduras | 1 | 1 | 1 | 0 |
| Hungary | 1 | 1 | 1 | 1 |
| Indonesia | 2 | 2 | 1 | 1 |
| Jamaica | 1 | 1 | 0 | 0 |
| Kazakhstan | 3 | 3 | 1 | 1 |
| Malaysia | 1 | 1 | 1 | 1 |
| Mexico | 1 | 1 | 0 | 0 |
| Mongolia | 0 | 0 | 2 | 2 |
| Nigeria | 7 | 7 | 4 | 1 |
| Pakistan | 7 | 6 | 8 | 8 |
| Philippines | 1 | 1 | 3 | 3 |
| Russian Federation | 3 | 3 | 2 | 0 |
| Serbia | 2 | 2 | 2 | 2 |
| South Africa | 1 | 1 | 0 | 0 |
| Sri Lanka | 2 | 1 | 10 | 5 |
| Trinidad and Tobago | 1 | 1 | 0 | 0 |
| Turkey | 1 | 0 | 1 | 0 |
| Ukraine | 1 | 1 | 0 | 0 |
| Venezuela RB | 11 | 10 | 9 | 7 |
| Zambia | 1 | 1 | 5 | 4 |

**Table B4.** Comparison of average metrics between all loans and news-reported loans

| **Variable** | **All Loans** | **News-Reported Loans** |
|---|---|---|
| Debt-to-GDP ratio | 49.9% | 42.5% |
| EMBI Spread (20 trading days prior to loan) | 407 | 369 |
| Fitch Rating (month prior to loan) | 12.2 (BB) | 13.1 (BB-) |
| Moody's Rating (month prior to loan) | 12.6 (Ba2–Ba3) | 13.6 (Ba3–B1) |
| S&P Rating (month prior to loan) | 12.6 (BB–BB-) | 13.5 (BB–B+) |
| Loan Size (USD bn) | 0.431 | 4.67 |

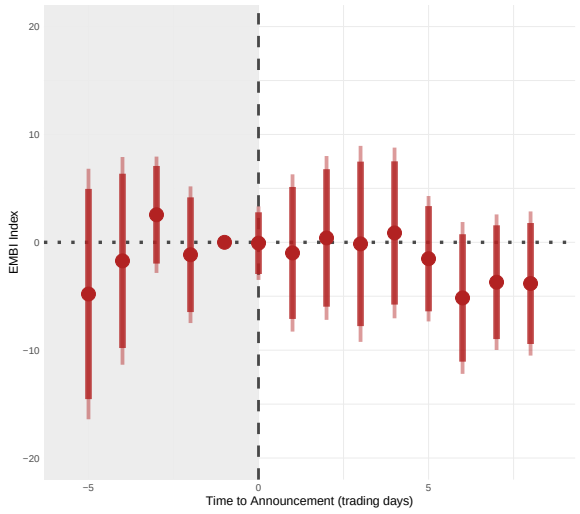



Note: This figure plots the density of pre-treatment conditions and loan size for loan events in AidData (all loans) and those appearing in financial news reports. EMBI spreads are measured over 1 to 20 trading days prior to the loan. The debt-to-GDP ratio (%) is reported for the year of the loan. Credit ratings are coded from 1 (strongest) to the maximum value (weakest) and are measured in the month prior to the loan. Loan size is expressed in billion USD. Dotted lines indicate the mean values for each source.

**Figure B2.** Comparison between all loans and news-reported loans

**Table B5.** Event window cleaning: Sources

| **Event Type** | **Source** |
|---|---|
| IMF Project Announcements | IMF website ( https://www.imf.org/external/np/fin/tad/extarr1.aspx) |
| Election Dates | Collected via Google Search of national election news |
| Interest Rate Changes | Bloomberg News coverage (https://www.bloomberg.com/news) |
| Sovereign Credit Rating Changes | Bloomberg News coverage (https://www.bloomberg.com/news) and Trading Economics (https://tradingeconomics.com/country-list/rating) |




Note: We subset to loans larger than the average size of loans reported in financial news (4.67 billion USD). The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure B3.** Investor reactions to large AidData Chinese loans

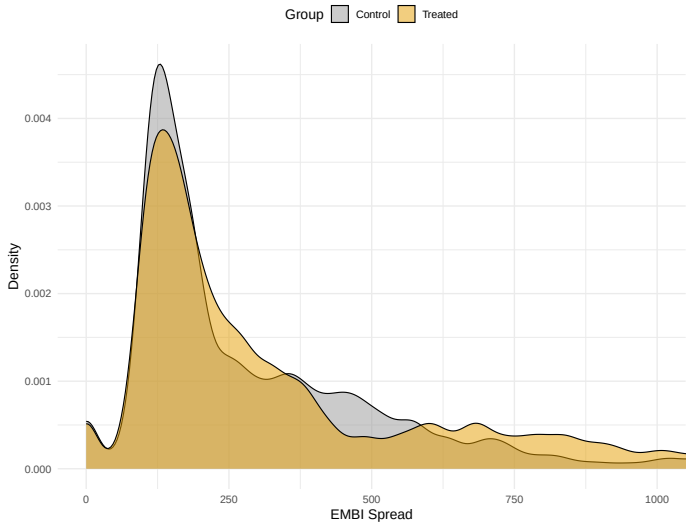
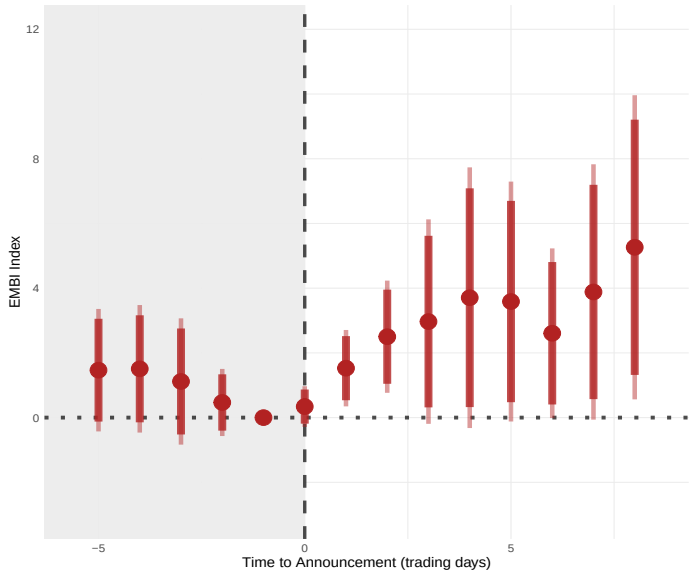



**Figure B4.** Distribution of EMBI spreads by treatment group

**Table B6.** Summary statistics of EMBI spreads by group

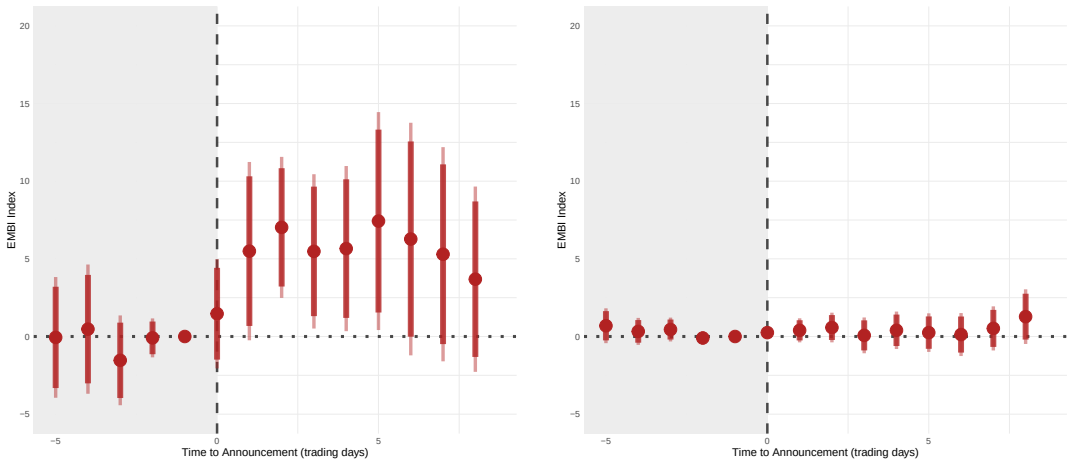
| Statistic | Control Group | Treated Group |
|---|---|---|
| Group | Control | Treated |
| N | 93527 | 109990 |
| Missing | 9355 | 8720 |
| Mean | 344.5714 | 349.3049 |
| Median | 204.074 | 228.152 |
| Q1 | 133.4485 | 142.0285 |
| Q3 | 442.1065 | 457.9837 |
| Min | 0 | 0 |
| Max | 1845.037 | 1526.341 |

# C Additional Figures on New Loans




Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

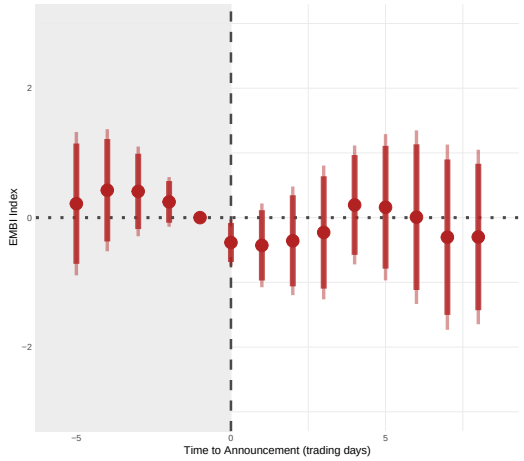
**Figure C1.** Investor reactions to new announcements of Chinese loans (removing unknown purpose loans)




(a) Budget and Liquidity Loans (b) Project Loans

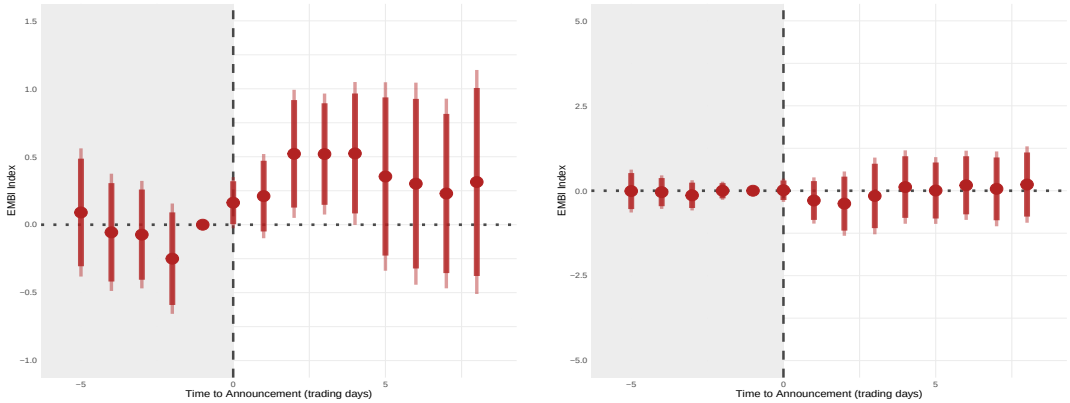
Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure C2.** Investor reactions to new announcements of Chinese loans (removing Venezuela)




Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

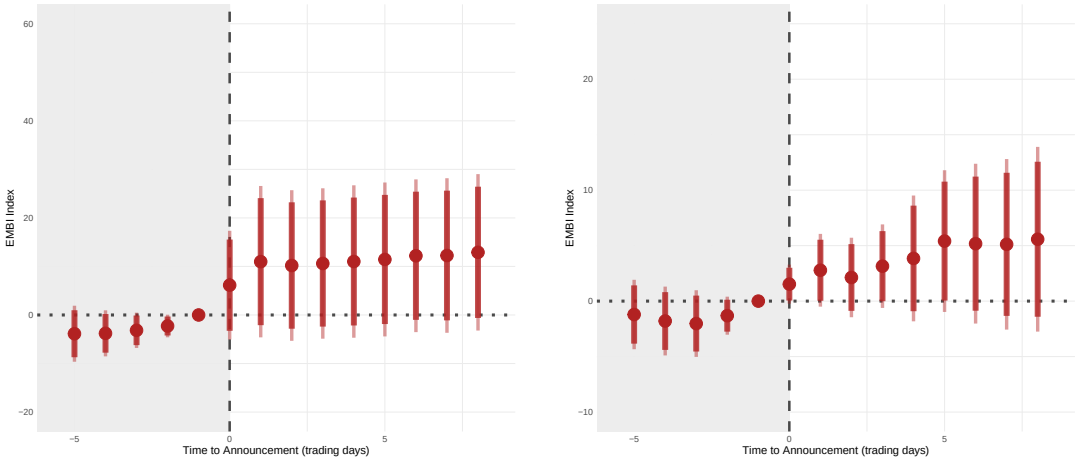
**Figure C3.** Investor reactions to announcements of Chinese loans: AidData project loans




(a) China Alone (b) With Non-Chinese Financiers

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 0.95 (thin) and 0.90 (thick) confidence intervals.

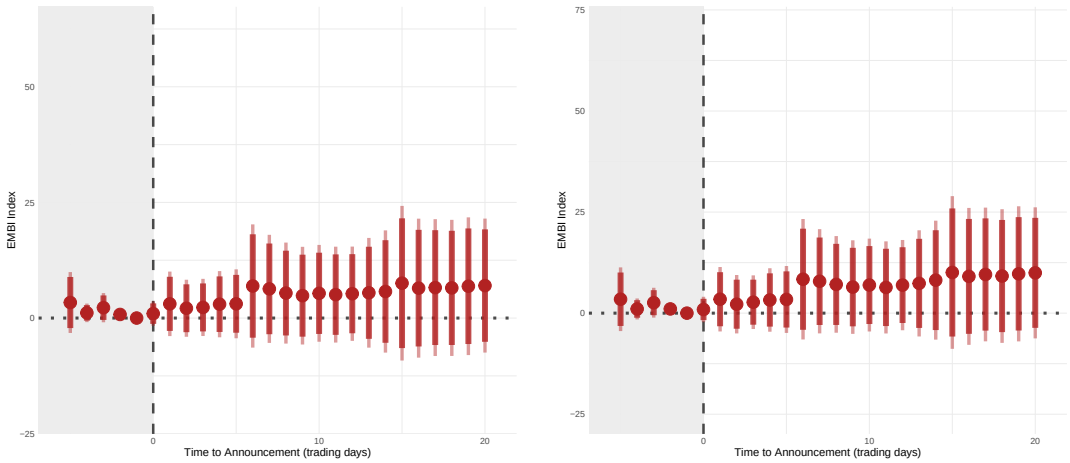
**Figure C4.** Investor reactions to Chinese loans (AidData): Loans with non-Chinese financiers




(a) All Loans (b) All Loans (excluding Saudi Arabia)

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals. There are 12 new loan announcements with clean event windows for other emerging creditors. Figure (b) removes Saudi Arabia loans due to difficulty in finding good matches for them, but the result remains consistent.

**Figure C5.** Investor reactions to new loans from other emerging creditors

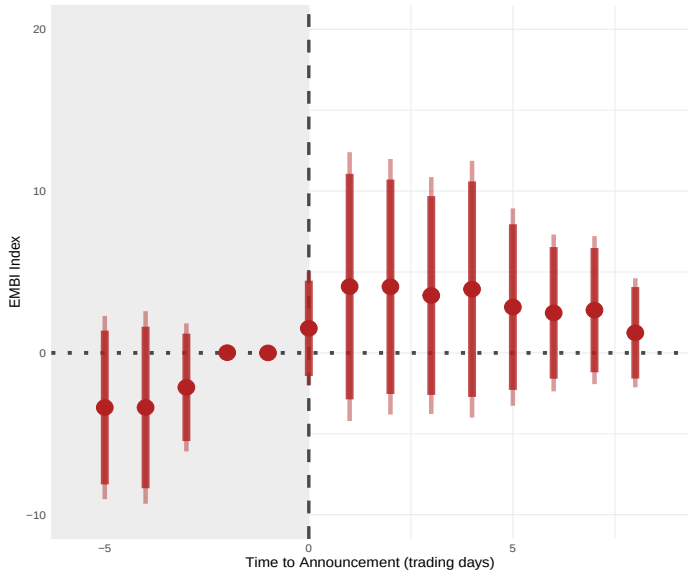



(a) Overlapping borrowers (b) Overlapping borrower-years

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals. There are 32 new loan announcements with clean event windows in (a), which are countries that have also borrowed from China. Figure (b) further restricts to 9 loans in borrower-years that have received Chinese loans.

**Figure C6.** Investor reactions to announcements of primary market bond issues overlapping with Chinese loans

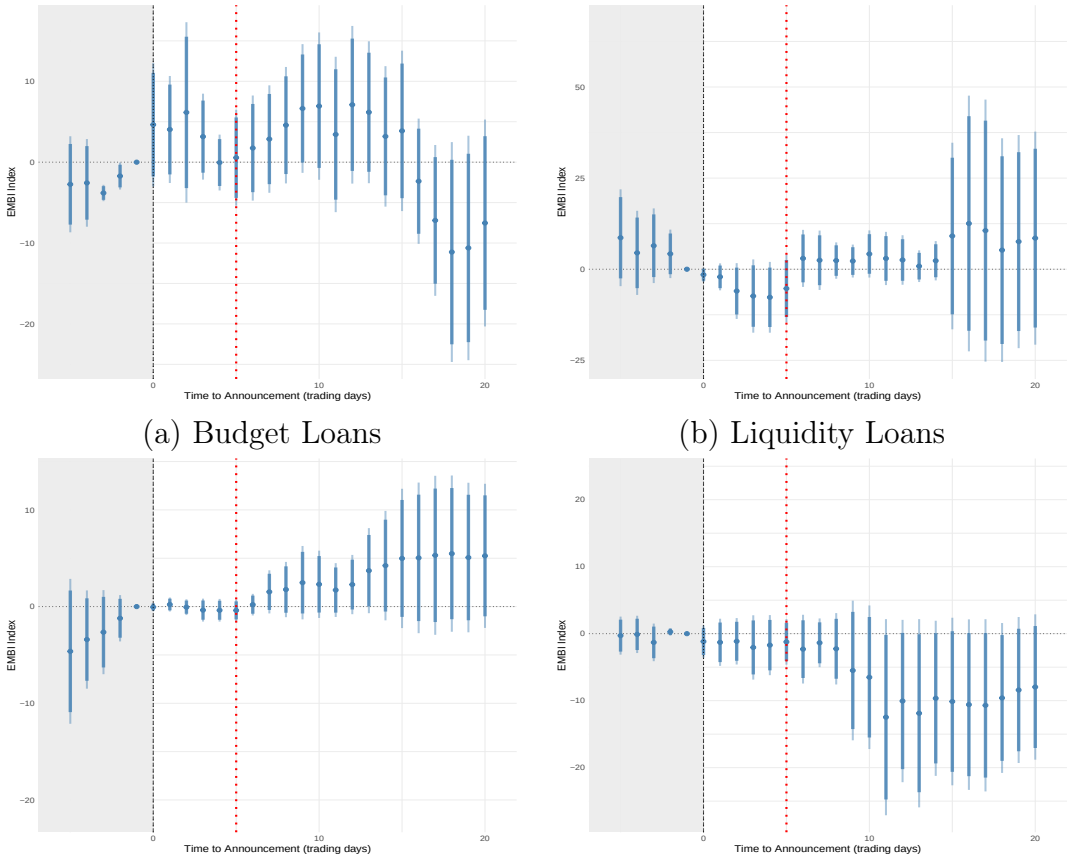
# D Additional Figures on Previous Loans




Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals.

**Figure D1.** Investor reactions to all announcements of previous loans

# E Placebo Tests




(a) Budget Loans

(b) Liquidity Loans

(c) Project Loans

(d) Unknown Purposes

Note: The vertical dashed line is the treatment day, and negative numbers indicate days pre-treatment. The error bars are 95% (thin) and 90% (thick) confidence intervals. The gray dashed line represents the "fake treatment date" set to one week before the treatment, and the red line indicates five trading days afterward. The absence of a significant effect between 0 and the red dashed line confirms the absence of pre-trends.

**Figure F1.** Placebo test: investor reactions to new Chinese loans