China's Bilateral Swap Agreements and Foreign Policy [*]

Qi Liu Xun Pang James Raymond Vreeland

Abstract

We examine the foreign-policy implications of China's expanding network of bilateral swap agreements (BSAs). BSAs provide a line of credit that governments can draw on during times of crisis. We suspect that entering a BSA with China can bring countries that have few outside options and have been left behind by the US-led economic order into closer alignment with China. Applying a Bayesian generalized synthetic control approach, we estimate both aggregate- and individual-level treatment effects for different sets of countries. We find that, on average, a country's participation in BSAs with China increases its short-run foreign-policy alignment with China. Comparisons of country-level causal effects reveal that the short-run effect and a medium-run finding are driven by financially vulnerable countries and those supportive of China's global leadership. The results suggest that the introduction of Chinese BSAs as part of the global financial safety net has political implications for international affairs.

Keywords: Bilateral Swap Agreements, Foreign-Policy Alignment, Global Financial Safety Net, Bayesian Causal Inference

Word count: 11,728

[*]Qi Liu is a Ph.D. Candidate in the Department of Government at Harvard University. Xun Pang is a Professor in the School of International Studies at Peking University. James Raymond Vreeland is a Professor in the Department of Politics and the School of Public and International Affairs at Princeton University (james.raymond.vreeland@gmail.com). All authors have contributed equally to this work, and their names appear in alphabetical order.

1 Introduction

In the aftermath of the Global Financial Crisis (GFC), China embarked on a strategic endeavor to internationalize its currency—the renminbi (RMB). Among China's initiatives, bilateral cross-currency swap agreements (BSAs) emerged as a major instrument. The People's Bank of China (PBC) entered into dozens of BSAs with a wide range of central banks spanning the globe. In this effort, China has surpassed all nations, even the United States. This surge in BSAs, colloquially known as the "rise of redbacks," now constitutes a significant layer within the global financial safety net (GFSN).

Our study asks a simple yet underexplored question: Do China's BSAs influence the foreign-policy alignment of partner governments? While existing research on China's BSAs has focused on their economic effects (Zhang et al., 2017; Hao, Han and Li, 2022; Olayiwola and Fasoye, 2019) or why China and its partners sign them (Liao and McDowell, 2015; Destais, 2016; Li, Sahasrabuddhe and Wingo, 2023), the foreign-policy consequences of BSAs have not been subject to rigorous empirical analysis.[1]

A BSA provides a partner central bank with pre-authorized access to liquidity during periods of financial stress. As such, it functions as institutionalized insurance—a pre-arranged bilateral bailout mechanism (Eichengreen, Lombardi and Malkin, 2018). Drawing on the broader literature on asymmetric interdependence in international political economy (Hirschman, 1945; Baldwin, 1971; Keohane and Nye Jr, 1973), we contend that BSAs may alter the incentives of partner governments in ways that encourage foreign-policy alignment with China.

We identify two pathways through which these effects may arise. First, a "vulnerability" chan-

[1]The only exception we know of is a study by Pang and Chen (2020), who conduct regression analysis and offer a case study.

nel emphasizes financial dependence. Some of China's BSA partners lack reliable alternatives to the liquidity support provided through the arrangement. These countries may seek to avoid diplomatic friction with China and be willing to accommodate Chinese foreign-policy preferences to preserve access to BSAs with the rising super power. Second, an "attraction" channel emphasizes political and ideational affinity. Some countries welcome China's leadership in global economic governance and interpret Chinese BSAs as particularly valuable. These governments are more willing to use foreign-policy alignment with China as a tool of reciprocity and relationship-building.

Of course, BSA partners differ widely in their vulnerability and attraction to China. Partners like Argentina are both financially vulnerable and often dissatisfied with US leadership of the global economy, while partners like South Korea have robust economies and work closely with the United States. Our two suggested pathways thus both yield expectations of heterogeneous effects of China's BSAs. We expect them to have greater influence over the foreign-policy positions of some countries than others.

Identifying these effects is empirically challenging. Countries do not enter BSAs at random: selection reflects economic, political, and strategic factors that may correlate with foreign-policy preferences. A large literature shows that security and political relationships often precede and shape economic cooperation, including trade and monetary ties (Gowa, 1995; Broz, 2015; Davis and Pratt, 2021; Davis, 2023; Strange, 1971; Kirshner, 2020; Cohen, 2015; Norrlof, 2020). Existing studies find that geopolitical concerns influence which countries sign BSAs with China (Li, Sahasrabuddhe and Wingo, 2023). This makes it difficult to determine whether BSAs cause foreign-policy alignment, whether foreign-policy alignment leads to BSAs, or whether both stem from preexisting political ties.

To address this issue, we apply a Bayesian generalization of synthetic control that exploits long

pre-treatment foreign-policy alignment trends to construct country-specific counterfactual trends. We control for a rich set of covariates as well as a latent factor term, which accounts for the possibility of unobserved confounders. This approach allows us to distinguish the marginal effect of entering a BSA from preexisting political affinity.

Our dataset covers 195 countries from 1992 to 2021, including 38 that entered BSAs with China. We capture foreign-policy alignment using well-established UN General Assembly (UNGA) ideal-point estimates and supplement this variable with a measure of UNGA draft resolution co-sponsorship. We estimate pooled average treatment effects and then examine country- and group-level effects to assess heterogeneity across partner governments.

Our findings reveal three results. First, on average, entering a BSA with China leads to a statistically significant short-run convergence in foreign-policy positions, measured by both UNGA voting and co-sponsorship. Second, substantial heterogeneity exists across partners: 14 countries drive the estimated alignment effect. Third, these patterns of heterogeneity closely match our theoretical expectations. Countries that are financially vulnerable or politically attracted to China's leadership exhibit stronger and more persistent alignment after signing a BSA.

These results contribute to debates on China's economic statecraft and the evolution of the GFSN. Broz, Zhang and Wang (2020) show that dissatisfaction with the US-led order leads states to support China's initiatives (specifically, the Belt and Road Initiative or BRI). Building on their work, we show that participation in other China-led arrangements can generate foreign-policy alignment. While Broz, Zhang and Wang (2020) focus on BRI investment, China's role in international liquidity provision has received much less attention. We also extend research on the implications of BSA proliferation for GFSN evolution. The GFSN consists of four layers: domestic reserves, BSAs, regional financial arrangements, and the International Monetary Fund (IMF).

Since the GFC, BSAs have become the most rapidly expanding layer of the GFSN, with its total liquidity surpassing that available through the IMF (Perks et al., 2021). Existing studies focus mostly on whether BSAs complement or substitute other layers of the GFSN (McDowell, 2017; Perks et al., 2021).

In our work, we demonstrate that BSAs carry not only financial but also political consequences. Broadly speaking, our finding contributes to scholarship examining China's use of economic power to influence global politics—such as through trade, foreign assistance, and foreign direct investment.[2] When it comes to financial power, scholars have examined China's bilateral loans and bailouts.[3] With strict capital controls in place and a relatively underdeveloped capital market, however, the RMB has remained sidelined as crucial during the most dire financial crises around the world. Moreover, China lacks a centralized international institution that it leads, like the IMF, to wield financial power during economic crises in return for political support in foreign affairs. But with the rise of their BSAs, the situation has begun to evolve.

2 The global expansion of China's BSAs

Longstanding tools for facilitating international liquidity, BSAs were prominently employed by the Fed after the GFC, when governments sought alternatives to IMF lending.[4] Since the late 2000s, however, China has rapidly become the largest provider of BSAs globally, in terms of both total commitments and number of partners—as shown in Figure 1(a). This surge has resulted in China attaining a central position within the global network of BSAs—as Figure 1(b) depicts.

[2]See, for example, Flores-Macías and Kreps (2013); Kastner (2016); Dreher et al. (2017); Custer (2018); Humphrey and Michaelowa (2019); Kim and Lee (2020); Kaya, Kilby and Kay (2021); Zeitz (2021); Dreher, Fuchs, Parks, Strange and Tierney (2022); Stone, Wang and Yu (2022); Blair, Marty and Roessler (2022); Wellner et al. (2022); Kim and Lee (2023).

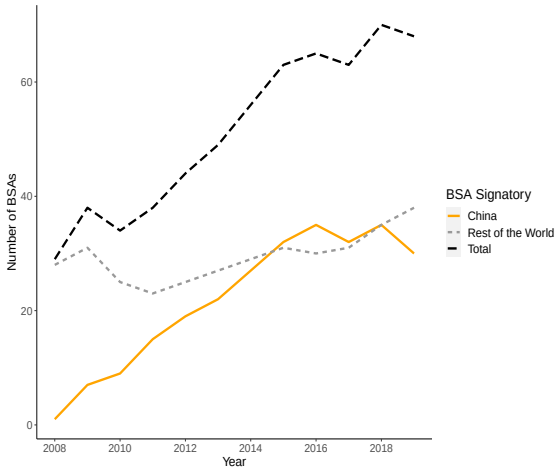
[3]Chin and Helleiner (2008); Bunte and Kinne (2021); Ferry and Zeitz (2024).

[4]See, for example, Perks et al. (2021); Stubbs et al. (2021); Broz (2015); Sahasrabuddhe (2019).

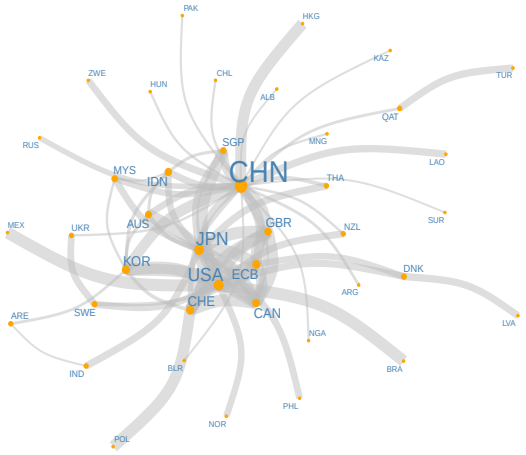
BSAs provide a prior guarantee for the exchange of currencies between two signatories. Once in place, if a partner central bank activates a BSA with China, it sells its own domestic currency to the PBC in exchange for RMB, agreeing to reverse the transaction later at a rate pre-determined in the BSA. This makes BSAs effective backstops for balance-of-payments problems because they provide guaranteed access to liquidity during external stress (Eichengreen, Lombardi and Malkin, 2018). Unlike IMF programs, which typically require lengthy negotiations and stringent conditionality, BSAs can be activated rapidly without policy conditions. This flexibility makes BSAs appealing to governments wishing to avoid the domestic and international costs associated with IMF oversight (McDowell, 2019; Reinsberg and Kern, 2024).

Given that China's BSAs supply credit denoted in RMB, they may appear to be of little use in international transactions when compared to dollar- or euro-denoted arrangements. Yet BSAs with China can actually provide liquidity quite effectively. Governments can of course use BSAs in their trade with China and to repay Chinese debt. Governments can also—rather creatively—swap their currency for RMB and then exchange the RMB for *dollar liquidity* in international financial markets (for example, through offshore RMB markets in Hong Kong). Argentina is said to have done exactly this when it faced liquidity shortages in 2014.[5] Accordingly, even when not activated, Chinese BSAs can act as a promise of liquidity and thus boost investor confidence. In short, BSAs represent fungible monetary instruments.

[5]Vincient Arnold, "Argentina: Emergency Liquidity Support Through Chinese Central Bank Swap Line and Qatari SDR Loan," 30 August 2023, retrieved from `https://som.yale.edu/story/2023/argentina-emergency-liquidity-support-through-chinese-central-bank-swap-line-and-qatari`.



(a) Expansion of the BSA Network



(b) World BSA Network (May 2020)

Figure 1: The Prominence of China in the Global BSA Network

Note: In panel (b), each labeled node corresponds to a country, and each curved line represents a BSA between the connected pair of countries. The size of the node label indicates the country's degree centrality in the global BSA network, and the thickness of the line represents the financial size of the BSA. Together, panels (a) and (b) show how China's BSA network has expanded, making China the most central provider of BSAs in the world.

3 BSAs and foreign-policy alignment

BSAs are monetary instruments that institutionalize an ongoing financial relationship between partners. We theorize that, although they contain no explicit political conditions, they can shape foreign-policy behavior when they create asymmetric interdependence, where the benefits and costs differ across the partner states. A large literature in international political economy, from foundational works on interdependence dependence to recent studies on monetary power and financial statecraft, suggests that such asymmetries can generate political influence.[6] This is because the weaker state has greater stakes in maintaining the tie and would thus make political concessions

[6] A partial list includes early work from Hirschman (1945); Keohane and Nye Jr (1973); Baldwin (1971) and more recent work from Dreher and Jensen (2007); Stone (2008); Lyne, Nielson and Tierney (2009); Copelovitch (2010); Stone (2011); Dreher and Sturm (2012); Chwieroth (2013); Nelson (2014); Lang and Presbitero (2018); Lawrimore and Vreeland (2018); Dreher, Lang, Rosendorff and Vreeland (2022).

for exchange. Chinese BSAs can create asymmetric interdependence by offering pre-authorized access to liquidity during periods of financial stress that is disproportionally valued by a weaker signatory.

For vulnerable, developing economies, the BSA may be one of the few credible buffers against sudden stops, offshore dollar shortages, or balance-of-payments difficulties (Perks et al., 2021). Note that vulnerability here refers to exposure to external shocks combined with limited access to alternative sources of liquidity. States that lack swap arrangements with other central banks, and states with more constrained macroeconomic capacity, typically developing economies, are more likely to rely on a Chinese BSA as one of their few credible sources of liquidity. Unlike with IMF programs, BSAs do not require policy reforms or external monitoring. This absence of conditionality allows governments to secure crisis liquidity at lower domestic political cost, increasing the relative appeal of the arrangement. This is especially true for lower-income countries that enter into BSAs with China.

Of course, lending to vulnerable partners may be risky because they may struggle to repay. Yet in practice, very few Chinese BSA partners have failed to meet their obligations. Repaying swap drawings on time is crucial for maintaining financial market confidence and preserving access to international capital markets, giving governments strong incentives to honor their commitments. Sri Lanka in 2022 was a notable exception. Even in such cases, however, China can restrict or condition the use of swaps, which preserves its leverage. For Sri Lanka, China limited the usage of the swap to trade settlement with China.[7] Because borrowers depend on BSAs for crisis liquidity while China retains discretion over activation and scope, asymmetric dependence persists.

[7]Bloomberg, "Sri Lanka Can't Use $1.5 Billion Swap on China IMF Concerns," 2 June 2022, retrieved from <https://www.bloomberg.com/news/articles/2022-06-02/sri-lanka-can-t-use-1-5-billion-china-swap-due-to-imf-concerns>.

BSAs also generate asymmetric exit costs. There are, of course, some exit costs for China. China benefits from BSAs because they reduce the risk of financial contagion from partner economies, stabilize trade and investment settlement, and support the RMB's offshore use (Liao and McDowell, 2015). However, China can achieve these goals through multiple instruments: capital controls, foreign reserves, bilateral lending, and its broad network of swaps with other states. Losing any single BSA does not meaningfully affect China's financial stability. For many partners, by contrast, the swap line represents a critical source of crisis insurance. Without it, governments often must rely on IMF lending, which is slower and politically costly—or on private markets, which may become inaccessible during periods of stress. Losing access to a Chinese BSA, therefore, raises the expected cost of future crises for partner governments. The swap line is thus more consequential for the partner's macroeconomic stability and political survival than it is for China's. This asymmetry mirrors Hirschman (1945)'s classic insight: when the continuation of a relationship matters more to one side than the other, the more dependent party may adjust its political behavior to maintain the tie.

That said, we should stress that China's leverage from asymmetry might not operate continuously. Unlike trade or investment relationships, where leverage is continuous, BSAs derive their value primarily from the assurance of liquidity until the agreement expires. Therefore, China has little incentive to threaten withdrawal during the contract period, and we expect alignment incentives are strongest at the moments when a BSA is *negotiated* or *renewed* rather than throughout its duration. While we do not have detailed data on the expiration of BSAs, they are typically renegotiated after three years. Asymmetric leverage may thus be expected to be highest when BSAs are first negotiated and then again after a three-year period, with perhaps diminishing returns as China faces pressure from market actors who begin to expect them to be renewed.

Finally, BSAs also carry political meaning. China's large, unconditional liquidity commitments present an appealing alternative to the governance style of existing international institutions, most notably the IMF (Kirshner, 2014; Jiang, 2014; Bunte, 2019). Governments dissatisfied with existing financial governance may find this form of financial arrangement especially valuable. They may be willing to reciprocate by strengthening ties with China, not because they are financially vulnerable, but because they prefer this form of liquidity provision and are receptive to China's leadership. Here, attraction generates alignment not automatically but through strategic reciprocity. Governments that value China's leadership use foreign-policy alignment to sustain a relationship they see as particularly beneficial.

Broz, Zhang and Wang (2020) show that governments most dissatisfied with US-led financial governance were the strongest supporters at the launch of the BRI. These governments might similarly see the BSA as a desirable form of cooperation. And the BSA can actually be more useful to governments than the more famous BRI funding. While BRI financing ties countries to development projects, BSAs serve as liquidity guarantees that are not only institutionalized but especially useful during crises, making them particularly valuable for weaker partner states.

Foreign-policy alignment provides a way to convey support for China's economic leadership for BSA signatories. Alignment arises from the attractiveness of China's model of support and from governments' desire to reinforce a broader partnership they view as appealing. By "attraction," we refer not to similarity in foreign-policy preferences, which of course may also arise from independent but parallel material interests, but rather to a government's positive orientation toward China's leadership. Countries view China's BSAs as a desirable form of global financial governance, which makes them more willing to reciprocate with support for China's broader foreign-policy agenda.

Before concluding this section, we should stress that there are numerous micro-mechanisms through which the channels noted above operate. For example, bilateral central bank cooperation under a BSA increases routine technical interaction, such as liquidity coordination and RMB settlement management. These interactions deepen administrative ties and further foster cooperation. The increasing prevalence of RMB instruments, such as RMB-denominated bonds (called Panda Bonds), also indirectly increases the value of BSA access. Finally, China's persistent current account surpluses with many countries, especially in the Global South, combined with FTAs and settlement arrangements that allow trade to be invoiced in RMB, can produce RMB shortages for partner countries. In these circumstances, BSAs become a unique, flexible backstop that amplifies China's structural leverage and strengthens the incentives for foreign-policy alignment.

We thus theorize that China's BSAs yield overall foreign-policy alignment through two mechanisms, vulnerability—because they generate asymmetric interdependence—and attraction—because they enhance China's global economic leadership by offering a new alternative:

> *Hypothesis 1 (H1): BSAs lead to a closer alignment of foreign-policy positions between China and its partner countries.*

4 The heterogeneity of China's BSA partners

Not all of China's BSAs establish asymmetric relationships. De jure, both parties have symmetrical standing under BSAs. Any de facto asymmetry is contingent on specific circumstances. China has entered into BSAs with a remarkable diversity of partners. Power asymmetries vary across them. Attraction to China's leadership is also heterogeneous across China's BSA partners. Countries that have expressed support for Chinese leadership may be more easily swayed on other foreign-

policy issues by the opportunities provided by China's BSAs. Other countries have remained rather reluctant about Chinese leadership (Broz, Zhang and Wang, 2020). We would not expect these latter countries to be influenced by a BSA with China to support Chinese positions in international affairs.

The effects of BSAs should be stronger for countries facing greater financial vulnerability (states lacking swap arrangements with other central banks) and states with more constrained macroeconomic capacity (typically developing economies). Because these governments have fewer credible alternatives, they place greater value on maintaining access to China's BSA. Anticipating that future liquidity needs may arise, vulnerable governments have incentives to exchange foreign-policy alignment for a swap line. They would also avoid diplomatic frictions that could jeopardize renewal or complicate the broader cooperative relationship. Aligning with China in foreign policy provides a straightforward way to signal reliability and obtain a tie they may need during periods of stress. But not all of China's BSA partners are financially vulnerable. So, this mechanism predicts heterogeneity.

Attraction to China's vision of global economic governance is also heterogeneous across signatories. China's willingness to provide flexible and unconditional liquidity support, in sharp contrast to the IMF, might only reinforce China's appeal to governments that already see China as a desirable leader (Kirshner, 2014; Jiang, 2014; Bunte, 2019). States that have formally signaled support for China's leadership, such as by signing a Belt and Road Initiative memorandum of understanding (BRI-MoU) or establishing high-level diplomatic partnerships with China, are especially likely to perceive BSAs as part of a preferable China-led economic order. But not all of China's BSA partners fall into this category. Indeed, as we discuss below, some of them are decidedly not the type of country that has shown interest in China's leadership. We thus theorize heterogeneity: the

alignment effect should be stronger for states that welcome China's global leadership.

Some examples readily illustrate the heterogeneity of of our theorized effects. Consider South Korea. This country has a BSA with China, but faces relatively low financial vulnerability and has little grievance towards the US-led financial system. In addition to its BSA with China, South Korea has BSAs with Canada and Australia, both of which serve as comparable, if not better, sources of liquidity. South Korea has also been able to access credit directly from the United States, establishing a $60 billion swap line when South Korea faced volatility in 2020.[8] When the won weakened against the dollar in 2022, the United States again promised to set up liquidity facilities when necessary.

Accordingly, South Korea is relatively invulnerable to political influence from China through its BSA. In fact, right when their BSA with China was up for renewal in 2017, Seoul actually agreed to host the US THAAD missile system even though Beijing was staunchly opposed. The China-Korea BSA was renewed seamlessly nonetheless.[9] According to observers, the renewal went forward because *China* benefits from its swap line with South Korea.[10] This BSA, signed with an economically strong partner that has little grievance with the United States, does not impact Korean foreign policy in the same way that we would expect for more vulnerable countries.

The example of Mongolia is different. Its government signed a BSA with China in 2011. In 2015, Mongolia suffered a liquidity shortage and drew approximately $1.7 billion from the

[8]Reuters, "South Korea, US agree to implement liquidity measures if needed," 30 September 2022, retrieved from <https://www.reuters.com/markets/asia/skorea-us-agree-implement-liquidity-measures-if-needed-2022-10-01/.>

[9]The People's Bank of China, "2018 RMB Internationalization Report," 26 September 2018, retrieved from <http://www.pbc.gov.cn/en/3688241/3688636/3828468/3828482/3828519/2019051614562045273.pdf>.

[10]South China Morning Post, "China, South Korea agree to extend currency swap deal, but does it mean tensions are easing?," 13 October 2017, retrieved from <https://www.scmp.com/news/china/diplomacy-defence/article/2115207/china-south-korea-agree-extend-currency-swap-deal-does.>

BSA.[11] Facing another liquidity crisis in 2017, Mongolia renewed the BSA.[12] Mongolia also turned to several other Asian governments as well as the IMF for a multilateral lending package, but strict policy conditionality was attached. The required regulatory reforms and austerity measures proved challenging. They became a focal point in Mongolia's 2017 election, with the winner expressing criticism of the IMF package.[13] By contrast, China's BSA was considered to have "very reasonable" costs.[14]

Still, China did extract *political* concessions. In conveying its appreciation for China's assistance, Mongolia publicly affirmed Tibet as a part of China and expressed regret over having welcomed a visit from the Dalai Lama.[15] State-run media in China highlighted Mongolia's recognition of mistakes and emphasized the juncture as a "renewed start" for their bilateral relations.[16]

As another illustration, take the case of Argentina. The 2001 peso crisis left Argentina financially vulnerable and provoked grievances with the US-led IMF (Kedar, 2012). Dissatisfaction with the IMF has persisted ever since. In 2012, when the IMF issued an ultimatum to Argentina, demanding corrections to its economic data, President Cristina Fernández de Kirchner publicly asserted the nation's sovereignty at the UNGA.[17] A decade later, when Argentina debated a deal

[11]See Reuters, "Mongolia leans on China as it waits for copper mine-led revival," 21 May 2015, retrieved from <https://www.reuters.com/article/idUSL3N0YC3IA20150521.

[12]Nikkei Asia, "China, Mongolia to extend currency swap agreement," 21 February 2017, retrieved from <https://asia.nikkei.com/Business/Markets/Forex/China-Mongolia-to-extend-currency-swap-agreement>.

[13]Reuters, "Mongolia banks prepare for overhaul after IMF bailout," 3 August 2017, retrieved from <https://www.reuters.com/article/mongolia-banks-idINL4N1KP1TX>.

[14]Reuters, "Mongolia leans on China as it waits for copper mine-led revival," 21 May 2015, retrieved from <https://www.reuters.com/article/idUSL3N0YC3IA20150521>.

[15]China Daily, "Mongolia to get help from China," 21 February 2017, retrieved from <http://www.chinadaily.com.cn/world/2017-02/21/content_28276535.htm>. On Dalai Lama state visits and China's foreign policy, see Fuchs and Klann (2013).

[16]China Daily, "Mongolia to get help from China," 21 February 2017, retrieved from <http://www.chinadaily.com.cn/world/2017-02/21/content_28276535.htm>.

[17]Reuters, "Argentina lashes out at IMF: 'This is not a game'," 25 September 2012, retrieved from <https://www.reuters.com/article/idUKBRE88O1EW20120925>.

with the IMF in 2022, anti-IMF protests erupted in the country.[18]

Yet, in the midst of Argentina's financial fragility, all the way back in 2009, China offered the country a BSA. Since then, China has been Argentina's sole BSA partner, and the size of the swap has increased substantially over time. As predicted by Broz, Zhang and Wang (2020), President Mauricio Macri personally attended the BRI Forum in Beijing in May 2017. Chinese President Xi Jinping welcomed him and emphasized the importance of Latin America's involvement in the BRI.[19] The support and participation of Argentina in the BRI were acknowledged and celebrated by the Chinese leadership.

In 2019, when the country risked another sovereign default, the domestic debate in Argentina highlighted the choice between China and the IMF. Some explicitly argued that the country should rely more on China precisely to tip the struggle for global power away from the United States and toward China.[20] During the 2023 BRI summit, China activated a currency swap line with Argentina, amounting to a freely accessible sum of $6.5 billion, surpassing Argentina's initial request by $1.5 billion. In response, President Alberto Fernandez, who was in attendance at the summit in Beijing, openly conveyed his gratitude.[21]

The anecdotes of Mongolia and Argentina are part of a broader pattern: countries receptive to China's leadership bring their foreign-policy positions into alignment with China's preferences following the establishment of a BSA. But we recognize that BSAs do not have the same force in

[18]Reuters, "Argentina anti-IMF protesters burn tires, hurl rocks as Congress debates deal," 10 March 2022, retrieved from <https://www.reuters.com/world/americas/argentines-protest-imf-outside-congress-lawmakers-debate-deal-2022-03-10/>.

[19]The Diplomat, "China: Argentina's Last Resort," 06 December 2019, retrieved from <https://thediplomat.com/2019/12/china-argentinas-last-resort/>.

[20]Nikkei Asia, "Argentina slouches toward China debt reliance on eve of election," 26 October 2019, retrieved from <https://asia.nikkei.com/Politics/International-relations/Argentina-slouches-toward-China-debt-reliance-on-eve-of-election>.

[21]Reuters, "China activates $6.5 bln swap line with Argentina," October 18 2023, retrieved from <https://www.reuters.com/markets/currencies/china-clears-65-bln-part-argentina-swap-line-deal-2023-10-18/>.

all partner countries, for example, South Korea. The examples presented here underscore the heterogeneity of the effects of China's BSAs. Accordingly, we introduce two additional hypotheses:

Hypothesis 2 (H2—the vulnerability hypothesis): The foreign-policy impact of China's BSAs is primarily observed in countries that lack reliable alternative sources for emergency liquidity.

Hypothesis 3 (H3—the attraction hypothesis): The foreign-policy impact of China's BSAs is primarily observed in countries that welcome China's global leadership.

5 Research design for identifying the causal effect of BSAs

We first identify the aggregate causal effect of China's BSAs on foreign-policy alignment to test H1, and then estimate group-level and country-level effects to test H2 and H3. Finally, we graphically present all countries that have signed BSAs with China in our dataset, using a nested research design (Lieberman, 2005; Lieberman and Singh, 2012). The illustrative presentation offers insights into underlying causal mechanisms.

5.1 Treatment and outcome variables

We define the causal effect of a BSA with China on the foreign-policy alignment of country i at time t as:

$$\delta_{it} = Y_{it}(D_{i,t-1} = 1|\mathbf{X}_{i,t-1}) - Y_{it}(D_{i,t-1} = 0|\mathbf{X}_{i,t-1}), \text{for } it \in \mathbf{s}_1, \tag{1}$$

where Y_{it} represents the foreign-policy alignment of country i with China in year t. The causal effect, or ITT, is estimated at the individual case level: δ_{it}, defined as the difference between two

potential outcomes under different treatment states, indicated by D_{it}; $D_{it} = 1$ indicates that country i has a BSA with China in year t, while $D_{it} = 0$ indicates the absence of such an arrangement. Our matrix of covariates is designated by $\mathbf{X}$. Note that $\mathbf{s}_1$ refers to the set of treated observations, so $it \in \mathbf{s}_1$ indicates our focus on the treatment effect on the *treated*.

We code the treatment variable from our original compilation of global BSAs from various sources.[22] Our dataset consists of 37 treated countries that enter a BSA with China during the period of analysis, and 158 control countries that do not.[23] The sample spans from 1992 to 2021.[24] The first BSAs came into effect in 2009, and the most recent in 2020. So, each country has a minimum of 18 pre-treatment years, and the post-treatment duration in our analysis ranges from one to 12 years. Figure 2 plots the distribution of the treatment assignment.

In Appendix D, we perform a parallel analysis using an alternative treatment indicator: the receipt of rescue lending from China during the same period. While our main treatment variable focuses on the effect of a line of credit, the alternative focuses on the use of Chinese credit. So, the former measures the effect of an institution, while the latter more of a spot market for political influence. We suspect that the presence of an institutionalized guarantee of credit changes the financial outlook of vulnerable countries and that this prospect alone drives political alignment with China.

As our main outcome variable, we use the foreign-policy distance from China's ideal point,

[22]The AidData project recently published China BSAs data for the period our dataset covers. We use our data because it aligns closely with theirs, and ours includes observations that are missing from theirs. AidData relies exclusively on the RMB Internationalization Reports; we additionally cross-reference major media releases in Chinese and English. For a detailed comparison of these datasets, see Appendix Table A1.

[23]We exclude Serbia because it became independent after 2006, and its pre-treatment history is insufficient. To avoid identification problems caused by carry-over effects, we also exclude a few observations where BSAs expired and were not renewed. We focus on country-years that are either never treated or remain treated, ensuring a staggered-adoption data structure.

[24]To avoid potential structural breaks, we exclude the Cold War era. Diagnostics indicate that the 18-year pre-treatment period is sufficient.

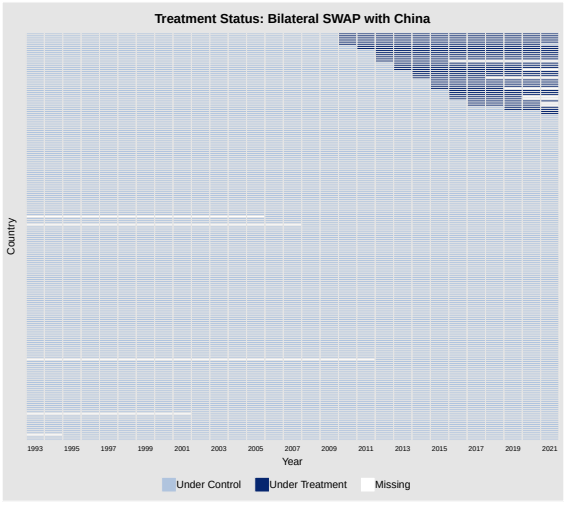


Figure 2: Treatment Assignment

Note: The horizontal x-axis represents sample years, and the vertical y-axis represents sample countries. Cells shaded in dark blue represent treated observations; cells in light blue represent control observations. White cells represent missing data points. In the pre-treatment period, this missingness occurs because certain countries had not yet been formally established during these years. In the post-treatment period, missingness occurs either due to the termination of BSAs or because of discarded observations following treatment reversal, required to maintain the staggered-adoption structure of the data.

estimated from UNGA votes (Bailey, Strezhnev and Voeten, 2017; Voeten, 2000, 2013). Existing literature on the foreign-policy implications of US financial power predominantly relies on UNGA voting data.[25] UNGA resolutions cover a wide spectrum of international affairs, and while voting may reflect a variety of strategic motivations, scholars have argued that they reflect the will of the international community and influence public perceptions in many countries (Voeten, 2000; Bearce and Bondanella, 2007; Kim and Schaefer, 2011; Voeten, 2021). In our analysis, the ideal-point distance between country i and China in year t is measured as:

$$y_{it} = \log(|\text{ideal point}_{\text{CHN}t} - \text{ideal point}_{it}|).$$

[25] See, among many others, Thacker (1999); Copelovitch (2010); Dreher and Sturm (2012); Dreher, Lang, Rosendorff and Vreeland (2022).

The ideal-points measure covers only resolutions brought to a vote, accounting for only about twenty percent of total resolution drafts. We thus supplement our analysis with an alternative measure, co-sponsorship of UNGA draft resolutions with China (Seabra and Mesquita, 2022):

$$\text{Co-sponsorship with China}_{it} = \frac{\text{Drafts co-sponsored by China and } i_t}{\text{Drafts sponsored by China}_t}.$$

Here, foreign-policy alignment is measured as the proportion of UNGA draft resolutions co-sponsored by country i and China in year t relative to the total number of resolution drafts sponsored by China in that year. We use this measure for robustness checks, relying on the standard ideal-point measure for our main analysis.

5.2 The estimation method and control variables

As with most analyses relying on observational data, reverse causality and endogeneity stand as central concerns: governments that already have close diplomatic or security relationships with China may be simultaneously more likely to vote with China and more likely to enter into a Chinese BSA. It is also possible that voting with China leads to signing a BSA. We address these possibilities in four ways, leveraging recent advances in causal inference.

First, we exploit a long pre-treatment panel. For every treated country, we observe at least 18 years of UNGA voting behavior, which our Bayesian synthetic control model uses to construct unit-specific counterfactual trends. This means that our estimated effects are identified not from differences between "China-friendly" countries versus others, but from deviations from a country's own predicted voting trajectory after they sign BSAs.

Second, we include a rich set of observed dyadic and monadic covariates, such as trade dependence, BITs, PTAs, SCO membership, China's diplomatic partnership level, distance, and voting

distance to the United States, all lagged by one year. These variables proxy exactly the kind of political and security ties that might make BSAs more likely, thereby conditioning our estimates on preexisting closeness to China. We discuss these variables below.

Third, the latent factor term in the model flexibly absorbs other latent confounders that are jointly correlated with both BSA adoption and foreign-policy alignment, further mitigating concerns that our results are driven by unobserved confounding factors.

Finally, to address the possibility that underlying political ties have led to voting alignment before BSAs are signed, we conduct placebo tests by artificially setting the treatment times earlier.[26]

Specifically, we apply `bpCausal` to estimate the causal effect defined in Equation (1). Under certain identification assumptions, the method uses the following prediction model for counterfactual estimation:

$$Y_{it}^{(0)} = \boldsymbol{\beta}_{it}\mathbf{X}_{it} + \mathbf{f}_t'\Lambda_i + \epsilon_{it}, \tag{2}$$

$$\boldsymbol{\beta}_{it} = \boldsymbol{\beta} + \mathbf{c}_i + \mathbf{d}_t, \tag{3}$$

where $Y^{(0)}$ represents the outcome under control, and $\mathbf{X}$ consists of observed confounders with $\boldsymbol{\beta}$ as their "weights."

The term $\mathbf{f}_t'\Lambda_i$ denotes a multifactor term, where Λ_i is a vector of latent factors, and $\mathbf{f}_t$ represents a vector of factor loadings. This multifactor term approximates unobserved confounders, helping satisfy the "latent conditional ignorability" assumption (see Pang, Liu and Xu, 2022). In a hierarchical setting, the coefficients of the covariates can be further decomposed to tailor the weights for each observation, as illustrated in Equation (3).[27]

[26] See Appendix Figure B2.

[27] The terms c_i and d_t are country- and time-specific residuals of β_{it}, and β is the average of β_{it} shared across all observations. So the relationship between Y_{it} and observed covariates X_{it} (β_{it}) can be heterogeneous across countries and over time.

The method uses all control observations in the sample to estimate the model parameters and then applies Bayesian prediction to generate the posterior distribution of the counterfactual, $\hat{y}_{it}^{(0)}$, by integrating over the parameters. The ITT, $\hat{\delta}_{it}$, is then calculated as $y_{it} - \hat{y}_{it}^{(0)}$ for each treated observation, where y_{it} is the observed outcome for the treated unit.

After calculating $\hat{\delta}_{it}$ for all i, t, the ATT can be estimated by simply aggregating the ITTs:

$$\widehat{ATT}_t = 1/N_1 \sum_{it \in \mathbf{s}_1} \hat{\delta}_{it}, \text{ for } it \in \mathbf{s}_1.$$

The flexibility of this approach also means that the ATT for any group g at each post-treatment time point can be obtained as:

$$\widehat{GATT}_{gt} = 1/N_g \sum_{it \in G} \hat{\delta}_{it}.$$

where g is the group indicator, and G denotes the set of observations within group g.

For the observed confounders $\mathbf{X}$, we include one-year lags of pre-treatment variables potentially associated with BSA formation and foreign-policy affinity. To account for economic and political affinity with China, we include a set of dyadic variables, including export and import dependence, a bilateral investment treaty (BIT) indicator, a preferential trade agreement (PTA) indicator, and geographic distance.[28] We also control for per capita income (logged), population (logged), and regime type.[29]

[28]Export (import) dependence is calculated by taking the logarithm of the proportion of China's exports to (imports from) a country relative to that country's GDP. Trade data are from the WITS database and China's National Bureau of Statistics: <https://wits.worldbank.org/country-indicator.aspx?lang=en>, and <https://data.stats.gov.cn/easyquery.htm?cn=C01>. BITs data come from the UNCTAD database: https://investmentpolicy.unctad.org/international-investment-agreements>. PTA data come from China's Ministry of Commerce: <http://fta.mofcom.gov.cn>. Geographic distance data are from the CShapes dataset (Schvitz et al., 2022).

[29]Level of electoral democracy (ranging from 0 to 1) comes from the V-Dem dataset. See <https://www.v-dem.net/vdemds.html>. Population and per capita income come from the World Bank's World Development Indicators database: <https://databank.worldbank.org/source/world-development-indicators>.

We further include a binary measure for membership in the Shanghai Cooperation Organization (SCO). Membership implies political- and security-cooperation with China.[30] We also consider another measure of partnership with China: The Chinese government has a hierarchical partnership system that categorizes countries based on their cooperation level. This variable ranges from 0 (low) to 11 (high), reflecting the depth of diplomatic relations between the two countries.[31] Lastly, we control for states' UNGA voting distance to the United States.

These observed covariates may not account for all relevant confounders. Accordingly, the factor term in Equation (2) extracts information from the residuals, which addresses biases arising from omitted variables (see Pang, Liu and Xu, 2022, 274). Our methodology represents a frontier state-of-the-art approach that is especially suited to deal with concerns about non-random selection and endogeneity.

6 Aggregate analysis

Figure 3 presents our pooled results. The graphs show some support for our main hypothesis from both outcome measures, ideal-point distance (panel a) and co-sponsorship of UNGA draft resolutions (panel b).

Figure 3(a) presents the ATT for each of 12 years following the signing of a BSA with China. The Bayesian predictive model demonstrates a high level of goodness-of-fit, as indicated by the small discrepancies between the observed outcomes and the within-sample predictions during the pre-treatment period. The absence of a clear pre-treatment trend suggests that the method effec-

[30] Shanghai Cooperation Organization, "About Shanghai Cooperation Organization," 09 December 2015, retrieved from <https://chn.sectsco.org/20151209/26996.html>.

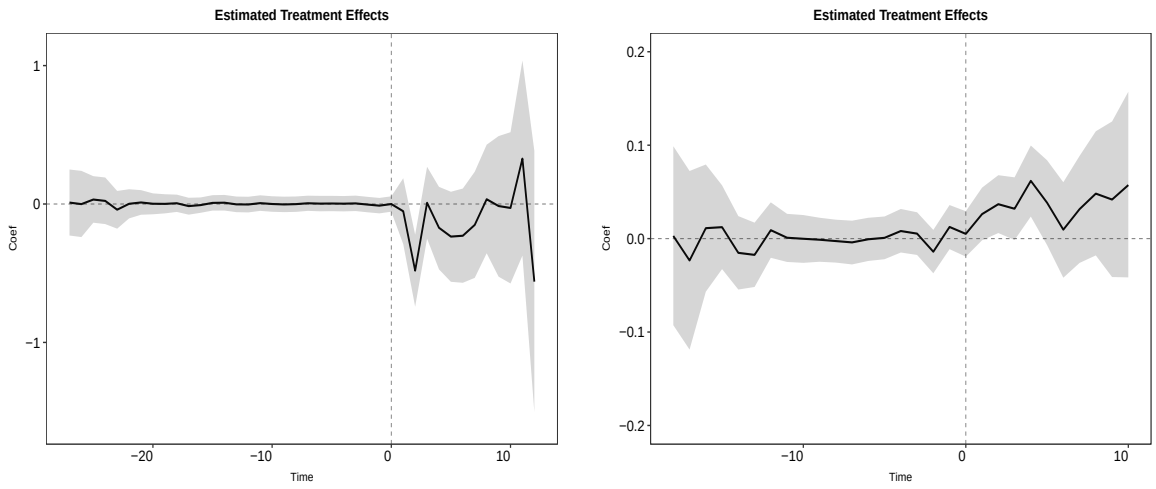
[31] A value of 0 indicates no diplomatic relationship, while a value of 11 represents the highest partnership level known as the "all-weather strategic partnership," which China has established with Pakistan. We collect data on the partnership level from various sources, including media releases and China's Ministry of Foreign Affairs.

tively captures unit-specific time trends.

The estimated ATT is predominantly negative throughout and statistically significant at t_2. The results from our pooled analysis thus corroborate H1 in the short run, but do not appear to consistently generate reliable foreign-policy influence in the long term (at least here, where we consider the pooled ATT). That said, the short-run effect size is substantial. BSA participation decreases a country's UNGA ideal-point distance from China by 38 percent. For an average country in the sample, this decreases its ideal-point distance to China by about 0.4 standard deviation. To give this estimate some substance, consider South Africa in 2015. Ceteris paribus, BSA participation is estimated to move the country's affinity with China nearly to the same level as Fiji (0.01), which is considered China's closest partner in the Pacific. In fact, the observed ideal-point distance between South Africa and China did shrink considerably after it entered into its BSA with China. In 2015, the distance was 0.59; it decreased to 0.11 in 2016.

We would highlight that our approach in this section is conservative. This short-run pooled effect reflects an average across all countries that have signed BSAs with China—with varying levels of susceptibility to China's influence. As we show in the next section, not all BSA partners respond in the same way to entering a swap line with China. For countries that are more vulnerable or more attracted to China, the foreign-policy response is estimated to be stronger and more long-lasting. This pattern is partially masked here in this section using the pooled sample. We explore heterogeneity in the next section.

The appendix reports the coefficients for the control variables (see Figure B1). These coefficients are not interpretable in a causal sense in our analysis framework (Kinnvall and Mitzen, 2020). They are used as "weights" to impute counterfactuals for our main outcome of interest. That said, the statistically significant coefficients have intuitive signs aligning with theoretical ex-



(a)UNGA Voting Distance (b) UNGA Draft Co-Sponsorship

Figure 3: Average Treatment Effects

Note: The dashed vertical lines divide the pre- and post-treatment periods. In the pre-treatment period (indicated by negative integers), the estimate is the average difference between observed control outcomes and their within-sample predictions in each year. In the post-treatment period (indicated by positive integers), we report the point estimate of ATT (the curve) and the 95 percent confidence interval (the gray area) by comparing and averaging observed treated outcomes and their predicted counterfactuals.

pectations.

Results further reveal that the latent factors included in the model to account for unobserved confounders matter. Some strong factors have posterior distributions that are bimodal and centered away from zero. This finding confirms, as suspected, that there are important omitted variables left in the residuals that our latent factors capture and correct for (see Appendix Figure B4 for the specifics of latent factor selection).

Turning to our alternative dependent variable—UNGA draft resolution co-sponsorship—Figure 3(b) presents the ATT. Here, a *positive* relationship indicates alignment with China. The point estimate is positive throughout the post-treatment period, suggesting that BSAs with China increase the likelihood of co-sponsoring a UNGA draft resolution with China. The ATT is statistically signif-

icant at t_2 and t_4, and the size of the effect is substantial. On average, China's BSAs generate a 6.2 percent increase in the likelihood of co-sponsoring with China in year four. This effect size approximates what would be generated by a more than fourfold increase in trade flows with China based on the estimation of Flores-Macías and Kreps (2013). The analysis thus lends further support to H1.

We conduct a series of robustness checks, and our qualitative findings remain consistent across all specifications. First, we reanalyze the data using a conventional two-way fixed effects model and report the corresponding regression table.[32] The results are consistent with our main model. Second, we re-estimate our model after removing all control variables, and the results are robust.[33] Third, although the main analysis selects a pre-treatment window that maximizes the available time series while avoiding structural breaks introduced by the end of the Cold War, we also estimate the model using a symmetric 12-year pre- and post-treatment window. This yields substantively identical results.[34] Finally, we control for IMF program participation in the treatment year; our results are again robust.[35]

As for our alternative treatment variable, rescue loans from China, the point estimates are mostly negative, indicating an effect of moving closer to China, but none are statistically significant (see Appendix Figure D2). This suggests that the foreign-policy impact of BSAs presented in Figure 3(a) is not driven by lending activities per se, but instead derives from the broader characteristics of the relationship institutionalized by the BSA. Rather acting through a spot market for political influence, the effect of BSAs appears to run through the credible commitment institution-

[32] See Appendix Table B2.

[33] See Appendix Figure C1. This does not suggest that the control variables are not potential confounders. It leaves the multifactor term to correct for biases arising from omitted variables.

[34] See Appendix Figure C2.

[35] See Appendix Figure C3. We do not use this variable in the main analysis because IMF programs may come after BSAs.

alized through the BSA.

In summary, the results support the hypothesis that BSAs with China increase foreign-policy alignment with China, measured both by voting and co-sponsorship at the UNGA, in the short run. The effect is unlikely to be attributable to lending activities, suggesting an intrinsic importance of the relationship that BSAs establish. Access to a line of credit from China draws countries into alignment with China's foreign-policy preferences, at least for some partner countries.

7 Examining heterogeneity

Not all countries that have BSAs with China are the same. Some countries are not particularly vulnerable to Chinese pressure, nor are they attracted to China's leadership—others are.

Our methodology enables us to report estimated effects at the individual-country, group, and total-sample levels—the ITTs, GATTs, and ATT (Pang, Liu and Xu, 2022). This feature of the `bpCausal` method allows researchers to seriously engage with the nested research design advocated by Lieberman (2005). We can examine each of our 37 countries individually, thus extending our analysis to consider more thorough explanations for the patterns that we observe.

Examination of individual- and group-level effects facilitates our exploration of the causal mechanisms behind the ATT. Specifically, we seek to investigate H2 and H3, the vulnerability and attraction hypotheses. We expect countries that exhibit no statistically significant effects to be relatively invulnerable to Chinese pressure and disinterested in Chinese leadership. By contrast, we expect the countries exhibiting statistically significant effects to be more vulnerable to Chinese pressure and more open to China's leadership of the global economy.

Figure 4 presents the ITTs of the 37 partner countries in our sample.[36] There are 23 "null"

[36] Appendix Figure B3 presents individual graphs for each case.

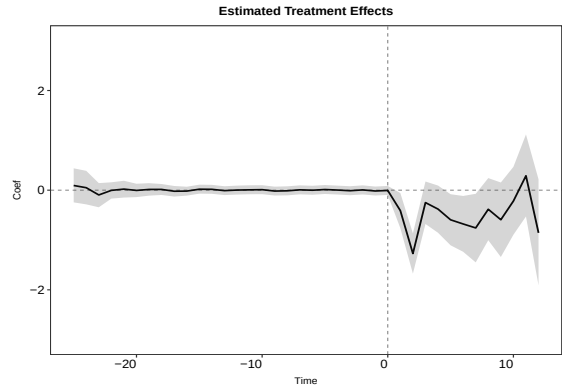
countries presented in blue. These are the countries where we estimate no statistically significant effects of China's BSAs in the post-treatment period. There are also 14 "significant" countries presented in red, where we estimate statistically significant effects at certain points during the post-treatment period.[37]

Figure 5(a) presents the GATT for only the significant countries. Not surprisingly, the effect of BSAs in this group is much stronger than the overall ATT from Figure 3(a), since we have dropped the null countries. Here, we observe statistically significant short-term effects at t_1 and t_2 as well as longer-term effects from t_5 to t_7.

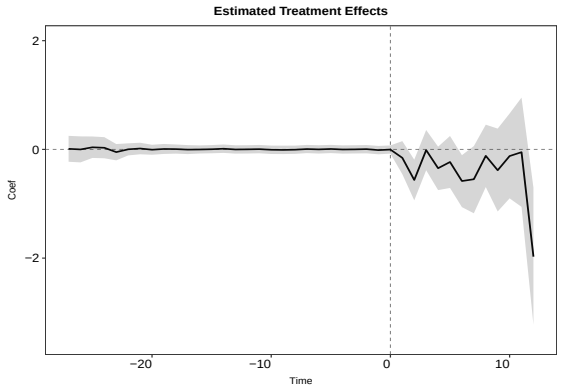
Figure 4: ITTs Grouped By Effect Heterogeneity

The question is this: Are there characteristics that distinguish the group exhibiting statistically significant ITTs from the group that does not? We consider four binary indicators that follow from

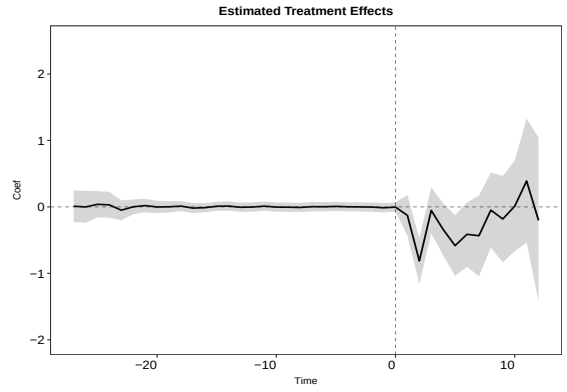
[37]Nigeria is the only country where both positive and negative effects are estimated to be statistically significant. Our classification includes Nigeria in the group of 14 "significant" countries.



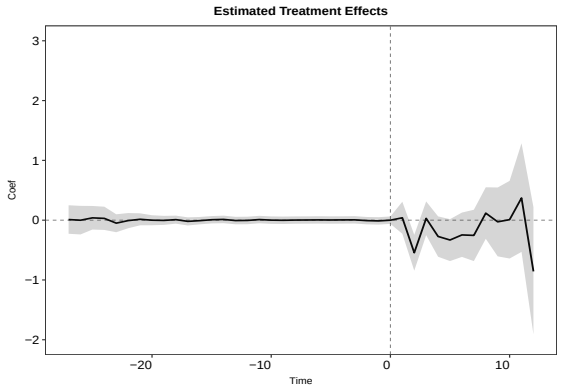
(a) GATT for the "significant" countries



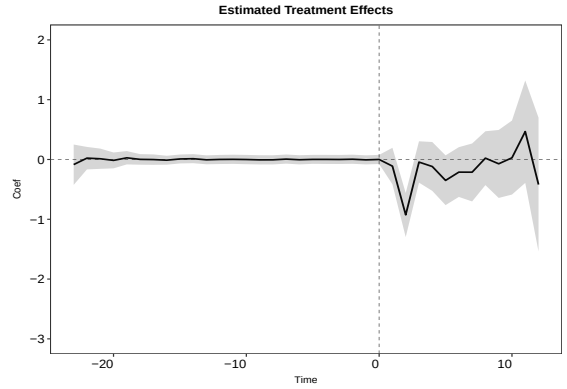
(b) GATT of "No Other BSAs" Group



(c) GATT of the "Developing Country" group



(d) GATT of "High-Level Partnership" Group



(e) GATT of "MoU Signatory" Group

Figure 5: Estimated GATTs Across Partner Countries with Varying Conditions

H2 and H3.

Following H2, we propose two binary indicators to capture the level of financial vulnerability of countries: (1) whether the country has no alternative BSAs with other countries ("No Other

BSAs") and (2) whether the country is a developing country ("Developing Country").[38] These indicators directly follow from the logic of the vulnerability channel articulated earlier. Countries that lack alternative BSAs depend solely on China for guaranteed liquidity support, making China's BSA uniquely valuable and increasing the incentive to maintain the relationship. When a country instead holds multiple swap lines, the marginal value of the Chinese BSA diminishes, reducing China's leverage. Likewise, developing countries face structurally higher exposure to external shocks, limited access to international capital markets, and fewer credible sources of emergency financing. For these governments, Chinese BSAs represent crucial insurance, raising the incentive to improve the relationship. The two indicators, therefore, capture the theoretical conditions under which vulnerability generates incentives for foreign-policy alignment with China.

Following H3, we propose two binary indicators of attraction to China's leadership: (1) diplomatic status with China as "comprehensive cooperation partnership" or higher ("High-Level Partnership") and (2) formal participation in the BRI through an MoU ("MoU Signatory"). These indicators capture governments' prior political and ideational affinity toward China's global economic leadership. China's diplomatic partnership hierarchy reflects existing political trust and strategic alignment between the two countries. Higher-level partnerships correspond to closer political coordination and shared visions of international affairs. Signing a BRI MoU likewise signals explicit, voluntary endorsement of China's leading international initiative and typically follows sustained high-level diplomatic engagement. We use MoUs because they are the highest-level expression of political interest in the BRI (Atkins et al., 2023). It is therefore an indicator of governments' viewing China's economic leadership as desirable. Both indicators thus measure the degree to

[38]We use the UN classification of developing countries and developed countries in May 2022 (see Developing country-UN Statistics Division-the United Nations, retrieved from `https://share.google/vqq4jRoGYQzAtIlEY`)

which governments are receptive to China's leadership and likely to deepen their foreign-policy alignment with China under a BSA.

Figure 5(b)-(e) presents the GATT for the four groups classified by our indicators where we expect statistically significant effects. Respectively, they present the GATTs for countries with (b) no other BSAs, (c) developing economies, (d) high-level partnerships with China, and (e) BRI MoUs.

Here, notably, we estimate both short-run and medium-run effect of foreign-policy alignment with China. For countries that only have a BSA with China and no other country, we estimate statistically significant effects at at t=2 and t=6. For developing countries, we estimate statistically significant effects at t=2 and t=4. As anticipated by our argument, we estimate stronger and more pervasive effects when accounting for country heterogeneity. Countries that are financially vulnerable or attracted to China's leadership are more susceptible to the influence of BSAs. When we focus directly on countries that we theorize to be susceptible to the foreign-policy influence of BSAs with China, we estimate stronger and longer-lasting effects.

Even among these more susceptible groups, however, we acknowledge that the effect does not persist indefinitely. The statistically significant effects of BSAs roughly coincide with when they are initiated, and, respectively, renewed. That is, they correspond to periods when governments are most attentive to maintaining access to the arrangement. Recall that China's BSAs typically have a three-year term, and the medium-run effects roughly align with renewal periods. Once the agreement is in place, the incentives to signal alignment diminish, and medium-run effects tend to cluster around renewal moments rather than extending throughout the full duration of the agreement. Not many countries signed BSAs early enough to observe multiple renewal cycles, which limits our ability to estimate longer-run effects.

Turning to countries that we do *not* theorize to be influenced by their BSA with China, we estimate null effects. Appendix Figure B5 presents the corresponding figures for each of the four complementary groups (countries with, respectively, other BSAs, advanced economies, no high-level partnership with China, and no BRI MoU). For these countries, the effect of BSAs is never statistically significant, even in the short term.

Taken altogether, these series of figures show what we expect: The groups theorized to be receptive to pressure to bring their foreign policy into alignment with China exhibit statistically significant effects in the post-treatment period; those theorized to be insusceptible to such pressure exhibit null effects.

8 Interpretation of heterogeneous effects

To further interpret the heterogeneous effects identified above, we conduct a systematic classification of all BSA partner countries using the indicators derived from H2 and H3. Here, we rely on a tool commonly used to assess the performance of classification models: a "confusion matrix." First we generate a binary indicator of "null" and "significant" countries. Then we graph that indicator against our four indicators to test H2 and H3, with the "null" countries indicated by blue dots and the "significant" countries by red dots. In the main text, we focus on the confusion matrix for the "No Other BSA" indicator, presented in Figure 6. We present the confusion matrices and prediction performances for our other variables (income level, high-level partnership with China, and BRI MoUs) in Appendix Figures E1 and E2.

In Figure 6, we expect "null" countries in the lower-left quadrant: They have other BSAs that they can rely on, so they should face little pressure to align their foreign policy with China. We expect "significant" countries in the upper right-hand quadrant: Because they only have a BSA

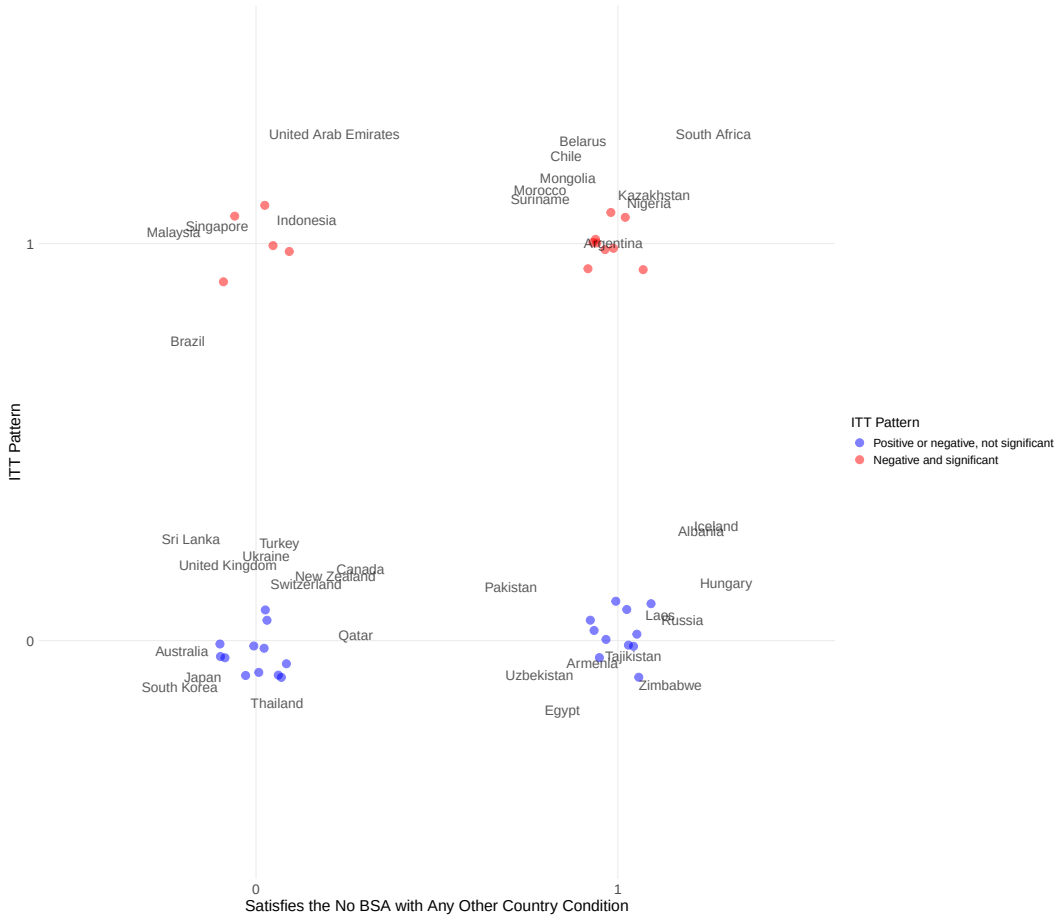


Figure 6: Countries with and without additional BSA partners beyond China

Note: The x-axis denotes whether a country has BSAs with any countries besides China (where 0 denotes countries with other BSAs and 1 denotes countries with no other BSAs). The y-axis denotes whether the country exhibits a statistically significant effect of their BSA with China. Countries in the upper right and lower left corners are well predicted. Countries in the upper right corner have no other BSAs and exhibit the predicted negative, statistically significant ITT. Countries in the lower left corner have other BSAs and, as predicted, do not exhibit a statistically significant ITT. Countries in the upper left and lower right corners are false negatives and false positives, respectively.

with China to rely on, they are susceptible to Chinese pressure. The figure depicts 21 countries correctly classified.

Cases in the other two quadrants are misclassified, according to our theoretical expectations. In the upper left-hand quadrant are countries that have other BSAs that they can rely on, yet we

estimate statistically significant effects of their BSA with China. In the lower right-hand quadrant are countries that have no other BSA option, yet we estimate no statistically significant effects. The figure depicts 16 misclassified countries. There are five "false negatives" in the upper-left quadrant and 11 "false positives" in the lower-right quadrant.

The five false-negative countries, Singapore, Brazil, Malaysia, the UAE, and Indonesia, are not well explained by the vulnerability hypothesis (H2). However, they are actually well-classified by the attraction hypothesis (H3). All of them, except Singapore, are categorized by the Chinese government as high-level partners—see Appendix Figure E1(c). And all of them, except Brazil, have signed BRI MoUs—again, see Appendix Figure E1(d). So, the statistically significant effect of the BSA in these cases is better explained by their support of a strong role for China in leadership of the global economy.

The 11 false-positive countries presented in Figure 6 are also unexplained by the criterion of having BSAs with no other countries (H2). They do not have BSAs with other countries, and so we expect them to be subject to Chinese pressure. Still, four of them (Albania, Hungary, Iceland, and Russia) are not low-income (see Appendix Figure E1(b)). Thus, they may be able to resist Chinese pressure based on the strength of their economies.

For the low-income false-positives countries, Armenia, Pakistan, Uzbekistan, Laos, Zimbabwe, Egypt, and Tajikistan, again we look to the attraction hypothesis (H3). All of them are classified as high-level strategic partners with China, so that criterion does not classify them well either. However, neither Armenia, Egypt, Laos, Tajikistan, nor Zimbabwe has signed a BRI MoU (during our sample period). Their lack of initiative to sign an MoU under the BRI suggests a certain indifference to the Chinese leadership of the global economy. These examples suggest that even when countries are financially vulnerable, those lacking enthusiasm for Chinese leadership can

resist Chinese pressure.

There remain two countries that none of our indicators explain: Pakistan and Uzbekistan. Of course, both of them are well known to maintain close relations with China. Indeed, the breadth and depth of these relations extend beyond what our indicators capture. On the one hand, it may be surprising that we do not detect a statistically significant effect of their BSA with China on their voting behavior at the United Nations. On the other hand, however, these two countries had little room to move.

So, while BSAs do not explain all countries' voting patterns, the bulk of evidence favors our three hypotheses. The initial quantitative analysis corroborates our principal hypothesis (H1), revealing a systematic relationship between entering into a BSA and foreign-policy alignment with China. Examination of the ITTs shows support for H2 and H3—and extends our analysis beyond most studies. The `bpCausal` method invites a nested research design, examining individual countries within a sample (Lieberman, 2005). In this section, we again go further beyond standard analyses, finding meaningful heterogeneity, again consistent with H2 and H3.

Not all countries have the same level of dependency on their BSA with China, and not all countries are equally receptive of Chinese leadership. By using our four indicators, we can account for most of the variation in the foreign-policy impact of China's BSAs across the 37 partner countries in our sample.[39] While not all of our observations can be explained, this is true for most quantitative studies. The advantage of the extended analysis presented in this section is that we can identify the specific countries that drive the relationship captured by the ATT and consider those that do not fit. The upshot of the analysis is a more nuanced picture of how China is beginning to influence the foreign policies of its BSA partners.

[39] See Appendix E for additional figures.

9 Conclusion

The "rise of redbacks" is upon us. China's extensive network of BSAs has become an integral part of the global financial safety net. Our study shows that this development has foreign-policy implications beyond finance. Just as the United States once established a multilateral institution, the IMF, to serve as a foundation for the US dollar to operate in a global economy, China has set up a series of bilateral arrangements that aim to serve a similar purpose—albeit at a nascent stage.

BSAs cannot eliminate structurally induced macro-economic imbalances, and their effectiveness in broad, severe financial crises is limited. Still, just as the IMF has conveyed influence to the United States over the foreign-policy positions of governments that have relied on it, China's BSAs have begun to draw governments toward supporting the rising power's preferred positions. Perhaps a result of flaws in the existing global financial infrastructure, other governments, such as Saudi Arabia and Qatar, are also developing BSA networks. Further geo-economic contestation in the BSA arena calls for future analysis of the implications for foreign-policy alignment and global order.

This paper only provides an early, nuanced understanding of how China's BSAs might someday shape the foreign-policy positions of its partner states. We investigate the foreign-policy consequences of China's BSAs and consider the salient heterogeneity of China's partner countries. Our theoretical framework accounts for the financial vulnerabilities of China's BSA partners as well as their acceptance of China's growing leadership role in world affairs. Countries that have been left unprotected and dissatisfied are more likely to align their foreign-policy positions with China after entering into BSAs with the rising power.

We employ a nested design strategy, leveraging recent advances in causal inference to provide

evidence of average-, group-, and individual-level causal effects. The pooled analysis indicates that, on average, signing a BSA with China results in a short-run alignment of a state's foreign-policy preferences with China. The comparative study of individual cases reveals that this effect is limited to states that are financially vulnerable and politically supportive of China's global leadership. When accounting for this heterogeneity, we estimate both short- and longer-run effects in the expected group.

While our analysis does not directly evaluate China's challenge to the existing global financial hierarchy, our findings suggest that BSAs provide Beijing with a novel, institutionally embedded channel for exercising political influence. In this sense, China's expanding swap line network may have broader implications for the future evolution of global financial governance. Policymakers should recognize that these arrangements, even if they appear as purely technical monetary instruments, can shape the foreign-policy stances of partner governments.

Analysis of China's surging financial power requires careful attention. The methods we use correct for potential selection bias confirm that entry into BSAs is certainly non-random. We invite future research to build on existing studies of the determinants of why governments choose to enter into BSAs with different countries (for example, Li, Sahasrabuddhe and Wingo, 2023). We offer our empirical approach as a means to explore a range of new dependent variables where BSAs may carry influence: Can China's BSAs serve as a credible seal of approval to investors? Does reliance on China's BSAs affect economic growth and the distribution of income? Do the effects of China's BSAs depend on the strategic importance of a country to China? These are all areas where scholars have found the United States to have influence through its leadership role at the IMF. If governments are turning to Chinese BSAs as an alternative to submitting to the IMF, it will become important to know how the effects of China's BSAs compare with those stemming

from IMF arrangements.

As for the conclusions of our analysis, we modestly suggest that our findings on the relationship between BSAs and China's foreign-policy preferences are just the beginning. We call for future research to examine where governments face stark choices over foreign policies and sources of finance, as global politics become more polarized. We hope that our study will become one of many that chart the influence of China's rise in financial prominence.

References

Atkins, Eleanor, M Taylor Fravel, Raymond Wang, Nick Ackert and Sihao Huang. 2023. "Two Paths: Why States Join or Avoid China's Belt and Road Initiative." *Global Studies Quarterly* 3(3):ksad049.

Bailey, Michael, Anto Strezhnev and Erik Voeten. 2017. "Estimating Dynamic State Preferences From United Nations Voting Data." *Journal of Conflict Resolution* 61(2):430–456.

Baldwin, David. 1971. "The Power of Positive Sanctions." *World Politics* 15(4):471–486.

Bearce, David and Stacy Bondanella. 2007. "Intergovernmental Organizations, Socialization, and Member-state Interest Convergence." *International Organization* 61(4):703–733.

Blair, Robert, 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.

Broz, J. Lawrence. 2015. "The Politics of Rescuing the World's Financial System: The Federal Reserve as a Global Lender of Last Resort." *Korean Journal of International Studies* 13(2):323–351.

Broz, J. Lawrence, Zhiwen Zhang and Gaoyang Wang. 2020. "Explaining Foreign Support for China's Global Economic Leadership." *International Organization* 74(3):417–452.

Bunte, Jonas. 2019. *Raise the Debt: How Developing Countries Choose Their Creditors*. New York: Oxford University Press.

Bunte, Jonas and Brandon Kinne. 2021. "The Politics of Government-to-government Loans: Competition and Power in Bilateral Lending Networks.".
URL: *https://fbf.eui.eu/wp-content/uploads/2022/06/BUNTE_loans_influence.pdf*

Chin, Gregory and Eric Helleiner. 2008. "China as a Creditor: A Rising Financial Power?" *Journal of International affairs* pp. 87–102.

Chwieroth, Jeffrey M. 2013. "'The Silent Revolution:' How the Staff Exercise Informal Governance over IMF Lending." *Review of International Organizations* 8(2):265–290.

Cohen, Benjamin. 2015. *Currency power: Understanding monetary rivalry*. Princeton, NJ: Princeton University Press.

Copelovitch, Mark. 2010. *The International Monetary Fund in the Global Economy: Banks, Bonds, and Bailouts*. New York: Cambridge University Press.

Custer, Samantha. 2018. "China's Financial Statecraft: Winning Africa one Yuan at a Time?" AidData Blog.

Davis, Christina. 2023. *Discriminatory Clubs: The Geopolitics of International Organizations*. Princeton, NJ: Princeton University Press.

Davis, Christina and Tyler Pratt. 2021. "The forces of attraction: How security interests shape membership in economic institutions." *Review of International Organizations* 16(4):903–929.

Destais, Christophe. 2016. "Central Bank Currency Swaps and the International Monetary System." *Emerging Markets Finance and Trade* 52(10):2253–2266.

Dreher, Axel, Andreas Fuchs, Bradley Parks, Austin Strange and Michael Tierney. 2017. "Aid, China, and Growth: Evidence from a New Global Development Finance Dataset." AidData Working Paper #46. Williamsburg, VA: AidData.

Dreher, Axel, Andreas Fuchs, Bradley Parks, Austin Strange and Michael Tierney. 2022. *Banking on Beijing: The Aims and Impacts of China's Overseas Development Program*. New York: Cambridge University Press.

Dreher, Axel and Jan-Egbert Sturm. 2012. "Do the IMF and the World Bank Influence Voting in the UN General Assembly?" *Public Choice* 151:363–397.

Dreher, Axel and Nathan M Jensen. 2007. "Independent Actor or Agent? An Empirical Analysis of the Impact of US Interests on International Monetary Fund Conditions." *Journal of Law and Economics* 50(1):105–124.

Dreher, Axel, Valentin Lang, B Peter Rosendorff and James Vreeland. 2022. "Bilateral or Multilateral? International Financial Flows and the Dirty-work Hypothesis." *The Journal of Politics* 84(4):1932–1946.

Eichengreen, Barry, Domenico Lombardi and Anton Malkin. 2018. "Multilayered Governance and the International Financial Architecture: The Erosion of Multilateralism in International Liquidity Provision." *Global Policy* 9:7–20.

Ferry, Lauren and Alexandra Zeitz. 2024. "China, the IMF, and Sovereign Debt Crises." *International Studies Quarterly* 68(3):sqae119.

Flores-Macías, Gustavo and Sarah Kreps. 2013. "The Foreign Policy Consequences of Trade: China's Commercial Relations with Africa and Latin America, 1992–2006." *Journal of Politics* 75(2):357–371.

Fuchs, Andreas and Nils-Hendrik Klann. 2013. "Paying a Visit: The Dalai Lama Effect on International Trade." *Journal of International Economics* 91(1):164–177.

Gowa, Joanne. 1995. *Allies, adversaries, and international trade*. Princeton, NJ: Princeton University Press.

Hao, Kaixuan, Liyan Han and Wei Li. 2022. "The Impact of China's Currency Swap Lines on Bilateral Trade." *International Review of Economics & Finance* 81:173–183.

Hirschman, Albert. 1945. *National Power and the Structure of Foreign Trade*. Berkeley, CA: University of California Press.

Horn, Sebastian, Bradley Parks, Carmen Reinhart and Christoph Trebesch. 2023. China as an International Lender of Last Resort. Technical report National Bureau of Economic Research.

Humphrey, Chris and Katharina Michaelowa. 2019. "China in Africa: Competition for Traditional Development Finance Institutions?" *World Development* 120:15–28.

Jiang, Yang. 2014. The Limits of China's Monetary Diplomacy. In *The Great Wall of Money: Power and Politics in China's International Monetary Relations*, ed. Eric Helleiner and Jonathan Kirshner. Ithaca: Cornell University Press.

Kastner, Scott. 2016. "Buying Influence? Assessing the Political Effects of China's International Trade." *Journal of Conflict Resolution* 60(6):980–1007.

Kaya, Ayse, Christopher Kilby and Jonathan Kay. 2021. "Asian Infrastructure Investment Bank as an Instrument for Chinese Influence? Supplementary Versus Remedial Multilateralism." *World Development* 145:105531.

Kedar, Claudia. 2012. *The International Monetary Fund and Latin America: the Argentine Puzzle in Context*. Temple University Press.

Keohane, Robert and Joseph Nye Jr. 1973. "Power and interdependence." *Survival* 15(4):158–165.

Kim, Anthony and Brett Schaefer. 2011. "The US Should Link Foreign Aid and UN General Assembly Voting." *Backgrounder* 2591.

Kim, Soo Yeon and Jesslene Lee. 2020. "Gaining Ground, Gaining Influence? Vote Shares and Power in the AIIB." Working Paper.

Kim, Soo Yeon and Jesslene Lee. 2023. "Contesting the Liberal Script? The AIIB and the World Bank in Development Finance." Working Paper. Presented at the 80th Annual MPSA Conference.

Kinnvall, Catarina and Jennifer Mitzen. 2020. "The Causal Interpretation of Estimated Associations in Regression Models." *Political Science Research and Method* 8(1):1–13.

Kirshner, Jonathan. 2014. Regional Hegemony and an Emerging RMB Zone. In *The Great Wall of Money: Power and Politics in China's International Monetary Relations*, ed. Eric Helleiner and Jonathan Kirshner. Ithaca: Cornell University Press chapter 8, pp. 213–240.

Kirshner, Jonathan. 2020. *Currency and coercion: the political economy of international monetary power*. Princeton University Press.

Lang, Valentin and Andrea Presbitero. 2018. "Room for Discretion? Biased Decision-making in International Financial Institutions." *Journal of Development Economics* 130:1–16.

Lawrimore, Trellace and James Vreeland. 2018. "Aid as a building bloc: Australia and the Bretton Woods Institutions." *Australian Journal of Political Science* 53(4):463–479.

Li, Siyao, Aditi Sahasrabuddhe and Scott Wingo. 2023. "The Limits of Economic Statecraft: China's Bilateral Swap Agreements and the External Security Environment." Presented at the IPES 2023 Conference.

Liao, Steven and Daniel McDowell. 2015. "Redback Rising: China's Bilateral Swap Agreements and Renminbi Internationalization." *International Studies Quarterly* 59:401–422.

Lieberman, Evan. 2005. "Nested Analysis as a Mixed-method Strategy for Comparative Research." *American political science review* 99(3):435–452.

Lieberman, Evan and Prerna Singh. 2012. "The Institutional Origins of Ethnic Violence." *Comparative Politics* 45(1):1–24.

Lyne, Mona, Daniel Nielson and Michael Tierney. 2009. "Controlling Coalitions: Social Lending at the Multilateral Development Banks." *Review of International Organizations* 4:407–433.

McDowell, Daniel. 2017. *Brother, Can You Spare a Billion?: The United States, the IMF, and the International Lender of Last Resort*. New York: Oxford University Press.

McDowell, Daniel. 2019. "The (ineffective) Financial Statecraft of China's Bilateral Swap Agreements." *Development and Change* 50(1):122–143.

Nelson, Stephen. 2014. "Playing Favorites: How Shared Beliefs Shape the IMF's Lending Decisions." *International Organization* 68(2):297–328.

Norrlof, Carla. 2020. "The security foundations of dollar primacy." *International Studies Perspectives* 21:126–132.

Olayiwola, Abiodun Sunday and Kazeem Fasoye. 2019. "Does China's Currency Swap Agreements have Impact on the US dollarâs Exchange Rate in Nigeria." *Global Journal of Human-Social Science* 19(3):31–38.

Pang, Xun and Chong Chen. 2020. "The "Hirschman Effect" in International Finance." *World Economy & Politics (Chinese)* (6):132–155.

Pang, Xun, Licheng Liu and Yiqing Xu. 2022. "A Bayesian Alternative to Synthetic Control for Comparative Case Studies." *Political Analysis* 30(2):269–288.

Perks, Michael, Yudong Rao, Jongsoon Shin and Kiichi Tokuoka. 2021. "Evolution of Bilateral Swap Lines." IMF Working Paper WP/21/210.

Reinsberg, Bernhard and Andreas Kern. 2024. "The Unintended Side Effect of the Global Financial Safety Net: Elite Capital Flight." Presented at the Political Economy of International Organizations Conference.

Sahasrabuddhe, Aditi. 2019. "Drawing the Line: The Politics of Federal Currency Swaps in the Global Financial Crisis." *Review of International Political Economy* 26(3):461–489.

Schvitz, Guy, Luc Girardin, Seraina Rüegger, Nils Weidmann, Lars-Erik Cederman and Kristian Skrede Gleditsch. 2022. "Mapping the International System, 1886-2019: The Cshapes 2.0 Dataset." *Journal of Conflict Resolution* 66(1):144–161.

Seabra, Pedro and Rafael Mesquita. 2022. "Beyond Roll-call Voting: Sponsorship Dynamics at the UN General Assembly." *International Studies Quarterly* 66(2):sqac008.

Stone, Randall. 2008. "The Scope of IMF Conditionality." *International Organization* 62(4):589–620.

Stone, Randall. 2011. *Controlling Institutions: International Organizations and the Global Economy*. Princeton, NJ: Cambridge University Press.

Stone, Randall, Yu Wang and Shu Yu. 2022. "Chinese Power and the State-owned Enterprise." *International Organization* 76(1):229–250.

Strange, Susan. 1971. *Sterling and British policy: a political study of an international currency in decline*. London; New York: Oxford University Press.

Stubbs, Thomas, William Kring, Christina Laskaridis, Alexander Kentikelenis and Kevin Gallagher. 2021. "Whatever It Takes? The Global Financial Safety Net, Covid-19, and Developing Countries." *World Development* 137:105171.

Thacker, Strom. 1999. "The High Politics of IMF Lending." *World politics* 52(1):38–75.

Voeten, Erik. 2000. "Clashes in the Assembly." *International Organization* 54(2):185–215.

Voeten, Erik. 2013. Data and Analyses of Voting in the UN General Assembly. In *Handbook of International Organization*, ed. Bob Reinalda. Routledge.

Voeten, Erik. 2021. *Ideology and International Institutions*. Princeton, NJ: Princeton University Press.

Wellner, Lukas, Axel Dreher, Andreas Fuchs, Brad Parks and Austin Strange. 2022. "Can Aid Buy Foreign Public Support? Evidence from Chinese Development Finance.".

Zeitz, Alexandra. 2021. "Emulate or Differentiate? Chinese Development Finance, Competition, and World Bank Infrastructure Funding." *Review of International Organizations* 16(2):265–292.

Zhang, Fan, Miaojie Yu, Jiantuo Yu and Yang Jin. 2017. "The Effect of RMB Internationalization on Belt and Road Initiative: Evidence from Bilateral Swap Agreements." *Emerging Markets Finance and Trade* 53(12):2845–2857.

Appendices

FOR ONLINE PUBLICATION ONLY

Appendix A Data Collection

Table A1: Data Collection Comparison with AidData

	Dataset in This Paper	**AidData**
Time Coverage	2008-2021	2008-2021
Total Number of Sovereign Signatories (excluding the ECB)	38	37
Observation-level Differences	• **Switzerland**: BSA in place in 2021 (See `http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/4190884/index.html`) • **The UAE**: BSA in place in 2018 (See `https://www.xinhuanet.com/world/2015-12/14/c_128528658.htm`) • **Zimbabwe**: BSA in place in 2020 and 2021 (See `https://www.guancha.cn/internation/2020_01_16_531797.shtml`)	• **Switzerland**: No BSA in place in 2021 • **The UAE**: No BSA in place in 2018 • **Zimbabwe**: No BSA with Zimbabwe
Data Source	• PBOC RMB Internationalization Reports • Major media releases in Chinese and English	• PBOC RMB Internationalization Reports

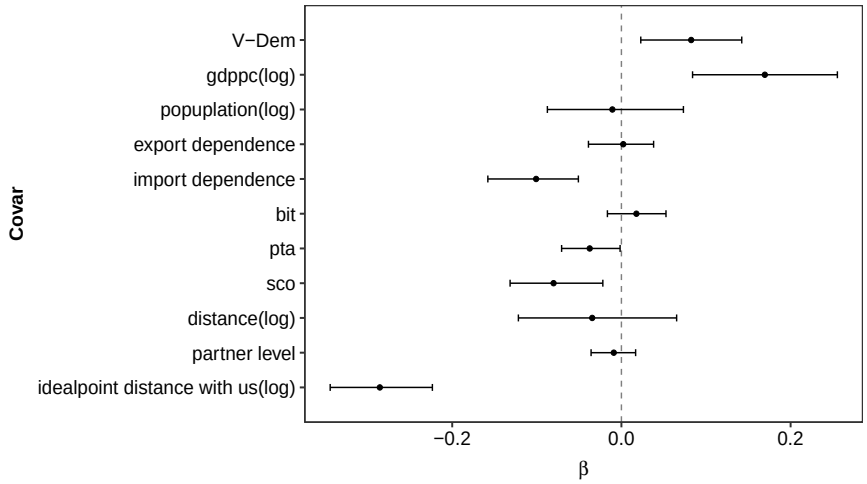
Note: Only sovereign signatories are counted here. AidData also reports Hong Kong and Macao's BSAs with China (Horn et al., 2023). We exclude them because we are interested in BSAs' foreign-policy implications. Georgia is not counted in both datasets, because it only signed a framework agreement instead of a formal BSA with China. Since we lag the treatment by one year, data differences in 2021 do not affect our analysis.

Appendix B Additional Results on the Main Analysis

Table B2: Chinese BSAs and Foreign-Policy Alignment: TWFE Regression Results

	Dependent variable:			
	UNGA Voting Distance		Co-sponsorship	
	(1)	(2)	(3)	(4)
China BSA (lagged)	−0.253**	−0.210**	0.023*	0.039***
	(0.103)	(0.093)	(0.012)	(0.012)
V-Dem	−0.550**	−0.547**	0.027	0.033
	(0.221)	(0.231)	(0.044)	(0.043)
GDPpc (log)	−0.287***	−0.206***	−0.006	−0.002
	(0.047)	(0.048)	(0.008)	(0.008)
Population (log)	−0.644***	−0.473***	−0.055	−0.040
	(0.178)	(0.176)	(0.038)	(0.038)
Distance (log)	1,820.667***	1,573.615***	−42.643**	−48.398***
	(168.823)	(154.077)	(16.800)	(15.581)
Ideal Point Distance to US (log)	−0.468***	−0.448**	0.144***	0.142***
	(0.177)	(0.176)	(0.038)	(0.038)
Export dependence		0.062		−0.044
Import dependence		−1.777		−0.047
BIT		−0.241		0.004
PTA		−0.231		−0.025
SCO		−0.380		0.027
Partner level		0.005		−0.004
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	4,598	4,598	3,240	3,240
R^2	0.090	0.101	0.031	0.039

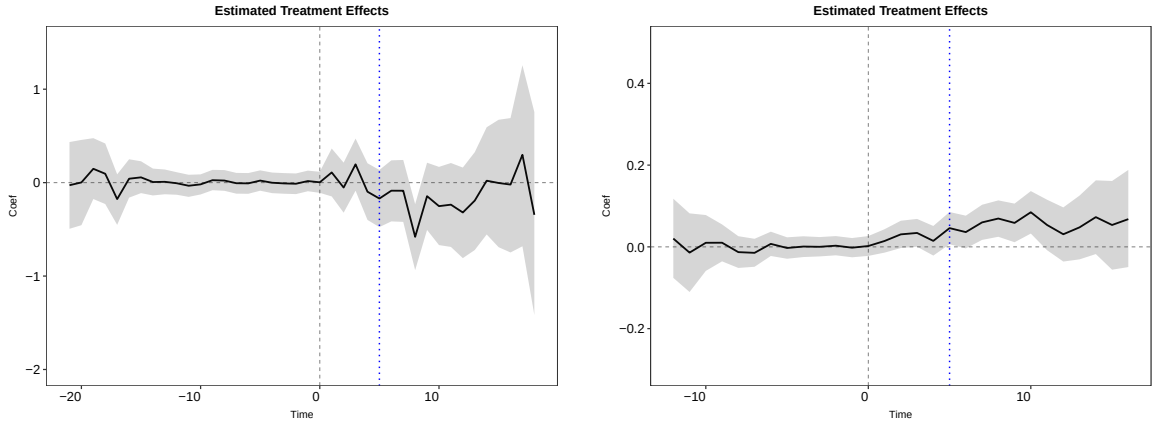
Note: *p<0.1; **p<0.05; ***p<0.01
Cluster-robust SEs at the country level in parentheses.



Estimated Coefficients

Figure B1: Estimated Coefficients

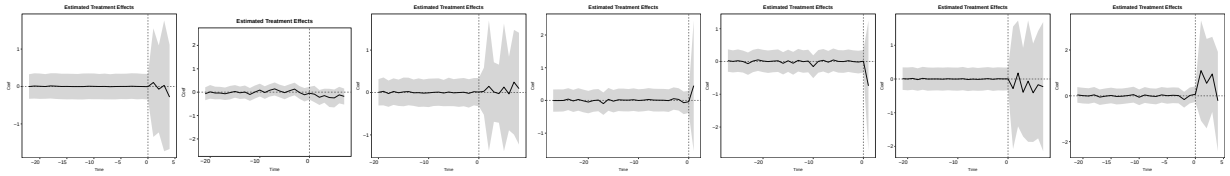
Note: In the figure, points in each bar represent the posterior distribution mean, and bars represent 95 percent Bayesian credibility interval bounds. Most of the estimated coefficients have intuitive signs aligning with theoretical expectations. Countries that are more democratic, more developed, or less populous tend to have greater ideal-point distance from China. Countries with higher import dependence, a PTA, SCO membership, and higher diplomatic status conferred by China are closer to Chinaâs ideal point. The only counter-intuitive estimates are for the BIT indicator and the measure of geographic distance, but these estimates are not statistically significant.



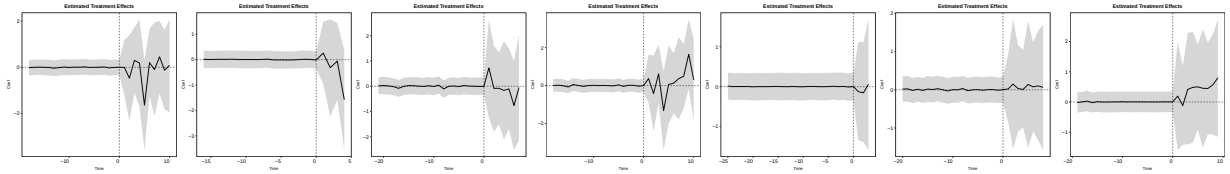
(a) ATT (UNGA Voting Distance to China) (b) ATT (Co-sponsorship with China)

Figure B2: Placebo Test

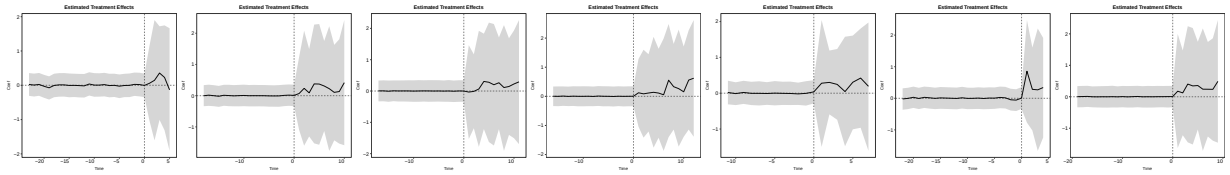
Note: The figure reports the results of a placebo test by artificially setting all the treatment times five years earlier (the black dashed lines) than the actual treatment years (the blue dotted lines). This aims to test whether there is any pre-treatment trend that is not captured by the latent factors. We do not find any significant “effect” during the placebo years between the two lines in the figure. This increases our confidence in the estimated ATTs.



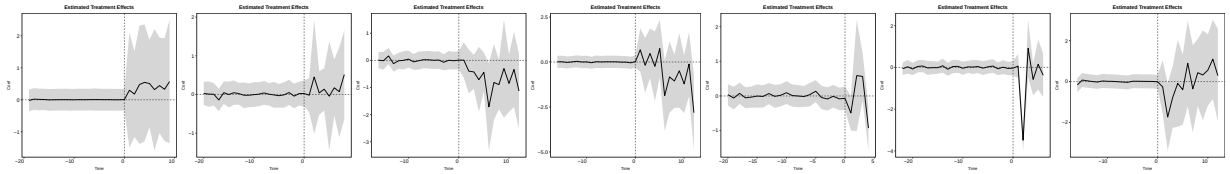
(1) Armenia (2) Canada (3) Hungary (4) Zimbabwe (5) Laos (6) Russia (7) Sri Lanka



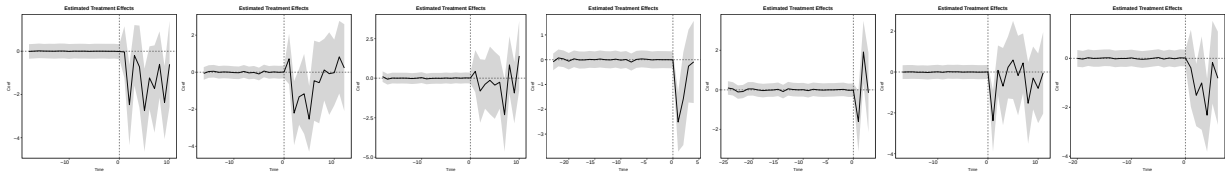
(8) Thailand (9) Uzbekistan (10) Qatar (11) Pakistan (12) Japan (13) Albania (14) Australia



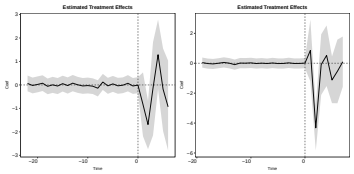
(15) Egypt (16) New Zealand (17) Iceland (18) South Korea (19) Switzerland (20) Tajikistan (21) Turkey



(22) Ukraine (23) United Kingdom (24) Argentina (25) Belarus (26) Brazil (27) Chile (28) Indonesia



(29) Kazakhstan (30) Malaysia (31) Mongolia (32) Morocco (33) Nigeria (34) Singapore (35) South Africa



(36) Suriname (37) UAE

Figure B3: Treatment Effects on All 37 Countries

Note: This figure presents the ITTs of our 37 cases for the effect of a BSA on ideal-point distance (negative effects imply greater foreign-policy alignment). First, we present the 23 "null" cases, where we estimate no statistically significant effect of China's BSAs in the post-treatment period on foreign-policy alignment. These are the cases depicted in blue in Figure 4 in the main text. Then we present the 14 "significant" cases, where we estimate statistically significant effects at certain points during the post-treatment period, presented in red in Figure 4.

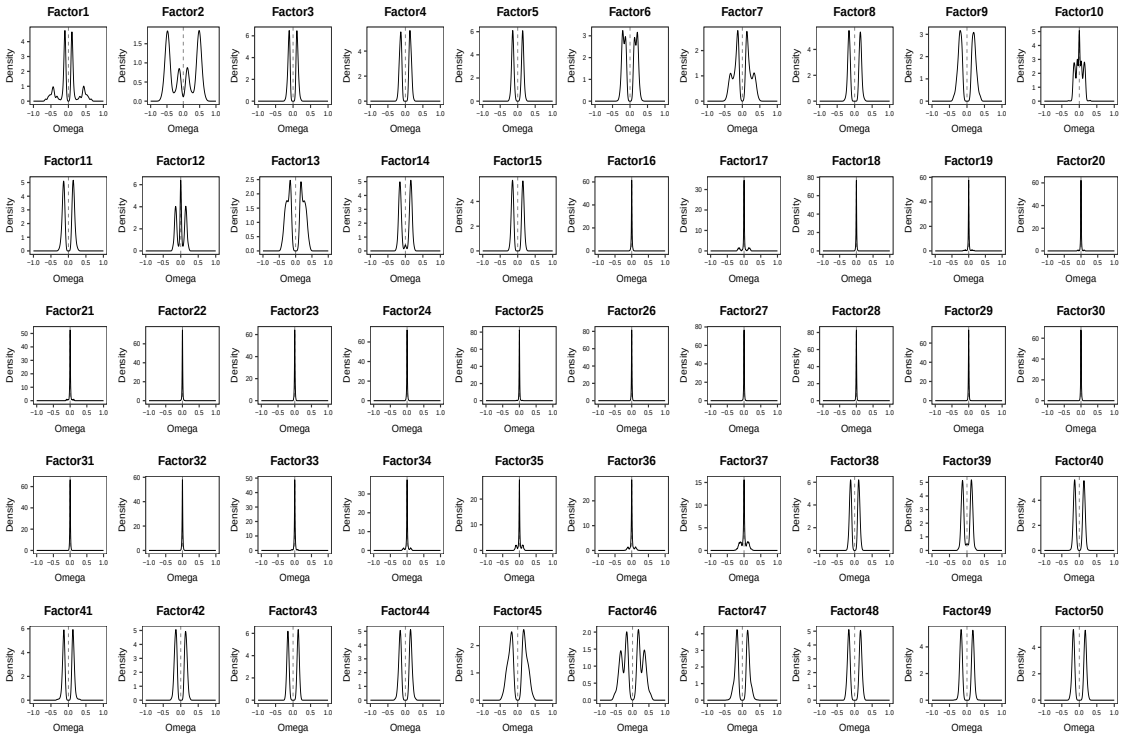
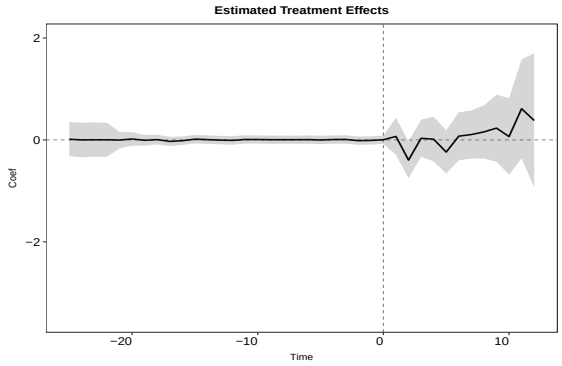
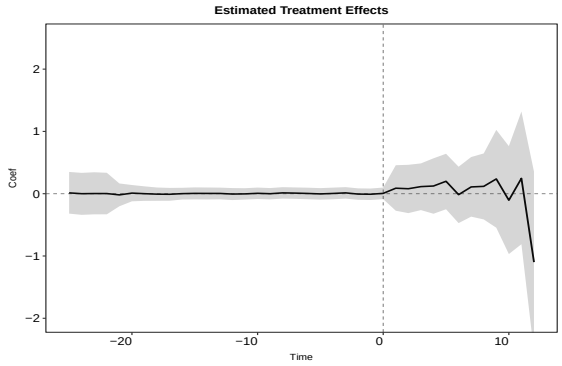


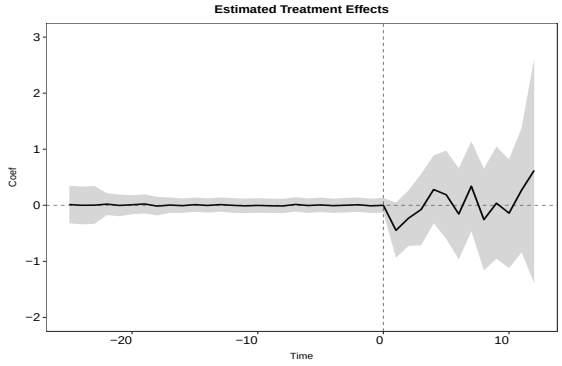
Figure B4: Factor Selection
Note: The figure shows the results of factor selection.



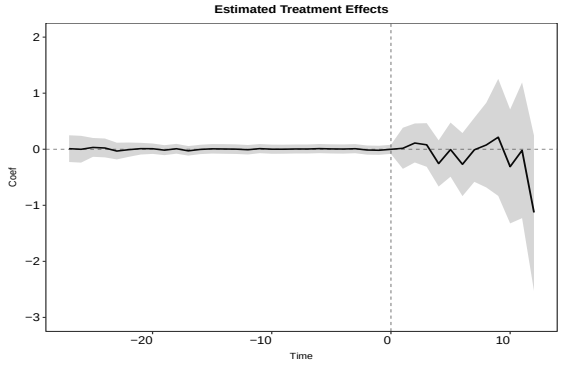
(a) GATT of Countries with Other BSA Partners



(b) GATT of Developed Partners



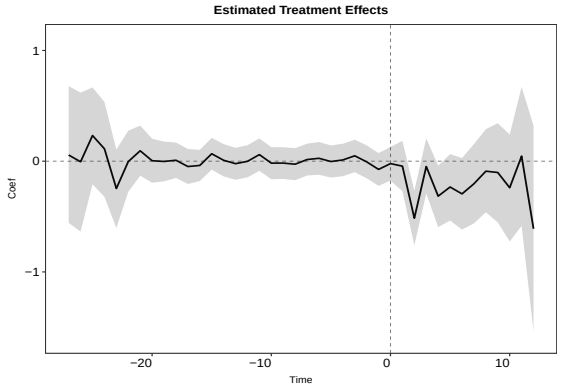
(c) GATT of Non-Comprehensive Partners of China



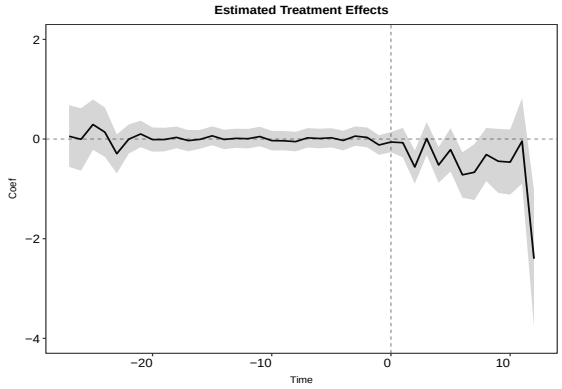
(d) GATT of Non-OBOR Countries

Figure B5: Estimated GATTs of partner countries that we do *not* theorize to be influenced by their BSA with China

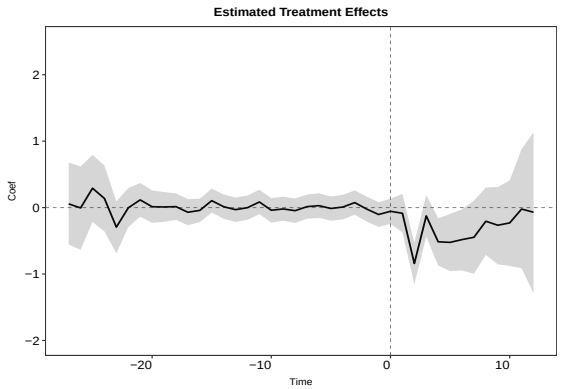
Appendix C Robustness Checks



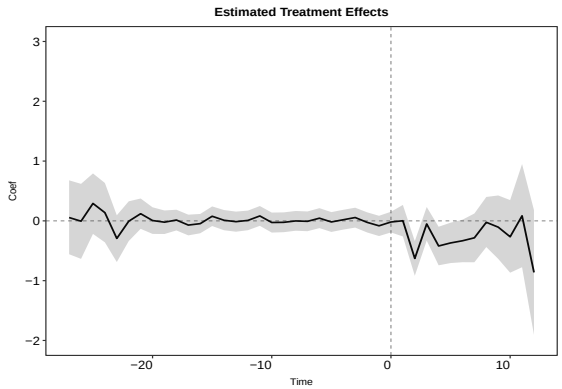
(a) ATT



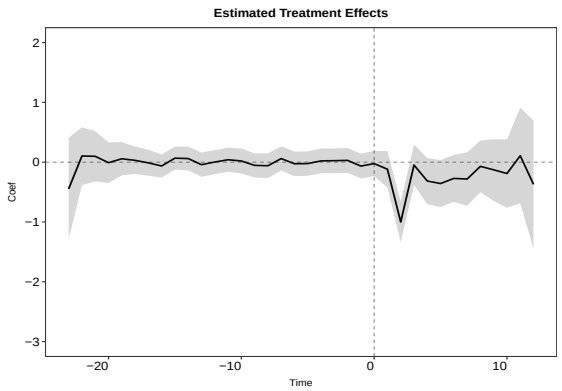
(b) GATT of "No Other BSAs" Group



(c) GATT of the "Developing Country" Group

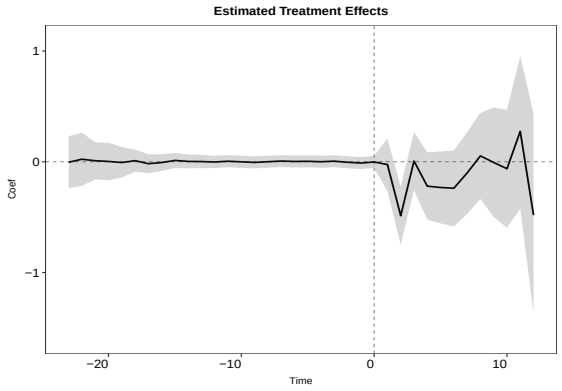


(d) GATT of "High-Level Partnership" Group

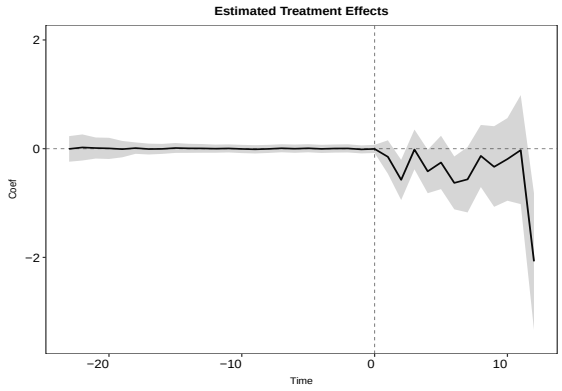


(e) GATT of "MoU Signatory" Group

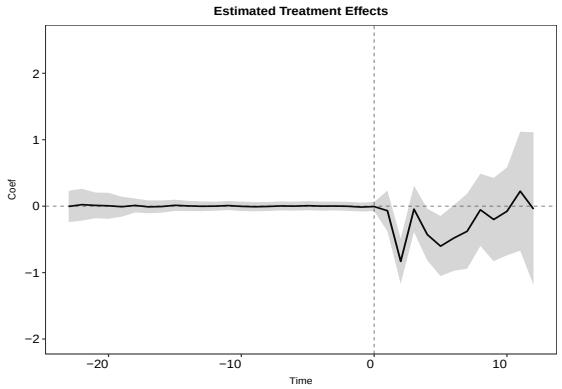
Figure C1: Estimated ATT and GATTs Across Partner Countries: Removing Controls



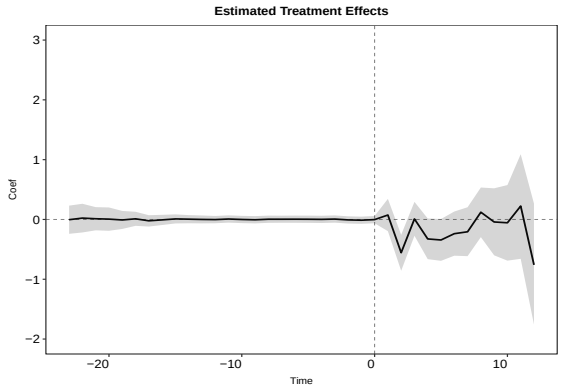
(a) ATT



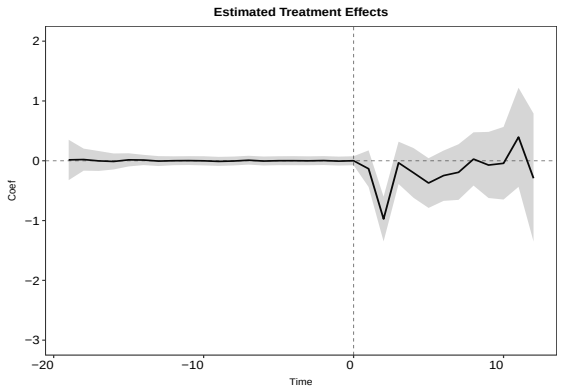
(b) GATT of "No Other BSAs" Group



(c) GATT of the "Developing Country" Group

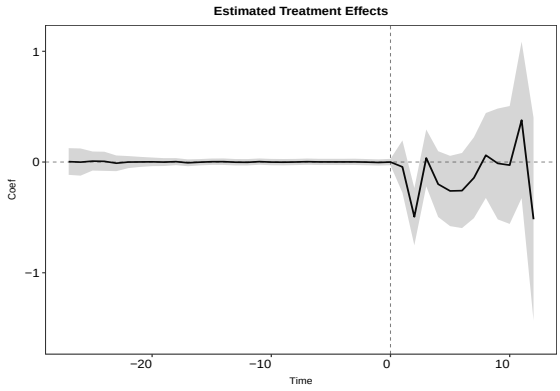


(d) GATT of "High-Level Partnership" Group

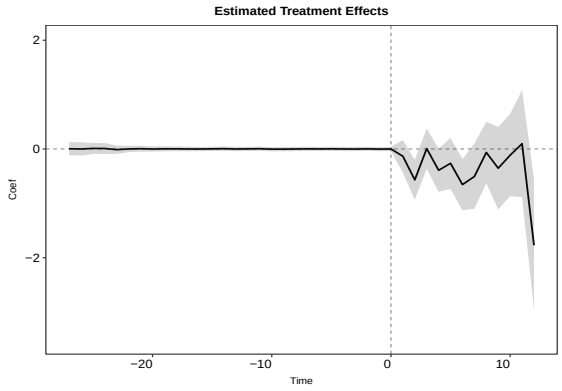


(e) GATT of "MoU Signatory" Group

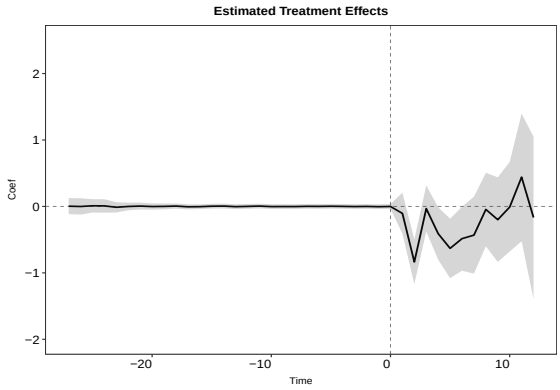
Figure C2: Estimated ATT and GATTs Across Partner Countries: Symmetric Pre-treatment and Post-treatment Windows



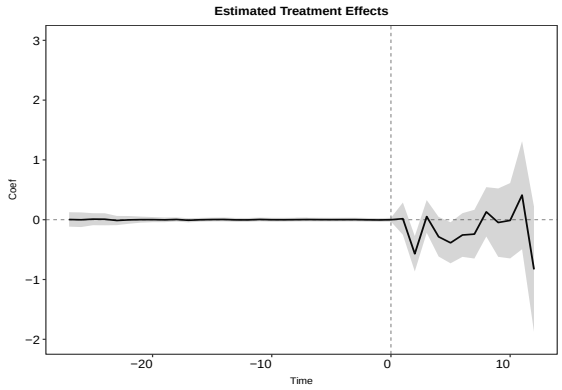
(a) ATT



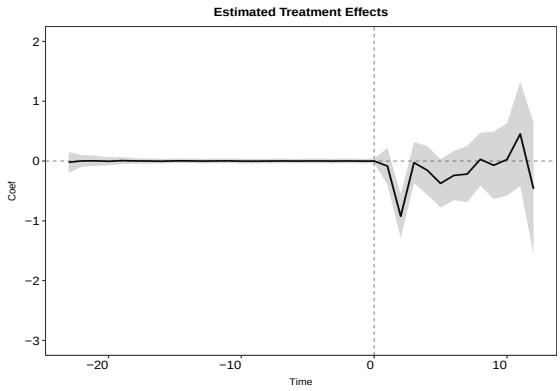
(b) GATT of "No Other BSAs" Group



(c) GATT of the "Developing Country" Group



(d) GATT of "High-Level Partnership" Group



(e) GATT of "MoU Signatory" Group

Figure C3: Estimated ATT and GATTs Across Partner Countries: Controlling for IMF Programs

Appendix D Alternative treatment indicator

We perform a parallel analysis using an alternative treatment indicator: the receipt of rescue lending from China during the same period. Our main treatment variable focuses on the effect of a line of credit, while this alternative focuses on the use of Chinese credit. So, the former measures the effect of an institution, the latter more of a spot market for political influence. We suspect that the presence of an institutionalized guarantee of credit changes the financial outlook of vulnerable countries and that this prospect alone drives political alignment with China.

Indeed, as seen below, the point estimates are mostly negative, indicating an effect of moving closer to China—but none are statistically significant (see Appendix Figure D2). This suggests that the foreign-policy impact of BSAs presented in Figure 3(a) is not driven by lending activities per se, but instead derives from the broader characteristics of the relationship institutionalized by the BSA.

To be clear, the rescue-lending dichotomous indicator is coded one starting when a country receives rescue lending from China, including loans from within the BSA framework and outside of it. To maintain staggered-adoption without treatment reversal, once a country receives any such loan, the variable is coded one until the end of the sample period. Our coding relies on Horn et al. (2023), who document that 25 countries received rescue loans from China between 2008 and 2021.[40] This treatment assignment is depicted in Figure D1. The estimated (null) effect on UN ideal points is depicted in Figure D2.

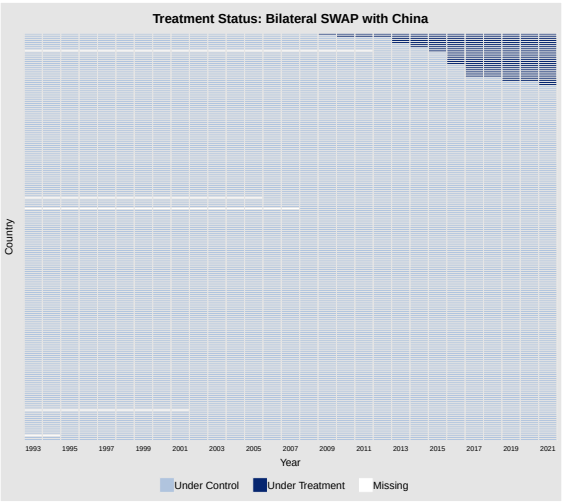


Figure D1: Treatment Assignment: Rescue Lending from China

Note: The horizontal x-axis represents sample years, and the vertical y-axis represents sample countries. Cells shaded in dark blue represent treated observations; cells in light blue represent control observations. White cells represent missing data points. In the pre-treatment period, this missingness occurs because certain countries had not yet been formally established during these years.

[40]The dataset covers a broad range of rescue loans, including balance of payment support by Chinese state-owned banks and enterprises, commodity prepayment facilities, and BSA drawdowns.

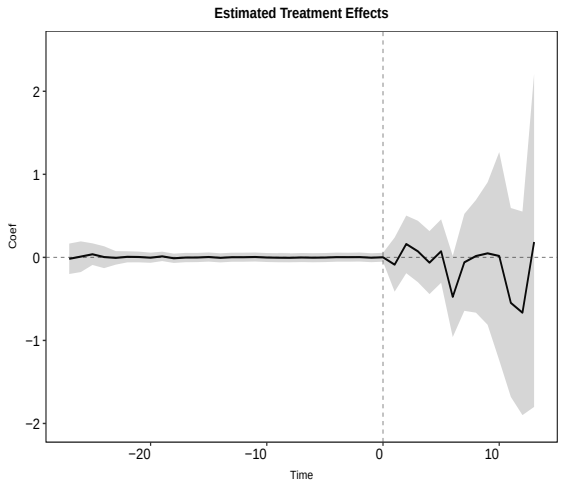
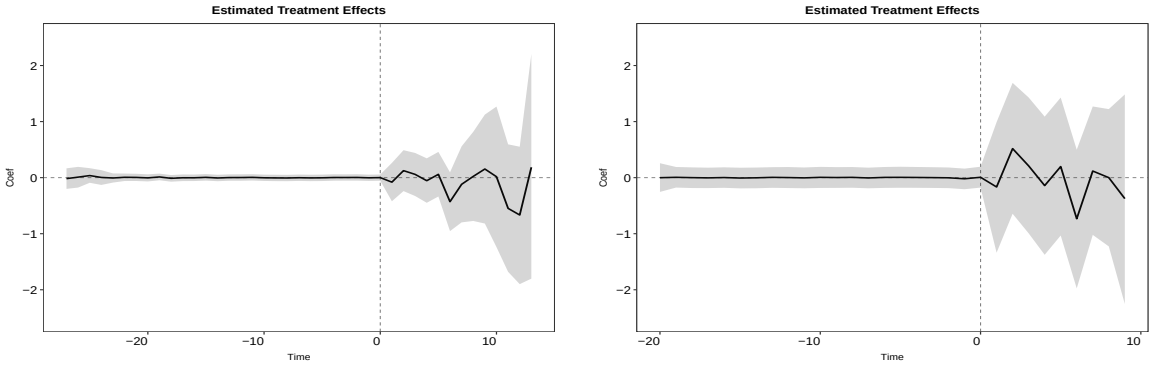


Figure D2: ATT of Rescue Lending from China

Developed or Developing Country?

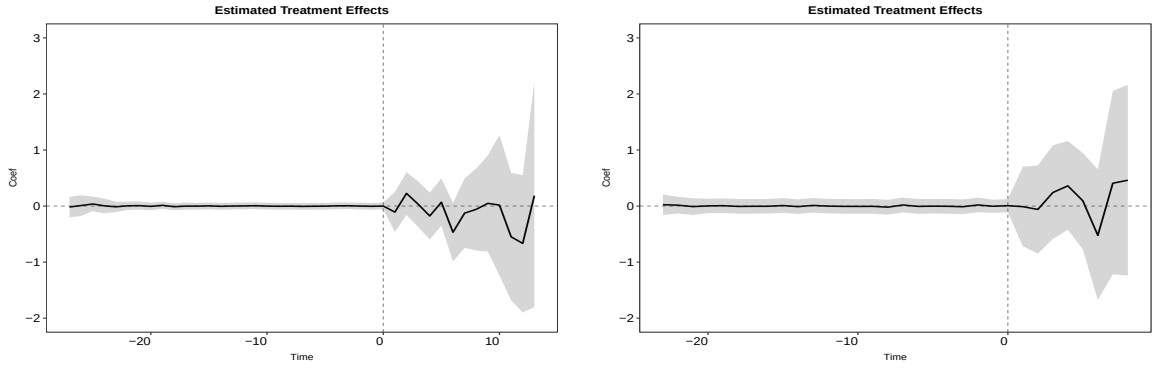


Developing Country Developed Country

Figure D3: Heterogeneous effects using Chinese rescue loans as treatment: Financial Vulnerability

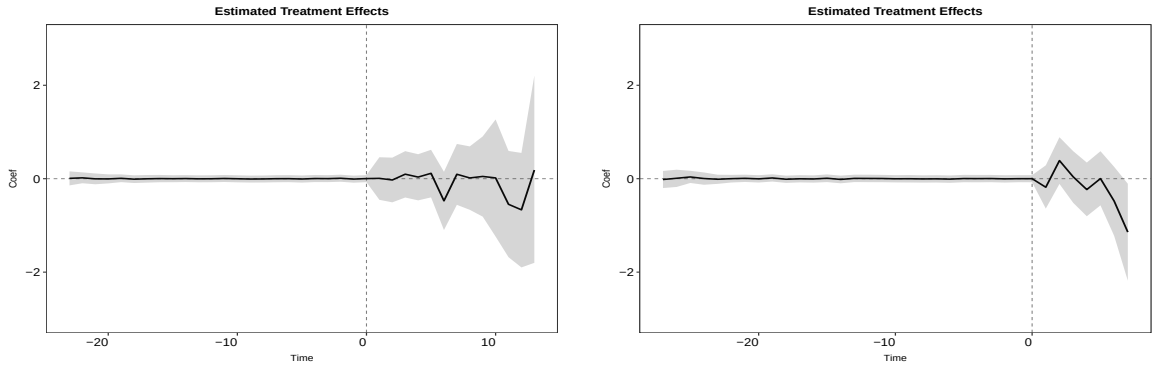
Note: We do not look at whether states have alternative BSAs here, because when the treatment is BSA drawdowns and emergency loans, it is not obvious what the alternative would be.

(a) China's Comprehensive Cooperation Partner or Above?



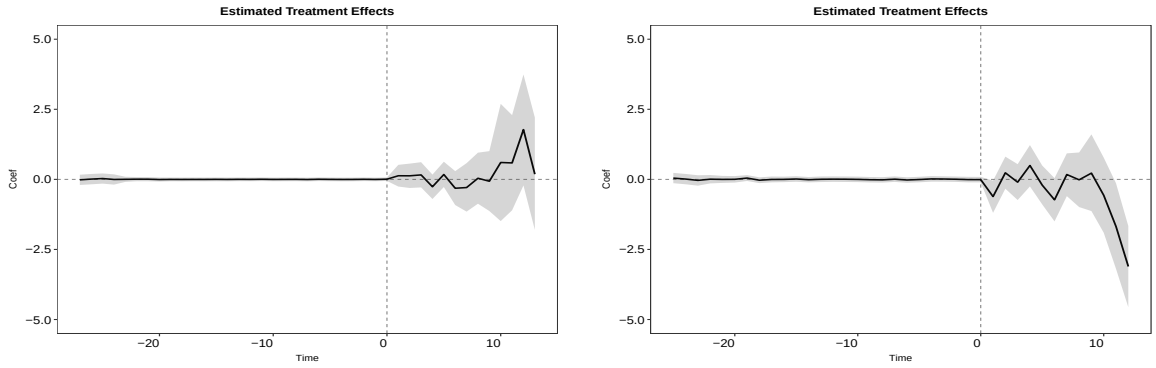
Yes No

(b) Signed BRI-MoUs or Not?



Yes No

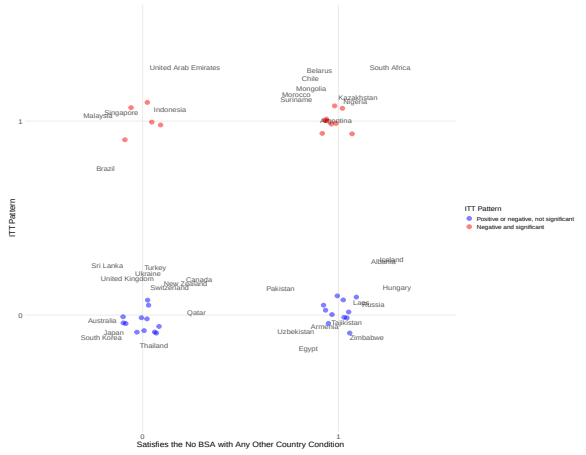
(c) Regime Type



Non-democracy Democracy

Figure D4: Heterogeneous effects using Chinese rescue loans as treatment: Dissatisfaction with the US-Led system

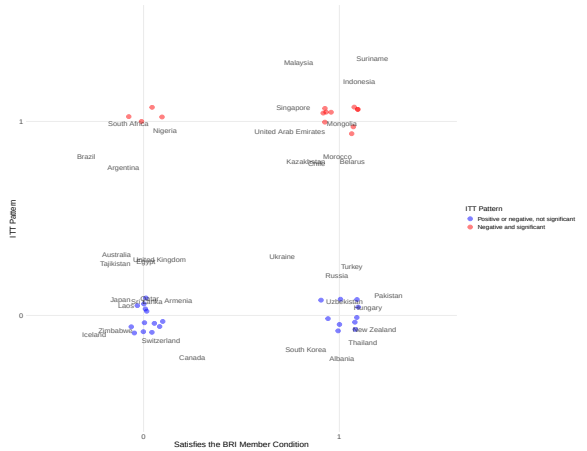
Appendix E Additional Figures on Case Comparisons and Conditions



(a) No Other BSA Condition

(b) Low-income Country Condition

(c) High-level Partnership Condition



(d) BRI MoU Signatory Condition

Figure E1: Confusion matrices for various proposed conditions

Note: For each graph, the x-axis denotes whether a country satisfies the proposed condition, and the y-axis denotes whether the country exhibits a statistically significant effect of their BSA with China. Countries in the upper right and lower left corners are well predicted by the proposed indicator. Countries in the upper right corner satisfy the given condition and exhibit the predicted negative, statistically significant ITT. Countries in the lower left corner do not satisfy the given condition and, as predicted, do not exhibit a statistically significant ITT. Countries in the upper left and lower right corners are false negatives and false positives, respectively.

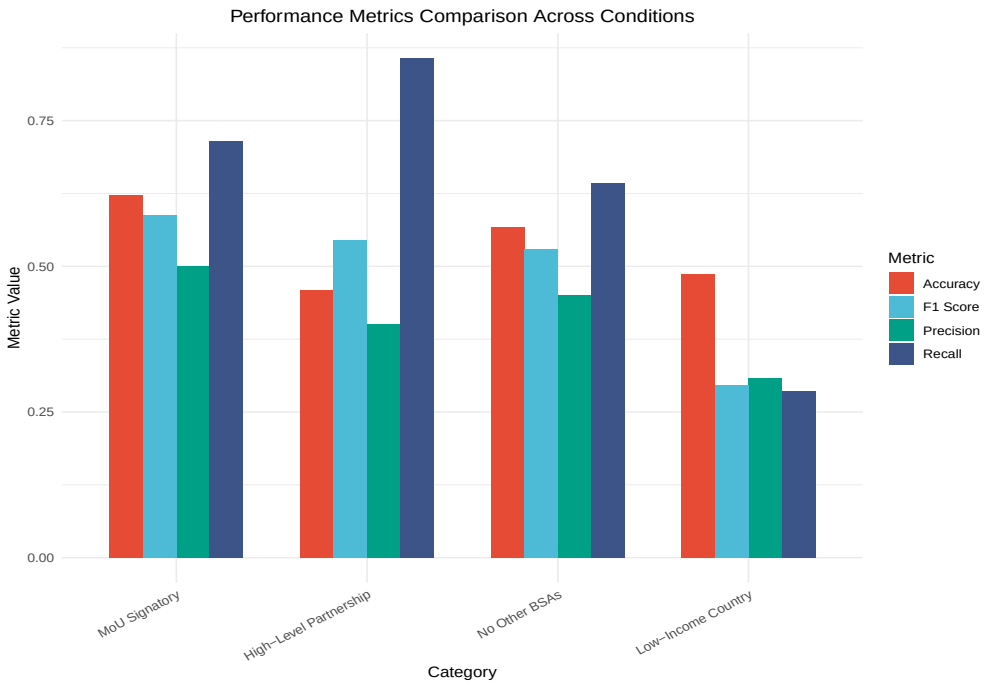


Figure E2: Comparison of Prediction Performance of Four Conditions

Note: A positive case is defined as a country being susceptible to China's BSAs, and a positive prediction is defined as a case that satisfies our conditions. Accuracy is the proportion of true results (both true positives and true negatives) among the total number of cases examined. Precision is the proportion of true positive results in all positive predictions. Recall is the proportion of true positive results in all actual positives. F1 score is the harmonic mean of precision and recall, providing a balance between them.