Geoeconomics of Chinese Influence: The Belt & Road Initiative and the Asian Infrastructure Investment Bank

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ABSTRACT:
Does China use multilateral economic institutions akin to the way the U.S. has done – by exerting influence over these international organizations to pursue its own goals? To address this question, we examine the geographic association between projects funded by the China-led multilateral Asian Infrastructure Investment Bank (AIIB) and projects in the Chinese Belt & Road Initiative (BRI), a bilateral initiative that aims to place China at the center of a global supply chain. We argue that under the right conditions China could benefit from exerting influence over the AIIB to further its own priorities. We test this theoretical claim using a novel dataset that identifies the geographic location of AIIB and BRI projects. Using spatial regressions, we find evidence of links between AIIB and BRI project locations, both within provinces and in adjacent provinces that straddle national borders. These findings are consistent with China exerting influence over the AIIB while still attempting to safeguard the reputation of the AIIB as a legitimate *multilateral* institution. The paper advances our understanding of China's complex use of multilateral platforms and suggests an AIIB-BRI linkage that has eluded the literature.

Keywords: Belt & Road Initiative, Asian Infrastructure Investment Bank, supplementary multilateralism, spatial regressions, geoeconomics, Chinese multilateralism, international organizations.

I. Introduction

A perennial question in both the study and practice of international relations concerns behavioral differences between democratic and authoritarian regimes vis-à-vis international cooperation or international organization (Hafner-Burton et al. in this special issue). Findings include the democratic peace and different patterns of membership and behavior in international organizations (IOs).[1] This question has become more pertinent with China's emergence as a global economic power rival to the U.S.[2] We contribute to this debate by investigating whether China is utilizing its leadership position in the Asian Infrastructure Investment Bank (AIIB) to further its core political-economic goals. We make both theoretical and empirical contributions. First, we identify the factors China would consider when deciding whether to intervene in a multilateral organization (it can influence) to pursue its own agenda. Second, we analyze geospatial data for evidence of links between the AIIB and Chinese President Xi Jinping's signature bilateral program, the Belt & Road Initiative (BRI).

An extensive literature examining the political economy of international organizations, particularly the World Bank and International Monetary Fund, suggests that the U.S. and, to a lesser degree, other G7 countries have utilized these multilateral institutions to advance their own goals. For example, various works find that countries voting in line with the U.S. at the United

[1] Democratic peace theories suggest that, for multiple reasons, democracies are less prone to go to war with one another. In a seminal contribution, Mansfield & Pevehouse (2006) show that transitional democracies are more likely to join IOs as a commitment device. Mattes & Rodriquez (2014) argue that certain types of non-democracies can be inclined toward international cooperation, like their democratic counterparts, and Mazumder (2017) suggests the potential of institutionally embedded authoritarian regimes for non-militarized cooperation. Cottiero & Haggard (forthcoming) find that regional organizations composed of authoritarian regimes could have detrimental effects on democratization, while Debre (2022) identifies "Clubs of Autocrats."

[2] On whether China threatens the liberal international order, see, e.g., Johnston (2003), Schweller & Pu (2011), Layne (2018), Kastner & Saunders (2012), Chan et al. (2019), Kastner et al. (2019), & Chu (2021).

Nations General Assembly (UNGA) get better, i.e., larger and less conditional, IMF loans (e.g., Thacker 1999; Stone 2004; Barro & Lee 2005; Andersen et al. 2006; Copelovitch 2010). Given that such voting alignment proxies ties between the U.S. and another country, using the IMF – which functions as a lender of last resort to economies in crisis – in this manner enables the U.S. to pursue its own interests. The literature reaches similar conclusions about U.S. influence over World Bank loans (e.g., Frey & Schneider 1986; Kilby 2013; Kersting & Kilby 2021). Additionally, previous work provides evidence of apparent vote buying, with dominant IO members using their influence over multilateral assistance to curry favor with strategically important countries.. For example, non-permanent members of the United Nations Security Council tend to get more loans from the World Bank (e.g., Dreher et al. 2009A; Vreeland & Dreher 2014) and are more likely to get IMF bailouts (Dreher et al. 2009B). In short, established powers have utilized IOs to reward allies or try to win strategic friends (Lall 2017).

China's ascent and its recent ventures into international institution building raise the question of whether China is also exerting influence over multilateral organizations to support its own agenda. To answer this question, we analyze the degree to which AIIB lending has buttressed China's flagship bilateral foreign policy initiative, the BRI. Few scholars dispute that China has the means to influence the AIIB in the way the U.S. influences the Bretton Woods institutions (BWIs) given China's considerable formal and informal power within the AIIB (Åberg 2016; Chen 2016; Section II). The question is, thus, not whether China could theoretically influence AIIB lending to support its bilateral initiatives, but whether it has actually done so.

In 2016, China led the founding of the AIIB as a new multilateral development bank (MDB). Despite vocal American efforts to dissuade other countries from joining (Perlez 2015; Anderlini & Mitchell 2015; Åberg 2016; He 2020), this new MDB was launched with 57 founding

members and a $100 billion capital endowment. Within four years, the AIIB had nearly doubled its membership and was able to raise funds on international capital markets through issuing triple A-rated bonds. While its original goal was to lend for hard infrastructure in Asia, its membership now extends beyond the region—the institution has almost as many non-regional members as regional ones—and its lending activities have grown to encompass budget support and soft infrastructure.[3] The AIIB's significance in multilateral development assistance is widely recognized, with most of the relevant literature focused on explaining China's varied motivations in founding the institution (e.g., Bustillo & Andoni 2018; Chan 2017; Chin 2016; He 2020; Ikenberry & Lim 2017; Jakupec & Kelly 2015; Kastner et al. 2018; Liang 2021; Paradise 2017; Ren 2016; Strand et al. 2016; Wan 2016).[4] The AIIB, overall, stands out as China's most significant foray into multilateral economic institution-building.

The BRI, launched in 2013, is China's largest bilateral economic initiative and predates the AIIB. This initiative includes both regional and non-regional countries, and funds infrastructure projects to establish a network of transnational trade routes and supply chains with China at its center. The BRI also lends in infrastructure-adjacent sectors, such as energy (He 2020). Although China has not publicly disclosed the size of its BRI investment, some estimates place the figure at over $800 billion (Malik et al. 2021). Undoubtedly, the AIIB and the BRI are both emblematic of ramped up Chinese global economic ambitions (Economy 2018).[5]

[3] Soft infrastructure includes, for example, digital infrastructure and health care. Hard infrastructure encompasses traditional infrastructure projects, such as roads and railroads.
[4] There is also a burgeoning literature on whether Chinese lending affects the World Bank (e.g., Hernandez 2017; Qian et al. 2023; Zeitz 2021).
[5] For the literature on the BRI, see Scheve and Zhang (2016); Beeson (2018); Vadlamannati et al. (2019); Zhou & Esteban (2018); Jones & Zeng (2019); Hillman et al. (2021); Rahman (2020); and He (2020).

While the extant literature on the AIIB and the BRI also raises our core question – how the AIIB serves Chinese foreign political-economic agenda – that question remains largely unresolved. On the one hand, Chinese President Xi (2017, 6) linked these institutions when describing his foreign economic policy: "We have made all-round efforts in the pursuit of major country diplomacy with Chinese characteristics… We have jointly pursued the Belt and Road Initiative, initiated the Asian Infrastructure Investment Bank." In line with Xi's remarks, a qualitative strand of this literature claims a strong conceptual connection between the AIIB and the BRI (Yu 2017; Cai 2018; Skålnes 2021; Zhao & Lee 2021), with numerous conjectures that AIIB lending aims to bolster, or even serve, the BRI (Haga 2021; Macikenaite 2020; Gabusi 2017).

On the other hand, Kaya et al. (2021) argue that China is more likely to pursue a strategy of "remedial multilateralism" rather than "supplemental multilateralism," given potentially high costs to China in the latter scenario. Under remedial multilateralism, China would use the AIIB to foster new connections with politically and economically *distant* states. In contrast, under supplemental multilateralism, China would use the organization to bolster extant bilateral ties by rewarding friendly states or dispensing patronage, as the U.S. has done through the Bretton Woods institutions. Examining AIIB country-level lending data, the authors find evidence of remedial but not supplementary multilateralism. Kaya and Woo (2021) similarly find evidence of remedial multilateralism when examining the original allocation of member state votes at the AIIB. Overall, despite qualitative studies that suggest China had intended to use the AIIB as a supplemental fund to support the BRI (Callahan 2016; Gabusi 2017; Haga 2021; Kawai 2015; Yu 2017; Sun 2015), the few relevant statistical studies fail to find such a link.

Although we agree with the argument that transparent Chinese interventions to divert the AIIB for the Chinese foreign political economic agenda would be costly, we argue that there are

conditions under which China would be more likely to pursue supplementary multilateralism. As the literature emphasizes, China's main goal in setting up the AIIB is to establish itself as an important player in global economic governance, potentially rivaling the U.S. This implies a high cost to visible interventions in AIIB decision-making for China's own political-economic goals, which argues against supplemental multilateralism at the AIIB in general.

Nonetheless, China might still want to pursue supplemental multilateralism under the right conditions. China should be more inclined to intervene in the AIIB when the expected net present value (NPV) of such interventions is high. China could reduce the expected international political costs of intervention by selecting modalities that are less likely to be detected or that offer plausible deniability. While BRI projects clearly connect China to the rest of the continent and beyond, we expect that any geographic connection between the BRI and the AIIB to be less obvious. Our theoretical framework suggests high costs if there were a transparent connection between BRI and AIIB activities, e.g., within China itself or in terms of a BRI-AIIB connection in the volume of lending to a country. However, the reputational cost of less transparent BRI-AIIB connections, such as at the provincial level, with no corollary country-level connection, is likely to be far lower.

To explore the geographic nature of BRI-AIIB connections, we construct a dataset that tracks the province-level (subnational) location of both BRI and AIIB projects, as illustrated by Figure 1. In addition to seeing how projects group within countries, the map hints at an association *across* national borders, that is BRI projects on one side of the border and AIIB projects on the other. Spatial regressions run on our dataset suggests patterns consistent with both, i.e., within-province colocation and transnational colocation: We find some evidence of more AIIB loans going to provinces that previously received BRI loans *and* of AIIB loans favoring provinces

directly across a national border from foreign provinces that previously received BRI loans (i.e., transnational colocation).

[Figure 1 here]

This study contributes to our understanding of China's geoeconomic expansion, specifically China's use of statecraft via BRI and AIIB lending to advance a political-economic plan with geographic dimensions. The paper also advances the understanding of whether and how China, as a rising power and rival to the U.S. within the U.S.-led post-war multilateral economic order, can use an IO to pursue its own goals. We therefore extend the literature on the nexus of great powers and IOs to beyond democratic regimes. Below we further discuss the theoretical terrain and its application to our study (Section II). We then follow with our estimation model and data analysis (Sections III and IV). The final section elaborates the study's broader implications and outlines future research on the topic (Section V).

II. Great Power Influence Over IOs

Scholars have long recognized that, in addition to leadership motivations and the provision of public goods, great powers are tempted to utilize IOs to pursue their own goals (Gilpin 1981; Lake 1993; Mearsheimer 1994/95). For example, as a state gains in economic stature in the international economic system, its dissatisfaction with a status quo that reflects the dominant power's preferences grows (Gilpin 1981). Meanwhile, a rising state's growing economic capacity boosts its appetite for the consumption of "international goods" and hence the provision of its own multilateral institutions as it encounters limitations in pursuing its preferences in the extant order (Pratt 2021; Faude & Parizek 2021). Similarly, it has long been recognized that, among the different possible Pareto-optimal outcomes from inter-state negotiations, the institutional outcome

chosen may reflect the dominant state's preferences (Krasner 1991). Also, power struggles affect ratification of international agreements (Schneider & Urpelainen 2013).

This long-standing recognition that IOs are not simply unique solutions to collective action problems but also reflect their preferences and interests has motivated a rich empirical literature on the political economy of IOs (Section I). That literature finds that IOs and their key functions, such as lending, can be used by extant powers to reward allies or to try to win strategic friends. This point has become so well-established that the analysis has evolved to examine auxiliary questions, such as the conditions that make it more likely for great powers to exert influence to divert IOs to their own ends (Dreher et al. 2022; Kersting & Kilby 2021; Stone 2011), the kind of "swing" states that great powers might try to win over (Vreeland & Dreher 2014, Chapter 2), and the role of bureaucratic agents in pursuing great power interests (Clark & Dolan 2021).

China and Use of IOs

With the rise of China as an important provider of development finance (Dreher et al. 2022) and as the founding leader in a new multilateral development bank (the AIIB), attention has recently shifted to how China might be utilizing IOs, particularly the AIIB, for its own purposes. China certainly has the ability to do so in the AIIB, where China has considerable formal and informal power. China holds the highest vote share at the AIIB, which stands at just shy of 30 per cent at the time of writing—nearly double the U.S. vote share in the BWIs.[6] Based on this, China has a de facto veto on important governance decisions requiring a super majority. China's informal power stems partially from the AIIB president, who, since the AIIB's inception, has been a seasoned Chinese diplomat and is constitutionally chosen by the institution's Board of Governors

[6] For discussions of member state representation at the AIIB, see Kaya & Woo (2022) and Kim & Lee (2020).

through a super majority vote (Lichtenstein 2018, 62). Also, the AIIB Board of Directors is non-resident, i.e., not based in Beijing, and so the directors' access to information is likely more limited than at other international financial institutions that have resident boards. And, the President has been delegated financial decision-making powers unlike in other MDBs (ibid). As Stone (2011) shows, the greater delegation to staff (implicit in a nonresident board and other elements of the AIIB charter), the higher the expected scope for great power (Chinese) informal influence. The AIIB's location in Beijing reinforces China's informal power, much as the location of the BWIs in Washington, DC, adds to U.S. influence.

Yet, several factors argue against China using IOs for its own foreign political-economic goals, such as rewarding allies, in quite the same manner that the U.S. has done. To begin with, China is a rising power within the U.S.-led system and thus faces greater critical scrutiny over its global ambitions (e.g., Bustillo & Andoni 2018; Cai 2018; Liang 2021). Although the U.S. has certainly faced some criticism and push-back for exercising its power over institutions like the BWIs, the well-established nature of these institutions and the long history U.S. dominance have traditionally meant lower costs on both the U.S. and the institutions—relative to the costs faced by a rising power and a new organization.[7]

This heightened scrutiny directed toward a rising power is particularly pronounced for China because its government is an opaque authoritarian regime. In the case of development assistance, for instance, Chinese aid has been deemed "rogue" and accused of supporting repressive or undemocratic regimes for the sake of resource extraction (Lancaster 2007; Naím 2009; for a discussion see Dreher et al. 2022). China has also been criticized for relying on its

[7] The lack of alternative organizations until recently also facilitated the U.S. sway over these institutions, but as new IOs emerge, the costs are increasing, such as a pivot to these alternatives.

own workforce at the expense of local employment (Alden & Hughes 2009; Tang 2016), thereby failing to benefit the local economy as much as possible. All this coupled with a lack of transparency about its international activities—such as, treating the foreign aid budget as a "state secret" (Taylor 2017) and requiring non-disclosure agreements from many borrowers—has subjected China to more intense scrutiny and suspicion.

In the context of this kind of international scrutiny, the legitimacy of China as a leading multilateral actor could easily be undermined. Drawing on a rich literature, Tallberg and Zürn (2019, 583) define legitimacy as "beliefs of audiences that an IO's authority is appropriately exercised." Such legitimacy facilitates compliance with the IO's rules and norms, as well as boosting its ability to spread its influence and maintain its authority. As Stone (2011, 16) underscores, "[i]n order for international institutions to serve anyone's interests, … they must enjoy some minimal legitimacy" (see also Davis & Wilf 2017). Tallberg and Zürn identify the procedures, output, and performance of the IO as key sources of its legitimacy.

Too much interference by a great power calls into question these sources of legitimacy. This presents a tradeoff for a great power, since a delegitimized institution is of little future use to it and detracts from the great power's standing as a credible leader in global governance. The less secure the IO's reputation—say, because it is a new institution—and the less entrenched the great power, the greater the risk that great power interference weakens the IO's legitimacy. In this light, overt diversion of AIIB funds to support Chinese economic or foreign policy goals is likely to come at a high reputational cost for both the AIIB and China.[8]

[8] Dellmuth et al. (2022) distinguish between citizen and elite beliefs about legitimacy. Although we do not explore this distinction in this paper, most of the legitimacy costs we discuss could be associated with elite beliefs.

Four types of costs stand out. The first is countries' willingness to participate and provide resources. The AIIB can more readily attract and retain participation if it is considered a truly multilateral development organization rather than an instrument of Chinese economic statecraft (Zhu 2019). Membership in the AIIB has been a highly visible and contested issue (e.g., Perlez 2015; Anderlini & Mitchell 2015). Because the AIIB is the newest MDB in an already crowded landscape, its attractiveness to members depends on its relative ability to give the proper voice to other states (Pratt 2021). For example, European allies of the U.S. joined over U.S. objections by arguing that their oversight would improve the institution. Obvious diversions of the institution's resources to support Chinese projects or interests are particularly likely to raise alarms within this group and so reduce their willingness to participate and provide additional resources.

Second, the AIIB's ability to raise funding in international capital markets rests on being recognized as a credible development bank (Ella 2021; Bustillo & Andoni 2018; Zhu 2019). Evidence of undue Chinese influence (and its knock-on effects) could lead credit rating agencies to downgrade the AIIB's bond rating and thereby raise its cost of borrowing. Since the business model of all MDBs (including the AIIB) is to float bonds to borrow at a low interest rate and then relend at a slightly higher interest rate, a rating downgrade would undermine the financial viability of the AIIB.

Third, as Chen and Liu (2018) argue, the AIIB may also play an important role by signaling Chinese self-restraint. Rules-based IOs have long been thought to provide a reassuring signal to other states that the leading state does not intend to wield its power in a solely discretionary way such that others in the system have to fear its intentions (Ikenberry 2001; Stone 2011). Building China's reputation as a restrained player through its actions in the AIIB would serve to allay other countries' fears/uncertainty of interacting with a powerful China across different types of fora.

Subversion of the AIIB to the Chinese foreign political-economic agenda, in contrast, would signal non-restraint.

Finally, for China to take a more prominent role in established IOs or to successfully launch other new IOs, other countries must also see China as a competent actor on the global stage. The success of China's first IO with broad global membership is critical to demonstrating that it is indeed ready to play this role. The AIIB serves this function only if other countries perceive minimal Chinese influence. With obvious politicization of the AIIB, Chinese multilateral leadership could come under attack, damaging Chinese prestige (Ella 2021; Liang 2021; Zhu 2019). A delegitimized AIIB would ultimately undermine Chinese global ambitions. For all these reasons, China has very publicly strived to make the AIIB conform to best practices in multilateral lending and institutional design (Chin 2019).

China and Supplementary Multilateralism

Consistent with these political costs to China of exercising overt interference in the AIIB, recent empirical research finds that Chinese influence over the AIIB has taken the form of "remedial multilateralism" (Kaya et al. 2021; Kaya & Woo 2021). Under remedial multilateralism, China uses the AIIB to foster new ties with politically and economically distant states. In contrast, "supplementary multilateralism" is the dominant finding in studies of U.S. influence over other IOs: countries that are economically or politically proximate to the U.S. receive preferential treatment from U.S.-led IOs (see Section I). In this case, the multilateral channel supplements the bilateral channel. Remedial multilateralism presents a less obvious manner of using the multilateral setting to serve the great power's own goals than supplementary multilateralism. These points, however, do *not* suggest that supplementary multilateralism is entirely disincentivized. As the case of the U.S. shows, influence over an IO may be an attractive way to

achieve a range of foreign political-economic goals. Rather, the costs to China pursuing supplementary multilateralism are quite high.

Under what conditions, then, would China be tempted to pursue supplementary multilateralism? How can China mitigate the tradeoff inherent in the pursuit of supplementary multilateralism? We argue that China is more likely to pursue supplementary multilateralism when the present value of expected net benefits (i.e., expected benefits minus expected costs) is high. Under this framework, in assessing how desirable a present-day decision is, actors consider the *current* value of present and *future* net benefits, which are discounted given the temporal dimension.[9] Higher discount rates suggest greater value placed on the present. Uncertainty and expectations also matter; an intervention that is less likely to damage the institution's reputation while deriving the desired benefit has a higher expected value and hence is more likely to be chosen. This suggests, for example, that less overt interventions, which decrease the risk of a negative reaction, are more likely to be selected.

This framework permits some broad observations about China's decision-making. First, we expect that the discount rate for Chinese decision makers to be lower relative to U.S. decision makers. A public choice perspective—where politicians maximize their own welfare—suggests that government discount rates are a function of how long officials expect to hold power (e.g., Barro 1973; Clague et al. 1996; DiLorenzo & Stone 2022). Those who expect to hold office for a short period (as in a multiparty system like the U.S.) worry less about future costs and place higher importance on the present. In contrast, politicians who see their term as indefinite (as in a stable one-party system like China) worry more about future costs, suggesting a low discount rate. This, in turn, means Chinese officials should be more cautious than their counterparts in utilizing an IO

[9] This framework assumes a risk neutral decision-maker.

to pursue short run gains because of future costs (e.g., in terms of IO legitimacy and Chinese reputation) despite immediate benefits. While for an American administration with a limited time horizon, the short-run benefits may outweigh the future costs, the opposite is likely to hold for Chinese officials with a low discount rate.[10]

Second, considering the expected net present value underscores the importance of detection. If an intervention in an IO is less likely to be noticed, its probability of detection is low and hence the expected cost of that intervention is low. We have emphasized that the potential costs of intervention are higher for China (even before we consider discounting). Thus, Chinese decision making is likely to be more sensitive to the probability of detection than U.S. decision making. This suggests that China will favor discrete interventions that are less likely to be detected. In this respect, we agree with the literature's emphasis on obfuscation of intervention reducing costs (e.g., Stone 2011) and take this further to suggest that obfuscation will be particularly valuable to China.

This framework also suggests that great power interventions are more likely when the net benefits of intervention are high. There are general – i.e., applicable across contexts – and specific – i.e., unique to the context – factors that influence net benefits. We highlight salience and institutional fit in the first category. The higher salience of the goal of the intervention, the greater the benefits. The better the institutional fit, i.e., the degree that the task falls within the normal range of the IO's activities, the lower the costs, especially in terms of undermining IO legitimacy. Good institutional fit also provides plausible deniability: if the IO is being used in a way that is aligned with its intended goals and purposes, it is harder to detect its subversion toward the great

[10] We do not suggest that officials lack concerns about domestic legitimacy or "audience costs," which are shown to exist in authoritarian regimes (e.g., Weiss 2008). Our point is narrower and specific to this instance.

power's goals.[11] Specific factors include institutional characteristics that make an IO susceptible to or advantageous for utilization toward the great power's foreign political-economic agenda, such as financial or reputational benefits.

Application to the AIIB and the BRI

The importance of salience and institutional fit are particularly evident when considering Chinese influence in the AIIB to support the BRI. Since 2013, the BRI has been a cornerstone of President Xi Jinping's efforts to increase China's geo-political-economic footprint (He 2020; Liang 2021). Xi (2017, 30) underscored the high salience of the BRI in a speech at the 19th National Congress of the Community Party, stating plainly: "We should pursue the Belt and Road Initiative as a priority." Its significance for Chinese foreign policy has earned BRI the status of "Xi Jinping's signature program" (Brautigam 2019).[12] The BRI aims to strengthen China's position in global supply chains and provide an outlet for excess Chinese production, as well as for excess foreign exchange reserves (Bluhm et al. 2020; Cai 2018; He 2020; Rahman 2020; Yu 2017). The BRI also aids Chinese companies to reduce manufacturing costs by giving them access to lower cost labor in poorer participating countries (Dreher et. al. 2022, 286). For these reasons, President Xi (2017) explains the BRI in terms of "five connectivities" between China and the countries hosting BRI projects: policy, trade, infrastructure, financial, and people-to-people. Its centrality to Chinese foreign policy explains the estimated $800 billion China has invested in the BRI (Malik et al. 2021). As a cornerstone of Chinese foreign policy, the BRI is undoubtedly of high salience

[11] As an example of poor institutional fit, consider the U.S. practice of linking multilateral loans that are ostensibly for economic development or balance of payments problems to geo-strategic security alliance consolidation. This poor institutional fit is perhaps one of the reasons why the literature has devoted considerable attention to how temporary UNSC members fare in terms of loans from the BWIs (see Vreeland 2019).

[12] By the same token, other countries' diplomatic attendance at the Belt and Road Forum is taken as sign of "foreign interest in China's global economic leadership" (Broz et. al. 2020, 423).

for the Chinese government. The map in Figure 2 below shows the geoeconomic connections the BRI has facilitated by overlaying the initiatives Chinese government officials have outlined on top of BRI project locations identified in our dataset.

[Figure 2 here]

The high degree of institutional fit between the BRI and the AIIB stems from their common focus on infrastructure (and adjacent sectors) and from their lending in largely overlapping regions. In our dataset, all BRI projects belong to two sectors: energy and transport, which account for, respectively, about 45 and 55 percent of projects. For the AIIB as well, these two sectors constitute the most important two sectors, with about 41 and 35 percent of projects belonging to energy and transport, respectively. Other AIIB projects are energy- and transportation-adjacent, particularly water projects (15 percent of projects), such as a dam project in Indonesia, a rural sanitation project in Egypt, a flood management project in the Philippines, and a similar project in West Bengal, India.[13]

At the same time, the language of "connectivity" that marks the BRI has also been adopted by policy-makers at the AIIB, with one top official discussing the AIIB as increasing Asia's connectivity to other regions as the AIIB has begun providing loans to countries outside of Asia (Kynge 2018). In this vein, Jin Liqun, the President of the AIIB, reported said that by July 2018, all AIIB projects fell within the BRI (quoted in He 2020, 156, footnote 9). This institutional fit between the BRI and the AIIB should increase Chinese officials' inclination to use the AIIB to support the BRI because the AIIB can do so without appearing to materially stray from its mandate.

As the map in Figure 1 shows, this institutional fit has indeed brought the two initiatives to the same regions (see also Appendix A). A few more examples are helpful to understand the

[13] Our discussion here follows the institution's own sectoral categorizations.

overlap between the BRI and the AIIB. China has made significant investments in the port of Duqm in a remote region of Oman, and so has the AIIB. (Jabarkhyl 2017). Duqm is considered central to China's economic presence in the Gulf region, and for this reason the AIIB's investment in Duqm's commercial port is in line with Chinese ambition to develop the city into a regional hub for Chinese investors and exporters. Meanwhile, China has funded BRI projects in the neighboring Saudi Arabian province of Ash-Sharqīyah. These BRI projects predate AIIB loans for Duqm; both aim to boost trade connectivity in the region. In another example, the BRI has several transportation projects in Pakistan's Sindh province, such as the building of motorways and highways. Directly across the border in India's Gujarat province, the AIIB has funded infrastructure projects that include a system of rural roads. These endeavors clearly fit well together to strengthen the transportation network in the area and thereby promote the type of regional connectivity the BRI envisions. But because these AIIB-funded projects are similar to AIIB projects elsewhere (in terms of sector, methods of execution, etc.), they are unlikely to attract intense scrutiny.

Additional Context-Specific Considerations

Despite the salience of the BRI and the institutional fit between the AIIB and the BRI, one might still question why China would enlist AIIB support rather than mobilize additional BRI lending through its domestic sources. Relative to BRI lending, the potential benefits of using the AIIB are both financial and reputational. Financially, using the AIIB allows China to leverage the contributions of other members. Moreover, thanks to bond-financing, the AIIB is able to raise funds on private capital markets, which further leverages the members' paid-in capital. Only one-fifth of the AIIB's capital is paid-in, so the "out of pocket" costs for China of AIIB lending are

extremely low.[14] Furthermore, the rules related to lending by international financial institutions makes them the most senior creditors so that the odds of repayment are good.

There are reputational advantages, too. The reputational costs from any failed projects in the AIIB would be shared across actors or fall squarely on the institution, as opposed to solely on China. Moreover, operating through the AIIB can conceal Chinese influence. Given the potential for foreign public and elite backlash against Chinese influence, AIIB lending can support Chinese global ambitions without drawing the ire of critical spectators (Abi-Habib 2018; Wen 2022; Wheatley & Kynge 2020). With BRI projects, there is no denying the Chinese imprint; in contrast, AIIB-financed projects enjoy a multilateral imprimatur. For example, although India is the single largest recipient of AIIB loans, India's participation in the BRI has attracted much more negative domestic reaction (Baruah & Mohan 2018). This is an example of an IO doing the great power's "dirty work" (Vaubel 1986; Dreher et al. 2022).

Hypotheses

Based on the analysis above, we expect that China is more likely to exert influence when the expected present value of net benefits from doing so is high. Salience of the BRI and the institutional fit between the AIIB and the BRI will increase China's inclination to intervene, despite its predisposition toward caution (for reasons discussed above). Since obfuscation reduces the expected costs of intervention, China should also be inclined to conceal its intervention as much as possible.

What do these expectations mean for the spatial connection between the AIIB and the BRI? One can think of three layers of potential spatial connection with increasing degrees of separation:

[14] Since China has provided approximately 30% of AIIB capital, every 6 cents that China paid into the AIIB translates into one additional dollar of AIIB lending.

1) AIIB-financed projects in China could bolster BRI projects within China itself; 2) AIIB-financed projects in other countries could bolster BRI projects in those countries; 3) AIIB-financed projects could bolster nearby BRI projects in neighboring countries. Our framework suggests scenario 1 would have the highest reputational cost. If AIIB lending volume to China were perceived as excessive—or if the activities funded drew attention because of their location near sensitive area in China such as Tibet or Xinjiang—damage to the AIIB's reputation would be considerable. At a minimum, such practices could lead the Indian or European representatives in the AIIB to cry foul.

The second possibility—AIIB projects supporting BRI investments in the same country but outside of China—could play out in one of two ways. First, countries with more BRI projects could receive more AIIB projects than comparable countries with few BRI projects. This fits the "standard" supplemental multilateralism pattern with a high probability of detection (and backlash). Previous research exploring Chinese influence in the AIIB has been at the national level and has only considered this scenario.

However, an alternative pattern of AIIB support for BRI investments within a country is possible: locating AIIB projects in close proximity to BRI projects without generating a link between the two at the national level. Consider a scenario with four countries (A, B, C, and D), each with two provinces (North and South). Countries A and B each get one BRI project; countries C and D each get two. Subsequently, countries A and C each get one AIIB project while B and D get none. Viewed at the country level, there is no link between BRI and AIIB allocations—the odds of a country receiving an AIIB project are 50% regardless of the number of BRI projects. Suppose, however, that all these projects (both BRI and AIIB) are in North provinces (which are otherwise identical to South provinces). In this case, the odds of a province receiving an AIIB

project are 50% for provinces with at least one BRI project but 0% for provinces with no BRI projects. Looking at the national level AIIB funding is unrelated to BRI funding but looking at the subnational level reveals a hidden pattern.

Although the national level linkage between BRI lending and subsequent AIIB loans is likely to be detected and hence is too costly, a within-country subnational correlation (that does not generate a national level correlation) has a better chance of avoiding detection. China is, therefore, more likely to adopt this lower cost approach. This explains the findings in Kaya et al. (2021). We also find no national-level correlation between BRI projects and subsequent AIIB projects in our dataset (see Appendix Table C1).

The third scenario (AIIB projects supporting nearby BRI projects in neighboring countries) is even harder to detect, as it requires tracking the spatial location of projects across national borders. We refer to this scenario as transnational colocation; see Figure 3 for an illustrative example. Planning such cross-border linkages would be easy enough for Chinese policymakers who plan the BRI network, tracking them less so for third parties, even those keen on international affairs.

[Figure 3 here]

III. Model and Data

To investigate whether there is an association between the subnational location of AIIB projects (on the left-hand side) and BRI projects (on the right-hand side) both within and across national borders, we organize our data at the first subnational level (ADM1), which we refer to as "provinces" for convenience, though the official terminology varies from country to country.[15]

[15] ADM1 refers the largest subnational administrative division in the country, such as states in the United States or provinces in Canada. We use the ADM1 level rather than exact coordinates

We include a number of control variable to account for characteristics that would make a province attractive for both AIIB and BRI projects even in the absence of Chinese influence.

Estimation model

Equation 1 presents our primary spatial model; Appendix B includes detailed discussions of spatial regressions, why we settle on this specific model, and extensions to Equation (1).

$$AIIB_{ijt} = \beta_1 BRI_{ijt-1} + \beta_2 neighbor\ BRI_{ijt-1} + \beta_3 WB_{ijt-1} + \beta_4 neighbor\ WB_{ijt-1} + \beta_5 Z_{ij} + \alpha_i + \delta_t + \varepsilon_{ijt} \quad (1)$$

where

$AIIB_{ijt}$	AIIB-funded projects in province i, country j, year t
BRI_{ijt-1}	BRI projects in province i, country j, averaged t-3 to t-1
$neighbor\ BRI_{ijt-1}$	BRI projects in provinces contiguous with province i, country t, averaged t-3 to t-1
WB_{ijt-1}	World Bank infrastructure projects in province i, country j, averaged t-3 to t-1
$neighbor\ WB_{ijt-1}$	World Bank infrastructure projects in provinces contiguous to province i, country j, averaged t-3 to t-1
Z_{ij}	Other factors (population, nighttime lights) in province i, country j
α_i, δ_t	Country and year dummy variables

because our location information for some sources is less fine grained, for example just identifying the centroid of the province for AIIB and BRI projects. Ignoring differences in precision and using exact coordinates could, thus, bias results toward finding Chinese influence, showing AIIB near BRI projects (i.e., at the provincial centroid).

All a country's provinces are in the sample if the country borrowed from the AIIB during our sample period (2016-2020). However, neighboring provinces are included in the calculation of explanatory variables regardless of whether their countries borrowed from the AIIB during our sample period since these provinces may still have received BRI and World Bank projects.[16] In iterations of our main model, we break down neighboring provinces into domestic and foreign neighbors to examine different values of β across these categories and to test the hypotheses (Section II).

Our dependent variable measures the number of AIIB projects approved for a province each year and is drawn from the organization's online database (AIIB 2022).[17] Our BRI variables are derived from the Reconnecting Asia database (Reconnecting Asia Project 2020).[18] As Equation (1) shows, we use three-year averages of the BRI variables lagged by one year so that the BRI projects predate related activity at the AIIB. This should be a sufficient lag since the AIIB project approval timeline tends to be short, typically 6 months from concept review to financing approval.[19] Appendix A lists the projects in our sample by country and provides more detail about the variables, including how we determine project location.

Our control variables aim to reduce the chance of omitted variable bias by accounting for economic and social characteristics that could make a province a desirable location for both AIIB and BRI projects (since both institutions focus on infrastructure investment) even in the absence

[16] For example, there are no AIIB projects in Thailand (which leaves Thailand out of our estimation sample), but Thailand has received BRI projects. Thailand borders Laos and Myanmar, both of which are in our estimation sample. Appendix B further discusses this point.
[17] Although the AIIB provides loan amounts for each project, we use project counts instead because data on Chinese loan amounts are inconsistent.
[18] This was our preferred source for the data as it includes projects clearly declared as part of BRI, and it was most up-to-date dataset. The more comprehensive dataset from aiddata.org includes all Chinese aid across the globe (not specific to BRI) and stops in 2017.
[19] Spatial regression results reported below are broadly similar if we switch to a two-year lag.

of Chinese influence. We include World Bank infrastructure projects (funded by the IBRD and IDA) because these projects' locations should reflect the same unobserved location characteristics that attract AIIB projects.[20] The World Bank often provides multiple locations per project; we code a project as in a province if it has at least one location in that province. We exclude World Bank projects co-financed with the AIIB. Finally, we include provincial population (for 2020, drawn from WorldPop (2018)) and nighttime lights (average annual emissions per capita for 2015, drawn from Elvidge et al. (2021)). The geospatial aid literature finds more funds to go to more populated areas, and nighttime lights are the preferred measure of subnational economic output (Dreher et. al. 2022, 205; Henderson et al. 2012).

Our unit of observation is the province-year for countries that received at least one location-specific AIIB loan between 2016 (when the AIIB began lending) and 2020.[21] The sample includes 435 provinces in 19 countries. As Table B2 shows, most provinces received no AIIB loans in a given year; four provinces received two projects in the same year (one each in Bangladesh, India, Pakistan, and Uzbekistan). BRI projects are slightly more numerous, with a total of 129 across the 2175 province-years. BRI projects per province per year range from zero to five (two provinces in Pakistan).

We examine spatial connections between AIIB and BRI infrastructure projects regardless of sector. Allowing for spatial connections between infrastructure projects in different sectors makes sense given China's stated goals. The aforementioned "five connectivities" of the BRI means that designers of the BRI see different sectoral projects in and across countries as connected

[20] To the extent that China has influence in the World Bank or that the World Bank attempts to compete with Chinese aid, BRI lending may impact World Bank lending. This would tend to bias our analysis against finding evidence of Chinese influence in the AIIB. We omit projects funded exclusively by World Bank trust funds as these may have different allocation criteria.
[21] All countries in our sample joined the AIIB before 2017.

in a broad sense (OECD 2018). Furthermore, the OECD notes that "regions not lying within ...BRI ...will also require increased investment in infrastructure to support economic development and avoid the widening of geographical divides," meaning geo-economic expansion requires attention to marginal areas in the path of expansion as well (ibid, 7). In this light, while a water project (say financed by AIIB) following a road project (financed from the BRI) may not seem physically connected, they nonetheless may be geographically connected such that they belong to the same overall geo-economic plan. Our dataset is designed to capture these geographical connections within and across borders.

IV. Findings and Discussion

We, first, expand upon the maps in Figures 1 and 2 above with a view to examining the AIIB-BRI connection within China. Our expectation is of no systematic connection between these two initiatives within China, as the costs to China would be quite high. Map 3 confirms our expectation.[22] To more systematically test this, in robustness checks to the analysis below we exclude China. Data limitations preclude a more detailed analysis.

[Figure 4 here]

We turn next to estimations structured around Equation (1). These explore whether there is a relationship between the number of BRI projects in a province or neighboring provinces in recent years and the number of AIIB projects in the province in the current year, *ceteris paribus*. Since the data set is a spatial panel with a count dependent variable, we use a variety of estimation methods. All specifications include year dummies, and we cluster standard errors by province. Where appropriate, we report two sets of t- or z-statistics: the standard model-based statistic and

[22] The map does not address the timing of projects, so we do not "lag" BRI projects. As a result, the map includes two additional BRI approved in 2020.

the statistic from a jackknife procedure to check for robustness to outliers.[23] We start with a stripped-down specification that does not consider spatial issues, then introduce neighboring provinces, and finally differentiate between domestic and foreign neighbors.

The baseline model in Table 1 Column (1) uses a negative binomial model that is appropriate for count data. The number of AIIB projects in a province is positively related to the number of recent BRI projects in the same province, even after controlling for province characteristics (population and economic activity) and the suitability for infrastructure investment (proxied by the number of World Bank-funded infrastructure projects). This link is robustly statistically significant (based on the jackknife procedure's z-statistic). All the control variables also enter with positive and robustly statistically significant coefficient estimates. Provinces with more World Bank infrastructure projects, larger populations, and higher nighttime light emissions per capita receive more AIIB infrastructure projects, *ceteris paribus*. Column (2) presents results from a pooled regression, i.e., an ordinary least squares regression using standard errors clustered by province, and Column (3) reports a country fixed effects specification (again with clustered standard errors). The key result—more AIIB projects in provinces that have received more BRI projects—is significant in both specifications, robust in the pooled model and marginally robust in the fixed effects model.

[Table 1 here]

Table 2 introduces spatial variables for neighboring provinces. To ensure consistent control variables, the World Bank variables mirror the BRI variables throughout. Results for

[23] With province-clustered standard errors, the jackknife procedure repeats the estimation process, dropping one province at a time. The jackknife allows us to systematically identify results driven by outliers, an important issue since many provinces in the data set receive no projects in a given year while a few provinces receive many projects. The standard jackknife is not compatible with models involving spatially correlated error terms.

same-province BRI projects are similar to those in Table 1: the number of BRI projects enters with positive and statistically significant coefficient estimates that are robust or marginally robust. The neighbor province BRI project coefficient estimate is much smaller and not statistically significant. For World Bank-funded projects, the neighbor province coefficient even changes sign but is very small in size.

[Table 2 here]

Table 3 differentiates between domestic and foreign neighbor projects to consider the possibility of transnational colocation. Results for same-province BRI and World Bank projects are similar to those in the previous tables. For neighboring provinces, differentiating between domestic and foreign neighbors has little impact; neither domestic nor foreign neighbors show a significant effect. That is—up to this point—estimates show no evidence of a strategy of translational colocation.

[Table 3 here]

The estimates presented above, however, fail to consider four issues. The first issue is endogeneity. The identification strategy relies on chronological ordering to ensure exogeneity, which assumes China does not have knowledge of the location of future AIIB projects when it selects the location of BRI projects. If this is wrong, or if our control variables (World Bank-funded projects, population, nighttime lights, and country dummies) are insufficient to account for location attractiveness, the estimates above could be biased and inconsistent. To address this concern, we follow the approach set out in Bluhm et al. (2020) to construct shift-share instruments

based on the interaction of purely cross-sectional variables (the frequency with which provinces receive BRI projects) and an exogenous time series variable (China's current account balance).[24]

Table 4 presents results from the instrumental variables estimation. The instrumentation strategy includes province fixed effects, so the specifications estimated most closely match those in Column (3) of the previous tables. We construct four instruments based on the frequency of any own-province BRI projects, the frequency of any neighbor-province BRI projects, the frequency of any domestic neighbor-province BRI projects, and the frequency of any foreign neighbor BRI projects. The first instrument is used in all columns; the second instrument is used in column (2); the third and fourth instruments are used in column (3). The test statistics reported indicate no apparent problem with weak instruments; Cragg-Donald F statistic values are above the critical values tabulated by Stock and Yogo (2005).[25] Only one significant positive estimate emerges from the IV estimation: the coefficient for neighboring foreign provinces.[26] This provides evidence supporting transnational colocation.

[Table 4 here]

[24] Bluhm et al. (2020) use an index of Chinese construction materials production to capture supply-side factors determining China's overall development finance budget rather than the current account balance. The construction materials index follows a "vent for surplus" view of aid, which seems to describe Chinese policy well during the 2000-2014 period that Bluhm et al. examine. However, with the advent of environmental regulations and other policy changes, China now uses its aid in part to move "dirty" industries abroad. As a result, first stage coefficient estimates are the "wrong" sign with the construction materials index (more Chinese production linked to less, not more, Chinese aid). This undermines the exclusion restriction (since influence over the AIIB could also be used to increase the supply of construction materials to China). Using the current account balance solves this problem; the first stage coefficients are the "right" sign (positive). This is a potentially important point for future empirical work on Chinese development finance.

[25] Stock & Yogo (2005) do not provide critical values for the case of three endogenous variables.

[26] Including province-level fixed effects is not our preferred specification given limited variation in the sample.

The second issue is the spatial nature of the data, which we discuss in Appendix B. Are there additional spatial effects that we have failed to capture? To explore this issue, we run Moran tests (Moran 1950; Kelejian & Prucha 2001) for additional spatial dependence for the OLS-based specifications in Columns (2) and (3) of Tables 1 to 3 above. These tests indicate whether including a spatial lag of the dependent variable is necessary. In all six cases (results available upon request), the Moran tests fail to reject the null hypothesis, implying that no spatial lag of the dependent variable is needed. We also estimate Spatial Durbin Error models that allow for spatial correlation in the error term (Elhorst 2014). In each case (for the specifications in Columns (2) and (3) of Tables 1 to 3), a Wald test fails to reject the null hypothesis that the error terms are not spatially correlated. See Tables B1 to B3 in Appendix B. In short, none of these tests suggests a problem with unmodeled spatial correlation.

Third, the sample used in Table 3 covers all provinces in countries receiving AIIB loans, including those that do not border another country. By construction, the number of foreign neighbor BRI projects is zero for these provinces. To address this issue, we re-estimate Table 3 using only border provinces. Whereas all results for foreign neighbor BRI projects were insignificant in Table 3, narrowing the sample generates significant results for the count model (Column 1) and marginally significant results for the country fixed effects model (Column 3). (Results available upon request.) Hence, these results provide some additional support for the transnational colocation hypothesis.

Finally, as alluded earlier, the behavior of the AIIB toward China itself may be different than AIIB behavior toward other borrowers. To allow for this, we re-estimate Table 3 once more, now also excluding provinces in or bordering China. This sample restriction strengthens the foreign neighbor effect in the country fixed effects specification from marginally significant to

significant (p-value 0.038). (Results available upon request.) These results, like the IV results and the prior robustness check, suggest a positive effect for foreign neighbor BRI projects, reflecting transnational colocation.

The finding on transnational colocation becomes more pronounced when one considers the "foreign neighbor BRI" estimate in the broader context of our findings. In principle, the spatial link between BRI projects and AIIB projects could be driven by infrastructure synergies: the presence of nearby BRI projects might make subsequent AIIB investments more productive. If so, the link between these projects would reflect an efficient allocation of AIIB resources rather than Chinese influence over the institution. If colocation of infrastructure projects were driven by synergies, however, this should likewise hold for foreign neighboring-province World Bank projects. In fact, we do not find any positive neighbor province effects for World Bank projects.

In sum, we find substantial evidence consistent with both same-province effects and transnational colocation of BRI and AIIB projects in this time period. The same-province link between BRI and AIIB projects is positive, statistically significant, and generally robust until we introduce province fixed effects (as required by the instrumentation strategy in Table 4). Given only five observations per province and limited variation in the data, this is hardly surprising. Transnational colocation is evident when we narrow the sample to cases where it is possible (i.e., to provinces that border another country).

V. Conclusions

This paper provides the first detailed analysis of possible links between AIIB and BRI projects through a large N-study and the use of a new dataset that identifies the (province-level) subnational geographic locations of both BRI and AIIB projects. The analysis finds novel evidence suggesting Chinese supplementary multilateralism, i.e., China using its influence over a multilateral

organization to supplement its bilateral development finance. Although both policy discussions and the academic literature suggest that China uses the AIIB to bolster the BRI, the few extant studies to date – based on country-level analysis – fail to find a connection. Instead, these studies point to remedial multilateralism only, whereby China uses the AIIB to connect with economically distant countries.

Building on extant works, we present a theoretical argument that China will be motivated to intervene in the multilateral setting (here by exerting its influence over the AIIB) to serve its bilateral goals (the actualization of the BRI). Under conditions where the present value of expected benefits is high and the present value of expected costs is low, Chinese intervention is more likely. We suggest that these conditions may be met in the case of the AIIB-BRI connection. The AIIB and the BRI's common focus on infrastructure generates a natural institutional fit between them, meaning the AIIB can invest in mission-compatible projects in a way that meets BRI objectives. The salience of the BRI in Chinese foreign political economic policy should increase Chinese motivation for supplementary multilateralism. This said, the degree to which spatial (geoeconomic) connections between AIIB and BRI projects can avoid detection and subsequent international backlash depends on the nature of those spatial connections.

Our empirical results, while limited by data availability, are consistent with these expectations. We find some evidence that AIIB projects are concentrated in provinces that have previously received BRI projects. When considering AIIB and BRI projects in neighboring provinces, we find evidence of a transnational colocation effect. In our most demanding estimation method and in relevant subsamples, provinces located next to foreign provinces with BRI-funded projects receive more AIIB-funded projects than do other provinces in the same country. These patterns cannot be accounted for by the specific features of the provinces. We also find that this

pattern unlikely to be driven by synergies between the infrastructure projects that the BRI funds and the infrastructure projects that the AIIB funds. Finally, neither of these province-level links between the BRI and the AIIB generates a linkage at the national level. This points to a subtle form of supplementary multilateralism to support China's BRI goals that is harder to detected and, if detected, provides plausibly deniable for both the AIIB and China.

The paper broadens our understanding of Chinese influence over IOs as distinct from the predominant form of American influence witnessed in the post-war order. Future work on this topic could expand upon these results as more data become available. A clear limitation in our analysis is the availability data (for both the AIIB and the BRI) and the accuracy of those data (for China's BRI projects). Limited coverage, missing location information, and varying definitions of project dates all present challenges, despite our efforts to increase data quality. Our approach has been to limit the period covered (ending in 2020 to avoid spotty coverage) and to guard against results driven by outliers via a jackknife procedure to estimate standard errors. More and better data on BRI and AIIB projects would provide better solutions to these problems.

Future work should also examine how the coexistence of the AIIB and the BRI affect the regional development landscape. We do not claim that Chinese influence over the AIIB to support the BRI exclusively benefits China; any assistance given for self-interested reasons could generate returns for others. It is plausible that even with this pattern, AIIB assistance delivers important economic benefits to localities. There could, however, also be considerable downsides to Chinese influence within the AIIB, including supports for authoritarian or corrupt regimes. Although AIIB safeguard policies on paper follow current best practices, the actual environmental effects of its projects is another area that deserves analysis, especially as the AIIB reduces its reliance on co-financing with more established donors. Future work can also examine how relations within the

region are affected by these financial flows. We hope that the greater clarity on Chinese development assistance in the first place lays the groundwork for these kinds of analyses.

Indeed, the paper contributes to several other scholarly and policy-relevant debates. First, Chinese multilateral assistance is undoubtedly changing the landscape of international development "aid," which includes not just concessional funds (grants and below-market loans), but also non-concessional lending (market-rate or above market rate loans). Dreher et al. (2022) explore the different characteristics of concessional and non-concessional Chinese development finance, but scholars are still in the early stages of unpacking what Chinese "aid" looks like. This project helps advance this agenda.

Second, understanding the nature of different dimensions of Chinese involvement in multilateral development assistance and the linkage between them – such as the connection between the bilateral BRI and the multilateral AIIB – helps illuminate broader questions about Chinese influence in the U.S.-led order. For example, researchers are now exploring whether China or the AIIB competes with the World Bank (Hernandez 2017; Zeitz 2021; Qian et al. 2023). Our study is relevant to these works: if China is using the AIIB to bolster its foreign policy goals, World Bank emulation of Chinese infrastructure projects (Zeitz 2021) could inadvertently promote Chinese goals, such as building out a supply chain with China at its center. How great powers use multilateral economic institutions is a perennial concern because these rules-based settings only help states cooperate and arbitrate disagreements, but also provide a platform for powerful states to advance their interests. While China as a rising power may not be able to manipulate multilateral settings in the same manner the U.S. has, it may be finding its own way of doing so.

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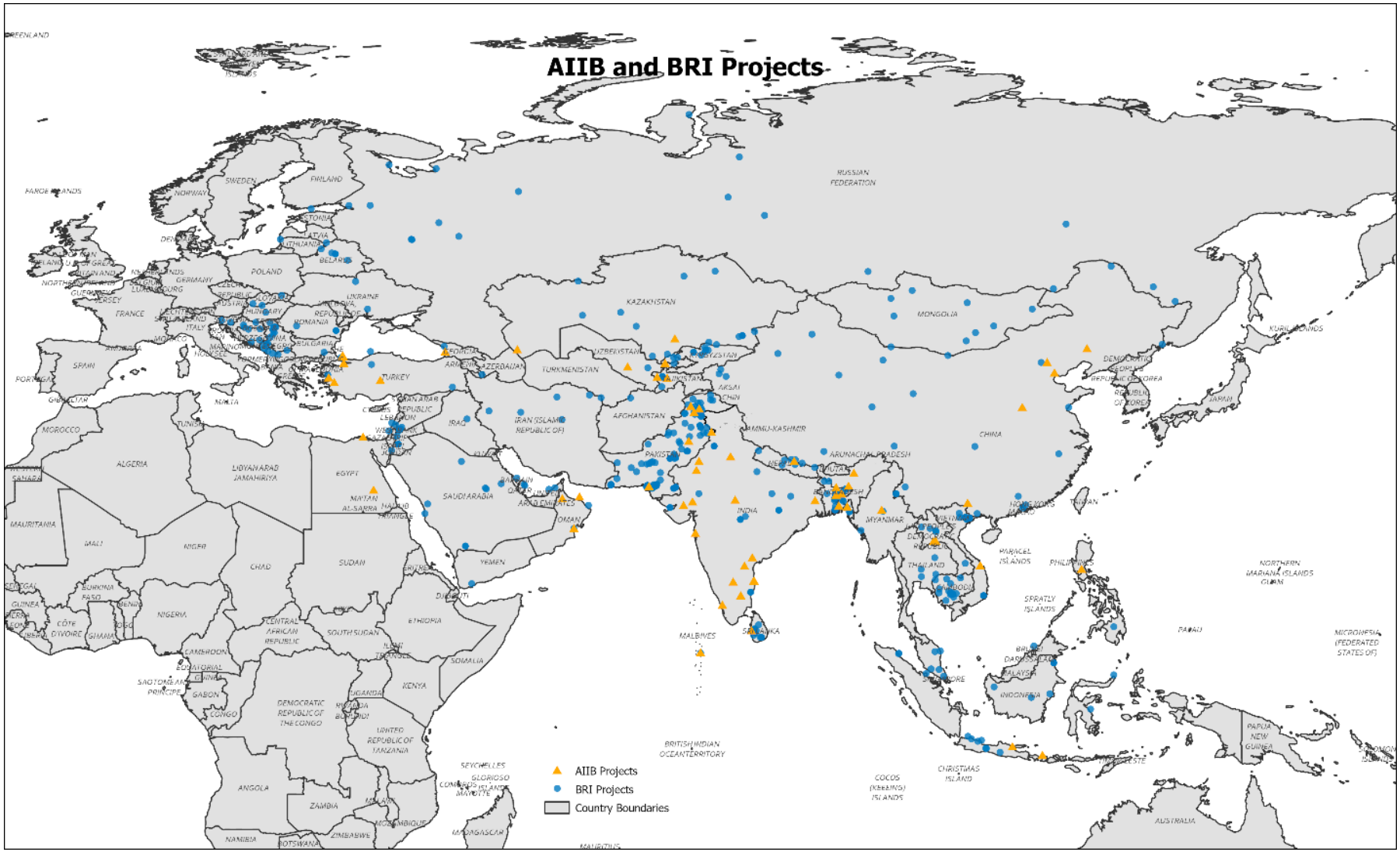
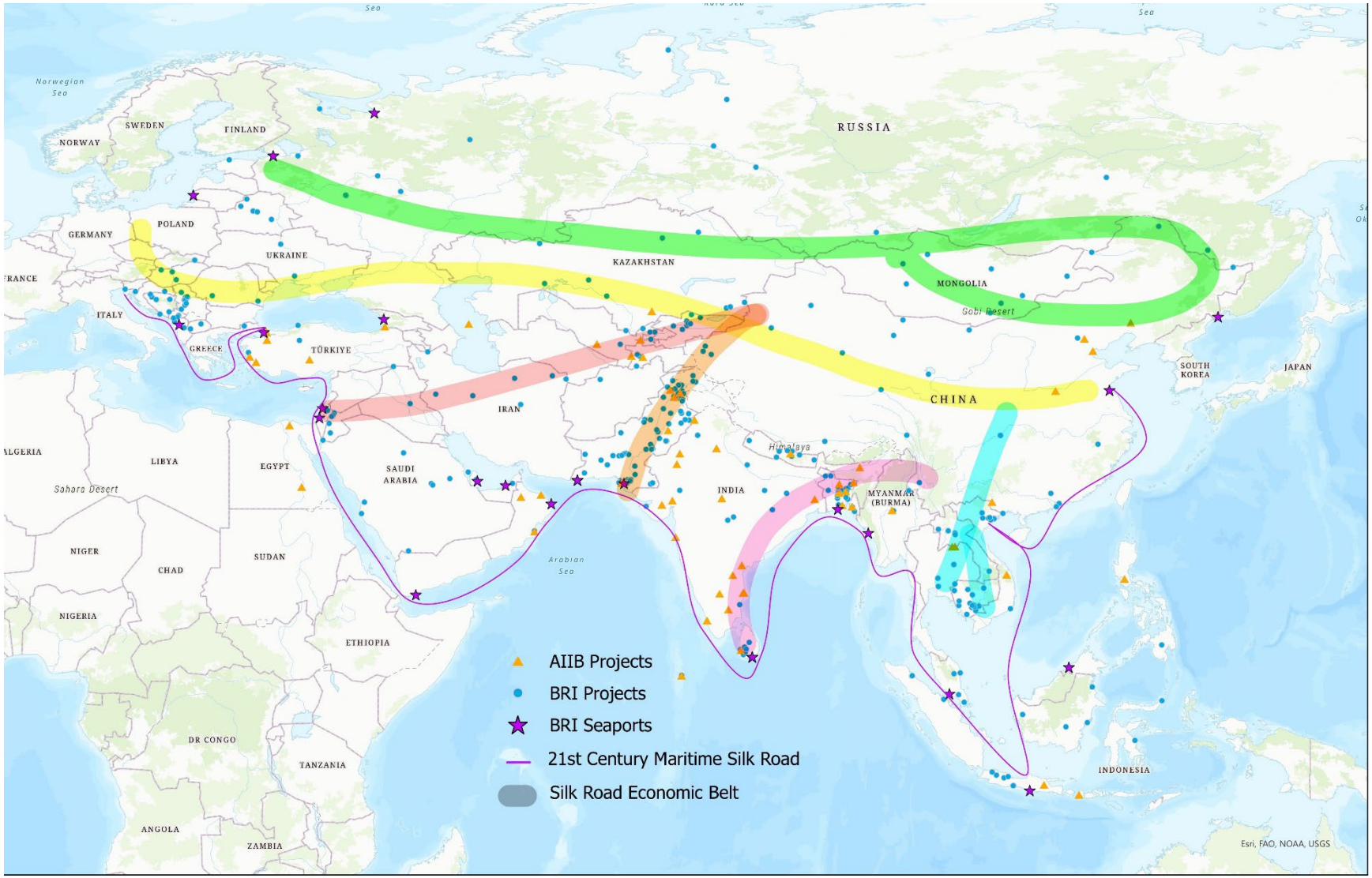
Figure 1: Location of AIIB and BRI Projects



Source: Authors' own dataset.

Figure 2: Geo-economic Connections Through BRI



Source: Authors' own dataset.

Figure 3: Transnational Colocation

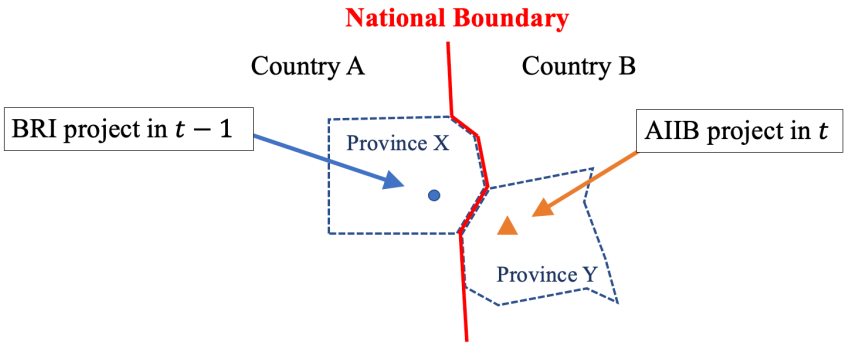
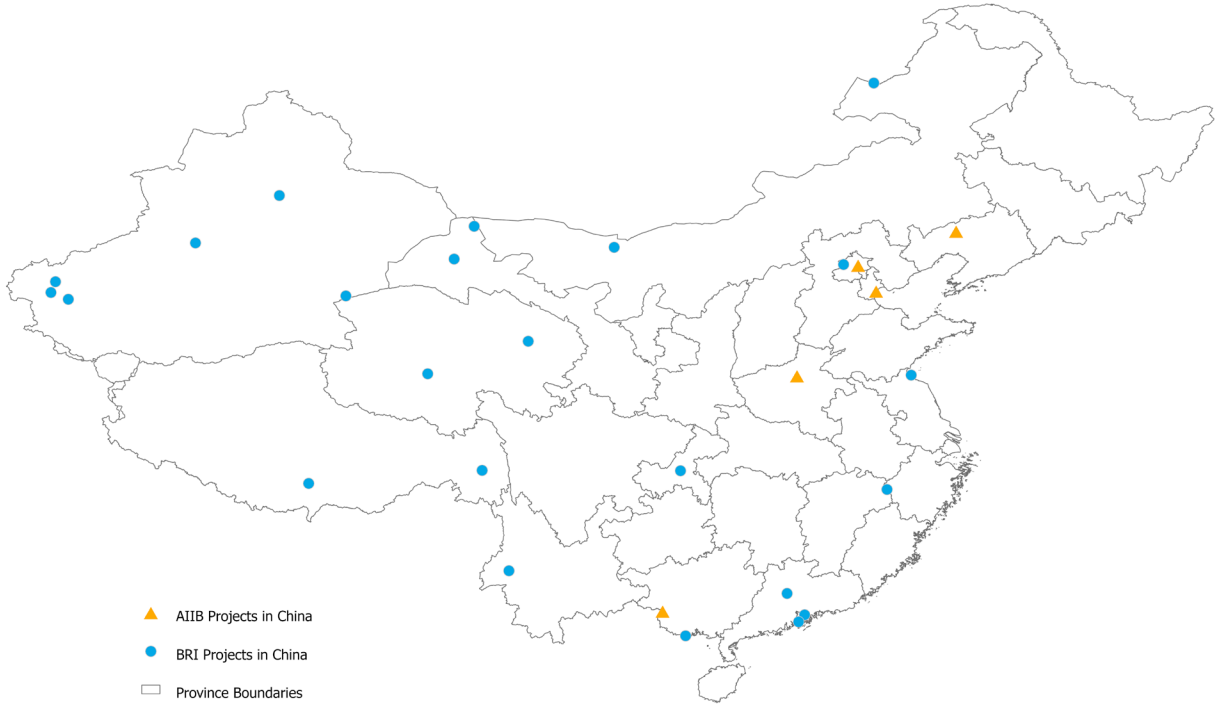


Figure 4: AIIB and BRI Projects within China



Source: Authors' own dataset.

Table 1: Baseline

	(1)	(2)	(3)
	nbreg	Pooled	Country FE
# BRI projects	0.460***	0.060***	0.056**
	(5.27)	(3.23)	(2.17)
	[5.00]	[2.39]	[1.66]
# World Bank projects	0.946***	0.043**	0.028
	(4.24)	(2.46)	(1.45)
	[3.87]	[2.37]	[1.37]
Population (log)	0.345***	0.005*	0.012***
	(3.72)	(1.90)	(3.31)
	[3.52]	[1.87]	[3.18]
Nighttime light per capita (log)	0.283**	0.003**	0.010***
	(2.43)	(2.33)	(2.60)
	[2.30]	[2.29]	[2.42]
Observations	2175	2175	2175
Countries	19	19	19
Provinces	435	435	435

Dependent variable: # of AIIB-funded projects in province; unit of observation is province-year. t/z statistics in parentheses based on province-clustered SEs; * 0.10 ** 0.05 *** 0.01. Jackknife t/z statistics in square brackets. All specifications include unreported year dummies. BRI and World Bank variables averaged over years t-3 to t-1.

Table 2: Neighboring Provinces

	(1)	(2)	(3)
	nbreg	Pooled	Country FE
# BRI projects	0.312***	0.056***	0.057**
	(2.78)	(2.70)	(2.22)
	[2.40]	[1.96]	[1.68]
# Neighbor BRI projects	0.094	0.002	0.002
	(1.36)	(0.36)	(0.17)
	[1.16]	[0.29]	[0.12]
# World Bank projects	1.116***	0.051**	0.040**
	(3.81)	(2.50)	(1.97)
	[3.48]	[2.41]	[1.85]
# Neighbor World Bank projects	-0.095	-0.004	-0.009***
	(-1.01)	(-1.19)	(-2.61)
	[-0.92]	[-1.15]	[-2.40]
Population (log)	0.364***	0.006**	0.013***
	(4.00)	(2.27)	(3.67)
	[3.75]	[2.23]	[3.50]
Nighttime light per capita (log)	0.275**	0.003**	0.009**
	(2.36)	(2.36)	(2.45)
	[2.22]	[2.31]	[2.27]
Observations	2175	2175	2175
Countries	19	19	19
Provinces	435	435	435

Dependent variable: # of AIIB-funded projects in province; unit of observation is province-year. t/z statistics in parentheses based on province-clustered SEs; * 0.10 ** 0.05 *** 0.01. Jackknife t/z statistics in square brackets. All specifications include unreported year dummies. BRI and World Bank variables averaged over years t-3 to t-1.

Table 3: Domestic versus Foreign Neighbors

	(1)	(2)	(3)
	nbreg	Pooled	Country FE
# BRI projects	0.350*	0.065***	0.058**
	(1.73)	(3.06)	(2.36)
	[1.53]	[2.27]	[1.79]
# Domestic neighbor BRI projects	0.070	-0.002	-0.012
	(0.58)	(-0.30)	(-0.61)
	[0.48]	[-0.25]	[-0.53]
# Foreign neighbor BRI projects	0.117	0.012	0.009
	(1.60)	(1.34)	(0.98)
	[0.99]	[0.75]	[0.57]
# World Bank projects	1.127***	0.049**	0.037*
	(3.45)	(2.33)	(1.74)
	[3.13]	[2.26]	[1.64]
# Domestic neighbor World Bank projects	-0.103	-0.003	-0.007
	(-0.84)	(-0.69)	(-1.61)
	[-0.77]	[-0.68]	[-1.52]
# Foreign neighbor World Bank projects	-0.080	-0.005	-0.012**
	(-0.48)	(-1.44)	(-1.98)
	[-0.41]	[-1.35]	[-1.62]
Population (log)	0.361***	0.005**	0.013***
	(4.10)	(2.28)	(3.63)
	[3.83]	[2.23]	[3.44]
Nighttime light per capita (log)	0.272**	0.003**	0.009**
	(2.33)	(2.15)	(2.34)
	[2.19]	[2.10]	[2.16]
Observations	2175	2175	2175
Countries	19	19	19
Provinces	435	435	435

Dependent variable: # of AIIB-funded projects in province; unit of observation is province-year. t/z statistics in parentheses based on province-clustered SEs; * 0.10 ** 0.05 *** 0.01. Jackknife t/z statistics in square brackets. All specifications include unreported year dummies. BRI and World Bank variables averaged over years t-3 to t-1.

Table 4: Instrumental Variables Estimation

	(1)	(2)	(3)
# BRI projects	-0.203*	-0.302*	-0.240
	(-1.81)	(-1.92)	(-1.43)
# Neighbor BRI projects		0.0408	
		(0.95)	
Domestic			0.00288
			(0.06)
Foreign			0.127**
			(1.99)
# World Bank projects	0.00831	0.0170	0.0159
	(0.49)	(0.84)	(0.75)
# Neighbor World Bank projects		-0.00532	
		(-0.91)	
Domestic			-0.00673
			(-1.00)
Foreign			-0.000818
			(-0.07)
Observations	2175	2175	2175
Countries	19	19	19
Provinces	435	435	435
Cragg-Donald Wald F statistic	121.99	28.68	16.37
Anderson canon. corr. LM statistic	114.37	55.78	48.03
Chi-sq(1) P-val	0.0000	0.0000	0.0000

Dependent variable: # of AIIB-funded projects in province; unit of observation is province-year. z statistics based on province-clustered SEs; * 0.10 ** 0.05 *** 0.01. All specifications include unreported year dummies and province fixed effects; see text for discussion of instrumentation strategy. BRI and World Bank variables averaged over years t-3 to t-1.

Online Appendix: Table of Contents

Appendix A: Data Appendix

Expanded Descriptions of Key Variables

For each AIIB project, we determine the province in which it is located from the title and description. For example, Project 000477 is titled "India: Chennai City Partnership: Sustainable Urban Services Program." Chennai is the capital of Tamil Nadu. Projects that have no subnational location, e.g., because they are national, are excluded. The year of the project is based on its financing approval date. Both for BRI and AIIB projects, in the case of disputed territories, we assign the territory to the government borrowing for the project located there.

World Bank project data are drawn from the International Aid Transparency Initiative (IATI) application programming interface (API) because World Bank reports additional data to IATI that it does not make available on its website. Given multiple locations are often reported for individual World Bank projects, for each project, we identify in which provinces it had locations (using the coordinates in the World Bank/IATI data and boundaries from GADM 4.0.1). The province-level count variables we report indicate how many World Bank-funded projects had at least one location in the province in the given year; that is, these variables count projects, not locations.[1] We collect World Bank project financing information from the World Bank Projects Database API. Using the list of co-financers for each project, we exclude World Bank projects co-financed with the AIIB to avoid the potential endogeneity issue these projects pose.

[1] World Bank project variables are meant to capture features of the province that attract AIIB and BRI infrastructure projects so we use only World Bank infrastructure projects. The World Bank identifies multiple sectors per project and reports percentages for each sector. Following Zeitz (2021), we classify a project as funding infrastructure if its largest sector is infrastructure-related (i.e., agriculture, energy, industry, information and communication technology, transportation, or water and sanitation). If an infrastructure sector is tied for largest sector, the project is counted as infrastructure.

We compile province-level 2020 population data by aggregating one-kilometer-wide raster data from WorldPop (2022) to the ADM1 boundaries defined by GADM 4.0.1. Given the wide range of population values (running from 15,331 people in Batanes, an archipelago province in the Philippines, to 23.7 million people in Uttar Pradesh, the most populous state in India), we log this variable. Our nighttime light data are from Elvidge et al. (2021) and Goodman et al. (2019), converted to per capita terms and logged.

Table A1: AIIB and BRI Projects by Country

	AIIB			BRI Projects		
	# Projects	# Provinces with Projects	# Foreign Neighbor Projects	# Projects	# Provinces with Projects	# Foreign Neighbor Projects
Azerbaijan	1 (2.2%)	1	0	0 (0.0)%	0	0
Bangladesh	6 (13.0%)	4	3	30 (14.7)%	7	1
China	2 (4.4%)	2	1	14 (6.9)%	9	18
Egypt	2 (4.4%)	2	0	0 (0.0)%	0	1
Georgia	1 (2.2%)	1	0	1 (0.5)%	1	0
India	11 (23.9%)	9	10	13 (6.4)%	7	130
Indonesia	1 (2.2%)	1	0	14 (6.9)%	9	0
Kazakhstan	1 (2.2%)	1	0	7 (3.4)%	4	10
Laos	2 (4.4%)	1	0	5 (2.5)%	4	6
Maldives	1 (2.2%)	1	0	1 (0.5)%	1	0
Myanmar	1 (2.2%)	1	4	1 (0.5)%	1	19
Nepal	1 (2.2%)	1	1	5 (2.5)%	3	8
Oman	2 (4.4%)	2	0	1 (0.5)%	1	4
Pakistan	4 (8.7%)	3	2	79 (38.7)%	5	2
Philippines	1 (2.2%)	1	0	1 (0.5)%	1	0
Sri Lanka	1 (2.2%)	1	0	10 (4.9)%	7	0
Tajikistan	2 (4.4%)	2	0	4 (2.0)%	3	8
Turkey	4 (8.7%)	4	2	1 (0.5)%	1	0
Uzbekistan	2 (4.4%)	1	2	4 (2.0)%	3	20

Table A2: Descriptive Statistics for Baseline Estimation

	mean	sd	min	max
# AIIB projects	0.021	0.156	0	2
# BRI projects	0.059	0.334	0	5
# Neighbor BRI projects	0.294	1.052	0	12.3
Domestic	0.224	0.922	0	12.3
Foreign	0.070	0.484	0	9.67
# WB projects	0.280	0.384	0	3
# Neighbor World Bank projects	1.364	1.704	0	13
Domestic	1.089	1.362	0	10.3
Foreign	0.275	0.817	0	10.3
Population in millions	9.160	23.219	.0153	237
Nighttime light per capita	0.038	0.104	.000127	1.14
Year	2018	1.415	2016	2020
Observations	2175			
Countries	19			
Provinces	435			

BRI & World Bank project counts averaged over prior 3 years (t-3 to t-1).

The number of neighboring province projects (BRI or World Bank) reported above is relatively large since most provinces have more than one neighboring province. The decimal reflects the fact that these variables are averaged over three years. The BRI neighbor project count ranges from zero to 12.3 (one province in Pakistan). The World Bank often reports multiple locations, so its project counts are substantially higher: 0.28 projects with a location in a province. Looking at the number of projects in neighboring provinces, the World Bank figure ranges as a high as 13 (a province in India). The same province in India has 10.3 domestic neighbor World Bank projects while a province in Tajikistan has 10.3 foreign neighbor World Bank projects.

Appendix B: Spatial Regression Models and Tests

In spatial regressions, there are some decisions to make regarding how to model spatial relationships, e.g., whether to include spatial lags of the dependent variable (spatial autocorrelation) and the covariates, and whether to model spatial correlation in the error term. Our initial estimations suggest that the inclusion of spatial autocorrelation is not necessary, which we next explain.[2] We start with a simplified version of the empirical model that focuses just on province locations:

$$Y_i = \alpha + \delta\left(\sum_{k\in C_i} Y_k\right) + \beta_1 X_i + \beta_2\left(\sum_{k\in C_i} X_k\right) + \varepsilon_i \text{ for all } i \in S \qquad \text{(A1)}$$

C_i is the set of provinces contiguous to province i; S is the set of province-level observations in the estimation sample, i.e., provinces in countries that have borrowed from the AIIB. The model includes spatial autocorrelation (measured by δ). The model also allows the value of X in province i to impact the value of Y in province i (β_1) and the values of X in provinces contiguous with province i ("neighbor provinces") to impact the value of Y in province i (β_2). In other words, this model includes both spatial autocorrelation and spatial lags of covariates. All this is standard in spatial regressions (sometimes termed the Spatial Durbin model (Elhorst 2014))—except that here C_i can include both $k \in S$ and $k \notin S$. That is, neighboring provinces need not be in the estimation sample to impact the outcome Y. This allows for the possibility that BRI projects in countries that do not borrow from the AIIB can influence the allocation of subsequent AIIB projects in neighboring countries that do borrow from the AIIB. Note that the standard statistical

[2] We implement this via Stata's spregress and spxtregress commands. Estimation via maximum likelihood yields similar results but the normality assumption behind the maximum likelihood estimator is hard to justify in this context.

packages (i.e., Stata sp routines) do not incorporate out-of-sample data so we construct the neighbor province X variables by hand.[3]

It is essential for us to include neighboring provinces not in the estimation sample of AIIB loans. These provinces are border provinces in countries that do not borrow from the AIIB but may still receive BRI projects. For example, there are no AIIB projects in Thailand (which leaves Thailand out of our estimation sample), but Thailand has received BRI projects. Thailand borders Laos and Myanmar, both of which are in our estimation sample. For provinces in these two countries that border Thailand (nine of 17 in Laos and five of 15 in Myanmar), the number of BRI projects in neighboring provinces should include those in Thailand. In total, the 19 countries in our sample have 26 neighboring countries with no AIIB project locations, i.e., there are 26 relevant out-of-sample countries. At the province level, the figures are 435 in-sample and 270 out-of-sample. The relevance of out-of-sample neighbors can pose a substantial problem for models that include a spatial lag of the dependent variable such as the one in equation (A1), especially for calculating indirect effects that reflect spillovers between neighbors.[4]

Given the trade-off between including a spatially lagged dependent variable and properly accounting for neighboring provinces, we run Moran tests for spatial dependence using an order-1 spatial contiguity matrix and the specifications spelled out in equations below (Moran 1950; Kelejian & Prucha 2001).[5] These tests help us decide whether the inclusion of an autocorrelation

[3] The issue of what happens at the edges of a spatial sample is generally not considered in the spatial econometrics literature, presumably because no good theoretical solutions are available.
[4] This depends on what exclusion from the sample means. The central issue in our case is that the implicates of zero projects in a neighboring foreign province depend on whether that foreign country is an AIIB borrower or not. In the case of the AIIB, there is no institutional rule to determine whether countries that have not yet borrowed are borrowers or non-borrowers.
[5] An order-1 spatial contiguity matrix allows for a direct impact of immediate neighbor provinces on the province in question but only indirect effects of provinces further away (i.e., noncontiguous provinces).

term is necessary. We run tests for a baseline version of the model (no neighbor province variables), the standard version (including neighbor province variables as in (A2) below), and an extended version (including separate domestic and foreign neighbor province variables). In all cases, the Moran tests fail to reject the null hypothesis that the error terms are independently and identically distributed (p = 0.6493, p = 0.6603, and p = 0.7435).[6] That is, the tests fail to reject the hypothesis that there is no spatial lag once we allow for spatially lagged covariates (if any). Based on these conceptual and statistical considerations and tests, we opt for the approach that includes all neighboring provinces and so estimate models that do not include the spatially lagged dependent variable (i.e., we set $\delta = 0$ in equation (A1)).

With this restriction imposed, our standard specification is given below. Equation (1) in the main text provides a simplified version of this equation.

$$AIIB_{ijt} = \alpha + \beta_1 \left(\tfrac{1}{3} \sum_{r=1,2,3} BRI_{ijt-r} \right) + \beta_2 \left(\tfrac{1}{3} \sum_{\substack{(k,\ell)\in C_{ij} \\ r=1,2,3}} BRI_{k\ell t-r} \right) + \beta_3 \left(\tfrac{1}{3} \sum_{r=1,2,3} WB_{ijt-r} \right) + \beta_4 \left(\tfrac{1}{3} \sum_{\substack{(k,\ell)\in C_{ij} \\ r=1,2,3}} WB_{k\ell t-r} \right) + \beta_5 Z_{ij} + \varepsilon_{ijt} \quad \text{for all } (i,j,t) \in S \tag{A2}$$

where

$AIIB_{ijt}$ AIIB-funded projects in province i, country j in year t

BRI_{ijt-r} Chinese BRI projects in province i, country j in year $t-r$

[6] Below we introduce country fixed effects. With these specifications, the p-values for the Moran test are p = 0.2690, p = 0.2656, and p = 0.3102, again failing to reject the null hypothesis.

WB_{ijt-r} World Bank-funded infrastructure projects in province i, country j in year $t-r$

Z_{ij} Other factors (population, nighttime lights) in province i, country j

Note that we use the three year average for BRI and World Bank projects, lagged by one year.

We also explore two additions to the model in Equation (A2). The first includes country-year fixed effects α_{jt} rather than a common intercept α:

$$AIIB_{ijt} = \beta_1 \left(\tfrac{1}{3} \sum_{r=1,2,3} BRI_{ijt-r} \right) + \beta_2 \left(\tfrac{1}{3} \sum_{\substack{(k,\ell)\in C_{ij} \\ r=1,2,3}} BRI_{k\ell t-r} \right) + \beta_3 \left(\tfrac{1}{3} \sum_{r=1,2,3} WB_{ijt-r} \right) + \beta_4 \left(\tfrac{1}{3} \sum_{\substack{(k,\ell)\in C_{ij} \\ r=1,2,3}} WB_{k\ell t-r} \right) + \beta_5 Z_{ij} + \alpha_{jt} + \varepsilon_{ijt} \quad \text{for all } (i,j,t) \in S \tag{A3}$$

Our research question focuses solely on the location of projects within a country rather than the country-level allocation process. Including country-year fixed effects thus means our empirical analysis also focuses solely on the location of projects within a country. This is practical in the context of least squares estimation, which is why we include the fixed effects when our models are linear, but not in count models. Count models face convergence problems due to the limited degrees of freedom remaining once country-year fixed effects are estimated. Count models also face challenges regarding consistent estimation of fixed effects and, by extension, of other coefficients.

The second addition to equation (A2) allows for contiguous spatial correlation in the error term ε. With i and k indexing provinces and j and ℓ indexing countries, and as above C_{ij} being

the set of provinces contiguous to province i in country j, contiguous spatial correlation is modeled as:

$$E\left(\varepsilon_{ijt}\varepsilon_{k\ell t}\right) = \lambda \text{ for } (k,\ell) \in C_{ij};\ E\left(\varepsilon_{ijt}\varepsilon_{k\ell t}\right) = 0 \text{ for } (k,\ell) \notin C_{ij} \qquad \text{(A4)}$$

Elhorst (2014) refers to this as the Spatial Durbin Error model. If the estimation model omits explanatory variables that are uncorrelated with the included explanatory variables but themselves are correlated spatially, their (implicit) inclusion in the model's error term implies a spatially correlated error term and thus a bias in reported standard errors.[7]

Table B1 to B4 below report results for the Spatial Durbin Error model, paralleling Table 1 to 4 in the main text.[8] The critical statistic in these tables is the chi-squared for the Wald test of spatial terms. The null hypothesis is $\lambda = 0$ (no spatial correlation in the error term). For the specifications without country fixed effects, the p-values range from 0.2551 to 0.3256; for the specifications with country fixed effects, the p-values range from 0.2195 to 0.9801. Thus, in all cases we fail to reject the null hypothesis of no spatial correlation in the error term. For this reason, the specifications reported in the main text do not include a spatially correlated error term.

[7] In this case, having contiguous provinces that are not in the estimation sample does not create a problem since no spillover effect needs to be calculated. Thus, here we do not face a choice between modeling a spatial correlation and using the correct measure of neighbor for the independent variables.

[8] We do not apply a jackknife procedure to Tables A1–A4 since the standard method is incompatible with estimation of spatially correlated errors. The point estimates in these tables can differ slightly from those in Tables 1 to 4 in the main text because the spatial estimator uses a GMM approach, rather than OLS.

Table B1: Spatial Durbin Error Model (Baseline)

	(1)	(2)
	Pooled	Country FE
# BRI projects	0.0603***	0.0565***
	(5.89)	(4.06)
# World Bank projects	0.0423***	0.0278**
	(4.35)	(2.44)
Population (log)	0.00508**	0.0115***
	(2.38)	(3.75)
Nighttime light per capita (log)	0.00319*	0.0101**
	(1.66)	(2.27)
Observations	2175	2175
Countries	19	19
Provinces	435	435
Wald test of spatial terms: chi2(1)	0.97	0.00
p-value	0.3248	0.9470

Dependent variable: # of AIIB-funded projects in province; unit of observation is province-year. All specifications include unreported year dummies. BRI and World Bank variables averaged over years t-3 to t-1. z statistics based on SEs incorporating spatial contiguity lag; * 0.10 ** 0.05 *** 0.01.

Table B2: Spatial Durbin Error Model (Neighboring Provinces)

	(1)	(2)
	Pooled	Country FE
# BRI projects	0.0573***	0.0571***
	(4.63)	(4.10)
# Neighbor BRI projects	0.00195	0.00164
	(0.48)	(0.29)
# World Bank projects	0.0504***	0.0402***
	(4.44)	(3.32)
# Neighbor World Bank projects	-0.00372	-0.00895***
	(-1.42)	(-3.02)
Population (log)	0.00571***	0.0129***
	(2.59)	(4.15)
Nighttime light per capita (log)	0.00324*	0.00920**
	(1.68)	(2.07)
Observations	2175	2175
Countries	19	19
Provinces	435	435
Wald test of spatial terms: chi2(1)	1.07	0.00
p-value	0.3006	0.9506

Dependent variable: # of AIIB-funded projects in province; unit of observation is province-year. All specifications include unreported year dummies. BRI and World Bank variables averaged over years t-3 to t-1. z statistics based on SEs incorporating spatial contiguity lag; * 0.10 ** 0.05 *** 0.01.

Table B3: Spatial Durbin Error Model (Domestic versus Foreign Neighbors)

	(1)	(2)
	Pooled	Country FE
# BRI projects	0.0662***	0.0588***
	(4.92)	(4.22)
# Domestic neighbor BRI projects	-0.00277	-0.0118
	(-0.56)	(-1.21)
# Foreign neighbor BRI projects	0.0114	0.00924
	(1.63)	(1.29)
# World Bank projects	0.0490***	0.0367***
	(4.19)	(2.94)
# Domestic neighbor World Bank projects	-0.00317	-0.00663*
	(-0.93)	(-1.75)
# Foreign neighbor World Bank projects	-0.00497	-0.0117**
	(-1.18)	(-2.42)
Population (log)	0.00541**	0.0125***
	(2.41)	(3.98)
Nighttime light per capita (log)	0.00296	0.00865*
	(1.52)	(1.93)
Observations	2175	2175
Countries	19	19
Provinces	435	435
Wald test of spatial terms: chi2(1)	1.30	0.00
p-value	0.2551	0.9811

Dependent variable: # of AIIB-funded projects in province; unit of observation is province-year. All specifications include unreported year dummies. BRI and World Bank variables averaged over years t-3 to t-1. z statistics based on SEs incorporating spatial contiguity lag; * 0.10 ** 0.05 *** 0.01.

Table B4: Spatial Durbin Error Model (Instrumental Variables Estimation)

	(1)	(2)
# BRI projects	0.0267	0.0550
	(0.80)	(1.44)
# Neighbor BRI projects	0.00542	
	(0.53)	
Domestic		-0.00285
		(-0.24)
Foreign		0.0283*
		(1.77)
# World Bank projects	0.0520***	0.0493***
	(4.54)	(4.11)
# Neighbor World Bank projects	-0.00396	
	(-1.40)	
Domestic		-0.00375
		(-1.03)
Foreign		-0.00604
		(-1.37)
Population (log)	0.00642***	0.00533**
	(2.79)	(2.20)
Nighttime light per capita (log)	0.00320*	0.00280
	(1.66)	(1.41)
Observations	2175	2175
Countries	19	19
Provinces	435	435
Wald test of spatial terms: chi2(1)	0.97	1.51
p-value	0.3256	0.2195

Dependent variable: # of AIIB-funded projects in province; unit of observation is province-year. All specifications include unreported year dummies; see text for discussion of instrumentation strategy. BRI and World Bank variables averaged over years t-3 to t-1. z statistics based on SEs incorporating spatial contiguity lag; * 0.10 ** 0.05 *** 0.01. See main text for instrumentation strategy.

Appendix C: Country-level Regression

Table C1: Country-level Analysis

	(1)	(2)	(3)
	nbreg	Pooled	Country FE
# BRI projects	0.0432	0.0358	-0.0235
	(0.82)	(1.06)	(-0.19)
# World Bank projects	0.0393	0.0304*	-0.0143
	(1.45)	(1.93)	(-0.64)
Population (log)	0.315	0.100	-0.0908
	(1.27)	(0.91)	(-0.01)
GDP (log)	-0.170	-0.0553	-0.0953
	(-0.82)	(-0.55)	(-0.05)
Observations	95	95	95

Dependent Variable: # AIIB Projects. Unit of observation is country-year (19 countries, 2016-2020). t/z-statistics in parentheses; * 0.10 ** 0.05 *** 0.01. All specifications include unreported year dummies.