Compete or Complement? How the World Bank Responds to the Establishment of the AIIB*

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Abstract

China's establishment of the Asian Infrastructure Investment Bank (AIIB) underscores the rising super power's ambition to offer new sources of funding to developing countries. The prospect of alternative funding does not necessarily imply a shift away from the West's foremost development organization, the World Bank. Experts estimate that the developing world requires trillions of dollars in infrastructure investment. So the AIIB could very well complement World Bank efforts, simply filling funding gaps. Still, the terms of AIIB loans are touted to be less intrusive than World Bank loans, void of policy conditionality. The AIIB option also enables governments to follow new leadership of the global economy under China. This paper thus examines the impact of the AIIB's founding on World Bank lending. Using the generalized synthetic control method, we estimate a decrease in the number of World Bank projects for AIIB founding members, an effect concentrated in infrastructure-intensive projects. Our results suggest that the AIIB represents real competition for Western influence in the developing world.

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1 Introduction

Founded in the aftermath of World War II – as the United States rose to lead the global economy – the World Bank has become the leading international development organization. Over its history, the World Bank, which is politically dominated by the West, has faced increasing criticism for several problems — such as lending standards that exceed the borrower's capacity to develop (Park 2007), relatively long project approval time (Humphrey 2017), and inadequate financing capacity for infrastructure projects.[1] While it does not apply to all of their loans, the institution has been associated with intrusive policy conditionality, known to dictate domestic economic policy following the Washington Consensus.

In 2016, the Asian Infrastructure Investment Bank (AIIB), initiated by the Chinese government, was established by 57 founding members with the ostensible goal to fill the shortfall in infrastructure investment in Asian countries and beyond. The formation of the AIIB marks the increasing institutional proliferation in the regime complex for development lending, where at least 27 Multilateral Development Banks (MDBs) have been formed since 1944 (Pratt 2020). Yet the AIIB stands out for its size, ambition, exclusion of the United States and Japan, and leadership under China. It might represent competition for the World Bank.

Of course, the prospect of alternative funding does not necessarily imply a shift away from the West's foremost development organization. Experts estimate that the developing world will require trillions of dollars in infrastructure investment[2], so the AIIB could very well complement World Bank efforts, simply filling funding gaps.

Still, the terms of AIIB loans are touted to be less intrusive than World Bank loans, promising recipient governments no conditionality on domestic economic policy. The AIIB option enables governments to follow the new leadership of the global economy under China. Despite efforts by the United States to prevent countries from joining, the AIIB now has more than 80 member states around the world and 18 prospective members waiting to join[3]. To date, the AIIB has approved 100 projects valued more than $22 billion to more than 29 economies[4].

1. Multiple organizations including the United Nations, World Economic Forum, and the Asian Development Bank have long been calling attention to the infrastructure gap in developing countries. According to the ADB, the Asia Pacific region needs to invest $26 trillion in infrastructure by 2030 despite the current shortfall of $800 billion per year. See Asian Development Bank. 2017. *Meeting Asia's Infrastructure Needs.* Available at https://www.adb.org/publications/asia-infrastructure-needs

2. For example, the World Economic Forum estimates that the infrastructure gap will reach 15 trillion dollars by 2040, see https://www.weforum.org/agenda/2019/04/infrastructure-gap-heres-how-to-solve-it/

3. Among the 85 current members, 46 are regional members and 39 are non-regional members. And 4 among the 18 prospective members are from the Asia-Pacific region, while 16 are from other regions. See https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html, accessed January 20, 2021.

4. Besides, there are 46 projects proposed by 15 economies worth more than $11 billion. A complete list of all approved and proposed projects by the AIIB can be found at https://www.aiib.org/en/projects/list/index.html, accessed January 26, 2021.

Despite the significance of the AIIB as a new player in the development finance regime, it is unclear likewise how the establishment of the AIIB will affect the operation of traditional MDBs such as the World Bank. Existing studies on the institutional proliferation in development finance mainly focus on explaining countries' motivation to create new MDBs (Pratt 2020; Chen and Liu 2018), and join newly-established institute such as the AIIB (Wang 2018). Lipscy (2015) examines the importance of entry barriers and outside options in explaining the institutional change of international organizations. Compared with the International Monetary Fund (IMF), the World Bank adopts more flexible distributive outcomes due to larger competitive pressures.

On the relationship between the AIIB and the existing MDBs, the existing literature has proposed two competing lines of argument. On one hand, one strand of research argues that the creation of the AIIB will complement the existing MDBs. One main reason is that the infrastructure gap is so big that there is no need for AIIB to compete with other MDBs for clients. Other reasons include that AIIB is a newcomer and thus has to learn from well-established MDBs, which is recognized by the AIIB president Jin Liqun. Some researchers find qualitative evidence that AIIB has co-financed with existing MDBs and largely aligned its lending standards, such as procurement policies, environmental and social frameworks, with the traditional MDBs (Brombal 2018; Peng and Tok 2016; Gu 2016; Zhao et al. 2019).

On the other hand, a possibly larger body of literature argues that AIIB is likely to compete with existing MDBs for clients and thus crowding out their development finance. They tend to see the AIIB from the perspective of a power transfer and hegemonic politics, which regards the AIIB as a challenge to the international economic order that is led by the U.S. For example, Hamanaka (2016) argues that China is attempting to replace Japan by creating a new bank without the U.S. and Japan. Similarly, some scholars believe that the establishment of the bank is a harbinger of the end of the western-oriented development model accompanied by China's willingness to build an international financial system centered on itself as the countermeasure against the U.S. pivot to Asia (Yu 2017). The conclusions of these studies are mostly supported by qualitative discussion and narratives of concepts and theories.

In this paper, we provide the first data-driven empirical analysis (to the knowledge of the authors) on the impact of the creation of the AIIB on World Bank projects. Analyzing data on World Bank projects to over 100 recipient countries during 2000-2018 and various country-specific data, we employ the generalized synthetic control (GSC) method to estimate the impact of the founding of the AIIB on the number of projects allocated to governments that joined the new institution.

We find consistent evidence that the World Bank provides fewer projects in infrastructure-intensive sectors to the founding members of the AIIB. The results are robust to various model

specifications, estimation methods, as well as imputation of missing values in covariates.

In what follows, we develop our argument that existing MDBs such as the World Bank might react to the establishment of the AIIB by either competing with or complementing it. Section 3 introduces the data and our identification strategy. Section 4 presents the empirical results. Results of robustness checks are provided in Section 5. And Section 6 concludes.

2 The World Bank and Establishment of the AIIB

The establishment of the AIIB marks the further complexity of the development finance area. Just as the entrance of new donors of foreign aid — like China — has impacted traditional bilateral donors, who now face increasing competition, we investigate whether the founding of the AIIB brings competitive pressure to multilateral development banks, influencing them to change their financing strategies. In this section, we first review the literature on how Chinese aid is impacting the strategies of Western donors. We then review studies of how Western influence has impacted World Bank lending and consider the impact of the emergence of new MDBs.

The findings of these literature raise new questions about the potential impact of the AIIB and provide ample motivation for our empirical investigation below. Since both the MDBs and recipient countries have a finite capacity to provide and, respectively, receive development finance, the entrance of the AIIB as an alternative source may force the World Bank to adjust its lending priorities, adapting to the new landscape of development finance.

2.1 Competition Among Development Finance Providers

There is a large body of scholarly works that focus on the determinants of aid allocation and interaction among foreign aid donors. For example, studies have found that donors often react to aid allocation by other donors to compete for export markets (Fuchs et al. 2015; Barthel et al. 2014), and gain votes and support in international organizations (Vreeland and Dreher 2014; Dreher, Lang, et al. 2018). To the extent that donors aim to influence policies in recipient countries with foreign aid, competition arises when multiple donors with different policy preferences providing aid to the same set of recipients (Bueno de Mesquita and Smith 2016).

With the increasing importance of foreign provided by emerging donors, recent works examine the motivation and consequences of aid by "new donors," especially China. Using a new database of official finance provided by China, Dreher et al. (2018) find that, similar to Western donors, China uses its official development assistance (ODA) for foreign policy goals, and the less concessional type of official finance mainly follow economic interests. With the rise of China as

an alternative source of development finance, a crucial question is how it shapes the allocation and effects of aid by traditional donors.

Focusing on the case of the World Bank, Zeitz (2020) finds that the World Bank mainly reacts to Chinese aid by emulation: providing a larger share of infrastructure-intensive projects to countries receiving more aid from China. By examining the conditionality attached to World Bank projects, Hernandez (2017) provides evidence that World Bank delivers projects with fewer conditions to recipients of Chinese aid. Using the first Forum on China–Africa Cooperation (FOCAC) as the temporal dividing point, Li (2017) shows that the democratizing effects of aid by OECD donors in Sub-Saharan Africa have gradually diminished after the 2000s.

Together, these studies have highlighted the changing dynamic among donors with the entrance of new providers of development finance. Note, however, that one might conclude from these studies that the emergence of the AIIB will not deter the bank from lending to founding members, but instead encourage the bank to provide more aid with softer conditions in order to win over countries drifting towards China's sphere of influence.

Yet, Broz et al. (2020) emphasize, indeed, that some governments are intentionally shifting their support for new leadership of the global economy under China. Following this demand-driven perspective, we might expect developing countries to deliberately turn away from the World Bank.

2.2 Dynamics Between Existing and New MDBs

How then might the establishment of a new MDB, such as the AIIB, affect the allocation of projects by existing MDBs? The allocation of multilateral development finance is often influenced by its key shareholders. In the case of the World Bank, existing works have provided abundant evidence showing that the allocation of World Bank projects often serves the strategic interests of the United States (Kilby 2009; Kersting and Kilby 2016), and favors recipient countries serving as temporary members of the UNSC (Dreher et al. 2009a). Similar patterns also holds for other international development finance and financial institutions such as the Asian Development Bank (ADB) (Kilby 2006) and the IMF (Stone 2011; Dreher et al. 2009b).

While the World Bank has been often considered as being deeply influenced by its major shareholders— the United States, Japan, Germany, France, and the United Kingdom, the decision power of the AIIB is mainly concentrated in emerging-market countries including China, India, and Russia. Given the different policy preferences between these two groups of countries, the two MDBs might have to compete for the same group of recipients. While recipient governments only have a finite capacity to take loans (Bunte 2019; Zeitz 2020), the additional finance provided

by the AIIB means that the World Bank might have to change its lending choice to maximize the utility of itself as well as its key shareholders.

On the other hand, the establishment of the AIIB also provides developing countries with an alternative to access to the much-needed development finance in infrastructure. The lengthy project approval procedure and extensive social and environmental standards have long been complained about by recipients of World Bank projects (Park 2007). In comparison, the AIIB has focused on streamlining project procurement, risk, and supervision, thus providing a more "lean" and "clean" source of infrastructure financing than the World Bank (Zhao et al. 2019). Nevertheless, the dominance of major shareholders in the World Bank, especially the United States, has circumvented other countries to effectively have a say in many of the decision-making processes of the institution (Woods and Lombardi 2006; Woods 2001; Buira 2005; Rapkin and Strand 2003, 2005, 2006). While the World Bank has slowly adapted (Lipscy 2015), under-represented states are still unsatisfied with the organization, actively seeking alternatives (Pratt 2020). Just as developing countries turn away from the United States due to grievances about global financial instability (Broz et al. 2020), discontent with the Bretton-Woods system might also lead them to support the China-backed multilateral bank, the AIIB.

In this paper, we focus on the case of the World Bank for the following reasons. First, with more than 80 members, the AIIB is currently the second-largest MDB in terms of member states, with the World Bank being the largest. The AIIB is often portrayed by the media and thinks tanks as a China-led effort to revolutionize the Western-dominated multilateral development finance area represented by the World Bank[5]. And in some cases the AIIB is even referred to as "China's World Bank"[6].

Moreover, the World Bank has long been criticized for neglecting infrastructure projects, the area where the AIIB is mainly devoted to. For example, Asian countries have long been dissatisfied with the lack of finance in infrastructure provided by the World Bank since the end of the 1960s (Kellerman 2019). Over the period of 2000 to 2014, only 13% of World Bank projects were in infrastructure sectors (Zeitz 2020), despite the fact that the World Bank has repeatedly warned the "infrastructure gap" in its own reports (Rozenberg and Fay 2019). As a result, we expect that the World Bank will mainly react to the creation of the AIIB by changing its lending behavior in infrastructure projects.

While the AIIB currently has more than 80 member states, we argue that the World Bank might react by adjusting its lending strategy mainly towards the 57 founding members of the AIIB

5. For example, see https://www.cfr.org/blog/aiib-chinese-led-development-bank-role-model

6. See https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/china-s-world-bank-alternative-points-to-multilateral-future-without-us-52883799

for their exceptional importance in the decision-making and operation of the AIIB. Together, the 57 founding members account for almost 97% of the voting power, and around 95% of the total subscriptions[7]. In terms of the project allocation, the founding members also almost dominate all the current AIIB projects: around 97% of all approved projects, and almost 98% of proposed projects[8].

In the next section, we provide empirical examinations of how the World Bank reacts to the establishment of the AIIB by focusing on the number of projects AIIB founding members receive from the World Bank, especially for projects in infrastructure-intensive sectors.

3 Research Design

3.1 Sample and Data

To examine the impact of founding the AIIB on the lending behavior of the World Bank, we construct a dataset that includes up to 154 countries[9] from 2000 to 2018. For the dependent variable, we focus on the total number of projects approved by the World Bank in a particular year, retrieved from the World Bank website[10].

The key explanatory variable is `AIIB founding member`, which equals 1 if a country is a founding member of the AIIB for years after 2016 (included), and 0 otherwise. Among the 154 countries in the sample, 31 of them are founders of the AIIB[11].

As for the covariates, we include a set of potential predictors of World Bank projects following Dreher et al. (2009a). To control for the level of development and size of the recipient country, we include GDP per capita and total population (both logged), taken from the World Development Indicators (WDI)[12]. As a country's level of indebtedness and reliance on foreign capital and assistance might be correlated with World Bank projects, we include the total debt service as a percentage of GNI, net ODA received as a percentage of GNI, and net foreign direct investment (FDI) inflow as a percentage of GDP, all taken from the World Bank[13]. We account for the domestic political institutions of the recipient country by including the Polity2 index from the Polity Project[14]. Since it has been found that countries serving as a nonpermanent member of

7. Author calculation based on the AIIB website as of August 2020: https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html

8. Author calculation based on AIIB website as of August 2020: https://www.aiib.org/en/projects/list/index.html

9. This includes all countries that have received at least one project from the World Bank from 2000 to 2018. The number of countries included in the analysis varies due to missing values in covariates.

10. https://datacatalog.worldbank.org/dataset/world-bank-projects-operations

11. Table A.1 provides the list of all 57 founding members of the AIIB and the 31 founders that are included in the analysis.

12. Available at https://datacatalog.worldbank.org/dataset/world-development-indicators

13. Available at https://data.worldbank.org

14. Available at https://www.systemicpeace.org/polityproject.html

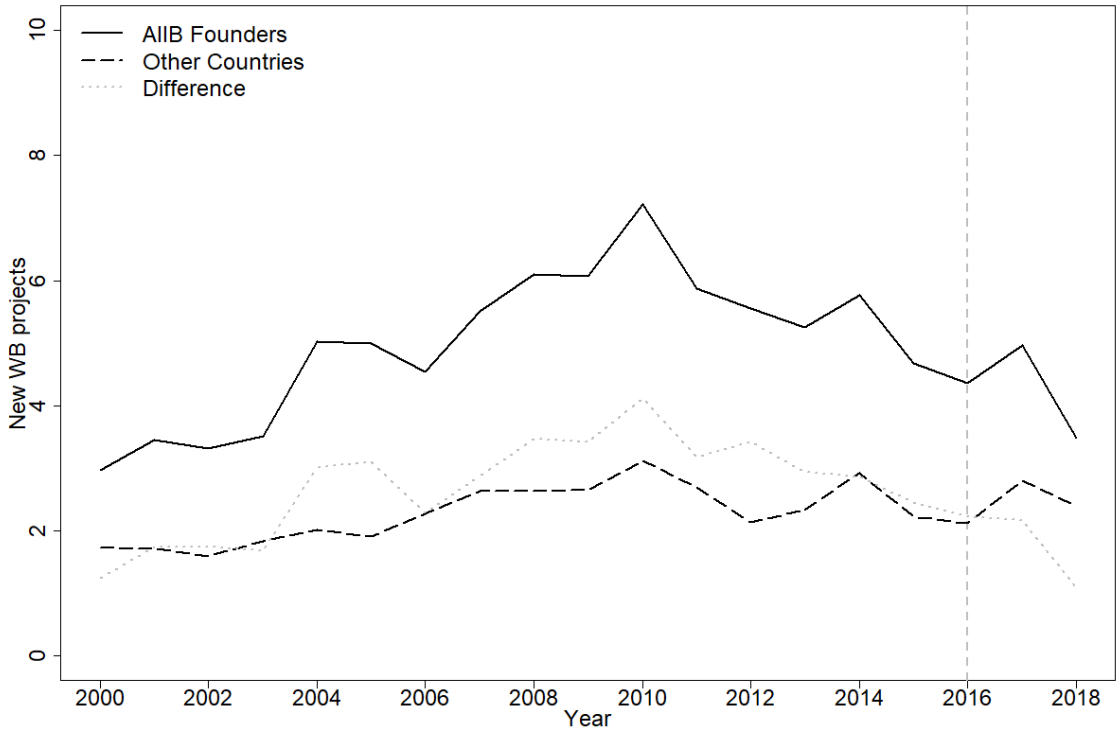
the United Nations Security Council (UNSC) often receive favorable treatment from multilateral development agencies including the World Bank (Dreher et al. 2009a; Vreeland and Dreher 2014), we include an indicator variable that equals 1 if a country is a temporary UNSC member, and 0 otherwise[15]. As several studies have found that World Bank lending is correlated with national elections in the recipient country (Dreher and Vaubel 2004; Kersting and Kilby 2016), we include an indicator variable that equals 1 if either a national executive or legislative election was held in the previous year, and 0 otherwise, using data from the Database of Political Institutions (DPI)[16].

3.2 Identification Strategy: Generalized Synthetic Control

Given that we have a binary treatment (`AIIB founding member`) and two periods (pre- and post-2016), it might seem natural to employ a traditional difference-in-differences (DiD) design to estimate the effect of the AIIB on the lending behavior of the World Bank. However, a key identification assumption of the DiD design is the parallel trends assumption, which is likely to be violated in our case. Figure 3.2 below shows the average number of new World Bank projects for AIIB founders and other countries from 2000 to 2018. The dotted line in Figure 3.2 indicates that the trends between treated and control groups vary significantly during the pre-treatment period, which is often considered as an indirect evidence of violating the parallel trends assumption, which can not be tested directly.

15. Data from Dreher et al. (2009a)
16. Available at http://dx.doi.org/10.18235/0001027

Figure 1: Average New World Bank Projects



Note: This plot shows the average new projects approved by the World bank for AIIB founding members (solid line), other recipients of World Bank projects (dashed line), and difference in group averages (dotted line) for the period of 2000 to 2018.

To address this challenge in identification, we utilize the generalized synthetic control (GSC) method developed by Xu (2017) to examine the effect of founding the AIIB on the lending behavior of the World Bank. The GSC method is particularly suitable for estimating the average treatment effect on the treated (ATT) using time-series cross-sectional data when the parallel trends assumption is not likely to hold, which is the case that we are dealing with. In essence, instead of comparing the difference in the (conditional) means between the treated and control groups in pre- and post-treatment periods, the GSC method takes a reweighting scheme by taking the pre-treatment outcomes as benchmarks in choosing the weights for control units. Unlike the traditional synthetic control method (Abadie et al. 2010) that is widely used in the study of international organizations[17], which requires the treated group to have only one member, the GSC method is more flexible and allows multiple members in the treated group.

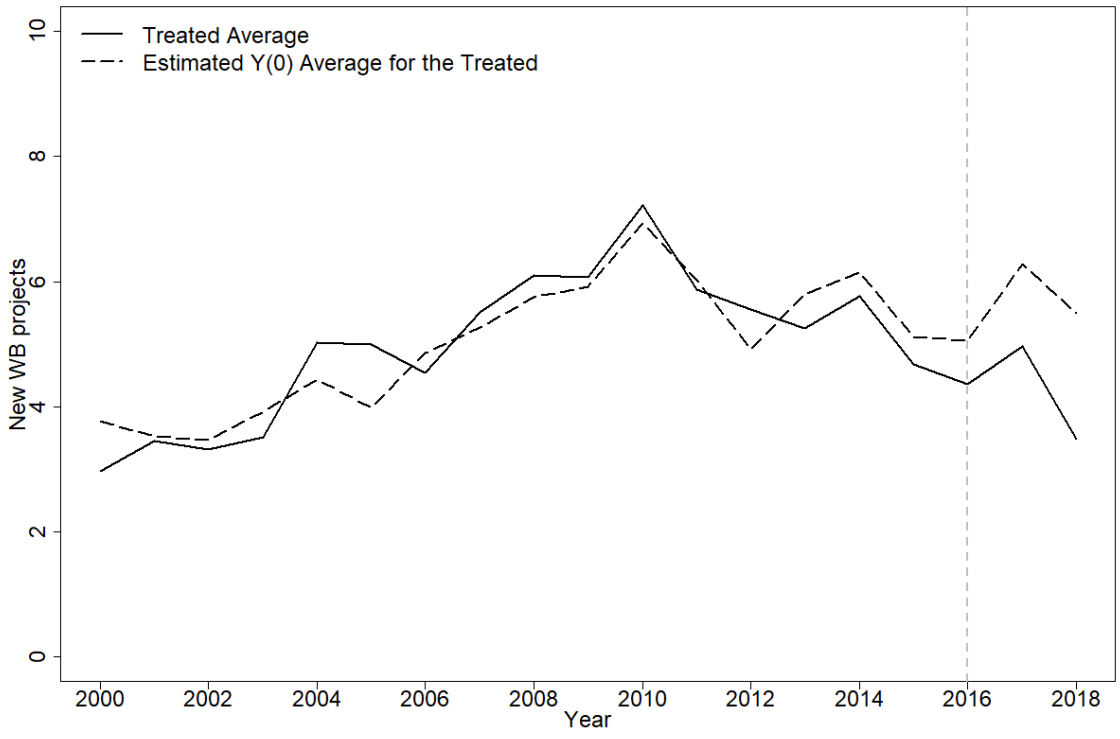
Figure 2 below illustrates the advantage of using the GSC method instead of the DiD design. Compared with Figure 3.2 where there is a large difference in the differences of the average outcomes between the treated and control groups, the GSC method estimates the counterfactuals

17. A recent application of the synthetic method is Lipscy and Lee (2019).

of the treated units for both the pre- and post-treatment periods. As Figure 2 shows, the estimated counterfactual outcomes for the treated units (in dashed line) are closely in-line with the actual outcomes (in solid line) for the pre-2016 period.

Therefore, we choose to use the GSC method as our main identification strategy and present results in the following section.

Figure 2: Estimated Counterfactual and Actual New World Bank Projects (No Covariates)



Note: This plot shows the actual (solid line) and estimated counterfactual (dashed line) average number of World Bank projects for AIIB founding members for the period of 2000 to 2018 using the generalized synthetic control (GSC) method developed by Xu (2017) with no covariates.

4 Empirical Results

4.1 AIIB Founding Members and New World Bank Projects

We begin by testing the effect of being a founding member of the AIIB on the overall lending behavior of the World Bank. Table 1 below reports the average ATT estimated using the GSC method for specifications without (Column 1) and with covariates (Column 2). Here, the dependent variable is the total number of new projects approved by the World Bank in a particular year, and the treatment is `AIIB founding member`, which equals 1 for AIIB founders for years from 2016 to 2018, and 0 otherwise. The first row of Table 1 shows that the estimated ATT is both negative and significant at conventional levels, indicating that AIIB founders on average

receive fewer new World Bank projects after the formal establishment of the AIIB in 2016.

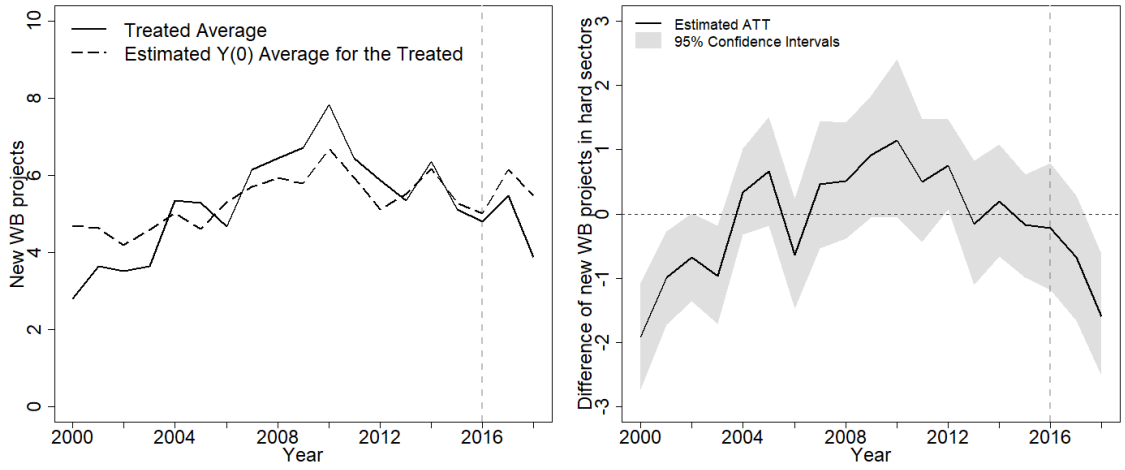
Table 1: AIIB Founding Members and New World Bank Projects

	(1)	(2)
AIIB founding member	-1.344***	-0.828**
	(0.351)	(0.339)
GDP per capita (log)		1.351**
		(0.517)
Population (log)		5.923***
		(1.002)
Lagged election		-0.308**
		(0.120)
FDI inflow (% GDP)		0.024*
		(0.012)
Debt service (% GNI)		0.051***
		(0.020)
ODA received (% GNI)		0.034**
		(0.014)
Polity		0.103***
		(0.029)
Temporary UNSC member		0.483*
		(0.248)
Country fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Unobserved factors	1	0
Observations	2926	1830
Treated countries	31	25
Control countries	123	73

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. The dependent variable is the total number of new projects approved by the World Bank in a certain year.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Figure 3 visualize the GSC results in Column 2 of Table 2. The left panel of Figure 3 plots the actual (in solid line) and estimated counterfactual (in dashed line) average number of new World Bank projects for AIIB founding members. While the two lines almost overlap with each other for years before 2016, they start to diverge since 2016 when the AIIB was founded. And the actual average World Bank projects for AIIB founders is consistently lower than the estimated counterfactuals. The right panel of Figure 3 shows the estimated ATT with 95% confidence intervals, which start to drop to negative after the year 2016.

Figure 3: AIIB Founding Members and New World Bank Projects



Note: This plot shows results of the estimated effects of AIIB founding members on new projects from the World Bank for the period of 2000 to 2018, using the generalized synthetic control (GSC) method developed by Xu (2017). The left panel shows the actual (solid line) and estimated counterfactual (dashed line) average number projects. The right panel shows the estimated average treatment effect on the treated (solid line) with 95% confidence intervals (shaded area). Covariates included in the model are: GDP per capita (logged), total population (logged), indicator of national executive or legislative election (lagged), FDI inflow (% GDP), total debt service (% GNI), ODA received (% GNI), Polity score, and indicator of temporary UNSC membership.

Combined, Table 1 and Figure 3 provide evidence showing that AIIB founding members receive fewer projects from the World Bank since the founding of the AIIB in 2016.

4.2 World Bank Projects in Hard vs. Soft Sectors

Since the AIIB focuses almost exclusively on infrastructure development, we investigate whether the founding of the AIIB only affects the World Bank's lending behavior in terms of projects in infrastructure-intensive sectors ("hard" sectors), or whether it also influences the World Bank's operation in other, "soft" sectors. Notably, a recent paper by Zeitz (2020) has shown that the World Bank has responded to the rise of China as a provider of development finance by taking an emulation strategy: *increasing* the share of projects in infrastructure-intensive sectors to major recipients of China's development finance. Using a similar approach, we test the effect of founding the AIIB on the lending behavior of the World Bank by differentiating projects that are in "hard" sectors versus those are in other "soft" sectors[18].

In Table 2 below, we replace the dependent variable with the number of World Bank projects that are in infrastructure-intensive sectors (Columns 1 and 2) and those are not (Columns 3 and

18. In line with Zeitz (2020), projects are coded as in infrastructure-intensive sectors if their primary sector in one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication.

4). While the first row of Columns 1 and 2 in Table 2 shows that the effect of being AIIB founding members on new World Bank projects in "hard" sectors is both negative and statistically significant, the coefficients in Columns 3 and 4 are insignificant, indicating the lack of evidence for a similar effect for projects in "soft" sectors.

Table 2: AIIB Founding Members and New World Bank Projects

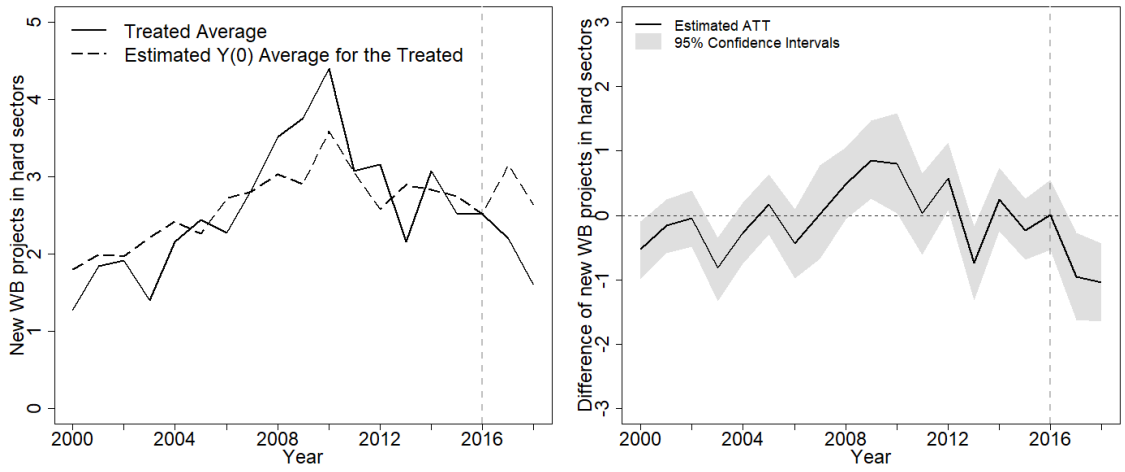
	Hard	Hard	Soft	Soft
	(1)	(2)	(3)	(4)
AIIB founding member	-0.722***	-0.660***	-0.213	-0.168
	(0.194)	(0.206)	(0.200)	(0.245)
GDP per capita (log)		1.180***		0.171
		(0.316)		(0.361)
Population (log)		2.801***		3.122***
		(0.578)		(0.669)
Lagged election		-0.212**		-0.096
		(0.079)		(0.084)
FDI inflow (% GDP)		0.020**		0.003
		(0.007)		(0.008)
Debt service (% GNI)		0.021*		0.030**
		(0.013)		(0.014)
ODA received (% GNI)		-0.006		0.040***
		(0.008)		(0.009)
Polity		0.029		0.073***
		(0.018)		(0.020)
Temporary UNSC member		-0.072		0.555***
		(0.155)		(0.170)
Country fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Unobserved factors	1	0	0	0
Observations	2926	1830	2926	1830
Treated countries	31	25	31	25
Control countries	123	73	123	73

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. The dependent variable is the total number of new projects in hard (Columns 1 and 2) or soft sectors (Columns 3 and 4) approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Figure 4 plots the estimated ATT of being founding members of the AIIB on new World Bank projects in "hard" sectors. Similar to Figure 3, there is a divergence between the actual and estimated average outcome after the founding of the AIIB in 2016 in the left panel. In comparison,

the divergence is clearer in Figure 4 than as in Figure 3.

Figure 4: AIIB Founding Members and New World Bank Projects in Hard Sectors



Note: This plot shows results of the estimated effects of AIIB founding members on new projects from the World Bank in hard sectors for the period of 2000 to 2018, using the generalized synthetic control (GSC) method developed by Xu (2017). The left panel shows the actual (solid line) and estimated counterfactual (dashed line) average number projects. The right panel shows the estimated average treatment effect on the treated (solid line) with 95% confidence intervals (shaded area). Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise. Covariates included in the model are: GDP per capita (logged), total population (logged), indicator of national executive or legislative election (lagged), FDI inflow (% GDP), total debt service (% GNI), ODA received (% GNI), Polity score, and indicator of temporary UNSC membership.

In summary, Table 2 and Figure 4 together provide evidence that the negative effect of founding the AIIB on new World Bank projects is mainly concentrated in infrastructure-intensive sectors, while less evident for projects in other "soft" sectors. Substantively, AIIB founding members on average receive 0.66 fewer infrastructure projects from the World Bank each year, which represents a substantial decrease, greater than 50 percent from the average[19].

5 Robustness Checks

In this section, we report the results of several robustness checks of our main finding that AIIB founding members receive fewer projects in infrastructure-intensive sectors from the World Bank.

First, in our main analysis, we included all 57 countries that were approved as AIIB founding members in the treatment group. While most of these prospective founding members were

19. Based on result in Column 2 from Table 2. On average, World Bank recipient receives around 1.282 project in hard sectors each year, see the summary statistics in Table A.2 in the Appendix

among the first to formally join the institution, two countries have actually not done so as of the end of our sample period in 2018: Brazil only joined the AIIB in November 2020, and South Africa still has not become a formal member. Therefore, we removed these two countries from the sample and reanalyzed the data. The results reported in Table B.3 in the Appendix are similar to the main results in Table 2, where the coefficient for `AIIB founding member` is both negative and statistically significant for projects in hard sectors.

Next, we create an alternative measure of the treatment , `AIIB formal membership`, to examine the effect of the AIIB on the lending behavior of the World Bank. Compared with `AIIB founding member`, which equals to 1 for all the AIIB founders after 2016, `AIIB founding member` equals to 1 if the country has formally joined the AIIB in that year, regardless of being a founding member. Since our sample only covers up to 2018 due to data availability, the vast majority of countries that have formally joined the AIIB are the founding members[20]. Therefore, using this alternative measure of the independent variable presents a hard test for our hypothesis, since it also differentiates AIIB founding members that joined the institution in different years. We report the results with this alternative measure in Table B.4 in the Appendix. The results remain almost unchanged.

Third, we address the potential bias due to listwise deletion of missing values in covariates by using multiple imputation (Lall 2016). Specifically, we use Amelia II by Honaker and King (2010) to impute the missing values in covariates[21]. We use Amelia to produce five imputed datasets and re-run our main analysis with two different measures of the treatment. The results are reported in Tables B.5 to B.8 in the appendix, which shows that there is no evidence that our results are driven by the listwise deletion of missing values.

Fourth, we replicate our results with alternative methods to estimate the effect of founding the AIIB on World Bank lending, which includes using a traditional Difference-in-differences design, Negative Binomial regression, Poisson regression, and Ordinary Least Squares regression. The results from these methods are reported in Table B.9 to Table B.12 in the Appendix, which are all in line with our main results using the GSC method.

Finally, we replace the dependent variable with the logged amount of total projects approved by the World Bank in hard or soft sectors, and the results are reported in Table B.13 to Table B.17 in the Appendix. Similar to our main results, the effect of being AIIB founding members on the total amount of new World Bank projects in hard sectors is negative and statistically significant across different estimation methods. However, there is no evidence that the total amount of all

20. Please refer to Figure A.1 for the membership year of all AIIB members included in the sample.
21. The variable `Temporary UNSC member` is not imputed.

types of World Bank projects to AIIB founders are significantly lower[22], and the effect seems to be concentrated mainly among AIIB founding members, but not to other AIIB members[23].

6 Conclusion

This paper investigates the impact of being an AIIB member, either a founding or a regular member, on the lending outcome of existing MDBs towards loan-recipient countries. Using the GSC Method, a significant decrease is documented in the number of loan projects in hard sectors from the World Bank for AIIB members, with founding members experiencing a sharper and more significant fall. This negative effect, however, is not evident in soft sectors for AIIB members. The results are robust to various specifications and estimation methods.

Nevertheless, the findings have several caveats, which might inform future research. Firstly, the mechanism of the "crowding-out" effect of AIIB founding membership remains unknown, particularly the driving forces behind this process. Whereas the development finance landscape has been evolving towards more supply as China's supply is increasingly noticeable, the gap remains significant. Our results might be driven by recipient countries shopping for credit with easier or, presumably, streamlined development finance from AIIB. Alternatively, existing MDBs might be voluntarily choosing to channel more funding to non-AIIB founding countries. The answer to this question is essential in order to understand the trajectory of development finance. Secondly, the data we analyze span till 2018, when the AIIB provided barely more than 10 billion US dollars in projects. Even though we find that the time period is long enough to reveal a statistically and substantively significant change in World Bank lending patterns, whether the trend will intensify or reverse remains unknown as increasingly more development finance is provided by the AIIB. Lastly, the AIIB started its lending by co-financing some projects with other MDBs for the first few years. Due to data limitations and information accessibility, our paper does not disentangle the impact of co-finance projects from their independent projects.

With these caveats in mind, we find evidence from the relatively short time span since the founding of the AIIB of changes in World Bank lending patterns — away from the countries that joined China's new institution. Given the continued development financing gap and prospects for complementarity, partnership, and cooperation between the two institutions, the negative effect of AIIB membership in World Bank lending is striking. It seems that the politics of international and domestic decision-making regarding development finance have reacted in a strong way to China's early efforts to lead an multilateral finance institution.

22. See Column 1 in Table B.13
23. See Table B.15 and Column 3 in Table B.17

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A Data Summary

Table A.1: List of AIIB Founding Members

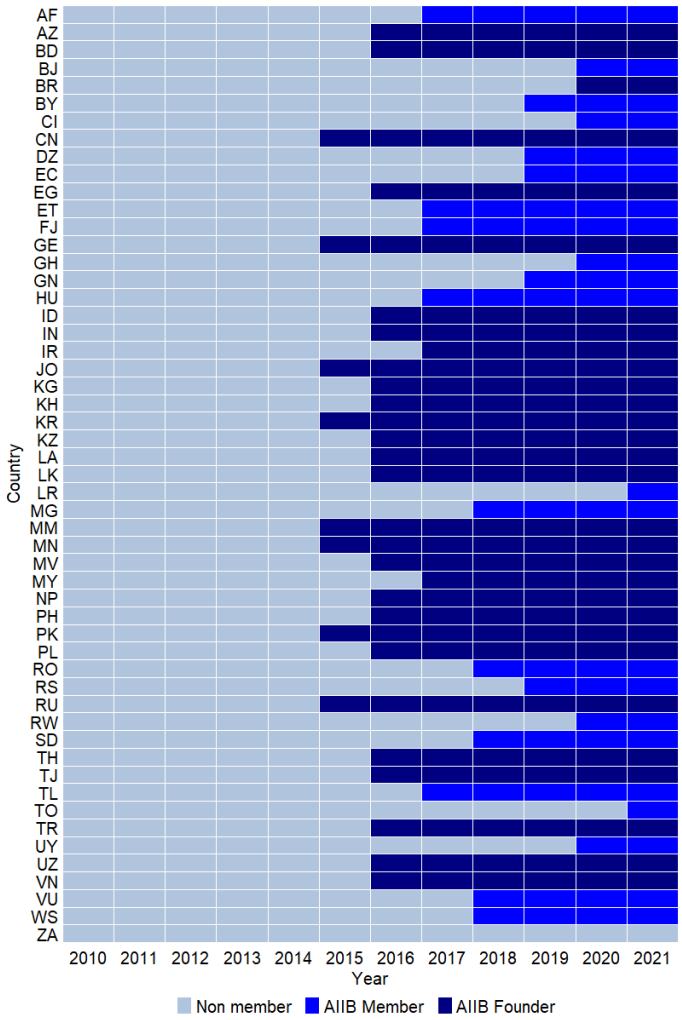
Australia	*India*	*Mongolia*	*South Africa*
Austria	*Indonesia*	*Myanmar*	Spain
Azerbaijan	*Iran*	*Nepal*	*Sri Lanka*
Bangladesh	Israel	Netherlands	Sweden
Brazil	Italy	New Zealand	Switzerland
Brunei	*Jordan*	Norway	*Tajikistan*
Cambodia	*Kazakhstan*	Oman	*Thailand*
China	*South Korea*	*Pakistan*	*Turkey*
Denmark	Kuwait	*Philippines*	United Arab Emirates
Egypt	*Kyrgyzstan*	*Poland*	United Kingdom
Finland	*Laos*	Portugal	*Uzbekistan*
France	Luxembourg	Qatar	*Vietnam*
Georgia	*Malaysia*	*Russia*	
Germany	*Maldives*	Saudi Arabia	
Iceland	Malta	Singapore	

Notes: Countries in italic font are those included in the sample of World Bank project recipients.

Table A.2: Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
AIIB founding member	2,926	0.032	0.175	0	1
AIIB formal membership	2,926	0.037	0.189	0	1
World Bank Project Count	2,926	2.819	3.496	0	34
World Bank Project Count, Hard	2,926	1.282	2.072	0	22
World Bank Project Count, Soft	2,926	1.537	1.924	0	15
World Bank Project Amount (log)	2,926	11.303	9.092	0	23
World Bank Project Amount, Hard (log)	2,926	7.574	9.016	0	22
World Bank Project Amount, Soft (log)	2,926	9.352	9.111	0	22
GDP per capita (log)	2,843	7.977	1.128	5.272	10.381
Population (log)	2,919	15.478	2.203	9.148	21.055
Lagged election	2,583	0.275	0.447	0.000	1.000
FDI (% GDP)	2,818	4.545	6.594	−40.414	103.337
Debt service (% GNI)	2,182	4.304	5.196	0.007	66.074
ODA received (% GNI)	2,541	6.274	8.975	−2.313	92.141
Polity	2,419	3.400	5.824	−10.000	10.000
Temporary UNSC member	2,736	0.052	0.221	0.000	1.000

Figure A.1: Time of AIIB Formal Membership



Note: This plot shows the year of AIIB membership for all 53 AIIB members that are included in the analysis. Note that despite being a prospective founding member since 2015, South Africa (ZA) has not yet formally joined the AIIB.

B Additional Results

B.1 Excluding Brazil & South Africa

Table B.3: AIIB Founding Members and New World Bank Projects (Exclude BR & ZA)

	Hard	Soft
	(1)	(2)
AIIB founding member	-0.508**	-0.006
	(0.218)	(0.264)
GDP per capita (log)	1.180***	0.171
	(0.315)	(0.377)
Population (log)	2.801***	3.122***
	(0.567)	(0.662)
Lagged election	-0.212***	-0.096
	(0.080)	(0.086)
FDI inflow (% GDP)	0.020**	0.003
	(0.007)	(0.008)
Debt service (% GNI)	0.021*	0.030**
	(0.013)	(0.014)
ODA received (% GNI)	-0.006	0.040***
	(0.009)	(0.009)
Polity	0.029	0.073***
	(0.018)	(0.021)
Temporary UNSC member	-0.072	0.555***
	(0.155)	(0.173)
Country fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Unobserved factors	0	0
Observations	1792	1792
Treated countries	23	23
Control countries	73	73
Exclude BR & ZA	Yes	Yes

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. The dependent variable is the total number of new projects in hard (column 1) or soft (column 2) sectors approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

B.2 Using AIIB Formal Membership

Table B.4: AIIB Formal Membership and New World Bank Projects

	Hard	Soft
	(1)	(2)
AIIB Formal Membership	-0.437*	0.308
	(0.246)	(0.240)
GDP per capita (log)	1.256***	0.152
	(0.377)	(0.392)
Population (log)	3.093***	3.446***
	(0.661)	(0.686)
Lagged election	-0.269***	-0.105
	(0.087)	(0.086)
FDI inflow (% GDP)	0.020**	0.002
	(0.008)	(0.008)
Debt service (% GNI)	0.016	0.033**
	(0.014)	(0.014)
ODA received (% GNI)	-0.007	0.039***
	(0.010)	(0.009)
Polity	0.029	0.066***
	(0.021)	(0.022)
Temporary UNSC member	0.056	0.488***
	(0.170)	(0.161)
Country fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Unobserved factors	0	0
Observations	1830	1830
Treated countries	27	27
Control countries	71	71

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. The dependent variable is the total number of new projects in hard (Columns 1 and 2) or soft sectors (Columns 3 and 4) approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

B.3 Multiple Imputation of Missing Values

Table B.5: Multiple Imputation: AIIB Founding Members and New World Bank Projects in Hard Sectors

	Hard (1)	Hard (2)	Hard (3)	Hard (4)	Hard (5)
AIIB founding member	-0.478***	-0.452**	-0.489***	-0.494***	-0.467***
	(0.190)	(0.185)	(0.188)	(0.188)	(0.180)
GDP per capita (log)	-0.172	-0.276	-0.209	-0.095	-0.163
	(0.142)	(0.161)	(0.148)	(0.184)	(0.146)
Population (log)	0.305	0.427	0.164	0.234	0.573*
	(0.515)	(0.524)	(0.514)	(0.550)	(0.477)
Lagged election	-0.097**	-0.094**	-0.079	-0.085	-0.070
	(0.056)	(0.054)	(0.055)	(0.054)	(0.054)
FDI inflow (% GDP)	0.008*	0.008*	0.008*	0.009*	0.010**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)
Debt service (% GNI)	0.002	0.000	0.003	-0.001	0.006
	(0.007)	(0.007)	(0.008)	(0.007)	(0.008)
ODA received (% GNI)	-0.003	-0.001	-0.008	-0.002	-0.004
	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)
Polity	0.011	0.016	0.008	0.017*	0.007
	(0.010)	(0.011)	(0.010)	(0.010)	(0.010)
Temporary UNSC member	0.017	0.028	0.014	0.017	0.019
	(0.123)	(0.122)	(0.119)	(0.122)	(0.124)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Unobserved factors	1	1	1	1	1
Observations	2736	2736	2736	2736	2736
Treated countries	29	29	29	29	29
Control countries	115	115	115	115	115

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. Each column represents results from one imputed dataset where missing values in covariates are imputed using Amelia. The dependent variable is the total number of new projects in hard sectors approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.6: Multiple Imputation: AIIB Founding Members and New World Bank Projects in Soft Sectors

	Soft	Soft	Soft	Soft	Soft
	(1)	(2)	(3)	(4)	(5)
AIIB founding member	-0.236	-0.232	-0.225	-0.258	-0.250
	(0.205)	(0.197)	(0.204)	(0.204)	(0.198)
GDP per capita (log)	-0.157	-0.235	-0.284*	-0.053	-0.146
	(0.140)	(0.157)	(0.147)	(0.169)	(0.150)
Population (log)	0.670*	0.838**	0.390	0.578	1.030***
	(0.315)	(0.357)	(0.331)	(0.349)	(0.338)
Lagged election	-0.099	-0.084	-0.092	-0.101*	-0.075
	(0.058)	(0.060)	(0.059)	(0.058)	(0.059)
FDI inflow (% GDP)	0.005	0.005	0.006	0.006	0.006
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Debt service (% GNI)	0.011	0.014*	0.013*	0.011	0.015*
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
ODA received (% GNI)	0.022***	0.024***	0.020***	0.022***	0.020***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Polity	0.026**	0.040***	0.036***	0.036***	0.033***
	(0.011)	(0.012)	(0.011)	(0.011)	(0.011)
Temporary UNSC member	0.448***	0.452***	0.446***	0.436***	0.422***
	(0.130)	(0.131)	(0.134)	(0.135)	(0.134)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Unobserved factors	0	0	0	0	0
Observations	2736	2736	2736	2736	2736
Treated countries	29	29	29	29	29
Control countries	115	115	115	115	115

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. Each column represents results from one imputed dataset where missing values in covariates are imputed using Amelia. The dependent variable is the total number of new projects in soft sectors approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.7: Multiple Imputation: AIIB Formal Membership and New World Bank Projects in Hard Sectors

	Hard (1)	Hard (2)	Hard (3)	Hard (4)	Hard (5)
AIIB Formal Membership	-0.295*	-0.266	-0.303*	-0.330*	-0.299*
	(0.174)	(0.165)	(0.165)	(0.178)	(0.185)
GDP per capita (log)	0.079	-0.001	0.156	0.254	0.062
	(0.144)	(0.159)	(0.174)	(0.170)	(0.156)
Population (log)	0.369	0.494	0.352	0.584*	0.725**
	(0.307)	(0.340)	(0.298)	(0.304)	(0.325)
Lagged election	-0.178***	-0.174***	-0.162***	-0.158***	-0.146***
	(0.058)	(0.059)	(0.058)	(0.056)	(0.057)
FDI inflow (% GDP)	0.015**	0.015**	0.016**	0.016***	0.016***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Debt service (% GNI)	-0.005	-0.004	-0.005	-0.003	-0.004
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
ODA received (% GNI)	-0.001	-0.002	-0.004	0.000	0.000
	(0.007)	(0.006)	(0.006)	(0.007)	(0.007)
Polity	0.020*	0.031**	0.019*	0.024**	0.013
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Temporary UNSC member	0.105	0.099	0.109	0.111	0.108
	(0.134)	(0.130)	(0.131)	(0.127)	(0.130)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Unobserved factors	0	0	0	0	0
Observations	2736	2736	2736	2736	2736
Treated countries	36	36	36	36	36
Control countries	108	108	108	108	108

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. Each column represents results from one imputed dataset where missing values in covariates are imputed using Amelia. The dependent variable is the total number of new projects in hard sectors approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.8: Multiple Imputation: AIIB Formal Membership and New World Bank Projects in Soft Sectors

	Soft	Soft	Soft	Soft	Soft
	(1)	(2)	(3)	(4)	(5)
AIIB Formal Membership	0.272	0.302	0.276	0.249	0.276
	(0.187)	(0.187)	(0.189)	(0.193)	(0.193)
GDP per capita (log)	-0.013	-0.083	-0.052	0.120	-0.026
	(0.161)	(0.181)	(0.185)	(0.174)	(0.166)
Population (log)	0.618*	0.801*	0.421	0.645*	1.036**
	(0.368)	(0.386)	(0.352)	(0.392)	(0.381)
Lagged election	-0.100*	-0.092	-0.098*	-0.103*	-0.072
	(0.059)	(0.059)	(0.060)	(0.060)	(0.060)
FDI inflow (% GDP)	0.006	0.006	0.008	0.007	0.007
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Debt service (% GNI)	0.013	0.017**	0.016**	0.018**	0.018**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
ODA received (% GNI)	0.023***	0.025***	0.022***	0.023***	0.023***
	(0.006)	(0.006)	(0.006)	(0.007)	(0.006)
Polity	0.022*	0.045***	0.031***	0.031***	0.036***
	(0.012)	(0.013)	(0.011)	(0.012)	(0.012)
Temporary UNSC member	0.386***	0.390***	0.388***	0.385***	0.372***
	(0.128)	(0.127)	(0.128)	(0.133)	(0.129)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Unobserved factors	0	0	0	0	0
Observations	2736	2736	2736	2736	2736
Treated countries	36	36	36	36	36
Control countries	108	108	108	108	108

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. Each column represents results from one imputed dataset where missing values in covariates are imputed using Amelia. The dependent variable is the total number of new projects in soft sectors approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

B.4 Using Alternative Regression Models

Table B.9: Difference-in-Differences Results

	Hard	Soft
	(1)	(2)
AIIB Founder * Post 2016	−0.491*	−0.223
	(0.263)	(0.262)
AIIB Founder	0.596***	0.480***
	(0.117)	(0.116)
Post 2016	0.040	0.205
	(0.134)	(0.134)
GDP per capita (log)	−0.120*	−0.312***
	(0.061)	(0.061)
Population (log)	0.643***	0.538***
	(0.033)	(0.033)
Lagged election	−0.220**	−0.206**
	(0.095)	(0.094)
FDI inflow (% GDP)	0.035***	0.016**
	(0.007)	(0.007)
Debt service (% GNI)	−0.024***	0.007
	(0.009)	(0.009)
ODA received (% GNI)	0.014*	0.029***
	(0.008)	(0.008)
Polity	0.062***	0.072***
	(0.008)	(0.008)
Temporary UNSC member	0.126	0.705***
	(0.186)	(0.185)
Observations	1,836	1,836
Adjusted R^2	0.274	0.247

Notes: This table shows results with Ordinary Least Squares regression. Standard errors are reported in parentheses. The dependent variable is the total number of new projects in hard (column 1) or soft (column 2) sectors approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.10: Negative Binomial Regression Results

	Hard	Soft	Hard	Soft
	(1)	(2)	(3)	(4)
AIIB Founding Member	−0.276**	−0.102		
	(0.118)	(0.129)		
AIIB Formal Membership			−0.209**	0.114
			(0.106)	(0.094)
GDP per capita (log)	0.685**	0.319	0.710***	0.230
	(0.300)	(0.221)	(0.222)	(0.179)
Population (log)	1.667***	1.671***	1.793***	1.710***
	(0.456)	(0.395)	(0.408)	(0.349)
Lagged election	−0.124***	−0.089**	−0.124***	−0.086**
	(0.048)	(0.041)	(0.044)	(0.042)
FDI inflow (% GDP)	0.007*	0.0002	0.007*	0.0002
	(0.004)	(0.003)	(0.004)	(0.003)
Debt service (% GNI)	0.002	0.001	0.002	0.001
	(0.008)	(0.005)	(0.006)	(0.005)
ODA received (% GNI)	−0.001	0.020***	−0.001	0.019***
	(0.006)	(0.004)	(0.006)	(0.004)
Polity	0.024	0.042***	0.026**	0.042***
	(0.020)	(0.013)	(0.012)	(0.009)
Temporary UNSC member	−0.104*	0.144**	−0.091	0.147***
	(0.063)	(0.065)	(0.069)	(0.057)
Country fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,836	1,836	1,836	1,836

Notes: This table shows results with Negative Binomial regression. Robust standard errors clustered at country level are reported in parentheses. The dependent variable is the total number of new projects in hard (Columns 1 and 3) or soft sectors (Columns 2 and 4) approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.11: Poisson Regression Results

	Hard	Soft	Hard	Soft
	(1)	(2)	(3)	(4)
AIIB Founding Member	−0.274**	−0.102		
	(0.118)	(0.129)		
AIIB Formal Membership			−0.205*	0.117
			(0.105)	(0.095)
GDP per capita (log)	0.690**	0.323	0.716***	0.231
	(0.301)	(0.221)	(0.222)	(0.179)
Population (log)	1.672***	1.686***	1.803***	1.727***
	(0.458)	(0.397)	(0.409)	(0.349)
Lagged election	−0.124***	−0.088**	−0.124***	−0.085**
	(0.048)	(0.041)	(0.044)	(0.042)
FDI inflow (% GDP)	0.007*	0.00002	0.007*	0.00002
	(0.004)	(0.003)	(0.004)	(0.003)
Debt service (% GNI)	0.002	0.001	0.002	0.001
	(0.008)	(0.005)	(0.006)	(0.005)
ODA received (% GNI)	−0.001	0.019***	−0.002	0.019***
	(0.006)	(0.004)	(0.006)	(0.004)
Polity	0.024	0.041***	0.025**	0.041***
	(0.020)	(0.013)	(0.012)	(0.009)
Temporary UNSC member	−0.103*	0.144**	−0.090	0.147***
	(0.062)	(0.064)	(0.068)	(0.056)
Country fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,836	1,836	1,836	1,836

Notes: This table shows results with Poisson regression. Robust standard errors clustered at country level are reported in parentheses. The dependent variable is the total number of new projects in hard (Columns 1 and 3) or soft sectors (Columns 2 and 4) approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.12: Ordinary Lease Squares Regression Results

	Hard	Soft	Hard	Soft
	(1)	(2)	(3)	(4)
AIIB Founding Member	−0.676***	−0.248		
	(0.230)	(0.286)		
AIIB Formal Membership			−0.463**	0.343
			(0.206)	(0.268)
GDP per capita (log)	1.356***	0.706**	1.338***	0.521*
	(0.278)	(0.316)	(0.270)	(0.307)
Population (log)	2.475***	3.348***	2.570***	3.409***
	(0.517)	(0.659)	(0.527)	(0.658)
Lagged election	−0.207***	−0.189**	−0.210***	−0.188**
	(0.077)	(0.084)	(0.077)	(0.084)
FDI inflow (% GDP)	0.018**	0.003	0.018**	0.003
	(0.008)	(0.007)	(0.008)	(0.007)
Debt service (% GNI)	−0.0004	0.011	−0.001	0.009
	(0.009)	(0.014)	(0.009)	(0.014)
ODA received (% GNI)	0.002	0.044***	0.001	0.043***
	(0.008)	(0.010)	(0.008)	(0.010)
Polity	0.030**	0.074***	0.032**	0.076***
	(0.015)	(0.017)	(0.015)	(0.017)
Temporary UNSC member	−0.102	0.437**	−0.081	0.431**
	(0.181)	(0.179)	(0.181)	(0.179)
Country fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,836	1,836	1,836	1,836
Adjusted R^2	0.534	0.445	0.533	0.445

Notes: This table shows results with Ordinary Lease Squares regression. Robust standard errors clustered at country level are reported in parentheses. The dependent variable is the total number of new projects in hard (Columns 1 and 3) or soft sectors (Columns 2 and 4) approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

B.5 Effect on World Bank Project Amount

Table B.13: AIIB Founding Members and New World Bank Project Amount

	All	Hard	Soft
	(1)	(2)	(3)
AIIB founding member	-0.482	-2.417**	0.315
	(0.994)	(1.137)	(1.257)
GDP per capita (log)	-1.379	3.037	-2.008
	(1.705)	(1.918)	(1.865)
Population (log)	9.226***	9.903***	15.722***
	(3.070)	(3.548)	(3.490)
Lagged election	-0.239	-0.473	-0.251
	(0.376)	(0.480)	(0.426)
FDI inflow (% GDP)	0.043	0.079*	0.004
	(0.036)	(0.045)	(0.043)
Debt service (% GNI)	0.030	0.069	0.086
	(0.064)	(0.074)	(0.070)
ODA received (% GNI)	0.162***	0.013	0.205***
	(0.045)	(0.053)	(0.049)
Polity	0.278***	0.169	0.237**
	(0.097)	(0.104)	(0.103)
Temporary UNSC member	0.865	0.101	0.620
	(0.783)	(0.888)	(0.825)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Unobserved factors	0	0	0
Observations	1830	1830	1830
Treated countries	25	25	25
Control countries	73	73	73

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. The dependent variable is the total amount (logged) of new projects in all sectors (column 1), in hard (column 3), or in soft (column 2) sectors approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.14: Multiple Imputation: AIIB Founding Members and New World Bank Project Amount in Hard Sectors

	Hard (1)	Hard (2)	Hard (3)	Hard (4)	Hard (5)
AIIB founding member	-2.186**	-2.155**	-2.232**	-2.377**	-2.225**
	(0.950)	(0.962)	(0.975)	(0.940)	(0.947)
GDP per capita (log)	-0.838	-1.357	-0.926	0.170	-1.129
	(0.799)	(0.897)	(0.833)	(0.904)	(0.813)
Population (log)	2.500	2.934	1.712	2.423	4.284**
	(1.775)	(1.957)	(1.802)	(1.858)	(1.930)
Lagged election	-0.416	-0.392	-0.365	-0.325	-0.266
	(0.354)	(0.342)	(0.334)	(0.346)	(0.344)
FDI inflow (% GDP)	0.055*	0.055*	0.065**	0.066**	0.062**
	(0.030)	(0.029)	(0.030)	(0.030)	(0.029)
Debt service (% GNI)	-0.034	-0.020	-0.018	-0.054	-0.028
	(0.044)	(0.043)	(0.047)	(0.046)	(0.046)
ODA received (% GNI)	0.037	0.040	0.009	0.035	0.037
	(0.034)	(0.034)	(0.034)	(0.036)	(0.033)
Polity	0.110*	0.126*	0.070	0.132**	0.032
	(0.060)	(0.068)	(0.059)	(0.062)	(0.061)
Temporary UNSC member	0.634	0.678	0.618	0.606	0.577
	(0.734)	(0.748)	(0.752)	(0.762)	(0.747)
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Unobserved factors	0	0	0	0	0
Observations	2736	2736	2736	2736	2736
Treated countries	29	29	29	29	29
Control countries	115	115	115	115	115

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. Each column represents results from one imputed dataset where missing values in covariates are imputed using Amelia. The dependent variable is the total amount (logged) of new projects in hard sectors approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.15: AIIB Formal Membership and New World Bank Project Amount

	All	Hard	Soft
	(1)	(2)	(3)
AIIB founding member	0.028	-1.443	1.538
	(0.976)	(1.193)	(1.232)
GDP per capita (log)	-1.799	3.164	-2.621
	(2.391)	(1.973)	(1.996)
Population (log)	10.887***	11.460***	17.285***
	(3.924)	(3.668)	(3.647)
Lagged election	-0.372	-0.611	-0.220
	(0.373)	(0.488)	(0.436)
FDI inflow (% GDP)	0.031	0.082*	0.003
	(0.039)	(0.045)	(0.041)
Debt service (% GNI)	-0.008	0.069	0.095
	(0.069)	(0.074)	(0.071)
ODA received (% GNI)	0.053	0.008	0.197***
	(0.051)	(0.051)	(0.048)
Polity	0.251***	0.136	0.215*
	(0.105)	(0.120)	(0.113)
Temporary UNSC member	0.522	0.017	0.576
	(0.709)	(0.889)	(0.833)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Unobserved factors	1	0	0
Observations	1830	1830	1830
Treated countries	27	27	27
Control countries	71	71	71

Notes: The table shows results from generalized synthetic control (GSC) method by Xu (2017) with observations at the country-year level for 2000 to 2018. Standard errors are based on parametric bootstraps (blocked at the country level) of 2,000 times. The dependent variable is the total amount (logged) of new projects in all sectors (column 1), in hard (column 3), or in soft (column 2) sectors approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.16: Difference-in-Differences Results (Amount)

	Hard	Soft
	(1)	(2)
AIIB Founder * Post 2016	−2.232*	−0.408
	(1.236)	(1.178)
AIIB Founder	1.564***	0.549
	(0.549)	(0.523)
Post 2016	1.748***	1.667***
	(0.632)	(0.602)
GDP per capita (log)	−1.305***	−1.462***
	(0.289)	(0.275)
Population (log)	2.113***	1.529***
	(0.156)	(0.149)
Lagged election	0.082	−0.289
	(0.444)	(0.423)
FDI inflow (% GDP)	0.156***	0.047
	(0.032)	(0.030)
Debt service (% GNI)	0.037	0.073*
	(0.043)	(0.041)
ODA received (% GNI)	0.031	0.141***
	(0.037)	(0.035)
Polity	0.162***	0.316***
	(0.036)	(0.035)
Temporary UNSC member	0.710	2.459***
	(0.872)	(0.831)
Observations	1,836	1,836
Adjusted R^2	0.160	0.153

Notes: This table shows results with Ordinary Least Squares regression. Standard errors are reported in parentheses. The dependent variable is the total amount (logged) of new projects in hard (Column 1) or soft sectors (Column 2) approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table B.17: Ordinary Lease Squares Regression Results (Amount)

	Hard	Soft	Hard	Soft
	(1)	(2)	(3)	(4)
AIIB Founding Member	−2.517**	−0.236		
	(1.137)	(1.121)		
AIIB Formal Membership			−1.109	1.007
			(1.104)	(1.018)
GDP per capita (log)	3.816**	1.021	3.538**	0.608
	(1.504)	(1.515)	(1.519)	(1.506)
Population (log)	10.022***	14.163***	10.409***	14.255***
	(3.374)	(3.166)	(3.379)	(3.158)
Lagged election	−0.189	−0.641*	−0.196	−0.639*
	(0.406)	(0.378)	(0.406)	(0.378)
FDI inflow (% GDP)	0.111***	0.015	0.111***	0.015
	(0.029)	(0.032)	(0.029)	(0.032)
Debt service (% GNI)	0.036	0.006	0.032	0.002
	(0.067)	(0.060)	(0.068)	(0.060)
ODA received (% GNI)	0.028	0.242***	0.025	0.239***
	(0.050)	(0.040)	(0.050)	(0.040)
Polity	0.188**	0.215***	0.197**	0.219***
	(0.082)	(0.076)	(0.081)	(0.076)
Temporary UNSC member	−0.461	0.553	−0.399	0.529
	(0.825)	(0.712)	(0.831)	(0.712)
Country fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	1,836	1,836	1,836	1,836
Adjusted R^2	0.339	0.371	0.338	0.371

Notes: This table shows results with Ordinary Lease Squares regression. Robust standard errors clustered at country level are reported in parentheses. The dependent variable is the total amount (logged) of new projects in hard (Columns 1 and 3) or soft sectors (Columns 2 and 4) approved by the World Bank in a certain year. Projects are coded as in hard sectors if their primary sector is one of the followings: (1) Transportation, (2) Energy and Extractives, (3) Agriculture, (4) Water, Sanit, and Waster, and (5) Information and Communication, and in soft sectors otherwise.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.