# Gaining Ground, Gaining Influence? Vote Shares and Power in the AIIB

Soo Yeon Kim National University of Singapore JESSLENE LEE
National University of Singapore

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#### Abstract

This paper examines the distribution of voting power in the Asian Infrastructure Investment Bank (AIIB), in comparison to that in existing international institutions. A comparative analysis of the institutional design of the AIIB and other institutions informs the hypothesis: states' vote shares in the AIIB are shaped by their respective vote shares in other institutions, conditioned on states' developing status. The findings suggest that most states gain in vote shares in the AIIB, relative to their vote shares in other institutions; this increase in vote share is larger for states at lower levels of development. This paper contributes to literature on the distribution of voting power in international institutions, as well as the impact of international institutions created by rising powers on global governance.

Keywords: international institutions, rising powers, multilateral development banks, Asian Infrastructure Investment Bank

## Introduction

Rising powers and their creation of new international institutions has prompted debates on their effect on the international architecture of global governance. The emergence of rising powers such as China, Brazil, and India leads to shifting power dynamics in the international order which provides an impetus for contestation in existing institutions or creation of new institutions (Keohane and Nye 1977, Gilpin 1983, Morse and Koehane 2014). Yet, do new international institutions created by rising powers conform to or challenge global governance? Do these new international institutions replicate or reform the rules and norms manifested in existing international institutions?

The Asian Infrastructure Investment Bank (AIIB), which began operations in January 2016, is a multilateral development bank established through China's leadership. Seen as a possible rival to the International Monetary Fund (IMF) and the world Bank, the establishment of the AIIB and the countries that have chosen to accede to this institution raise important questions about the trajectory of global governance. Whether it is cooperation between rising powers and the G-8 countries or the kind of leadership that rising powers may offer through new international institutions, the AIIB presents an important empirical domain for addressing these questions.

This paper analyzes the voting power of members in the AIIB. The analysis engages the question of whether countries that have joined the AIIB have made gains in voting power as compared to existing institutions, namely the IMF, World Bank, and the Asian Development Bank. In doing so, the paper seeks to explain variation in the distribution of voting power in new international institutions, in comparison to that in existing international institutions. The distribution of voting power is reflected in the allocation of vote shares among member states and decision-making rules, which determine the influence a member state has over institutional outcomes as well as the agenda-setting process. Discussions on new international institutions invoke questions related to influence because, on the one hand, the motivations for the creation of and membership in an international institution is intertwined with the (mis)alignment of power in existing international institutions and the balance of power in the international order (Ikenberry and Lim 2017, Pratt 2017); on the other hand, the international institution's conception of itself and the way it situates itself in the institutional framework affects its preferences on the distribution of voting power (Kaya 2016). In this sense, international institutions are at once driven by and has consequences on the distribution of voting power.

To explore the distribution of voting power in this context, this paper examines the Asian Infrastructure Investment Bank (AIIB) in comparison to the other longstanding multilateral financial institutions: the World Bank, the International Monetary Fund (IMF), and the Asian Development Bank (ADB). The analysis begins with a comparison of the institutional design of these institutions, drawing on the framework of The Rational Design of International Institutions (Rational Design) (Koremenos et al. 2001)

and Continent of International Law (COIL) (Koremenos 2016) projects. A comparative analysis of the institutional design of these international institutions would illuminate the identity and interest of the new institution, which then offers an insight on the preferences of the new institution with regards to the distribution of power among its members. The findings show that the AIIB accords larger vote shares to its members, relative to other institutions. This gain in vote shares is conditioned on states' level of development. This paper contributes to the study of international institutions by expanding on the discussion of institutional design and the role of power. Delineating the distribution of voting power within new international institutions created by rising powers offers a perspective on the impact of these institutions on global governance as well as the impact of rising powers in the international order.

The next section further discusses the literature related to the distribution of voting power in international institutions. This is followed by a comparative analysis of the institutional design of the AIIB, in relation to existing international institutions. This then leads into the quantitative analysis of the allocation of vote shares in the AIIB. The final section concludes with a discussion on the implications of the findings for the study of international institutions and rising powers.

# Vote Shares and Voting Power

States value the distribution of voting power within international institutions because it bears symbolic significance and confers decision-making power that shapes institutional outcomes and processes. Voting power is derived from the formal allocation of vote shares and decision-making rules. The distribution of voting power in existing international institutions galvanizes discontent because it allows for the dominance of stronger or leading states over the decision-making process (Kellerman 2019). Where the allocation of vote shares is incommensurate with the economic size of states and rules skew decision-making in favour of certain states or blocs of states, institutional outcomes reflect pre-determined or "politically determined bargaining outcomes" (Lipscy 2015: 345). International financial institutions and multilateral development banks, like the World Trade Organization and the World Bank, are perceived to allow systemic dominance of big powers and disadvantage weaker or developing states (Fleck and Kilby 2016, Narlikar 2004, Kilby 2013). Discontent with the status quo drives demands for institutional reforms in existing international institutions to accommodate the expanding capabilities of rising powers or to adjust for better representation for developing or smaller states (Griffith-Jones 2002, Lesage and Van de Graaf 2015, Callaghan and Hubbard 2016, Voeten 2019). Notwithstanding, institutional change has occurred only in a limited and limiting way, where the distribution of voting power has not been substantially adjusted and the institutional arrangements themselves also constrain any such possibility of future adjustment commensurate with emerging dynamics in the international order or for better representation. Where there have been changes in formal allocation of vote shares, such as the IMF's quota and governance reforms in 2010, these institutional reforms may not have a substantive impact of constraining the ability of dominant states to continue wielding power through informal channels (Kilby 2011, Leech and Leech 2013, Wade 2013). The lack of adequate institutional accommodation foments discontent and leads to an expectation that new international institutions would better account for these asymmetries.

Vote shares are determined by subscription shares of member states which is in turn related to the member states' economic size; the larger the capital subscription of a member, the larger the number of votes the member has in the institution. Vote shares matter in symbolic and substantive terms. Vote shares represent the "formal political power" of states in the international institution (Kaya 2016) and thus the relative positions of states in the institution. Where decisions are made based on formal voting, states with larger vote shares would be able to wield this influence to shape outcomes in alignment with their preferences; where formal voting is called on decisions concerning institutional arrangements that affect fundamental agenda-setting, vote shares yield greater significance because it shapes the *process* of decision-making itself. This includes decisions on composition of boards and so on. Vote shares thus matter not only for a shaping of institutional outcomes but also safeguards the process through which these outcomes may be derived. Yet, vote shares alone do not determine voting power. Vote shares should be considered in terms of not only their size but the decisions that these vote shares impact.

These observations point towards the significance of the distribution of voting power as an analytical focus. This also highlights the fundamental puzzle: if the creation of new international institution proceeds against the backdrop of changing power dynamics in the international order and discontent with existing international institutions, would new international institutions replicate or reform the existing patterns of the distribution of voting power? And if there is change, in what ways would the distribution of power be different? In short, what determines the distribution of voting power in new international institutions?

### Distribution of Voting Power in the AIIB

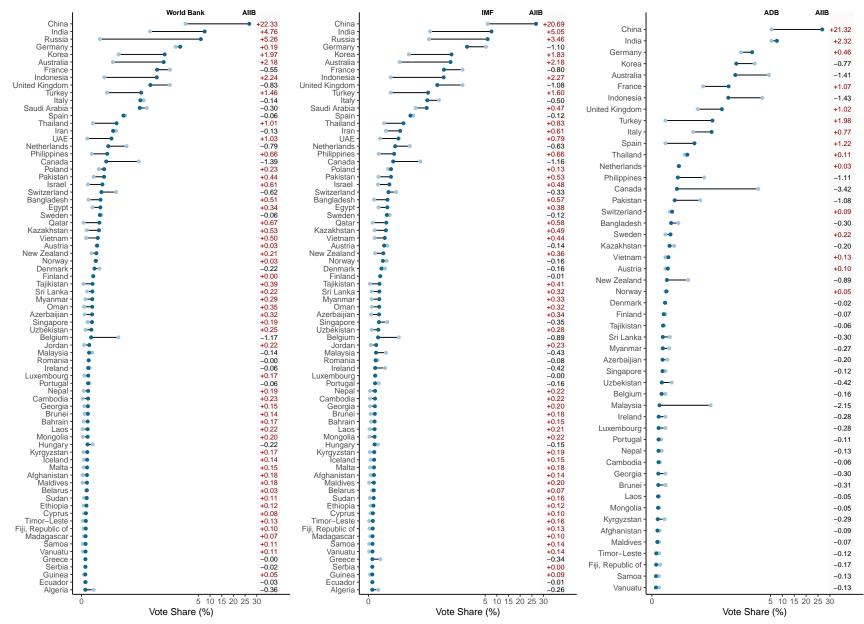
The rise of China, with its burgeoning political and economic power, accompanied by its initiation of new international institutions has raised questions about its motivations for and the impact of its initiatives. Studies attribute China's creation of the AIIB to a dissatisfaction with the pace and degree of institutional change in existing international institutions to accommodate its growing economic size (Callaghan and Hubbard 2016, Strand et al. 2016, Xu 2017). Theoretical expectations diverge on whether the AIIB is compatible with the status quo (Kahler 2013, Stephen and Skidmore 2019), reproduces

the status quo (Ransdell 2019), or has the potential to be a tool for China to further its self-interests and challenge global governance (Ikenberry and Lim 2017, Bisley 2018). Notwithstanding, the puzzle persists: what shapes the distribution of voting power in the AIIB?

# Institutional Design of the AIIB

Institutional design demonstrates intent and sheds light on the motivations or preferences of its creators and members. Studies that have analyzed the institutional design of the AIIB treat the AIIB in a regional context, ie. in relation to regional institutions (in particular, the ADB), because of the explicit framing of the AIIB as an Asian bank. The AIIB is frequently compared to the ADB because of their similarities in geographical scope, representativeness, and lending (Ransdell 2019). Yet, the scope and domain of the AIIB transcends that of the regional context. Besides, it should perhaps also be incongruent that the institution created by China should be situated within regional terms when the debate surrounding China is concerned with its identity as a rising global hegemon. Furthermore, the AIIB has been held to standards with regards to safeguards, procurement, and transparency in comparison to major multilateral development banks (Callaghan and Hubbard 2016). There is thus a need to fill the gap in examining the AIIB on the level of global governance, by comparing it with other international financial institutions.

A comparison of vote shares across the institutions (see Figure 1) demonstrates that most member states exhibit an increase in their vote shares in the AIIB as compared to their vote shares in existing institutions. This positive differential, however, is most pronounced in the comparison between the AIIB and the World Bank, followed by that between the AIIB and the IMF. 53 (out of 69) states experienced an increase in vote shares in the AIIB relative to the World Bank. The member states that experienced the largest increase in vote share is China with an increase of 23.33%, followed by Russia with an increase in 5.26% of vote share, and India with 4.76%. China, Russia, and India (in this order) are also the largest shareholders in the AIIB. Excluding China, the average increase in vote shares from the World Bank to the AIIB is 0.58%. 49 (out of 69) states exhibit an increase in vote shares in the AIIB, in relation to the IMF. China, Russia, and India again have the largest increase in vote shares at 20.68%, 5.05%, and 3.46% respectively. Excluding China, the average increase in vote shares from the IMF to the AIIB is 0.61%. Few states exhibited an increase in vote shares from the ADB to the AIIB, though this could be attributed to the broader membership of the AIIB. Only 15 (out of 49) states see an increase in their vote shares. However, excluding China, the average increase in vote shares is 0.68% which is a larger increase than in the comparison with the World Bank and the IMF. The member states the have the largest increase in vote shares are China, India, and Germany.



6

Compared against all the other institutions, China saw the largest gains in vote share in the AIIB and this gain significantly outweighs the gains made by other acceding states. This is largely attributable to the fact that the US and Japan, among the largest shareholders in the World Bank, IMF, and ADB, have chosen not to join the AIIB. That vote shares in these institutions and the AIIB are determined by members' capital subscriptions which are related to the size of the member's economy, the absence of the US and Japan makes available a greater proportion of subscription and thus vote shares that can be distributed among members of the AIIB. Arguably, being the largest economies in the world aside from China, US and Japan have the potential to contribute to a substantial proportion of capital subscriptions in the AIIB and thus affect significantly the distribution of vote shares.

To further exemplify the significance of the relative distribution of vote shares in the AIIB, the following analysis turns towards the institutional arrangements of the AIIB.

#### Centralization and Control

The institutional arrangements of the AIIB exhibit two main features: the centralization of tasks and concentration of control in the principal architect of the AIIB, China. Centralization and control in the AIIB is exemplified most significantly through the de facto veto of China, determined by the overwhelming size of its vote share.

The de facto veto of China enables it to dominate decision-making with regards to not only current institutional outcomes but also institutional *change*. In other words, China has the ability to influence decisions concerning lending as well as rules governing the decision-making process itself. This effectively allows China to preserve its preponderance in the AIIB.

#### Centralization

Centralization in international institutions refers to the extent to which tasks of the institution including information dissemination, bargaining, and enforcement are delegated to a single focal entity within the institution (Koremenos 2016: 43). The core task of the AIIB is the provision of development aid for infrastructure. Decisions on lending by the AIIB are governed by institutional arrangements that allow for the centralization of substantive tasks under the discretion of the dominant shareholder. Decisions on lending – from project initiation and approval to loan disbursement – is presided over by the Board of Governors and Board of Directors. These decisions require collective approval, through either a special majority or super majority vote. Member states of the AIIB are represented by their respective Governors; the Board of Governors delegates powers for policy, operations, and oversight to the Board of Directors. The composition

and procedure of the Board of Directors allows China to dominate the Board by virtue of its voting power.

The Board of Directors is composed of constituencies representing several member states, each constituency with varying levels of voting power which is derived from the aggregate of the vote shares of the member states within the constituency. In voting, each Director casts the number of votes held by the members of the constituency. This arrangement privileges member states that have their own director in Board but disadvantages those that share one director that is representing several members. Likewise, that China (and Hong Kong) has its own constituency, gives it autonomy in voting which further enhances the weight of the overwhelming size of its vote at 26.75%. While India also has its own constituency, its vote share is 7.66% which is far less than half of China's. To further illustrate the unevenness of the distribution of decision-making power across the institution: the total voting power of each constituency ranges between 2.35% and 27.59% (or 15.78%, excluding the constituency of China). This discrepancy in the size of vote shares of China and the next largest shareholder, as well as in comparison to the other member states, points towards the relative influence that China wields over decisions.

While the dominance of the leading shareholder over the management of the institution is common across the other institutions, the influence of China in the AIIB outweighs that of the leading shareholders in the other institutions. Furthermore, while China is similarly represented in the Board of Directors in the other institutions, its voting power in these institutions significantly lag behind that of the dominant members. The Board of Directors of the World Bank is composed of five appointed Directors, representing each of the five largest shareholders, and seven others who are elected. The leading constituencies are thus the ones each representing the US (15.9%), Japan (6.89%), and China (4.45%) respectively. Similarly, in the IMF, US, Japan, and China hold the largest vote shares at 16.5%, 6.15%, and 6.09% respectively and each have their own Director. For the ADB, Japan and the US share same vote shares (12.7%) and each are represented by their own Director; while China has its own Director in the ADB and is the third largest shareholder, its vote share is only 5.4%.

The centralization of the task of lending decisions in the AIIB is further enhanced by the procedure of the Board of Directors. That the Board of Directors functions on a part-time non-resident basis<sup>3</sup> suggests a further delegation of decisions to the President and the management, both represented or based in China. This non-resident status of the AIIB Board of Directors diverges from the practice of the other institutions which require the Directors to function at the principal office of the institution.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Article 28.3, AIIB AOA.

<sup>&</sup>lt;sup>2</sup> Article 5.3, IBRD AOA.

<sup>&</sup>lt;sup>3</sup> Article 27.1, AIIB AOA.

<sup>&</sup>lt;sup>4</sup> Article 5.4, IBRD AOA; Article 12.3, IMF AOA; Article 32, ADB AOA.

Thus, decisions on the substantive task of lending by the AIIB are governed by a highly centralized mechanism centred around its leading shareholder. The implication of the de facto veto of China is further exemplified through the concentration of control in the AIIB.

#### Control

Control in international institutions refers to how collective decisions are made (Koremenos 2016: 44). The allocation of control is formalized through membership, voting arrangements as well as other kinds of rules that characterize decision-making. Voting arrangements concern not only the allocation of vote shares among memtates but also the voting rules; voting rules refer to whether a simple majority, supermajority, or unanimity is required for decisions. Where there are procedural asymmetries, certain member states are able to dominate decision-making at the expense of others. The AIIB exhibits relatively high levels of asymmetric control, with the concentration of control in China given the size of its vote share. The weight of China's vote is further emphasized by the shareholding structure as well as the voting rules and the types of decisions these rules govern.

The allocation of votes in the AIIB is based on a weighted shareholding structure. The vote share of each member state is composed of basic votes (which is based on the equal distribution of 12% of aggregate sum of basic votes, share votes, and Founding Member votes for all members) and share votes (which is equal to the number of shares of the capital stock held).<sup>5</sup> China holds the largest proportion of vote shares in the AIIB (26.75%), followed by India (7.66%) and Russia (5.9%). China's vote share effectively gives it de facto veto over decisions that require a supermajority vote, which is an affirmative vote of a majority of two-thirds of total number of Governors representing not less than three-fourths of total voting power of members. While the initial number of vote shares allocated is based on the initial capital subscription by member states, changes to both the overall capital stock of the AIIB and a member state's capital subscription (and thus vote share) require a supermajority vote.<sup>7</sup> This means that, by possessing a de facto veto over supermajority decisions, China is the final arbiter for the distribution of voting power within the AIIB. Also, while vote shares of regional member states are reflective of their respective GDP, GDP is "indicative only" for non-regional member states (Bank 2015: 2). The ambiguity here opens the possibility of an "informal political margin" (Strand et al. 2016) which is not unlike that in other institutions such as the ADB which allows for the manipulation of vote shares to achieve a "politically desirable distribution" (Ransdell 2019).

<sup>&</sup>lt;sup>5</sup> Article 28, AIIB AOA.

<sup>&</sup>lt;sup>6</sup> Article 28, AIIB AOA.

<sup>&</sup>lt;sup>7</sup> Article 4.3 and Article 5.3, AIIB AOA.

Notwithstanding, the terms for the initial allocation of and changes to vote shares in the AIIB are similar to that in the World Bank<sup>8</sup> and the ADB.<sup>9</sup> Decisions concerning changes to the distribution of voting power, more specifically increases to a member state's voting power, require a majority vote the size of which gives the leading share-holders veto powers. The World Bank requires an approval of three-fourths majority of the total voting power for increases in capital stock, and the US holds a 15.9% vote share, and increases in subscription are subject to prevailing conditions.<sup>10</sup> The ADB requires a majority representing not less than three-fourths of total vote shares.<sup>11</sup> As such, the leading shareholders in these institutions (US in the World Bank; US and Japan in the ADB) are able to preside over the distribution of voting power. For the IMF, vote share is shaped by a member state's quota which is in turn based on the state's relative position in the world economy.<sup>12</sup> The adjustment of quotas, and thus vote shares, in the IMF needs 85% of total voting power which hence requires the approval the US who holds 16.5% of vote shares.

Besides the rules governing change in distribution of voting power, the fundamental formula for the allocation of vote shares arguably safeguards the potential for change in a way that undermines China's dominance in the AIIB. The relatively low percentage of basic shares (12% in the AIIB as compared to 20% in the ADB) allows less voting power movement, even if new members were admitted (Ransdell 2019). This suggests that the fundamental institutional arrangements of the AIIB maintains the proportion of vote shares in the AIIB.

Thus, with these voting arrangements, China as the leading shareholder is able to dominate the decision-making process in the AIIB. Not only do the existing rules of the AIIB privilege China, but China's dominance over decision-making concerning current operations as well as institutional change also means that it is able to preserve the set of rules and thus its privileged position in the AIIB. This centralization and concentration of control in the principal architect in the AIIB is not unlike that of other institutions, however. The AIIB, in fact, largely exhibits institutional congruence with existing institutions as illustrated by its institutional design. This is perhaps unsurprising; if the institutional design of existing international institutions manifests a distribution of power that provides for, enlarges, or reinforces the influence of the dominant power over the decision-making process and thus institutional outcomes, there is little reason to expect that new international institutions created by rising powers should deviate from such institutional arrangements. Notwithstanding, as discussed, the institutional arrangements of the AIIB also accrue significant gains for China, relative to its position in the existing institutions. Yet, does centralization and control in the

<sup>&</sup>lt;sup>8</sup> Article 2.3, World Bank AOA.

 $<sup>^9</sup>$  Article 5.3, ADB AOA.

 $<sup>^{10}</sup>$  Article 2.2 and 2.3, World Bank AOA.

<sup>&</sup>lt;sup>11</sup> Article 5.4, ADB AOA.

<sup>&</sup>lt;sup>12</sup> Section 5, IMF AOA; IMF Factsheet.

leading shareholder shape the distribution of voting power in the AIIB and if so, how? What determines the vote shares of member states?

# **Empirical Analysis**

We test the hypothesis that states gain a higher vote share in the AIIB than in the other multilateral financial institutions. The sample consists of 74 states who have officially joined the AIIB. Official AIIB members are those that have ratified the Articles of Agreement through their domestic processes and deposited the first installment of capital within the AIIB. States that are signatories to the AOA but have not completed the above process are considered prospective members and are not included in the sample. China is excluded from the sample because its overwhelming proportion of its vote share could skew the results of the regression. To investigate whether and the extent to which voting power changes in the AIIB relative to other institutions, we analyze the vote shares of these states across the AIIB, World Bank, IMF, and ADB. The dependent variable is the vote shares of member states in the AIIB (AIIB). This is measured in terms of the number of votes each member state has as a percentage of the total votes in the AIIB.<sup>13</sup> The independent variables of interest are the corresponding vote shares of member states in the World Bank (WB), IMF (IMF), and ADB (ADB) respectively, to capture gains from joining the AIIB relative to existing multilateral financial institutions. Is the increase in vote shares exhibited in the case of China also reflected in the cases of other states?

Taking into account the explanation that states create and join new international institutions because of discontent with existing institutions, we expect that developing countries are likely to be more receptive towards the AIIB because of the potential for better representation in the institution. States seek better representation in an "imbalanced system" in terms of being able to influence priorities and processes in the institution (Reisen 2015: 298). Following from this, the question is whether developing countries do gain (and gain more) from joining the AIIB. Furthermore, that the AIIB was conceived to fill the infrastructure financing gap in developing Asia, we expect that developing countries may be expected to have a greater representation in the AIIB. We thus investigate whether developing countries gain more in vote shares in the AIIB as compared to other institutions. We include a variable that measures the level of development of states (GDP per capita) and interact states' vote shares in each of these institutions with their developing status (WB\*GDP per capita, IMF\*GDP per capita, ADB\*GDP per capita). The data were obtained from the World Development Indicators. <sup>14</sup>

<sup>13</sup> https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html

<sup>&</sup>lt;sup>14</sup> https://data.worldbank.org/indicator/NY.GDP.PCAP.KD.

The analysis includes control variables that proxy for economic and political alignment with China. We expect that states with closer economic and political relations with China benefit from the allocation of vote shares. We include a variable for the concentration of trade with China (*Trade Concentration with China*) to account for the relative importance of trade with China level of economic relations between states and China. This is measured in terms of trade with China as a proportion of total trade with the rest of the world. We expect that higher levels of trade with China are likely to be associated with larger vote shares in the AIIB. The data were obtained from the Direction of Trade Statistics database.<sup>15</sup>

UN Voting Similarity and Regime Similarity are included in the analysis to account for political alignment with China. UN Voting Similarity measures the similarity in voting in the UN General Assembly between a state and China. <sup>16</sup> The variable ranges from 1 (always votes the same way as China) to 0 (always votes the other way from China); an increase in the value of this variable indicates greater distance in their voting and thus foreign policy preferences. UN voting similarity scores are often used in existing literature to proxy for alignment in interests between states which translate into corresponding benefits in other issue areas (Kilby 2009, Dreher and Fuchs 2016). We thus anticipate greater demonstrated alignment in interests with China to be associated with greater share of votes in the AIIB. Regime Similarity measures the regime similarity between a member state and China which is derived from the difference in their Polity IV scores, which ranges from institutionalized autocracy (-10) to democracy (+10). <sup>17</sup> Greater regime similarity is denoted by a lower value to the variable. We expect greater regime similarity to have a positive effect on vote shares in the AIIB.

We also include measures for membership in other institutions of strategic importance to China. *SCO Member* is a dummy variable for whether the member state is a member or dialogue partner (1) or observer (0) of the Shanghai Cooperation Organization (SCO).<sup>18</sup>. *BRI Member* is a dummy variable for whether the member state is an official partner of the Belt and Road Initiative (BRI).<sup>19</sup> We expect that states with shared institutional participation with China (or more specifically, participation in China's multilateral institutions) are likely to benefit more from joining another institution created or led by China which in this case is the AIIB.

We also include other factors that might be associated with the share of votes in the AIIB in order to investigate the robustness of the association between vote shares in other institutions versus the AIIB. We include *Asian Country* which is a dummy variable for whether the member state is in Asia because the salience of AIIB's identity as ostensibly

<sup>15</sup> https://data.imf.org//

 $<sup>^{16}\</sup> https://dataverse.harvard.edu/dataset.xhtml?persistentId=hdl:1902.1/12379$ 

 $<sup>^{17}\ \</sup>mathrm{https://www.systemicpeace.org/inscrdata.html}$ 

<sup>18</sup> http://eng.sectsco.org/

<sup>&</sup>lt;sup>19</sup> https://eng.yidaiyilu.gov.cn/

a regional bank (Hamanaka 2016) and an apparent competitor to the ADB might lead higher vote shares being accorded to states in the region. This regional classification follows the UN Geoscheme.<sup>20</sup>

Appendix Table A1 presents summary statistics for the variables employed in the analysis.

# **Findings**

Table 1 reports the main results of the estimated effect of vote shares in other institutions on vote shares in the AIIB. There are three sets of results: Models (1) and (2) for the effect of vote shares in the World Bank on that in the AIIB, Models (3) and (4) for the effect of vote shares in the IMF on that in the AIIB, and Models (5) to (6) for the effect of vote shares in the ADB on that in the AIIB. For each set of results, we distinguish between specifications for our main explanatory variables without and with the control variables.

These results demonstrate that vote shares in the existing multilateral financial institutions are associated with higher vote shares in the AIIB. The estimated coefficients of our main explanatory variables remain statistically significant and increase in magnitude, pointing towards the strong positive effect of vote shares in other institutions on that in the AIIB. The estimated coefficients for the vote shares in the World Bank, the IMF, and the ADB are statistically significant at 0.01 level. The increase in vote shares is the largest from the IMF to the AIIB, where 1 percentage point increase in IMF vote shares leads to an 8 percentage point increase in AIIB vote shares, whereas the same for World Bank vote shares and ADB vote shares are only associated with a 5 percentage point increase and 3 percentage point increase, respectively, in AIIB vote shares. This demonstrates that states systematically gain more vote shares in the AIIB than in the other institutions. This increase in vote shares is the largest from the IMF to the AIIB, followed by that from the World Bank to the AIIB, and lastly from the ADB to the AIIB. In other words, the gain in vote shares by states in the AIIB is most profound in relation to the multilateral institutions and not with the regional institution.

The interaction terms also enter with statistically significant coefficient estimates in all the specifications. The negative sign of the estimated coefficients indicates that the gain in vote shares declines as GDP per capita increases. States at lower levels of development experience a higher increase in vote shares in the AIIB as compared to states at higher levels of development. This conditional effect based on developing status is strongest in the case of the IMF (Models (3) and (4)) where the positive effect of vote shares in the IMF shrinks by 0.6 percentage points with each unit increase in GDP per

https://unstats.un.org/unsd/methodology/m49/

Table 1. Estimated Effect of Vote Shares in Other Institutions on Vote Shares in the  $\operatorname{AIIB}$ 

	Dependent variable: AIIB Vote Shares								
	(1)	(2)	(3)	(4)	(5)	(6)			
WB	7.034*** (0.923)	5.796*** (1.053)							
WB*GDP per capita	$-0.587^{***}$ $(0.090)$	$-0.467^{***}$ (0.104)							
IMF	,	,	$8.652^{***}$ $(0.639)$	8.383*** (0.708)					
IMF*GDP per capita			$-0.738^{***}$ $(0.062)$	$-0.711^{***}$ (0.069)					
ADB			(0.002)	(01000)	2.366*** (0.564)	3.194*** (0.869)			
ADB*GDP per capita					-0.163*** $(0.059)$	-0.254** $(0.093)$			
GDP per capita	0.105 $(0.074)$	0.145 $(0.092)$	$0.089^*$ $(0.049)$	$0.101^*$ (0.058)	0.210** (0.100)	0.027 $(0.173)$			
Trade Concentration with China	(0.011)	0.035	(0.010)	0.071*	(0.100)	0.027			
		(0.057) $-0.537$		$(0.036)$ $-1.285^*$		(0.087) $-4.248$			
UN Voting Similarity		(1.161)		(0.712)		(2.544)			
Regime Similarity		0.009 $(0.019)$		-0.010 $(0.012)$		-0.050 $(0.034)$			
SCO Member		0.768** (0.342)		$0.172 \\ (0.221)$		0.034 $(0.451)$			
BRI Partner		0.109 $(0.205)$		-0.039 $(0.129)$		0.073 $(0.336)$			
Asian Country		0.543** (0.266)		0.471*** (0.166)		-0.227 $(0.650)$			
Constant	-0.774 $(0.666)$	-1.309 $(1.388)$	-0.715 $(0.439)$	-0.407 $(0.865)$	-1.857** $(0.919)$	2.836 $(2.597)$			
Observations R <sup>2</sup>	74 0.692	68 0.754	74 0.865	68 0.904	49 0.694	$45 \\ 0.725$			
Adjusted R <sup>2</sup>	0.679	0.716	0.860	0.904	0.694	$0.725 \\ 0.654$			

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

capita. Furthermore, not only do vote shares in the ADB have less of a positive effect on vote shares in the AIIB; this increase in vote shares in the AIIB is not affected by development status.

The results also suggest that factors that account for economic and political alignment with China are largely not associated with higher vote shares in the AIIB. The exception is *Trade Concentration with China* and *UN Voting Similarity* whose estimated coefficients are statistically significant but only at the 0.1 level in Model (4). AIIB members that are also SCO members gain more in terms of vote shares, where being an SCO member is associated with a 0.7 percentage point increase in vote share in comparison to non-SCO members. Being in Asia has a positive effect on vote shares in the AIIB, with member states in Asia gaining higher vote shares of 0.4 to 0.5 percentage point increase relative to their non-Asian counterparts. Considering the results of the full specifications, thus, the predominant explanation that states sign up to the AIIB because of their proximity to China and hence also derive gains or that they may expect to derive gains from their joining of the AIIB.

To further illustrate the effects of the coefficient estimates of the interaction terms, across the institutions, we plot their marginal effects. Figures 2 to 4 illustrate how the level of development of a member state affects the relationship between vote shares in the AIIB and vote shares in other institutions. Based on the marginal effects plots, the gain in vote shares in the AIIB is stronger at lower levels of development. The marginal effect of vote shares in other institutions have a statistically significant effect on AIIB vote share around the mean level of GDP per capita. It best explains the vote shares of the member states in the lower-middle and upper-middle income level. As the level of development of the state increases, the smaller the increase in the vote share of the state relative to that in other institutions. The confidence intervals widens at the tail ends of the graph, indicating more uncertainty in the estimated effects for states with the highest and lowest levels of GDP per capita.

Figure 2. Marginal Effects of World Bank Vote Shares on AIIB Vote Shares for Different Levels of GDP per capita

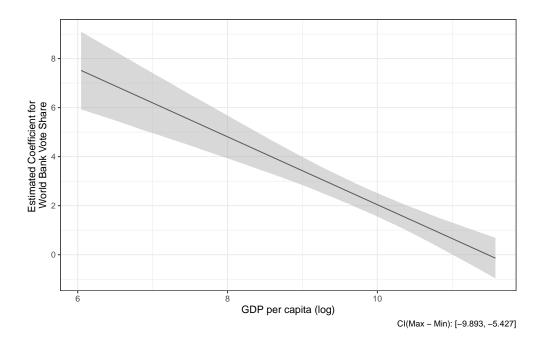


Figure 3. Marginal Effects of IMF Vote Shares on AIIB Vote Shares for Different Levels of GDP per capita

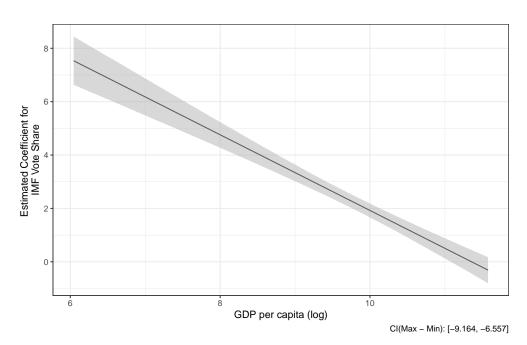
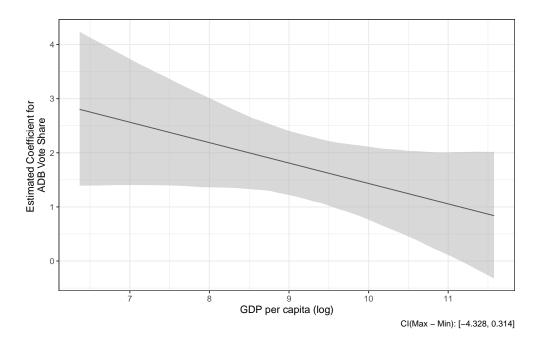


Figure 4. Marginal Effects of ADB Vote Shares on AIIB Vote Shares for Different Levels of GDP per capita



### **Extensions**

We evaluate the robustness of our main findings by considering alternative explanations for the allocation of vote shares in the AIIB, in particular the prevalent perspective that the AIIB serves as an instrument of institutional statecraft for China to expand its influence which then informs the expectation that vote shares in the AIIB are shaped by Chinese political and economic interests (Ikenberry and Lim 2017, Cai 2018, Cammack 2018, Wilson 2019). Our control variables account for alignment in the dyadic relationship between member states and China which does not presuppose that China is exerting influence per se. The focus is on alignment which simply suggests that member states have an interest in joining the AIIB which then may have an impact on their relative share of votes in as China requites their membership in the institution; this is in contrast to the alternative explanation on Chinese influence that apportions greater agency on the part of China and that vote shares serve as a means of exerting influence.

To account for this alternative explanation, we adopt Kaya and Woo (2018)'s model which analyzes whether vote shares in the AIIB are shaped by Chinese interests. In Kaya and Woo (2018)'s study, Chinese interests, and thus political and economic proximity with China, are captured by the following variables: *Regional Member* is a dummy for regional membership which could demonstrate "group favouring" by China to conceal

its exercise of influence (Kaya and Woo 2018: 12). Political interests are accounted for in terms of voting similarity between member states and China in the UN General Assembly ( $UN\ Ideal\ Points\ Distance$ ) and relations with Taiwan ( $Taiwan\ Relation$ ), states' voting similarity with the US in the UN General Assembly ( $UNGA\ Voting\ Similarity$ ) and whether they are part of the EU (EU) to account for relations with "rival's friends" (Kaya and Woo 2018: 21). Economic interests are proxied by trade relations ( $Import\ Share$  and  $Export\ Share$ ), foreign economic assistance (overseas development assistance (ODA) and other official assistance (OOF)), level of oil exports to China ( $Oil\ Exports$ ). Regime type (Regime) is also included in order to correct for potential selection effects where states that are of similar regime type as China may be more likely to join the AIIB, and thus also accrue a certain allocation of vote shares. It should be noted that the dependent variable in the original study is "representation" which is the total subscription shares of member states as a proportion of its GDP.

Table 2 presents the estimation results for our robustness check. Models (1), (2), and (3) consider vote shares in each institution separately. The results show that the variables that capture Chinese interests and which demonstrated statistical significance in Kaya and Woo (2018) mostly lose their statistical significance with the inclusion of our explanatory variables. In particular, regional membership, ideal points distance with China in the UN, and relations with Taiwan do not affect vote shares in the AIIB relative to the World Bank and the ADB. In the case of the IMF, the estimated coefficients of Regional Member and UN Ideal Points Distance are in the similar direction as in Kaya and Woo (2018)'s model but are statistically significant only at the 0.05 level. More significantly, the estimated coefficients for the vote shares in the World Bank and the IMF, and their interaction terms with development status, are robust and statistically significant at the 0.01 level. The results of the robustness check thus corroborates our main findings: vote shares in other institutions have a strong positive effect on vote shares in the AIIB and this increase in vote shares in the AIIB declines with increasing levels of development. Furthermore, states have higher levels of vote shares in the AIIB than in other institutions and this positive differential is larger in relation to the World Bank and the IMF than the ADB. This positive differential endures irrespective of Chinese interests and is, instead, conditioned by states' level of development. These results diminish the strength of alternative explanations in terms of how the AIIB may be used by China to further its interests and thus it would seek to exert its influence through the AIIB through the allocation of vote shares.

# AIIB: A Regional Bank with Multilateral Characteristics

The AIIB, despite being ostensibly a regional bank, exhibits features of a multilateral bank. The findings demonstrate that the gain in vote shares is the most significant between the AIIB and the World Bank or the IMF instead of the ADB. This challenges

Table 2. Robustness Check

_	$Dependent\ variable:$				
	AIIB Vote Shares				
	(1)	(2)	(3)		
WB	5.473***				
WB*GDP	$ \begin{array}{c} (1.085) \\ -0.459^{***} \\ (0.107) \end{array} $				
IMF	(0.107)	8.027***			
IMF*GDP		(0.734) $-0.682***$			
ADB		(0.071)	2.236		
ADB*GDP			(1.144) $-0.167$		
Regional Member	0.368	0.410**	(0.129 $-0.262$		
UN Ideal Points Distance	(0.298) $-3.097$	(0.182) $-2.776**$	(0.719 $-3.952$		
Taiwan Relation	$(1.908) \\ 0.223$	$(1.173) \\ 0.030$	(2.687 $0.339$		
UNGA Voting Similarity	(0.259) $-2.469$	(0.159) $-2.048*$	(0.399 $-2.879$		
EU	$(1.932) \\ -0.447$	$(1.189)$ $-0.382^*$	(4.292 $-0.080$		
Import Share	$(0.337) \\ 0.077$	$(0.207) \\ 0.124*$	$(0.574 \\ -0.020$		
Export Share	$(0.107) \\ 0.279$	(0.066) $-0.044$	(0.184)		
Cumulative ODA	(0.192) $-0.010$	$(0.123) \\ 0.003$	(0.268 $-0.034$		
Cumulative OOF	$(0.020) \\ 0.021$	$(0.012) \\ 0.009$	$(0.037 \\ 0.007$		
GDP per capita	$(0.015) \\ 0.045$	$(0.009) \\ 0.099$	(0.032 $-0.189$		
Oil Exports	(0.122) $-0.002$	$(0.076) \\ -0.001$	(0.270 $-0.025$		
Regime	$(0.024) \\ 0.006$	$(0.015) \\ -0.007$	$(0.040 \\ -0.025$		
Constant	(0.022) $2.255$ $(2.205)$	(0.013) $1.457$ $(1.368)$	(0.037) $5.867$ $(4.429)$		
Observations	63	63	44		
$ m R^2$ Adjusted $ m R^2$	$0.812 \\ 0.757$	$0.930 \\ 0.910$	$0.778 \\ 0.671$		
Note:		(0.1; **p<0.05;			

19

the perception that the AIIB is a competitor of the ADB (Wan 2015). The gain in vote shares also more significantly benefits developing countries. This gain in vote shares is significant as it serves as a conduit of influence which states may exert over the decision-making process and mould institutional outcomes of the AIIB to their preferences. That the AIIB accords greater voting power to its member states relative to the World Bank and the IMF, this might indicate that the AIIB situates itself within the broader framework of global governance and not regional governance. This leads to the question, albeit tangentially, of whether the AIIB is a competitor to the ADB because of its explicit regional framing or a competitor to the World Bank and the IMF because the AIIB's distribution of voting power contests most significantly that in these multilateral institutions. A shift in distribution of voting power, not only in terms of higher vote shares but also in favour of developing countries, could present the AIIB as an alternative to multilateral institutions; this would be particularly salient for states that have been disadvantaged by the asymmetric distribution of voting power in existing institutions. Nonetheless, whether a competitor to regional or multilateral institutions, the impact of AIIB on global governance warrants further examination.

### Conclusion

In this paper, we examine the distribution of voting power in the AIIB. The analysis investigates the distribution of vote shares in the AIIB, in comparison to other multi-lateral financial institutions including the World Bank, the IMF and the ADB. To test the hypothesis that vote shares in the AIIB are shaped by vote shares in these other institutions, we conduct a comparative analysis of the institutional design of the AIIB and the other institutions as well as a multivariate regression analysis. The comparative analysis of the institutional design suggests that the AIIB exhibits congruence with institutional arrangements of existing institutions. The results of the empirical analysis support our hypothesis: vote shares in the AIIB are higher than that in other institutions. The increase in vote shares is larger relative to the World Bank and the IMF, than the ADB. Furthermore, this gain in vote shares is inversely proportional to states' level of development; developing countries experience larger gains in vote shares in the AIIB.

Notwithstanding, in spite of these gains in vote shares, the actual impact of these institutional arrangements and distribution of vote shares on states' ability to influence the decision-making process or institutional outcomes of the AIIB remains to be examined. Just as formalized rules that provide for privileges may not accrue in substantive terms, the formal distribution of power may not translate into substantial influence on the operations or outcomes of institutions.

More broadly, in terms of distribution of voting power, the AIIB seems to exhibit

both continuity and change: the AIIB replicates patterns of distribution of voting power in existing institutions in the overwhelming dominance of the leading member state but also offers change in terms of greater voting power for other states. However, institutional arrangements themselves may not always or directly manifest in actual governance and outcomes. Whether the AIIB, thus, complements or contests global governance requires further examination. Future research could examine institutional outcomes of the AIIB to find out if it delivers outcomes that converge with or diverge from the existing distributional consequences of the existing institutional framework. This would also point towards whether the distribution of voting power in international institutions do accrue to influence for states.

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# Appendix

Table A1. Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
AIIB Vote Share (%)	74	1.068	1.415	0.172	7.686
WB Vote Share (%)	74	0.704	0.983	0.040	4.030
IMF Vote Share (%)	74	0.752	1.074	0.030	5.320
ADB Vote Share (%)	50	1.293	1.388	0.301	5.363
GDP per capita (t-1, ln)	74	9.196	1.536	6.045	11.576
Trade Concentration with China (t-1)		2.481	2.116	0.000	12.901
UN Voting Similarity		0.641	0.162	0.153	0.833
Regime Similarity		3.460	7.244	-10.000	10.000
SCO Member (dummy)		-	-	0	1
BRI Member (dummy)		-	-	0	1
Asian Country (dummy)	74	-	-	0	1