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The Asian Infrastructure Investment Bank and its Effect on The Multilateral Development Financial System and ASEAN Countries: An Analysis of Voting Power

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“On my honour as a student of the Diplomatische Akademie Wien, I submit this work in good faith and pledge that I have neither given nor received unauthorised assistance on it.”

- Juan Felipe Borrero Gutierrez

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## List of Abbreviations

| <b>Abbreviation</b> | <b>Definition</b>                                     |
|---------------------|-------------------------------------------------------|
| ADB                 | Asian Development Bank                                |
| AfDB                | African Development Bank                              |
| AIIB                | Asian Infrastructure Investment Bank                  |
| EBRD                | European Bank for Reconstruction and Development      |
| IADB                | Inter-American Development Bank                       |
| IsDB                | Islamic Development Bank                              |
| IBRD                | International Bank for Reconstruction and Development |
| IDA                 | International Development Association                 |
| IFC                 | International Finance Corporation                     |
| IFI                 | International Financial Institution                   |
| IMF                 | International Monetary Fund                           |
| MDB                 | Multilateral Development Bank                         |
| NDB                 | New Development Bank                                  |
| RMDB                | Regional Multilateral Development Bank                |
| SAP                 | Structural Adjustment Programmes                      |
| SRMD                | Sub- Regional Multilateral Development Bank           |
| UNSC                | UN Security Council                                   |

## Abstract

The multilateral development financial system is comprised by multilateral development banks (MDBs), creditors and borrowers. The Asian Infrastructure Investment Bank (AIIB) is no exception. This thesis examines how the creation and expansion of the AIIB has affected influence dynamic among its top five creditors -China, India, Germany, Russia and South Korea- and the ASEAN countries, a key group of borrowers with growing regional weight. Using a comparative analysis of voting rights across AAA-rated MDBs and calculating the Hubbell Influence Index, the study evaluates countries' capacity to project and receive influence. The results show China's influence increasing and surpassing traditional creditors. On the other hand, ASEAN countries show a potential influence capacity, if they were to act cohesively. These findings are tested for robustness using expanded samples and the Taylor Influence Index. In sum, the AIIB appears to be a continuance rather than a rupture that incorporates emerging creditors into the system.

Das multilaterale Entwicklungsfinanzierungssystem besteht aus multilateralen Entwicklungsbanken (MDBs), Gläubigern und Kreditnehmern. Die Asian Infrastructure Investment Bank (AIIB) ist keine Ausnahme. In dieser Arbeit wird untersucht, wie sich die Gründung und der Ausbau der AIIB auf die Einflussdynamik zwischen ihren fünf wichtigsten Gläubigern - China, Indien, Deutschland, Russland und Südkorea - und den ASEAN-Ländern, einer wichtigen Gruppe von Kreditnehmern mit wachsendem regionalen Gewicht, ausgewirkt hat. Anhand einer vergleichenden Analyse der Stimmrechte in den mit AAA bewerteten MDBs und der Berechnung des Hubbell Influence Index bewertet die Studie die Fähigkeit der Länder, Einfluss auszuüben und zu erhalten. Die Ergebnisse zeigen, dass Chinas Einfluss zunimmt und die traditionellen Gläubiger übertrifft. Andererseits zeigen die ASEAN-Länder ein potenzielles Einflussvermögen, wenn sie geschlossen auftreten. Diese Ergebnisse werden mit erweiterten Stichproben und dem Taylor Influence Index auf ihre Robustheit hin überprüft. Zusammenfassend lässt sich sagen, dass die AIIB eher eine Fortsetzung als einen Bruch darstellt, der aufstrebende Gläubiger in das System einbindet.

## 1. Introduction

The multilateral development financial system is comprised by multilateral development banks (MDBs), and their members. They have played a pivotal role in financing development projects and are considered focal points where knowledge, resources and political will is channelled. Their outreach and investment capacity is considerable. In 2018 alone, MDBs had a total capitalization of about 1.3 trillion USD and 222.7 billion in new lending commitments (Bazbauers and Engel 2021). By the end of 2020 MDBs have lent about 1.5 trillion to countries in need of development projects without using their own capital (Humphrey 2022). These banks lend from private capital markets to on-lent to interested countries. Furthermore, as international institutions conformed by member states, they are subject to political interests. They operate therefore at the intersection between politics and economics and play a crucial role in the execution of development projects.

After the creation of the World Bank, development became a focal point of the global agenda throughout the second half of the twentieth century. Economic development was understood as modernization and the need to enhance infrastructure to allow private businesses to flourish. Investments in infrastructure, like railways, highways, electrical grids, etc. needed to be financed in countries that did not have the financial means to either cover the expenses with their own budget or rely on the private sector to borrow. The World Bank was created to provide a source of financing backed by developed countries for developing countries. The Bank would become a focal point for the latter to finance their modernization.

This would soon translate into the reproduction and proliferation of the Bank's institutional framework, triggering the emergence of regional, subregional and specialized banks throughout the twentieth century. These banks became key partners of the World Bank because of their region-specific expertise and additional lending capacity, showing remarkable success in financing infrastructural projects. However, the political tensions inherent to the World Bank's institutional framework also proliferated.

The multilateral development financial system, as Ye (2023) names it, is not only comprised by the banks and their borrowers but also non-borrowing members. The latter are often developed economies with a healthy macroeconomic performance and outlook. Their membership is a signal of confidence for private capital markets because they provide MDBs with the initially required capital. In exchange, they receive shares from the banks. These type of members are considered creditors because they provide a bank with security, elevating its financial rating. On the other hand, these countries are prone to involve themselves in the operations of MDBs, bringing with them political interest and having an effect on loan allocation. Therefore, countries like the United

States, Germany, Japan, the United Kingdom, France, etc. are considered influential members of MDBs.

These are not necessarily the only influential countries in the system. Recent developments show how China, India or Russia are seeking to increase their influence by either promoting reforms within the system or creating new MDBs, in which they hold significant amounts of shares. This is the case of the Asian Infrastructure Investment Bank (AIIB), a Chinese initiative that consolidated in 2016 and expanded until 2020. Whether the emergence of the bank is considered a rupture or a continuance with the system, it is up for discussion. However, China's attempt to position itself in a leadership role seems evident.

Moreover, the AIIB's influence on the ASEAN countries has been a priority for China and the bank since its emergence. This corresponds with a Chinese effort to become a leader in the region that is already well integrated in the global economy. It also corresponds with the need of ASEAN countries to enhance their current infrastructure to promote regional economic integration and competitiveness. The role of the AIIB, which specific mandate is to invest in infrastructural projects in Asia<sup>1</sup>, seems tailored to the needs of both China and the ASEAN. However, the question of growing Chinese influence is also a matter of discussion as it can be understood as an emerging economy with sufficient power to influence the behaviour of other countries and international institutions. The ASEAN, comprised by middle income countries in its majority, can also be seen as a group of emerging economies, that, in a smaller scale than China, might be gaining influence.

Therefore, the present analysis will investigate the influence of the top five donors of the AIIB, China, India, Germany, Russia and South Korea, and the ASEAN countries to shed light on their relationship and the effect of the AIIB's emergence. This is done by analysing the voting power of these countries in different MDBs (rated AAA) and then calculating the Hubbell Influence Index in 2014, 2018 and 2022. This index delivers values on the capacity of countries to influence others and the influence they received from other countries (Ye 2023). Further, this analysis is tested for robustness by expanding the sample and changing the period, and calculating the Taylor influence index, a measure of net influence.

This analysis is structured as follows: First, the regular functions of an MDB are depicted to understand what tensions are behind their institutional framework. Second, the history of the multi-

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<sup>1</sup> This is a mandate that implied literally by its name.

lateral development financial system around the World Bank is recounted to understand the context from which the AIIB originated. Third the literature that examines MDBs and their relationship with the political interest of their members is reviewed. Voting power, emerging economies and the emergence of new MDBs will play a vital role in this review. The relationship between the AIIB and the ASEAN countries will also be examined to understand the context from which the bank came to be. Further, the Hubbell Influence Index is explained as the central index of the analysis. Finally, This results are tested for robustness and analysed in the following section.

## 2. What is an MDB?

The institutional framework is a feature that determines and MDB's lending behaviour and shareholding structure. This is why a basic description of the regular functioning of MDBs is important, as it not only provides context, but shows their position as established institutions between creditors, borrowers and the financial markets<sup>2</sup>. Among the most salient exponents of MDBs besides the World Bank (IBRD), the Inter-American Development Bank (IADB), the Asian Development Bank (ADB), the African Development Bank (AfDB), and the European Bank for Reconstruction and Development (EBRD) are considered to be exemplary institutions that managed to replicate the IBRD's original model with the backing of wealthy states, like the members of the G7 (Humphrey 2022).

MDBs originally emerged to respond to market failures and avoid crisis, especially for developing countries (Delikanli 2018). They have become central actors in the international economic order because “[n]o other kind of organization combines a public policy mandate, a multilateral cooperative framework, global expertise, and the financial firepower to make investments at scale” (Humphrey 2022, 3). Indeed, they not only are built upon multilateral agreements which leads to a strong shareholder governance, but they have specific mandates as a *raison d'être*, which differentiates them from simple commercial banks (Delikanli 2018). MDBs share structural, operational and historical similarities and are thus permeable to the same political, intellectual and economic forces, making them subject to simultaneous development with some regional variations (Humphrey 2022), thus the system. They are considerate a conglomerate of institutions that share lending and governance practices: the multilateral development financial system (Ye 2023; Heldt and Schmidtke 2019; Delikanli 2018).

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<sup>2</sup> These markets are comprised by bond markets but also rating agencies and commercial banks.

The underlying MDBs' financial model is considered to be a success among other international organizations, as it allows for an efficient outlet for governments to achieve public policy projects at a slight cost (Humphrey 2022). In general terms, MDBs channel resources from international capital markets to countries that require loans and investment to develop themselves (ibid). To do so, MDBs use countries' contributions to a limited extent and borrow money from these markets to a much larger extent (ibid). These resources are then granted as loans for a slightly higher rate than acquired, allowing banks to cover administrative costs and create net income on repayment (ibid). Thanks to this, MDBs can finance themselves without depending on members states to replenish resources, a differentiating feature from other multilateral institutions. This gives MDBs organizational independence to act according to their own institutional framework and mandate-drivenness.

The financial framework follows four steps through which MDBs raise resources to on-lent them to developing countries: first, countries interested in founding an MDB buy shares of it to provide the bank with seminal capital, which becomes the foundational moment of an MDB. After that, the bank can officially start issuing debt bonds in the international capital markets<sup>3</sup>. Lending operations start soon after resources have been raised in the financial markets. Shareholder capital and externally borrowed capital is used to provide the financialization of development projects for a slightly higher interest rates than the one of the international bond market. After loans are granted, borrower countries start the repayment process. The income received is then spent to repay the capital bond markets, pay MDBs' administrative costs and the remaining is considered to be net income or reserves. Thanks to this reserves, MDBs are able to finance themselves and do not depend on shareholder capital to expand their operations.

Historically, this model has been a success as MDBs have consistently increased their operations and reserves throughout the 20<sup>th</sup> century, with only one MDB created in this period not been operational to this day (Humphrey 2022; Bazbauers and Engel 2021). For the top 5 MDBs in the world (also called the legacy MDBs), including the World Bank and the leading regional MDBs, the AfDB, ADB, IADB and EBRD the ciphers are very illustrative: "With a total share capital of about US\$50 billion paid in over their entire history, the five legacy MDBs have lent US\$1.5 trillion dollars for development projects as of end-2020, without using up a penny of their original

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<sup>3</sup> This is not the only possible way to raise resources as loan with bilateral development agencies and commercial banks are possible, but this is the case for some borrower-led MDBs that are not necessarily backed by strong creditor countries.

share capital “ (Humphrey 2022, 28). Reserves, which are either reinvested in loans or other assets, have grown consistently every year since their inception (ibid).

Although MDBs are subject to considerable privileges like self-regulatory frameworks, preferential access to exchange reserves, legal ex-territoriality, tax exemptions in financial markets and preferred creditor treatment, they are subject to market-like interactions (Humphrey 2022; Delikanli 2018). Borrowers demand loans and MDBs supply them. The repayment of these loans is considered to be safe as borrowers prioritize the repayment, giving MDBs preferred creditor treatment (Humphrey 2022). This is a tacit rule that enjoys common agreement among borrowers and recognizes MDBs as institutions that are driven by development goals, not necessarily commercial ones (ibid). However, MDBs that borrow from international bonds markets are dependent on those markets because they have to react to fluctuations to ensure a steady inflow of resources (ibid). The financial framework is therefore subject to internal and external factors.

Internally, an MDB counts with member state’s capital contributions, comprised by paid-in capital and callable capital (ibid). Paid-in capital is the money that countries use to buy shares of any MDB. As this transaction takes place, the capital is transferred from the country’s to the MDB’s account. Callable capital, on the other hand, is a promise made by members to provide an MDB with financial resources in times of insolvency, need or crises (ibid). An MDB has never found itself in such a situation, however, callable capital is considered when calculating the financial rating of a bank. The sum of paid-in and callable capital is known as **subscribed capital** and will play a key role in the methods of this study.

Considering that MDBs enjoy financial and relative regulatory and operative autonomy, these institutions have internal instruments at hand to increase their income (ibid). Raising the interest of loans, granting larger loans to countries capable to pay back quicker, like Middle Income Countries (MICs), aiming at fast-disbursing fast repaying loans, re-investing reserves in assets or reducing administrative costs are some of the tools used to increase income (ibid). However, MDBs have to use these tools carefully as they might be detrimental for developing economies. For example, too high interest rates might drive away borrowers that cannot cope with higher loan prices, like lower income countries (ibid).

As a bank, an MDB has the incentive to increase its net income and as any other bank lending is constrained by the bank’s headroom (ibid). However, other statutory limits and capital adequacy measurements are in place to prevent a lending increase that is detrimental for other mandates of the bank. Increasing shareholder’s capital is not an alternative because political will is difficult to

sway and when it is there, it comes with ulterior political motives, which can affect an MDB's autonomy (ibid).

Externally, MDBs gather resources in different formats, in the case of AAA-rated MDBs, through the issuing of bonds in the financial market (ibid). This AAA-rated bonds are attractive for investors of the bond market as they are seen as a safe investment with low default likelihood and high liquidity, meaning that they are easy to re-sell. Thus, these type of bonds are marketed for low interest rates but are sought after in times of crisis as their quality and crisis-resilience are well-known (ibid). MDBs can, therefore, strategically decide to sell bonds in different bond market depending on the circumstances because it is highly likely to find somebody willing to buy. This keeps borrowing costs down, which makes MDBs loans attractive for borrowers and for the bank itself as it can cover administrative costs and expand reserves after repayment (ibid). Nevertheless, the rating of an MDB in the bond market is determinant to their lending operations. Thus, the calculation involved in ratings are determined by lending practices and whether an MDB is backed by creditors with a good score, like the G7 (ibid).

Beyond their institutional framework that gives them enough room to take independent action, MDBs are permeable to economic and political interest originating from member states. Borrowers and creditors<sup>4</sup> are two types of members that influence MDB's operations (Delikanli 2018). Borrowers and creditors have motives, for which they decide to openly support these institutions. What are some of the incentives that banks have to accept countries and what are the incentive for countries to join MDBs?

Creditors are a pivotal part in the formation of an MDB, as they not only provide with subscribed capital but with a full backing of the bank as an institution. That represents a signal of security for bond investors in the market, which translates into an increased willingness to buy bonds issued by the bank (ibid). A bond backed by well-rated country is more likely to be repaid. This happens in a larger scale and with groups of wealthy and well-rated countries. If a group of countries, with an AAA credit rating decide to join an MDB this provides the markets with enough confidence to get a similar rating as well, which in time represents lower borrowing costs for the bank. This is

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<sup>4</sup> After having pointed out that the majority of the resources of MDBs come from external sources, the term of "creditors" might seem misleading. It is used to differentiate between borrowing countries, which are usually developing countries and those that do not borrow, which are usually high-income countries.

the case of the five legacy MDBs. In turn, the bank not only receives regulatory and fiscal privileges but also a much-desired access to capital markets. Creditors can therefore influence MDBs through their shares.

Creditors can pursue their political agenda through their influence in MDBs. However, high-income countries have been limited by some MDBs, “[t]he reason is directly linked to governance. Non-borrower members might bring financial advantages, but they also bring development agendas and policy preferences that do not always align with those of borrowers” (Humphrey 2022, 43-44). In fact, some consider the interest of creditors is linked to political motives, as they see the banks as vehicles through which power can be exerted and political goals achieved (Delikanli 2018), which will be discussed further in Section 4.

For borrowers, the advantages of joining an MDB are plenty. The most obvious is that MDBs offer access to capital at rates that developing countries would not have access to because of the risk involved in commercial lending to developing countries (Humphrey 2022). Beyond that, MDBs have technical knowledge and expertise at their disposal which might also be of interest for developing countries (Humphrey 2022; Delikanli 2018). In turn, the bank offers cheap loans to borrowers willing to take credit and to prioritize the repayment of that credit over other liabilities (Humphrey 2022).

Additionally, MDBs have to adapt their supply to borrowers’ needs and situations to keep lending (ibid). Thus, the bank must take into consideration the demand side; and not only the financial side, which includes interest rates, maturity currency an amount of loans, but also the perceived quality of the development project funded, the bureaucratic hurdles that a borrower may face, the conditionality of credit and even idiosyncratic personal relationships between government and MDB’s staff (ibid). Overall, MDBs have to balance out this considerations to decide whether to make loans to developing countries which is risky as they might default or to lend to safer borrowers, which may leave lower-income countries unfinanced, a detriment for their developmental mandate (ibid).

MDBs are institutions build upon the intersection between international capital markets, multilateralism and the mandate of supporting development where needed. They navigate a constellation of borrowers, creditors, markets and are permeable to internal and external influences. It is therefore important to understand how these institutions evolved through history, permeated by politics and economics.

### **3. Historical context: The World Bank and its proliferation**

The formation of MDBs is deeply rooted in the history of the 20<sup>th</sup> and 21<sup>st</sup> century. This period saw the increment of global trade flows, a tendential hegemony of the allies and particularly the United States, and growing inequality between developed and developing countries (McMahon 2024; Alfani 2023). The creation of MDBs corresponded with the emergence of a new international economic order that shaped global trade and investment. Especially after-war ideas like Keynesianism, developmentalism, neoliberalism and structuralism would play a pivotal role in the practices of the World Bank, and subsequently all other MDBs that were created throughout the century. These ideas were introduced by creditors and their political agendas, borrowers and their demand for loans and economic schools of thought (Woods 2006).

International economic governance faced pivotal transformations throughout the 20<sup>th</sup> century. Public and private actors saw increases in political cooperation, economic global dynamism and the strengthened presence of new institutions. This century was thus characterized by the increase of intergovernmental organizations and the rise of markets and governments actively shaping economic processes (Kahler 2021). Although not linear, this process made markets, and subsequently private actors, subjects of more state regulation (ibid). This was incorporated in the Bretton Woods Conference. Then, governments of the world gathered together to reaffirm their capacity to regulate international and domestic markets. Thus, the Conference saw the creation of institutions that rested on a codified legal basis guided by the principle of multilateral cooperation (ibid). It is in this context, the International Monetary Fund (IMF) and the World Bank (originally the IBRD alone) were meant to provide alternative financing to the bilateral scheme that was been used up to that point. Simultaneously, their outset was rooted in a multitude of ideas, political developments, and the capitalist logics (ibid).

Therefore, it is necessary to understand the context behind the creation of the IBRD and the IMF. In the aftermath of the first world war, the League of Nations was established as a multilateral organization that aimed to foster diplomatic international conflict resolution and establish an organized international system that relied on cooperation (Bazbauers and Engel 2021; Pedersen 2015). The League promoted the standardization of economic measurements, allowing for a more fluent economic cooperation and managed trade concessions with mandates distributed all over the globe (Pedersen 2015). Additionally, it continued the discussion on the international regulation of lending practices, the monetary system and exchange rates after private lending to developing countries increased during the interwar period with exorbitant interest rates (Bazbauers and Engel 2021). The first public lending agency that awarded credit based on the capacity of each county's

re-payment was proposed during this time (ibid). Although this initiatives failed, the idea remained and international economic cooperation kept increasing steadily with the creation of Export-Import banks, the Bank for International Settlement and predecessors of the IMF like the United States' Exchange Stabilization Fund in 1934 (ibid).

Another important precedent for the interwar period was the relationship between the United States and Latin America. Already determined by the Monroe Doctrine, establishing the Western Hemisphere as an American zone of influence or even hegemony, and Roosevelt's good neighbour policy, the economic cooperation between these countries had already started in the early 19<sup>th</sup> century (Bazbauers and Engel 2021; Munro and Brand 2014). In 1934, this was embodied by the Export-Import Bank in Washington "(...) providing the equivalent of development loans to some Latin American countries" (Robert Bazbauers and Engel 2021, 28). Proposals to form an Inter-American Bank originate from this period, without any success due to reluctance from the United States to formalize state-led lending through an international institution. However, both the Export-Import Bank and the proposal for an Inter-American Bank influenced the final draft of the founding document of the IBRD, with traceable parallels and similitudes (ibid).

The Keynesian revolution is another precedent influencing economists and politicians present at the Bretton Woods Conference. Keynes's theory proposed a more active role of the state in economics (ibid). Moreover, its proposed economic model is compatible with the modernization theory, a paradigm that suggest that economic development can be achieved through the modernization and construction of infrastructure (Bazbauers and Engel 2021). Although Keynes himself was against a multilateral approach to development financing and other United States' representatives were worried about overemphasizing democratic decision making, the negotiations started with Anglo-Saxon domestic and international interests on the agenda's focus (Scott-Smith and Rofe 2017).

In July 1944, before the war ended, the Bretton Woods Conference took place in New Hampshire, paving the way for the creation of the IMF as a lender focussing on short-term balance of payment deficits, and the IBRD as a lender dealing with long-term loans for reconstruction and development (Bazbauers and Engel 2021; Scott-Smith and Rofe 2017). The agenda was set in a moment where the United States and the United Kingdom were competing for economic global dominance and it is traditionally considered to be an Anglo-Saxon condominium (Gardner 1980). However, the presence of multiple delegations suggests a true multilateral moment (Bazbauers and Engel 2021). Although the consensus of the two powers was necessary, the Conference was a place of multilateral diplomacy in which delegations of various nations from Latin America, Asia and Africa were

present, because legitimacy had to be ensured (Scott-Smith and Rofo 2017). It is from this point that the IMF and IBRD started to shape a new global economic order.

### **3.1. The IBRD and MDBs until 1980**

The IBRD's principal role was to promote reconstruction and development (Lindbaek, Pfeffermann, and Gregory 1998). Although they were negotiated in 1944, the Bretton Woods Institutions were opaqued by the instauration of the Marshall Plan, which started to operate in Europe close after war's end in 1947 (ibid). The World Bank would only start significant lending operations in 1957 (ibid). This shows how the focus of the United States was to first support the reconstruction of European economies and only well into the second half of the century economic development became an item in its agenda. It is during this period that the IBRD would consolidate into a system "[in] which regional and international organisations arrange loans, credits, and guarantees for investments in countries, generally with the aim of fostering economic growth" (Robert Bazbauers and Engel 2021, 1).

During these years, the IBRD was influenced by Keynesian theory that favoured the emergence of welfare states through modernization; a model that aimed at increasing investment and thus facilitating production, growth and the standards of living of a certain population (ibid). This was contested by structuralist theoreticians, who warned about increasing dependency to creditors through increasing debt. However, these ideas were not integrated in the Bank's operational framework: a strong preference was given to projects on public infrastructure (electricity, dams, transport, communication, etc.), which subsequently marked a shift from European reconstruction to the development of countries outside of Europe, and a clear preference for the Keynesian modernization paradigm (ibid).

The debate would maintain its course, even with the IBDR's focus on modernization and infrastructure. Inspired by the results of the Marshall Plan, developing countries became more assertive about their needs, especially with regards to the supply of capital from abroad and their exposure to commodity prices (ibid). Economist from Latin America, like Prebisch, warned that the decline of commodity prices would be detrimental for development countries' growth, which could be avoided through structural changes in production chains domestically and internationally (ibid). Parallely, newly independent African and Asian states advocated for a New International Economic Order as early as 1955 as an outcome of the Bandung Conference and propose to tackle global structural inequality by nationalizing key industries and natural resources, which had remained under administration of former imperial powers (Gray and Gills 2016). In the fifties, the

IBRD experienced a considerable shift from reconstruction to development, leaving the Europe's reconstruction aside and focussing developing countries' needs (ibid).

Nevertheless, this period was followed by the escalating geopolitical tensions between the USSR and the United States. The IBRD became a tool through which developing countries could be swayed to the capitalist cause (Dreher, Sturm, and Vreeland 2009). During the period of the Cold War the IBDR admittedly led lending operations with political drive favouring the interests of its creditors the United States, Japan, Germany, France and the United Kingdom (ibid). Thus, it effectively delivered containment policies that suited the United States' interests (ibid). Through the control of this institution, these countries could influence decisions taken in other countries (Bazbauers and Engel 2021).

As a consequence of this, the International Finance Corporation (IFC) and the International Development Association (IDA) emerged correspondingly as the private lending arm and the social and economic development arm of the World Bank Group in the sixties (ibid). Both aimed to compliment the IBRD and fill the void left for private loan demand, in the case of the first, and non-profitable but necessary domains like poverty reduction, in the case of the latter. Particularly the last one would relegate the UN to a secondary position in terms of social and economic development and addressed the grim economic outlook of developing countries in the early Cold War period (ibid).

The IBRD was also permeable to borrower's needs and demands that translated into their national policies. Developmentalism "was not a single policy model but a varied menu of interventionist policies that governments mixed and matched, including state ownership of some industrial sectors, strategic investment by national development banks, and a degree of central economic planning" (Babb and Kentikelenis 2021, 523). Developing countries pursued an import substitution policy consisting of nurturing national industries and protecting them through trade barriers until a certain level of competitiveness was achieved (ibid). This was incorporated by the IBRD by enhancing the focus on social issues and poverty, as well as on infrastructural needs.

This was viewed favourably by Western economists and the United States as this model would promote capitalist development, containing the advancement of communism (ibid). In terms of rapid industrial development, this policies delivered different results in different countries. For instance, in Asia they were considered a success for countries like South Korea, Japan and Taiwan, while in Sub-Saharan Africa and Latin America they failed or had mixed results (ibid).

Thus, the World Bank reaffirmed its position as a multilateral institution that coordinated creditors and borrowers in the public credit market, yet it maintained a structure of power in which creditors would set the Bank's priorities (ibid). Furthermore, the Bank reduced lending to developed states, increased its credit portfolio with developing countries and expanded its scope towards sectors like health, education and agriculture (ibid). As a consequence in the World Bank, this renewed focus would emphasize on reducing absolute poverty, setting the corner stones for a long-term goal (ibid).

This period of time is also known for the first wave of proliferation of regionals and sub-regionals MDBs (RMDBs and SRMDBs). "From 1960 to 1977, a further 18 MDBs were added to the system, ten of these in the 1970s. Only two were from Europe, the rest from the rapidly growing number of newly independent states" (Robert Bazbauers and Engel 2021, 47). Newly formed MDBs were attached to certain regions or specific mandates because they were better embedded in regional political and economic constellations (Bazbauers and Engel 2021; Kellerman 2019).

In addition, developing countries sought a more autonomous position in the multilateral development financial system through the creation of these banks, motivated by the ideas of structuralism and the international regional cooperation (Bull and Bøås 2003). These banks, however, would follow the same practices and logics of the IBRD and replicate its work on a smaller scale and with some variations, as the United States and creditors became part of these (Bazbauers and Engel 2021; Bull and Bøås 2003). For example, IADB would combine the mainstream Keynesian approach and autochthonous elements of Latin American economic thought, resulting in a pragmatic and rough-minded institution with a social agenda (Bazbauers and Engel 2021). This was also the case for the ADB and the AfDB, two banks that originally incorporated regional inter-state cooperation but received increasing aid and attention from American policymakers (Bull and Bøås 2003).

These banks represented a continuance of the IBRD's framework. Besides maintaining similar power structure between creditors and borrowers, borrowing followed the same political interests. Moreover, the concept of development through modernization was kept intact. The multilateral development financial system between the fifties and the seventies was that development, comprised by key infrastructural projects, was to be financed through debt.

At the time this was a scheme that found consensus among economists and staff members; however, it would unfold into a debt crisis in the eighties (Bazbauers and Engel 2021): Because MDBs need borrowers, they became debt pushers, and as debts were pushed, they were accumulated by developing countries. By the beginning of the seventies, these countries found themselves in a

position in which debt from private and public sources increased overwhelmingly thanks to low interest rates and the introduction of innovative financial instruments (ibid). By 1979, increasing interest rates hit the export capacity of these countries resulting in a recession and the default of several loans (ibid).

Behind this crisis, the dependency of developing countries to oil exports and thus their exposure to commodity prices played a significant role. At the beginning of the seventies a rise in oil prices led to oil-importing countries to acquire more loans thus causing the fall of interest rates. Consequently, oil-exporting countries took the opportunity to acquire even more debts (ibid). When the commodity prices, including oil, crashed by the end of the seventies, the latter defaulted on their loans causing private banks to stop financing, as the investment risk increased (ibid). The World Bank stepped in as a lender of last resort, paying off the private banks and buying the debt of developing countries (ibid). This moment coincided with the arrival of the neoliberal doctrine and the Washington Consensus, which change the World Bank's position in the international economic order.

Since its inception the World Bank, and later numerous other MDBs, showed its capacity to first promote debt as a driver of the capitalist development modern based on Keynesian ideas and modernization theory. Thus, MDBs became agents promoting a capitalist approach to economics in the context of the Cold War and can be understood as geopolitical institutions with the task to maintain and expand Western influence over developing countries. It is during this time that MDBs shift from reconstruction to development and start supplying not only the public but the private and non-profit sector of these countries. The scheme of debt and development becomes, however, an incentive for MDBs to push for more indebtedness, which eventually led to overaccumulation of debt and its subsequent default. MDBs and especially the World Bank stepped in as debt collectors and lender of last resort. As such, MDBs contributed to the cause and the solution of the debt crisis of the eighties. This had an effect, on the relationship between creditors and borrowers.

### **3.2.The IBRD and MDBs from 1980 to 2009**

“The global shift from the Keynesian, welfare, modernisation model to neoliberal structural adjustment – or austerity politics – must be told in conjunction with that of the IMF and World Bank. This is because the policy prescriptions associated with this neoliberal approach were negotiated between the US and the Bretton Woods twins in Washington, DC, and hence are called the Washington Consensus” (Robert Bazbauers and Engel 2021, 59)

In 1982, Mexico, followed by several Latin American countries, defaulted on its loan repayments following an interest rate increase of the US Treasury (Babb and Kentikelenis 2021). This marked the end of developmentalist policies as United States' officials, economists and World Bank's and

IMF's representatives met to negotiate the consequences and the conditions for developing countries to receive bail-outs (Babb and Kentikelenis 2021; Bazbauers and Engel 2021). This conditionality emerged thanks to ideas and practices that coincided to favour a neoliberal set of policies based on neo-classical economic thought. Loan conditionality is therefore deeply embedded in the emergence of neoliberalism.

Through this shift, the Keynesian and developmentalist model were set aside to favour the liberalization of overall economic activity, oriented towards macroeconomic stability, openness to international markets and domestic liberalization (Bazbauers and Engel 2021). Thanks to the universality attributed to them, free-market policies were given priority over state-interventionism (Babb and Kentikelenis 2021).

In political terms, this shift coincided with the arrival of politicians that advocated for free-market economies and a roll-back of the state: Ronald Reagan in the United States, Margaret Thatcher in the United Kingdom and Helmut Kohl in West Germany (Bazbauers and Engel 2021). The developing world, in need of funding after economic turbulence, had lost bargaining power, and was left at the mercy of leaders that believed in market efficiency above all and had little patience or willingness to engage in a discussion about their developmental needs (Babb and Kentikelenis 2021). The Washington Consensus crystallized as a result of the conditional policies introduced unilaterally by these politicians and enforced by MDBs. For developing countries, however, the eighties would be known as the lost decade of growth as austerity politics would have a detrimental effect on economic development.

Through a coordinated effort between US Treasury representatives and economists of the Bretton Woods twins, the Consensus was a crucial moment in the architecture of the multilateral development financial system. The United States' hegemony was reaffirmed as developing countries were now conditioned to liberalize and open themselves to United States' imports and finance (Bazbauers and Engel 2021). Additionally, the former self-constrained roles of the IMF and World Bank were readjusted to increase the collaboration between both institutions: "Having a lending agreement with the IMF became a routine prerequisite not only for negotiating with private creditors but also for accessing World Bank resources" (Babb and Kentikelenis 2021, 526). Their lending and policy conditionality was incorporated in structural adjustment programmes (SAP), an instrument designed to bail-out governments in distress while ensuring domestic reforms (Babb and Kentikelenis 2021). Both institutions had now the power to demand reforms from developing countries in exchange for development finance.

SAP transformed the role of the Bretton Woods twins to global debt managers, having not only influence on the allocation of resources but on the domestic reforms that countries in need were conditioned to undertake (Babb and Kentikelenis 2021; Bazbauers and Engel 2021). This influence increased over time because reforms were not delivering the expected growth targets, which resulted in a new set of policy conditions (Babb and Kentikelenis 2021). These new set included institutional reforms, like central bank independence and corporate bankruptcy legislation while promoting orthodox market liberalization (ibid). Good governance, as a measure to ensure multi-party elections and anti-corruption and auditing systems, as well as a social safety target of 1.90 USD per day to combat absolute poverty were introduced in an attempt to improve the SAP performance (Bazbauers and Engel 2021). Additionally, and not to the consensus of many economists, the reforms started to move towards the privatisation of public pension funds and the abolishment of capital controls (Babb and Kentikelenis 2021). In other words, the World Bank became more constricting on the manoeuvre space government could take when it came to public policy (ibid).

The consequences of SAP were significant for the developing world (ibid). Trade barriers were drastically reduced, labour markets were deregulated, public bureaucracies dismantled, state-controlled industries sold to private hands, and laws and policies were changed to fit the free-market (ibid). In addition, as the developing world is vast and diverse, the results of SAP were uneven, with variations in application, success or social and environmental costs.

The Asian Financial Crisis in 1997 marked the end of SAP conditionality and as shift towards effective financial aid. The crisis originated when Japanese foreign capital, followed by other investors, fled massively Thailand leading to a decline of exports and a currency crisis related to the government's incapacity to maintain a stable course (King 2001; Noble and Ravenhill 2000). This crisis showed how developing countries with a sound macroeconomic record were caught off guard by a financial deregulated international markets, a consequence of the SAP and the Washington Consensus.

Simultaneously, developing countries initiated a crusade for debt forgiveness and the availability of concessional resources (Bazbauers and Engel 2021). The Asian Financial Crisis accompanied by growth stagnation in Latin American, and countless failures in post-soviet countries, catalysed this movement. This crusade never translated into debt forgiveness; however, the World Bank adapted its framework to include more economic theories, counterbalancing the neoliberal agenda (ibid). This was politically motivated by leaders like Bill Clinton in the United States and Tony Blair in the United Kingdom and was reinforced by the many perceivable failures of the SAP during the nineties (ibid).

Numerous theories would influence the framework of MDBs during this time (ibid): First, New Institutional Economics emerged as a branch of economics that analyses market imperfections and revives state-interventionism emphasizing project efficiency. Second, developmentalism resurged with the Asian Tigers as its living representatives. Up until the Asian Financial Crisis, many Asian countries including Japan, South Korea, Taiwan, Singapore and Hong Kong adopted a developmentalist approach of industrialization with some state-interventionism that performed well, although “watered down to the point that the neoliberal development paradigm emerged unscathed” (ibid, 66). Thirdly, Neostructuralism reintroduced structuralist ideas of global equity while recognizing the importance of market dynamics for development.

This change of paradigm resulted in the creation of the Sustainable Development Goals and translated into an intensified focus on poverty reduction at the World Bank. Although the neoliberal approach as the mainstream paradigm and conditionality on fiscal and monetary policy remained, the focus was enriched by innovative ideas like, for example, the cost of social adjustment (ibid). This found little practical applications but delivered an internal change that resulted in the emergence of country-tailored programmes, shifting away from the universalistic approach (ibid). Additionally, this shift caused a division between the IMF and the World Bank:

“(...) IMF views on the virtues of liberalised capital markets in less-developed economies, and on some of the components of IMF conditionality attached to its Asian rescue packages. In its scepticism about the value of short-term capital flows, the World Bank lined up with East Asian governments and some economists against what Bhagwati (1998a) terms the 'Wall Street-Treasury complex', which critics allege had captured the IMF.” (Noble and Ravenhill 2000, 24).

In terms of lending, this period was characterized by expansion. The Bank reaffirmed its position as a reliable source for low-income economies (Bazbauers and Engel 2021). However, as the developing world stabilized between 1999 and 2007, lending volume decreased drastically because developing countries learned to diversify their loan sources and increase their foreign exchange reserves to avoid high credit conditionality (ibid). The post-Washington Consensus era ended with the Great Financial Crisis, a historical come back of liberal ideas.

The World Bank, having shifted from a reconstruction to a development bank, became one of the corner stones upon which the international economic order rests. As such, its role has not only influenced public policy, but actively enforced it in developing countries. It is essential to understand that the World Bank has transformed into a complex institution that has been permeable to political developments and intellectual developments like for example developmentalism, structuralism, neoliberalism and the rise of neoconservative governments in the eighties. The influence of Western countries, like the United States or the United Kingdom, is undeniable.

Furthermore, its outreach is not reduced to its own institutional limits. Historically, the World Bank has proven to be highly influential for other RMDBs, which since their inception have mirrored Bank's functioning and policies. The example of the IADB makes this evident: during the Washington Consensus era, conditionality was incorporated following a capital enlargement and United States' demands to use at least 25% of the banks resources to fund SAP (ibid). Like this, there are many other examples of RMDBs incorporating World Bank's policies and mirroring loan operations (ibid).

Additionally, there is a tendency for this MDBs to increase their business in times of crisis, as it has become evident with the global recession of the eighties and the Asian Financial crisis in 1997. This can be understood as a double tension in which MDBs are situated (ibid): on the one hand, their mandate is to incentivize development in developing countries while, unofficially, being a vehicle for creditors' values and influence. This is observable through the IBRD's theoretical approaches to development. On the other hand, there is a tension between lenders and borrowers, between those who see MDBs as a source of finance and those who try to use it to influence other countries. This tension was evident during the seventies, as the bank had to navigate between pushing indebtedness and risking debt default. The multilateral development financial is historically composed by banks and their members. The dynamics between these ought to be further discussed.

#### **4. MDBs and their role in the existing international governance**

The political situation of MDBs is discussed in the following section as one of the most important components that motivated their emergence and influences their operations. Political interests are not completely irrelevant to the banks, borrowers and creditors can influence MDBs' lending operations. There is an ongoing discussion, however, about the political role of MDBs: while some see them as multilateral institutions that embody efforts towards international cooperation (Humphrey 2022; Woods 2006; Koremenos, Lipson, and Snidal 2001; Keohane 1984), other see them as an instrument through which Western nations, and particularly the United States, can control money inflows and impose their values, interests and exert power (Bazbauers and Engel 2021). While the first argue that MDBs are autonomous institutions thanks to their unique financial framework and their extensive expertise and authority in issues related to development, the latter argues that influential creditor countries have controlled the institutions or sought to control them to their political advantage (Ray 2021; Strand and Zappile 2015; Vestergaard and Wade 2013; Dreher, Sturm, and Vreeland 2009; Leech and Leech 2005). Nevertheless, all perspectives agree: MDBs

are permeable to the political agenda of their members, especially creditor countries; the question is: to what extent.

Throughout their history, MDBs have been able to channel political interests of influential creditors, controlling resource allocation during the Cold War and later even enforcing domestic reforms through SAP. They have favoured Western economic interests and policies (Bazbauers and Engel 2021; Kundnani 2017). Since the majority of creditors are traditionally Western countries and allies, and borrowers are not, the perception of the role varies from each position. However, the tendency is that creditors have a larger influence. This has translated in the political agenda of influential creditors being integrated into MDBs' priorities.

However, borrowers have been partially able to influence the system as well. The historical context shows that borrowers have made claims for the reorganization of the global economy and debt forgiveness. Although met with resistance from staff members, the MDBs have adapted their priorities to include a more social approach, consistent with such claims. However, main economic and political interests like market liberalization and globalization have persisted, with increasing influence in the global economy (Sharma 2015; Woods 2006).

Some argue that MDBs have had a positive influence on global inequalities (Humphrey 2022; Woods 2006; Koremenos, Lipson, and Snidal 2001; Keohane 1984). These institutions are able to not only to finance themselves but also to expand their lending capacity by channelling private. The fact that they offer alternative channels through which infrastructural projects can be funded, is already an advantage for developing countries (Humphrey 2022). Moreover, their institutional autonomy allows them to set priorities and often differ with influential creditors as "(...) the management of these MDBs have often been at loggerheads with the U.S. and other major shareholders about aspects of their policies and strategy." (ibid, 14). The size of MDBs' operations makes it impossible for influential countries to determine project details or micromanage these institutions (ibid).

Therefore, major shareholders, have different strategies to keep their influence on MDBs at large. The elections of key officials and the backing of MDBs' financial framework is one of them (Koremenos, Lipson, and Snidal 2001). The most known one for MDBs is the explicit implementation of weighted-voting rules as a function of each member's capital contributions. "The larger economies, which provide capital to these institutions carry disproportionate votes." (ibid, 772). This allows them not only to control staff and provide strategic direction to control decisions. Nevertheless, some argue that this control only works as a framework of constraint in which factors like

the staff education and relationship to borrowers play a role, rendering the interest-assertiveness of powerful shareholders to a minimum (Woods 2006).

Furthermore, MDBs have succeeded at addressing development from the international sphere. It is an achievement that MDBs managed to bring together developed and developing countries to address the issue of economic development through international cooperation (Keohane 1984). An international cooperation framework that has managed to be independent from national resources and involve several points of view into its practices. This translates not only in the financial framework relying on creditors and borrower, but on a multitude flows of knowledge and social capital that also contribute to the mitigation of global inequality (ibid). In other words, MDBs have fostered an environment of material and intellectual exchange.

MDBs are in Keohane's (ibid) view, international organizations that potentially mitigate global inequities. Although the institutions are genuinely motivated to foster development, their structure and underlying principles are morally deficient because of their lack of sensitivity for people in developing countries and their orientation towards the interest of the wealthy (ibid):

“Contemporary monetary, trade, and oil regimes help the advanced industrialized countries to cooperate with each other, serving their interests. They create some benefits for poor countries, but these are small compared to what would be needed to correct gross violations of basic human rights that take place when people die of hunger or are continually miserable because of lack of clean water, adequate health care, or decent shelter. Greater empathy between rich and poor people across national borders as well as within them—would not only be desirable; sharing more generously with poor people abroad is arguably the moral duty of affluent citizens of Europe, Japan, and North America, as well as of other countries” (ibid, 256).

Nevertheless, these institutions would be politically preferable because they incentivize resource transfer from developed to developing countries and limit the tendency of advanced countries to act selfishly (ibid). Although there is not particular mention of other MDB but the World Bank in this text, this argument can be used to understand the political logics and situations that circumscribe MDBs all over the world because the banks bring developed and developing countries together with the purpose of fomenting development.

Empirical evidence corroborates this conclusion. A survey made to senior government officials and MDBs' staff showed how relevant they are (Prizzon, Josten, and Gyuzalyan 2021). MDBs seem to offer a full package for borrower countries: an interest rate below market prices, combined with an effective *modus operandi* and a vast knowledge bank with experts in several fields (ibid). Although there are potential improvements like a better bank-borrower relation and more flexibil-

ity on conditionalities, the study concludes that MDBs are essential partners for borrowers. Similarly, some literature encourages more MDB-financing to develop more mechanisms to target sustainable development (Nițescu, Murgu, and Manolache 2023).

The advantages of MDBs are political and economic as the countries are brought together by a multilateral framework that includes countries into a framework provided by an institution that represents little fiscal costs and substantial access to investment. MDBs' institutional framework can be considered a success and it has been useful for borrowers. In terms of their institutional history, this has provided excellent results throughout their history as they have stably grown in size and proliferated in number. However, other researchers that are dedicated to understanding the loan allocation process within MDBs -meaning which borrower gets which kind of loan- have a different view of powerful shareholders and their influence on lending operations.

#### **4.1. Voting power, lending behaviour and hegemony**

The political agenda of influential members is essential to understand the political role of MDBs and its consequence on loan allocation. Again, researchers agree: loan allocation and the general functioning of the banks are permeable to political circumstances. However, this kind of research demonstrates how the influence of politics on MDBs goes beyond the circumstantial, with creditors or wealthy shareholders having an influential role on MDBs governance structures (Ray 2021; Strand and Zappile 2015; Vestergaard and Wade 2013; Dreher, Sturm, and Vreeland 2009; Leech and Leech 2005). These studies point out the mechanisms and evidence that supports the premise that countries of the G7, and especially the United States, hold significant power to influence loan allocations.

How do the United States and other major creditors exercise their influence in MDBs? They have votes weighted by the amount of capital they have subscribed to each bank (Koremenos, Lipson, and Snidal 2001). The explanation for how this votes are used has reasons beyond the institutional framework of MDBs and it is thus complimented by analysis of countries' domestic interests and foreign policies. It is therefore important to first understand the politics behind voting powers and then their influence on lending operations.

The proliferation of MDBs and the replication of the World Bank's institutional framework had an effect on the voting systems of MDBs. Findings highlight that the weighted voting system governing the World Bank is under considerable influence of the United States and other major contributors, with developing countries being underrepresented (Leech and Leech 2005). This has

given the World Bank a bias favourable towards the United States as the inequality of votes distribution is also favourable to this country (ibid). For RMDBs this can be true, although the pattern seems to wear down in some cases; it varies from creditor-led to borrower-led voting structures (Ray 2021). This corresponds with the reading that MDBs are not a replication of one unitary model but adaptative institutions that respond to regional and global circumstances, giving them unique distinctions (Humphrey 2022).

Among the attempts to involve borrowers in the decision-making of the World Bank, a voice reform undertaken in 2008 is considered to be a multilateral milestone as it was the first attempted voting power realignment in the World Bank's history (Vestergaard and Wade 2013). While some considered the reform to be a momentous change, others fail to recognize its substance (ibid). Critics argue that a series of tactics were used by Western powers to avoid it: "the aggregate shift of voting power from developed to developing countries is very modest in percentage point terms, and lower than official figures indicate." (ibid, 161). Thanks to this, the reform did not manage to achieve its original goal; however, it showed the unwillingness of creditors to share the control of MDBs by restructuring shareholding (ibid), and it planted the seed for countries willing to have a more influential role in the system to seek alternatives outside of the World Bank. This is the case of China, as it will be illustrated in the next section.

Having established that voting power is essential to control or at least influence MDBs and their operations, lending behaviour ought to be studied. The concentration of voting power by a small group of creditor countries has a political effect on loan granting (Ray 2021; Strand and Zappile 2015; Kilby 2009; Dreher, Sturm, and Vreeland 2009). Here, the influence of the United States and other creditor countries becomes evident as loan granting seems to correlate with political allegiance.

Political interests like membership on the UN Security Council (UNSC) is one factor that seems to be contributing to the increase in loan allocations because votes can be swayed that way (Ray 2021). Temporary members of the UN Security Council have received more favourably loans and funding from the World Bank as means to buy their votes (Dreher, Sturm, and Vreeland 2009). Although the votes of non-permanent members are uncoercive, as the UNSC may only consider the votes of permanent members, their function is to provide legitimacy. Thus, influential creditors in the World Bank seem to sway votes from non-permanent members to enhance legitimacy of UNSC decisions, while pushing for loan allocation in favour of countries in the UNSC (ibid).

Being the largest shareholder in the system, the United States's influence on lending behaviour is central because it shows how creditors can control loan allocation (Strand and Zappile 2015). Although absolute control can be ruled out, there are circumstantial factors that influence the United States' control over MDBs and their resources (ibid). Factors like commercial ties with particular countries, development needs and shared values, like democracy, the rule of law and human rights, play a pivotal role in the United States' political support for MDBs' loans (ibid). This underpins that influence on lending decisions is not absolute and that it depends on bilateral relations, long and short-term societal processes, and political circumstances. This can be translated to other creditors and major shareholders that are overwhelmingly represented in MDBs' shares and can thus influence the system to fit their political interests.

Moreover, the consequences of this political permeability can be detrimental for the development goals of an MDB, which affect its legitimacy as a developmental institution (Vestergaard and Wade 2013). Developing countries have sought to even out the voting powers by either creating new MDBs or reforming the current system, none of which had a significant effect on shareholding structures (Humphrey 2022; Ray 2021; Kellerman 2019). Despite this, creditors have managed to keep their influence and even increase its outreach by not only controlling resource allocation but by introducing policy conditionality (Bazbauers and Engel 2021; Kilby 2009). Not only did these demand institutional reforms but also liberalization, expanding United States' financialization and trade at the expense of reducing welfare programs, thus increasing poverty (Bazbauers and Engel 2021). In other words, the political influence of creditor countries is not necessarily aligned with the overarching developmental mission of MDBs, and this tension can obstruct development.

It is because of the overwhelming voting representation of creditor countries, their consequential influence in lending operations and the potential obstruction of developmental goals of MDBs that critical voices describe the multilateral development financial system as hegemonic (Park 2022; Bazbauers and Engel 2021). And indeed, the United States as a hegemon has shaped the system to fit their interest. This in turn does not implicate that their influence over MDBs is necessarily harmful. The United States have played a significant role in the introduction of accountability and transparency systems to improve lending operations and created awareness of its social and environmental impacts since the nineties (Park 2022). Using their power as a major shareholder and the connections to other creditor countries, the United States managed to introduce effectively, and despite the resistance of MDBs' bureaucracies, a system of accountability that is used nowadays (ibid).

Furthermore, MDBs are institutions that, despite following a similar pattern, are uniquely tailored to the regional political and economic situation of which they are part (Bull and Bøås 2003). The system in itself is quite diverse and the relationship between borrowers and creditors determines different voting structures: while there are MDBs in which creditors control the loan pricing, like the World Bank, there are share-power schemes, like the IADB, or the borrower-led banks, like the CAF (a development bank of Latin America and the Caribbean) (Ray 2021; Humphrey 2014). This is considered a spectrum in which each bank finds itself between the World Bank and the CAF (Humphrey 2014). This has proven to be essential for the demand of borrowers as preference depending on lending cost, duration and size of bureaucratic procedures, and environmental and social safeguards has an effect on their decision (Humphrey 2012).

Overall, the primary issue of this discussion has been the influence of voting power on lending behaviour. While there is consensus regarding the political permeability of the banks' decision-making processes and governance structure, analysts disagree on the extent by which this political issues affect lending operations. It is therefore contested that creditor countries have an absolute power over MDBs' activities because these are complex and quite autonomous bureaucracies that count on their own reserves to replenish their capital. On the other hand, it has been argued that without creditors, banks are less effective in acquiring resources in the private markets, which gives creditors an advantage over other countries. It is through this power, reflected in strong shareholding, that countries can use MDBs to pursue political goals of their agenda. Either creditors can impose a constraining framework that gives MDBs room to manoeuvre or they act as hegemon of the system. Literature has different views and evidence in this regard. However, the overall tendency aims at the profound influence that creditor countries exert over the largest MDBs. Especially the United States' influence has been discussed, with evidence suggesting a lending bias towards countries that have similar views, share commercial or geopolitical interests. Therefore, it can be argued that MDBs with large representation of creditor countries are susceptible to political lending.

## **4.2. Emerging economies in MDBs**

“Since the mid-1990s, however, a number of emerging market governments have found themselves in strong financial positions, due to, among other factors, the huge rise in global private capital flows, high foreign exchange income from rising commodity prices and growing export industries, and much stronger fiscal accounts.” (Humphrey 2012, 142).

Having described the role of creditor countries in the multilateral development financial system, the role of middle-income countries (MICs) has to be discussed because since the nineties countries outside the West have shown steady rates of economic growth and macroeconomic stability

accompanied by assertiveness in the international political sphere. This can be translated into the MDBs landscape with MICs being the preferred borrowers of MDBs and emerging shareholders (Humphrey 2022; Ray 2021; Babb and Kentikelenis 2021; Prizzon, Josten, and Gyuzalyan 2021; Humphrey 2012). For the fiscal year of 2024, MICs were defined as those countries with a gross national income between \$1,136 and \$13,846 per capita (World Bank n.d.). This classification, ranging from the lower-middle income and upper-middle income bracket, covers about 75% of the population and 33% of the world's GDP across diverse countries with varied populations and economies (ibid).

Emerging economies act usually as borrowers within the system since they have the largest developmental needs. “As EMDCs [emerging markets and developing countries] urbanize and industrialize, they are building infrastructure networks that will operate for decades into the future.” (Humphrey 2022, 4). However, as their reliable macroeconomic record enables them to a broader access to international bond markets, a significant portion of MICs are starting to prefer MDBs cooperation for their technical know-how and policy advisory services, rather than just for their funding (Prizzon, Josten, and Gyuzalyan 2021). Similarly, MICs' government officials indicate that they value MDB financing for its technical know-how when it comes to rural development (ibid). Additionally, they still consider finance to be pivotal and forecast an increase of MDB financing in the next five to ten years, which reinforce the historical trend of MDBs lending increasing (ibid). Therefore, MICs are important partners for MDBs as they have the need for financialization in development projects. Parallely, MDBs are also incentivized to increase lending to MICs, as it is considered an effective way to generate income (Humphrey 2022). MICs are less risky borrowers in comparison to lower-income countries and may absorb larger loans with shorter maturity (ibid). This incentivises MDBs to increase loan allocations to MICs even further. Staff from the top 5 MDBs have opposed requests from creditors in the past to reduce credit supply to MICs like China, Türkiye or Brazil because for the banks it is a lucrative venture (ibid).

In terms of voting power, the shifting economic rise of MICs like China has not been fully translated into the multilateral development financial system. Yet their rise is observable:

“By the 2010s, it was clear that the Global South—led by China, the world's new economic powerhouse—was exerting far greater influence, as measured by share of world gross domestic product, global trade patterns, and a host of other measures (Wade 2011).” (Babb and Kentikelenis 2021, 531)

MICs have increased their access to capital markets, making them more selective about their borrowing preferences (Babb and Kentikelenis 2021; Humphrey 2014; 2012). Thanks to this diversi-

fication, MICs have improved their position in the global economy, starting to claim more influence also in the multilateral development financial system. Although some reforms were initiated, the results were insufficient, leaving MICs in creditor-controlled MDBs excluded from important decision-making processes (Vestergaard and Wade 2013). This led to augmented pressure in the World Bank's structure as China's and the United States' geopolitical pressure increases, accompanied by the remnants of the global COVID-19 pandemic and increasing consequences of climate change (Morris 2023). Additionally, this also has also led to the emergence of new multilateral development banks, the New Development Bank (NDB) and AIIB.

### **4.3. The creation of new MDBs: continuance or rupture ?**

In recent years, the system has seen the rise of other financial institutions that have sought to distance themselves from traditional creditor countries like the G7 by following similar structures and operational framework of traditional MDBs (Bazbauers and Engel 2021). This shift, characterized by creation of the NDB and the AIIB, has had as a common denominator: The rise of China. Whether these new institutions challenge or continue the current system is a question that puzzles researchers; however, the willingness to reform the system is there (ibid). While some scholars argue that this shift advocates for a more equal standing of MICs (Ye 2023), other see in this institution a continuance rather than a rupture (Heldt and Schmidtke 2019). In any case, MICs seem to be looking more assertively to gain control on MDBs, which goes along with the plea for a multipolar world order in which power is balanced among countries (Bazbauers and Engel 2021). The emergence of these banks is, however, not an eclipse of the influence of Western creditors because the United States and allies hold considerable influence over most of MDBs to balance it out (ibid). The appearance of these new institutions within the international development financial system have sparked new interrogatives and studies aiming at responding them. Following an attempted reform to re-establish voting rights to represent MICs economic power in a more accurate way, the right conditions and the political will presented themselves in Beijing (H. Wang 2017; Ren 2016). Thus, the Chinese influence on the creation of these new banks.

In the case of the NDB, its effect on the influence of the G20 and the BRICS has been investigated (Ye 2023). The study determines that the emergence of the bank had an effect on the increase of influence that MICs have sought (ibid). The results suggest that the influence of BRICS increased after the foundation of the NDB. Furthermore, it concludes that the BRICS together could be more influential than the United States thanks to the NDB (ibid). The results highlight as well that MICs have succeeded at increasing their influence in the multilateral development financial system, a quest that has been pursued since at least the world Bank's voice reform (Ye 2023; H. Wang 2017).

The methods through which the influence of countries was studied will be replicated in the empirical part of this thesis; however, its results show how the creation of the NDB could represent a rupture within the system because emerging creditors occupy a more influential position.

Thus, the system is in danger of being fragmented, yet the emergence of new MDBs follows a pattern that suggest coherence and high degrees of similarity, including the AIIB and NDB (Heldt and Schmidtke 2019). MDBs follow similar institutional frameworks that originate in the World Bank, showing cohesion in their mandates, legality and approach towards the market (ibid). Thus, the multilateral development financial system, can be understood as such. Additionally, the AIIB and NDB have integrated well into the system in which the World Bank has played a focal role in cooperation related to technical and administrative support (Heldt and Schmidtke 2019; H. Wang 2017). Suggesting that these institutions represent a rupture of the system is misleading as “(...) rising powers do not seek to replace the current system of global governance institutions by a system based on fundamentally different governance features.” (Heldt and Schmidtke 2019, 1180).

Furthermore, throughout their brief history these new banks have found themselves between cooperation and competition with other MDBs in the system. Filling infrastructural financial gaps and enabling borrowers to access capital, these MDBs are coordinating with already existing MDBs (Reisen 2015). This new institutions are not only responding to the lack of voice of MICs in the multilateral development financial system, but also to a large necessity for investment in infrastructure. They are therefore beneficial for countries’ effort towards development (ibid). In this sense, they promote competition within the system as well. As a new source of financing, these banks offer a model that provides needed capital swiftly and with less bureaucratic hurdles, although with less attention to environmental, social and other safeguards. Nevertheless, these seem to be due to the institutional inexperience, with the AIIB, for example adopting similar safeguards compared to other MDBs (Creutz 2023a).

Thus, the AIIB and NDB can be seen as a continuance of the system, as any other MDB. The increasing influences of MICs and a continuance of the system are not necessarily mutually exclusive. These new institutions are a continuance in the *modus operandi* of MDBs as they recognize the focality of the World Bank and reproduce its multilateralism, legalism and market capitalism. Even though their share-holder structure differs from the top five MDBs, they follow similar practices and have adapted to the systems requirements and institutional framework.

Whether emerging creditors, like China, are using their new position to influence other countries and suit their political agenda, like many other creditors, has to be discussed. In particular, the role of the AIIB will be examined to understand to what extend is this bank being used as a political

tool or a true multilateral organization. While some have argued that the role of multilateral Chinese-led institutions is a vehicle of power and a mechanism to exercise influence, by for example promoting projects alongside the known Belt and Road Initiative, others have argued that these institutions have led to a more balanced world order in which the US and China understand each other as peers and legitimate competitors (Kaya, Kilby, and Kay 2021).

## **5. The AIIB and its influence in Asia**

“The Asian Infrastructure Investment Bank (AIIB), proposed by China in 2013 and founded in 2014, is one of the world’s newest multilateral development banks (MDBs). However, it has already become the second-largest multilateral institution in the world by membership after the World Bank. Its membership had expanded from 57 founding members in 2015 to 106 approved countries by January 2023, with the African country of Mauritania the latest country to join the bank. The bank’s approved member countries account for over 80% of the world’s population and 65% of the global gross domestic product (GDP). This is a testimonial to AIIB’s evolution from a regional MDB to a global development institution.” (Yu 2024, 153).

Essentially, the AIIB’s emergence can be explained by two overarching reasons comprised by politics and economics (Gutner 2023). As explained before, there is a disparity of voting rights between creditors and MICs, which has had an effect on the assertiveness of MICs and their role and status within the system. In the case of the AIIB, China acted out of frustration with the current system and due to the lacking reforms in voting powers (Ren 2016). This corresponded with the country’s political goal to transform into a global power that is capable of projecting influence externally (Gutner 2023). Economically, the demand for infrastructural investment in Asia and the Pacific is immense, with 1,7 trillion USD per year needed to keep growing and continue the fight against poverty, from which only a small fraction is covered by the existing institutions (ibid). China seized the opportunity to first use the AIIB with political motivations and supply Asian countries with capital. Therefore, since its inception the bank has aimed at supplying the high infrastructural investment demand in Asian countries, especially in transport and energy issues, while balancing the political will of an increasingly assertive but non-confrontative Chinese government (Ren 2016).

Countries’ responses range from complete aversion to cautious hope. For instance, countries in South-East Asia showed great interest and saw in the new bank an opportunity to develop relations with China from a different angle (ibid). Furthermore, European states like the UK, France and Germany joined China as creditors of the AIIB (ibid). This allowed the bank to increase its lending capacity and obtain a AAA rating, with which it can borrow for a very competitive price in international capital markets (Humphrey 2022). In Washington and Tokyo, however, the new bank was received with caution, both the United States and Japan decided not to join (Ren 2016). Behind

this abstention, there is preoccupation of Chinese influence being too great as a new source of finance might have disrupted the system and also because of environmental and social safeguards being lowered (Ren 2016; Reisen 2015).

Chinese influence on the AIIB is therefore a question that puzzles researchers as this institution, alongside the NDB, could be challenging the current multilateral development financial system thanks to a new shareholding structure in which the United States, but also other important actors like Japan are absent. What exactly is the role of the AIIB in the international economic order and what were China's intentions for the creation of this new institution? The answers are varied and range from critics that consider it a threat to the liberal international order and a vehicle of Chinese power, to perspectives that consider it a beacon of regional integration and a necessary motor of Asian growth and development (Wilson 2017).

As explained, the creation of new MDBs turned out to be a continuance than a rupture from the current system. The AIIB, for example, has been known for its cooperation with other MDBs and the reproduction of the multilateralist and other multilayered practices of other MDBs, particularly the World Bank (Heldt and Schmidtke 2019; H. Wang 2017). Thus, the overarching agreement is that by projecting too much power over the bank, China risks weakening the AIIB's credibility and legitimacy, both crucial for the Bank's rating and its relationship with borrowers (Yu 2024; Humphrey 2022; Kaya and Woo 2022a; De Jonge 2017; Ren 2016). The role of China in this institutions is therefore influential yet far from dominant. "[I]t should be seen as a forum within which China is 'crossing the river by feeling the stones' (*mo shi guo he*) in realizing sustainable development goals shared by all member nations" (De Jonge 2017, 1083). Equally so, the bank replaces missing bilateral relations through a MDB-financing (Kaya, Kilby, and Kay 2021), which allows China to manage its relations differently.

The AIIB serves as a forum where China can foster new relations while engaging with the region's necessities, enhancing the cooperation climate in Asia and balancing the position of regional rivals, like India (*ibid*). Especially countries with fewer economic ties to China are more likely to get swift and generous loans from the AIIB:

"Specifically, trading less with China, receiving less financing from China (captured by the level of debt to China), and receiving less FDI from China are all associated with privileged access to AIIB funding—even after controlling for the country's overall trade, overall external debt, and overall FDI inflows" (*ibid*, 11).

Additionally, China's support of its known allies in the region might cause too much controversy, sufficient to alter the legitimacy of the institution. In other words, it would be too costly for China

to openly support its allies through the AIIB, which is why the relationship between political alignment with China and AIIB lending cannot be concluded (ibid). Thus, the AIIB seems to provide a stable multilateral environment in which China engages with the region, providing a mechanism that links development goals, the international capital market and engagement from borrower and creditors (De Jonge 2017). It has the potential to become central for Asia and its development goals, as it covers the high demand for developmental and infrastructural projects in East Asia while promoting regional integration and multilateral institutional-building (De Jonge 2017; Reisen 2015).

The AIIB has been an actor of regional integration thanks to its explicit mandate to support infrastructural projects that enhance economic connectedness (Creutz 2023b). This is observable in the depoliticization of financing for projects that enhance connectivity in politically complicated regional settings (ibid). However, this strategy has been carefully implemented to align itself with the interest of key shareholders, like China, and is considered to serve indirectly geopolitical motives (ibid): “Behind China’s efforts to create the AIIB lies an aim to influence developing Asian countries to follow its infrastructure and economic development model” (Yu 2024, 160). This is reinforced by China’s AIIB shareholding of 26.58%, the largest shareholder considered to have veto power as key decisions require at least 75% of the votes (ibid).

Just as other MDBs, this power is contained by the multilateral framework of MDBs. Thanks to this, the AIIB must be transparent and comply with international rules and regulations, including its internal functioning and project performance (ibid). This makes the institution a legitimate MDB, one that, as others, is permeated by political views of its creditors (Kaya and Woo 2022b). The AIIB, as other MDBs, has institutional autonomy thanks to the intrinsic characteristics of the basic institutional framework, which allows them to be independent from countries’ contributions and fosters autonomous decision-making (Humphrey 2022; Woods 2006). In addition, the presence of other strong creditor countries has to be considered. China’s ambition of having direct power over the AIIB’s decisions risk the bank’s legitimacy among creditors and borrowers, potentially risking lending operations (Ren 2016). China’s role in the AIIB is therefore limited by the presence of other countries and the confidence that capital markets attribute to the bank’s legitimacy.

Furthermore, the AIIB has partnered up with other MDBs in the past, like the World Bank and the ADB by co-financing projects (Wang 2025). The AIIB, originally intended to compete against the World Bank and the ADB, has transformed into a cooperating actor willing to accommodate existing institutional frameworks (Faude and Parizek 2021). Views from staff members corroborate

that co-financed projects increase independence from political factors and are more likely to be determined by banking factors, like risk and size (Wang 2025). Simultaneously, this has an effect on the accountability and evaluation of the AIIB's projects since preceding methods are incorporated in co-financed projects, as other MDBs require so (R. Wang 2025; Creutz 2023a). This is assessed as a work in progress as the AIIB's institutional capacity is still unexperienced and lags behind, although progress has been made (Creutz 2023a). The AIIB within the multilateral development financial system has integrated through cooperation, co-financing and the incorporation of regulations.

Other perspectives are not as optimistic. Critics of the AIIB are concerned with China's veto of power mirroring United States, and therefore with the geopolitical tensions that the bank could potentially cause (Matisoff 2022). As early as 2015, concerns about the West's power erosion in the international scene were raised, as the AIIB was seen as a tool of potential power shift benefiting China (Renard 2015). And indeed, the bank has been portrayed as an institution that combines both disruptive and complementary characteristics that do not seek ideological alternatives to the liberal world order, but to provide a solution to the current system's failures (Stephen and Skidmore 2019). The AIIB is a non-liberal international organization, with its pragmatism corresponding with Chinese geopolitical motivations (ibid).

Overall, the AIIB has been portrayed as a Chinese power instrument that, to maintain legitimacy, credibility and signalize confidence to the markets, admitted the presence of other creditors (Bazbauers and Engel 2021). It is therefore bound to comply with preexisting rules and regulations that allow for a continuance of the multilateral development financial system, rather than a rupture (ibid). However, the tension between its role as a multilateral development institution and as an instrument of Chinese influence are behind the current framework of the bank. This study will contribute to this discussion by analysing the influence of members of the ASEAN and the top five AIIB's creditors to determine how influence evolved comparatively before and after the emergence of the AIIB. Before that, the relationship between the AIIB and ASEAN countries has to be discussed.

### **5.1. The ASEAN countries, China and the AIIB**

The ASEAN was founded in 1967 as a consequence of geopolitical factors external to its members (Kühnhardt 2010). The conflicts in Indochina, the decline of French influence and the emergence of China after 1949 catalysed the creation of a regional institution that fomented peace and stability through cooperation (ibid). From its inception, the ASEAN was expected to be a multilateral regional security framework; it became the cornerstone of an economic and cultural cooperation

project that is considered a relative success in bringing countries of the region together through unique diplomatic practices (Caballero-Anthony 2016; Beeson 2013; Kühnhardt 2010).

Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam are the member states of this organization. They share deep political and historical ties with China and the United States, often juggling between the rising influence of both geopolitical powers (Beeson 2013). In addition, between the seventies and the nineties, the region saw rapid economic development and deepening ties of the regional economic cooperation, which translated into interconnected economies and a strong regional economic network (Kühnhardt 2010). Intra-regional trade and the political will of leaders in this region is vital to continue with the regional integration project, all while managing their external relations with the United States, China, Japan, the European Union, etc.

In terms of trade, this region is highly globalized and is a key partner for global powers like the United States, China, Japan, among others. ASEAN countries represent “collectively the United States’ fourth-largest trading partner and together represent a market with a GDP of more than \$2.9 trillion and a population of 647 million people.” (Office of the United States Trade Representative, n.d.). For China, trade relations with the ASEAN are crucial, with both partners becoming each other’s largest trading partners in the last years (Zhai 2023). Both countries are part of the region’s top 5 FDI providers, concentrated in manufacturing, real estate and financial activities (ASEAN Secretariat 2024).

The China-ASEAN relationship is one that has been studied for its rapidly growing economic interdependence (Bi 2021; Foo, Lean, and Salim 2020; Zhai 2023). Expanding into multiple sectors like trade, investment, digitalization, production capacity, infrastructure and connectivity, the interdependence between both has increased (Bi 2021). Not only is the ASEAN trading more with China, but the compatibility of trade also outweighs competition, which gives this relation a complementary nature comprised by ASEAN’s labour, commodities and raw materials and Chinese capital and technological production capacity (Bhowmik, Zhu, and Gao 2021).

This relationship has been encompassed by economic cooperation and trade-liberalizing institutions that have sought to foster economic exchange by addressing the ASEAN’s and Chinese needs. A strategic partnership for peace and cooperation and the subsequent China-ASEAN Free Trade Area have been established as a consequence (Bi 2021; Foo, Lean, and Salim 2020; Ba 2014). This is considered to be a fundamental milestone as China-ASEAN relations entered a period of rapid trade and investment expansion, reduction of trade barriers and the shift from trade deficit to trade surplus for the ASEAN overall (Bi 2021).

The Belt and Road Initiative (BRI) has also played a role in China-ASEAN relations. This programme emerges as a consequence of China's era of reform and opening in which the coordination of development agendas, construction of infrastructural works in foreign land, expansion of trade, investment and financial cooperation, and cultural exchange are the priority (Johnston 2018). In the ASEAN's, both agendas have similitudes that allow for common goals and compound interest to play a central role (Bi 2021; Foo, Lean, and Salim 2020). Thus, enhancing infrastructural connectivity, especially in construction projects like ports, railways, highways and communication systems have become a central facet of the relations to (Zhai 2023).

Geopolitically, the region of Southeast Asia stands in the middle of tensions among great powers and must therefore manage their relations, especially with China (Bi 2021; Beeson 2013). The varied offer of economic cooperation programmes between the two actors promotes a competitive environment that is relative to the ASEAN countries' different preferences, needs, and their corresponding receptiveness to accept Chinese expansion (Bi 2021; Ba 2014). Therefore, China's efforts to be a leader in the region had a noticeable impact that is conditional to the regional and local political economies and the presence of other important players like Japan and the United States (Ba 2014).

The AIIB is a pivotal player in South East Asia since most of the countries of the ASEAN have the status of "prospective founding members" and have acceded the bank, although at their own discretion (Killian 2022). Despite preoccupation of the expansion of Chinese political power, all ASEAN countries have welcomed the initiative and joined the bank (ibid). However, the AIIB's purposes in the region are deeply interrelated with the BRI, which could increase Chinese influence in the region (Kyaw 2021; Suehiro 2017).

China's growing interest in the region since the beginning of the 21<sup>st</sup> century was also a contributing factor leading to the AIIB's emergence. In this sense, the AIIB can be seen as the lending arm of the BRI, corresponding with Chinese economic interest in becoming an essential partner and investor for ASEAN countries (Kyaw 2021; Suehiro 2017). On the one hand, the AIIB's presence could strengthen the regional integration of the ASEAN by promoting connectivity projects that enhance intra-regional trade and integration overall. On the other hand, it could be detrimental for the Southeast Asian integration project as it could potentially promote bilateral relations and negotiations, at the margins of the Association (ibid). As these countries are strategically placed in the focus of the BRI, the lending allocation of the AIIB are key to determine the success of China's overarching goals (Kyaw 2021).

This tension is clear in the shareholding structure of the bank. China holds over 26% of the shares and has therefore veto power over decisions (ibid). China's dominance over the bank's operation is evident, to the point that countries and scholars alike have expressed concern (ibid). This concerns borrowers because after having accumulated debts, these countries might have to recur to selling statal assets to China to repay their debt, which is known as debt traps (ibid). Whether this is a deliberate strategy of the Chinese government to acquire key infrastructure abroad or this is the result of Chinese apathy for the economic situation in lower and middle-income countries, the debate is still open, with evidence suggesting rather the latter (Himmer and Rod 2022). In any case, this is an issue that ASEAN countries have acknowledged, which makes them cautious towards Chinese mega-investments including those financed through the AIIB (Kyaw 2021).

Although China's influence on the AIIB is recognizable, the ASEAN countries enjoy a strategic position not only geographically and economically, but also in terms of influence within the AIIB. They are collectively the second largest contributor to the bank total subscribed capital, with the highest shareholder being Indonesia, and Laos being the lowest among ASEAN countries (ibid). This potentially gives a powerful presence of ASEAN countries and impactful influence in decision-making processes. This collective power needs to be articulated by cohesive voting from the ASEAN countries, which could reflect positively on their situation (ibid).

Studies on the voting behaviour on other international organizations, like the UN General Assembly have been undertaken (Chairil, Putri, and Pertiwi 2023; Jang and Chen 2019). Although it is suggested that ASEAN countries have similar priorities with overlapping agendas and interest, their behaviour in the General Assembly shows that this is relative to circumstances (ibid). In other words, their cohesion or divergence in voting behaviour varies by subject, with issues like colonialism, nuclear weapons or economic development generating high degrees of cohesion and arms transfer, antiterrorism or armed conflicts causing divergence (ibid). Therefore, ASEAN countries are susceptible to national interest and circumstantial factors that affect their votes. This could also be the case for the AIIB, where national contexts and regional or local frictions between members hinder coordinated voting effort.

In terms of lending, the AIIB has prioritized projects in the ASEAN region, with the support of China (Kyaw 2021). After the signing of the China-ASEAN strategic partnership Vision 2030, the number of projects in the region increased (ibid). Between 2016 and 2019, the bank approved the funding for eleven projects in six ASEAN countries, with Indonesia being the largest borrower, with around five projects (ibid). Myanmar, the Philippines, Laos, Cambodia and Singapore have

received funding for infrastructural projects as well, covering the sectors of energy, transport, water management, communications, etc. (ibid). The bank has therefore been consistent in funding key infrastructural projects in the region and being a promoter of ASEAN's connectivity goals.

Overall, the ASEAN relationship with the AIIB is embedded in a context of geopolitical tensions. As ASEAN countries have to balance their relationship with the United States and China, their infrastructural needs and economic interests play a pivotal role in navigating this international setting. This is especially relevant for their growing commercial interest in China, as trade and investment between the two grow steadily. Therefore, these countries have welcomed Chinese initiatives while being cautious about Chinese influence. On the other hand, China is increasingly interested in becoming a leading actor in the Southeast-Asian region. This can be translated into the AIIB's relationship with the ASEAN. Although China holds veto power, the ASEAN represent the second largest shareholder collectively, which potentially gives these countries more influence in decision-making processes and has made them a focal point of investment for the bank. In general, the AIIB has supplied the ASEAN with funding needed in key infrastructural projects and can be seen as a beneficial actor that is treated with caution.

## **6. Research operationalization**

Operating at the nexus between economics and politics, MDBs are institutions designed to align with geopolitical interest, which reflect on their voting structure. This chapter introduces the operational framework through which this thesis investigates the creation of the AIIB and its impact on its top five donors and ASEAN countries using voting power. The purpose of the analysis is therefore to examine the AIIB's effect by determining whether it represented a rupture or a continuance by reproducing already existing voting power asymmetries and countries' influence. To understand this, it was necessary to first discuss MDBs' basic institutional framework, their history and the political issues surrounding voting powers and operational lending.

The literature reviewed suggests that MICs can be assertive actors in the system that are looking to increase their influence in the system. The political permeability of traditional MDBs has shown their inflexibility to change shareholding structures or reform voting rights. Moreover, newly created MDBs are considered a continuance, a reconfiguration of the system tailored to the specific regional circumstances. Therefore, the AIIB is expected to reproduce the systemic power asymmetries between creditors and borrowers despite the leadership of emerging economies like China or India. China's ultimate goal to position itself in a leadership role is expected to be reflected in an increase of its influence.

To examine this voting power is used as a way to quantify the institutional influence that each country holds based on subscribed capital. The core assumption is that formal voting rights serve as proxy for institutionalized influence within MDBs governance. Thanks to subscribed capital that then translates into the amount of shares and consequently voting power of a country, the influence of a country can be quantified. By transforming raw voting rights data, the analysis shows how countries project and absorb influence on and from others.

The contribution sought by the present thesis is to shed light on the relationship between ASEAN countries and the AIIB to understand the effect its creation had on these countries. The top five donors were selected to identify dynamics between creditors and borrowers and examine influence distribution. The ASEAN countries, on the other hand, were selected as an important group of borrowers for the bank that are MICs and can potentially play a more assertive role in the international sphere thanks to their position in the international economy. As a sample of MICs where the major shareholder is also a MIC, China, the study will also seek to analyse China's role as an emerging creditor, rather than a borrower, and its underlying political interests.

Therefore, the analysis is based on three pillars. First, the influence of donor countries over the sample studied. The tensions underlying the institutional framework of an MDB with creditors, borrowers and external political and economic forces will play an essential role in this regard. Especially the analysis of the influence of creditors is crucial to understand this, as they have a political incentive to join MDBs. Second, the voting power structures are to be examined to understand the role of influence of emerging creditors. This relationship has already been studied, yet none of the literature reviewed sought to examine this for the case of the AIIB. Third, the role of the ASEAN countries will be key to the analysis. Since this group is a priority for China and the AIIB, the influence as borrowers and significant shareholders gives them a unique position. An analysis on the AIIB's effect on the system overall can be illustrating because it not only provides insights on the rise of China but also on the importance of other MICs that are oftentimes excluded from systematic analysis.

The Hubbell Influence Index will be the analysis' primary instrument. The index gives information about direct and indirect influence by calculating the impact of countries' voting power on one another. A country with high Hubbell values not only holds significant shares but is positioned to project influence on others. This will be tested by calculating the Taylor Influence Index, an alternative measure that involves the net influence of a country within the system. It gives information, whether a country projects or receives influence, revealing structural power asymmetries. This allows for comparisons between different countries and MDBs.

Through this analysis, voting power is studied to determine whether institutional structures are shifting their leadership or whether similar power structures are being reproduced. In other words, the geopolitical strategy of countries to gain influence is being measured by examining their presence in the multilateral development financial system. In sum, the complex question of MDBs' political permeability can be operationalized into a data-driven analysis of influence distribution. This sheds light on the evolution of new MDBs and the relationship between traditional creditors, emerging creditors and borrowers.

## 7. Methods

The years chose to undertake the calculation of the Hubbell Influence Index are 2014, 2018 and 2022. This marks four years before and after the accession of all ASEAN members in 2018. The social network analysis used gathers data on the voting rights that are multiplied by a beta coefficient to ensure comparability by balancing total subscribed capital of each MDB studied in relation to the IBRD's total subscribed capital.

To retrieve the necessary data, information on voting rights and subscribed capital was researched from the annual financial reports of each MDB studied. The sample of countries is comprised by the ten ASEAN countries, the five top donors and an addition of all ASEAN countries, mirroring Ye's (2023) treatment of the BRICS. This amounts for a sample of fifteen countries and one country grouping that for modelling reasons is treated as a country as well.

The social network analysis used by Ye (2023) takes voting rights of G20 and BRICS countries into account to provide an overview of the interactive relationship between countries and their capacity to influence others and be influenced by others. It suggests that "countries with strong voting power tend to have great influence not only over MDBs' decisions but also the allocation of resources" (ibid, 1960) and quantifies these voting powers to achieve a matrix of state-to-state influence.

In this analysis, AAA-rated MDBs are considered, including: the ADB, AfDB, EBRD, IADB, IsDB, AIIB and NDB<sup>5</sup>. The creation of the NDB and its effect on the influence power of G20 countries has already been studied by Ye (ibid), yet it is also included in the study because it predates the AIIB and is therefore a contributing factor that may have a potential effect on the voting power of ASEAN countries.

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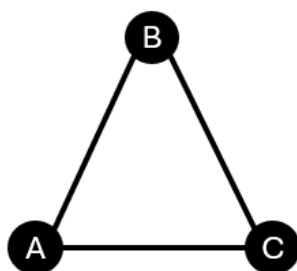
<sup>5</sup> In contrast to the original model, the European Investment Bank has not been included as data was not publicly available and it would only affect one country, namely Germany.

This method can be applied to the study of other banks that have emerged throughout the years and this can result in valuable insights about influence increase of non-traditional creditors. The present study aims at providing insights on how the creation of these MDBs could have led to changes in the influence of emerging economies in the multilateral development financial system, particularly the ASEAN countries. Subsequently, the study can potentially shed light on the relationship between China and the ASEAN, comprised by the AIIB's effect, by contributing to the study of the ASEAN's regional capacity to exercise influence as a bloc.

The model follows a clear path divided into three operative steps: First, the voting rights of the sampled countries at different MDBs are considered in relation to each countries subscribed capital at the IBRD to sum them up, considering data of different years. Second, once the sums of all voting rights are prepared, this can be summarized in a matrix that determines the sum of influence of each country in comparison to their influenced status. Third, through this matrix, the Hubbell Influence Index can be calculated to determine to what extent a country is influenced or influences others. These steps as well as the process of data obtention are explained further in the following section.

### **7.1.A social network analysis of countries' influence**

In the following section the computation of the Hubbell Influence Index is explained. This model is of particular interest to understand the influence of countries as it not only considers the direct influence of countries towards one another, but also indirect influence (ibid). Figure 1 shows the logic behind the measurement of indirect influence. Just as country A can influence C directly, it can also influence B to then influence C, which is considered indirect influence. This analysis aims at measuring both direct and indirect ties by examining countries' voting power. A three-step approach will be the main route through which the data has been retrieved, transformed, adjusted and computed.



*Figure 1: 3-Country influence diagram (own illustration)*

### 7.1.1. From raw voting powers data to adjusted voting rights

As explained above, the data originates from the annual financial reports that each of the banks has made publicly available in their respective webpages. To calculate the adjustment of voting rights, the subscribed capital values for each country and year were retrieved. This data, however, varies as different units of account are used. To transform all available data to USD, conversion rates present in the financial reports were given preference. If these were not provided, as it is the case of the EBRD, an IMF database was used to calculate the conversion. Table 1 contains all the conversion rate values used.

| Currency/Unit of Account | Year | Value                            |
|--------------------------|------|----------------------------------|
| UA of the AfDB           | 2014 | 1 UA = 1.44881 USD (AfDB 2015)   |
| EUR                      | 2014 | 1 EUR = 1.32850 USD (IMF 2025)   |
| Islamic Dinar            | 2014 | 1 ID = 1.48509 USD (IsDB 2015)   |
| UA of the AfDB           | 2018 | 1 UA = 1.39079 USD (AfDB 2019)   |
| EUR                      | 2018 | 1 EUR = 1.1809545 USD (IMF 2025) |
| Islamic Dinar            | 2018 | 1 ID = 1.39079 USD (IsDB 2019)   |
| UA of the AfDB           | 2022 | 1 UA = 1.33084 USD (AfDB 2023)   |
| EUR                      | 2022 | 1 EUR = 1.05304 USD (IMF 2025)   |
| Islamic Dinar            | 2022 | 1 ID = 1.33084 USD (IsDB 2023)   |

Table 1: Conversion rates used

Additionally, for the banks where voting power in percentage as a relation between the number of shares and the total of shares is not given, as it is the case of the EBDR and the NDB, the voting rights were manually calculated.

After making sure that every country has a percentage of voting power and a total number of subscribed capital in USD, an adjustment is needed to facilitate the comparison of voting power between banks. To make the voting rights of different banks and corresponding to different bank sizes, it is necessary to retrieve data not only on the voting rights of each country and MDB but balance them through a coefficient that compares the size of each MDB with each other. Therefore, a beta coefficient was calculated using the following formula:

$$\beta_j = \frac{\text{Subscribed capital}_j}{\text{Subscribed capital}_{IBRD}}$$

With  $j = 1 \dots 16$  denoting the country sample. Data on voting rights and subscribed capital must be summarized in one variable to allow for a smooth comparison between each countries voting rights. This variable is calculated as follows:

$$x_{ij} = p_{ij} \beta_j$$

Where  $p$  denotes the voting rights of country  $i$  at MDB  $j$  and  $\beta$  is the coefficient calculated by the total subscribed capital of MDB  $j$  divided by the total subscribed capital at the IBRD for each year as explained in the former step. Table 2 shows the result of this first matrix with adjusted voting rights for 2014. As it can be observed, this operation delivered a table of voting power of each country of the sample at each studied MDB in a way that it is comparable thanks to the operation with the beta coefficient. The tables for the years 2018 and 2022 have been added to the appendix (Table 8 and 9). This is the first step towards the computation of the Hubbell Influence Index.

| Countries/ MDBs    | ADB  | AFDB | EBRD | IBRD | IADB | ISDB | SUM 14 = $x_j$ |
|--------------------|------|------|------|------|------|------|----------------|
| <b>ASEAN</b>       | 8,07 | 0,00 | 0,00 | 3,09 | 0,00 | 1,36 | 12,52          |
| <b>Brunei</b>      | 0,35 | 0,00 | 0,00 | 0,14 | 0,00 | 0,09 | 0,58           |
| <b>Cambodia</b>    | 0,20 | 0,00 | 0,00 | 0,04 | 0,00 | 0,00 | 0,24           |
| <b>China</b>       | 3,32 | 0,42 | 0,00 | 4,83 | 0,00 | 0,00 | 8,57           |
| <b>Germany</b>     | 2,29 | 1,54 | 1,35 | 4,38 | 1,08 | 0,00 | 10,63          |
| <b>India</b>       | 3,26 | 0,09 | 0,00 | 3,05 | 0,00 | 0,00 | 6,40           |
| <b>Indonesia</b>   | 2,67 | 0,00 | 0,00 | 0,98 | 0,00 | 0,74 | 4,39           |
| <b>Laos</b>        | 0,19 | 0,00 | 0,00 | 0,04 | 0,00 | 0,00 | 0,23           |
| <b>Malaysia</b>    | 1,51 | 0,00 | 0,00 | 0,44 | 0,00 | 0,53 | 2,48           |
| <b>Myanmar</b>     | 0,45 | 0,00 | 0,00 | 0,15 | 0,00 | 0,00 | 0,60           |
| <b>Philippines</b> | 1,34 | 0,00 | 0,00 | 0,46 | 0,00 | 0,00 | 1,80           |
| <b>Russia</b>      | 0,00 | 0,00 | 0,63 | 2,83 | 0,00 | 0,00 | 3,46           |
| <b>Singapore</b>   | 0,18 | 0,00 | 0,00 | 0,28 | 0,00 | 0,00 | 0,46           |
| <b>South Korea</b> | 2,63 | 0,00 | 0,16 | 1,65 | 0,00 | 0,00 | 4,44           |
| <b>Thailand</b>    | 0,84 | 0,00 | 0,00 | 0,49 | 0,00 | 0,00 | 1,33           |
| <b>Vietnam</b>     | 0,35 | 0,00 | 0,00 | 0,07 | 0,00 | 0,00 | 0,42           |

Table 2: Adjusted voting rights for 2014 of country  $i$  at MDB  $j$

### 7.1.2. The State-State matrix (C) of net influence

With this data, it is then possible to compare each countries' adjusted voting rights with each other. This is done by a matrix that subtracts each of the sixteen sum values from each other as follows:

$$C = \begin{bmatrix} x_1 - x_1 & \cdots & x_1 - x_{16} \\ \vdots & \ddots & \vdots \\ x_{16} - x_1 & \cdots & x_{16} - x_{16} \end{bmatrix}$$

Thanks to this matrix, the two-model data involving a country and a MDB are now transformed into a one-model matrix that shows the voting rights of each country with respect to other countries. In this sense, “[a] row (...) represents the influence of the country on other countries, and a column represents how the country is influenced by other countries” (ibid, 1964). The tables showing the matrix C computed for each of the three years can be found in the appendix (Tables 10, 11 and 12).

As it can be observed, this matrix faces the complete net voting power of each country (the SUM variable of the tables in the former step) and subtract one another. The matrix is symmetric and is a representation of the influence based on voting powers that a country can project over every other country examined, following the row values. The column numbers correspond with the influence a country receives from all the other countries present in the sample. Therefore, this matrix represents the influence of countries in relation to each other.

### 7.1.3. Hubbell Influence Index

It is necessary to consider direct and indirect relationships between countries to fully understand the extent to which a country may influence others or be influenced by others, as explained in Figure 1. This thesis has computed the Hubbell Influence Index to measure how ASEAN countries and the top donors of the AIIB are influenced and influence each other within the multilateral development financial system, indicated by the following equation:

$$T = (\alpha C)^0 + (\alpha C)^1 + \alpha^2 C^2 + \cdots + \alpha^k C^k + \sum_{k=1}^{\infty} \alpha^k + C^k$$

Where  $\alpha$  is an attenuating factor ( $\alpha = 0$  being entirely attenuated and  $\alpha = 1$  entirely unattenuated), and the C values origin from the model explained previously. The results were calculated using the limit value equation of:

$$T = (I - \alpha C)^{-1}$$

Where  $I$  represents an identity matrix, a matrix where with the same size as  $C$  where all values are 0 but the diagonal equals 1. The attenuation factor ( $\alpha$ ) was assumed a constant for modelling reasons and set to 0.009. This calculation delivered yet another matrix for each year that shows the countries' indexes in relation to each other. The sum of row values is then considered to be the total direct and indirect influence a country can project on the system and given the countries' sample; the sum of the column values is considered to be the total direct and indirect influence received by a certain country from the complete sample.

After conducting this, two values explaining the influenced and influence index for each country can be represented in a table and ranked from the most influential to the least, categorizing each country and its capacity of influence over others and, in general, the system itself. Each of the values corresponds to the sum of row values (Influence) and column values (Influenced). The Hubbell Influence Index gives therefore information about each country's capacity to project influence on others, and to receive influence. A positive value of the influence index means that a country could project its influence on to others, a positive value of the influenced index represents that a country received influence from others. A negative influenced index expresses a countries'

| 2014        |           |            | 2018        |           |            | 2022        |           |            |
|-------------|-----------|------------|-------------|-----------|------------|-------------|-----------|------------|
| Countries   | Influence | Influenced | Countries   | Influence | Influenced | Countries   | Influence | Influenced |
| ASEAN       | 1,748     | -0,212     | China       | 1,926     | -0,797     | China       | 1,873     | -0,702     |
| Germany     | 1,539     | -0,003     | ASEAN       | 1,269     | -0,140     | ASEAN       | 1,340     | -0,169     |
| China       | 1,311     | 0,225      | Germany     | 1,056     | 0,073      | Germany     | 1,139     | 0,032      |
| India       | 1,071     | 0,465      | Russia      | 0,887     | 0,242      | India       | 0,900     | 0,271      |
| S. Korea    | 0,854     | 0,681      | India       | 0,868     | 0,261      | Russia      | 0,862     | 0,309      |
| Indonesia   | 0,848     | 0,687      | S. Korea    | 0,568     | 0,560      | Indonesia   | 0,652     | 0,519      |
| Russia      | 0,746     | 0,790      | Indonesia   | 0,557     | 0,572      | S. Korea    | 0,552     | 0,619      |
| Malaysia    | 0,637     | 0,899      | Philippines | 0,290     | 0,839      | Philippines | 0,299     | 0,872      |
| Philippines | 0,562     | 0,973      | Malaysia    | 0,278     | 0,851      | Thailand    | 0,282     | 0,889      |
| Thailand    | 0,511     | 1,025      | Thailand    | 0,272     | 0,857      | Malaysia    | 0,281     | 0,890      |
| Myanmar     | 0,429     | 1,107      | Vietnam     | 0,191     | 0,938      | Laos        | 0,218     | 0,953      |
| Brunei      | 0,427     | 1,108      | Myanmar     | 0,183     | 0,945      | Vietnam     | 0,209     | 0,962      |
| Singapore   | 0,414     | 1,121      | Singapore   | 0,183     | 0,946      | Singapore   | 0,202     | 0,969      |
| Vietnam     | 0,409     | 1,126      | Laos        | 0,181     | 0,948      | Myanmar     | 0,197     | 0,974      |
| Cambodia    | 0,390     | 1,145      | Brunei      | 0,172     | 0,957      | Brunei      | 0,192     | 0,979      |
| Laos        | 0,388     | 1,147      | Cambodia    | 0,150     | 0,979      | Cambodia    | 0,172     | 0,999      |

Table 3: Hubbell Influence Index Ranking (2014, 2018, 2022)

capacity to not be influenced by others, which will have an effect on net influence<sup>6</sup>. This is interpreted as influence deflection. Table 3 shows the main results of this study. These will be tested, analysed and discussed further in the next sections.

## **8. Robustness Test**

After having presented the results and following the application of Ye's model of influence ranking, the robustness of the results are to be tested by a change of period and sample and the calculation of the Taylor influence index.

### **8.1.Extension of the sample and change of period**

To extend the sample, the top ten main shareholders of the AIIB were considered. Türkiye, France, Australia and the United Kingdom were included in the analysis. Since Indonesia, the other top shareholder of the bank, was already included, the United States was added to the sample for benchmarking purposes. Since this country is the main shareholder in most of MDBs, its influence over the system is the highest possible, which provides a useful comparison point.

Additionally, the years were selected to cover distinct stages of the development of the AIIB as an institution. First, 2016 marks the year in which the AIIB was created. Between 2016 and 2020 an expansion period took place, which is why the second year selected is 2020. This allows for an analysis of the influence of countries before and after the expansion of the bank's shareholder structure. Although the bank is still accepting new members, only four of the regional members completed their membership after 2020 (AIIB 2025). For the non-regional members, the list is longer but the majority of non-regional members were accepted in the period before 2020, especially important creditor countries like the top ten shareholders.

The results are analysed in the following section of this study. However, the Hubbell Influence Index calculated in this table suggests consistency on the general tendencies but not on the individual movements of countries' rankings in the results of the analysis for 2014 , 2018 and 2022. China increased its influence overall; the ASEAN as a collective is also in the upper part of the influence rank. However, the countries' individual influence are the lowest in the sample. The full extent of tables including the adjusted voting matrix C and the State-to-State matrix for 2016 and 2020 are available in the appendix (Table 13, 14, 15 and 16).

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<sup>6</sup> The Taylor influence index will provide more information in this regard.

Further, the Hubbell Influence Index was calculated for the same countries and period without presence of the United States to determine whether the overwhelmingly high voting powers in most of the MDBs studied could have an effect on the influence ranking (see Table 21 in the appendix). These results show that the ranking remained unchanged without the United States; however, the values of influence and influenced indexes changed. The influence index of every country in the sample increased in comparison to the same year and sample with the United States. The influenced index shows a decrease for all countries. This suggests that the United States' weight is capable of reducing all countries influences and increasing their influence reception, it does not have an effect on how influential countries in the sample are in relation to each other.

| 2016           |           |            | 2020           |           |            |
|----------------|-----------|------------|----------------|-----------|------------|
| Countries      | Influence | Influenced | Countries      | Influence | Influenced |
| United States  | 1,705     | -1,292     | United States  | 1,756     | -1,301     |
| China          | 0,797     | -0,384     | China          | 0,873     | -0,418     |
| ASEAN          | 0,475     | -0,061     | ASEAN          | 0,488     | -0,033     |
| India          | 0,401     | 0,013      | Germany        | 0,428     | 0,026      |
| Germany        | 0,345     | 0,069      | India          | 0,426     | 0,029      |
| France         | 0,281     | 0,133      | France         | 0,302     | 0,152      |
| Russia         | 0,273     | 0,140      | Russia         | 0,273     | 0,182      |
| United Kingdom | 0,225     | 0,188      | United Kingdom | 0,270     | 0,184      |
| Indonesia      | 0,123     | 0,291      | Australia      | 0,129     | 0,326      |
| South Korea    | 0,117     | 0,297      | South Korea    | 0,126     | 0,329      |
| Australia      | 0,114     | 0,300      | Indonesia      | 0,120     | 0,335      |
| Turkey         | 0,061     | 0,352      | Turkey         | 0,084     | 0,371      |
| Malaysia       | 0,016     | 0,430      | Malaysia       | -0,004    | 0,459      |
| Philippines    | 0,022     | 0,436      | Philippines    | -0,016    | 0,471      |
| Thailand       | 0,034     | 0,447      | Thailand       | -0,025    | 0,479      |
| Vietnam        | 0,074     | 0,488      | Vietnam        | -0,066    | 0,521      |
| Myanmar        | 0,078     | 0,491      | Singapore      | -0,068    | 0,523      |
| Singapore      | 0,078     | 0,491      | Myanmar        | -0,072    | 0,527      |
| Brunei         | 0,083     | 0,497      | Brunei         | -0,075    | 0,530      |
| Cambodia       | 0,094     | 0,508      | Cambodia       | -0,086    | 0,541      |
| Laos           | 0,095     | 0,509      | Laos           | -0,087    | 0,542      |

Table 4: Hubbell Index for the robustness test with extended sample (2016 and 2020)

## 8.2. Taylor influence index

Further, the Taylor influence index was computed to test the results of the study for the top five and ten shareholders of the AIIB. Through this approach the net influence of each country is considered to balance between influence projected and influence received. This is done by subtracting the column marginals from the row marginal and then normalizing (Hanneman and Riddle 2005). This gives information about the preponderance of countries to exert or receive influence with respect to one another. The results of this influence are normalized to ensure comparability. The index was calculated using this formula:

$$T = \frac{(R - C)^2}{\sqrt{\sum (R - C)^2}}$$

Where T is the Taylor influence index, R is the influence exerted (or the row marginals therefore the R), and C is the influence received (or the column marginals therefore the C). In the example presented the column and row marginals are the same as the influence and influenced indexes calculated for the Hubbell Influence Index. Table 5 shows the values for 2014. This was replicated for all years including 2016, 2018, 2020 and 2022 (see Table 17, 18, 19 and 20 in the appendix).

| Countries   | Influence | Influenced | Net Influence | (Net Influence) <sup>2</sup> | Taylor |
|-------------|-----------|------------|---------------|------------------------------|--------|
| ASEAN       | 1,748     | -0,212     | 1,874         | 3,513                        | 0,546  |
| Germany     | 1,539     | -0,003     | 1,527         | 2,333                        | 0,445  |
| China       | 1,311     | 0,225      | 1,133         | 1,284                        | 0,330  |
| India       | 1,071     | 0,465      | 0,738         | 0,544                        | 0,215  |
| S, Korea    | 0,854     | 0,681      | 0,257         | 0,066                        | 0,075  |
| Indonesia   | 0,848     | 0,687      | 0,236         | 0,056                        | 0,069  |
| Russia      | 0,746     | 0,790      | -0,033        | 0,001                        | -0,010 |
| Malaysia    | 0,637     | 0,899      | -0,246        | 0,060                        | -0,072 |
| Philippines | 0,562     | 0,973      | -0,405        | 0,164                        | -0,118 |
| Thailand    | 0,511     | 1,025      | -0,531        | 0,282                        | -0,155 |
| Myanmar     | 0,429     | 1,107      | -0,715        | 0,511                        | -0,208 |
| Brunei      | 0,427     | 1,108      | -0,718        | 0,516                        | -0,209 |
| Singapore   | 0,414     | 1,121      | -0,729        | 0,532                        | -0,213 |
| Vietnam     | 0,409     | 1,126      | -0,763        | 0,582                        | -0,222 |
| Cambodia    | 0,390     | 1,145      | -0,810        | 0,656                        | -0,236 |
| Laos        | 0,388     | 1,147      | -0,815        | 0,664                        | -0,238 |

Table 5: Calculating the Taylor Influence Index for 2014

In other words, the same influence and influenced indexes from Hubbell are used to subtract the latter from the first one, the result is squared and divided by the normalizing factor. The Taylor index gives information about the influence that countries can project considering the influence it receives, therefore also called net influence. A positive value of the Taylor influence represents a country's overall capacity to influence others, even after receiving influence. A negative result represents the overall incapacity of a country to influence others. The results for all years of the main analysis are illustrated in Table 6.

| 2014               |        | 2018               |        | 2022               |        |
|--------------------|--------|--------------------|--------|--------------------|--------|
| Countries          | Taylor | Countries          | Taylor | Countries          | Taylor |
| <b>ASEAN</b>       | 0,546  | <b>China</b>       | 0,697  | <b>China</b>       | 0,660  |
| <b>Germany</b>     | 0,445  | <b>ASEAN</b>       | 0,340  | <b>ASEAN</b>       | 0,362  |
| <b>China</b>       | 0,330  | <b>Germany</b>     | 0,236  | <b>Germany</b>     | 0,286  |
| <b>India</b>       | 0,215  | <b>Russia</b>      | 0,189  | <b>India</b>       | 0,156  |
| <b>S. Korea</b>    | 0,075  | <b>India</b>       | 0,144  | <b>Russia</b>      | 0,137  |
| <b>Indonesia</b>   | 0,069  | <b>S. Korea</b>    | -0,002 | <b>Indonesia</b>   | 0,047  |
| <b>Russia</b>      | -0,010 | <b>Indonesia</b>   | -0,008 | <b>S. Korea</b>    | -0,004 |
| <b>Malaysia</b>    | -0,072 | <b>Philippines</b> | -0,139 | <b>Philippines</b> | -0,141 |
| <b>Philippines</b> | -0,118 | <b>Malaysia</b>    | -0,144 | <b>Malaysia</b>    | -0,148 |
| <b>Thailand</b>    | -0,155 | <b>Thailand</b>    | -0,147 | <b>Thailand</b>    | -0,153 |
| <b>Singapore</b>   | -0,208 | <b>Vietnam</b>     | -0,187 | <b>Vietnam</b>     | -0,193 |
| <b>Myanmar</b>     | -0,209 | <b>Myanmar</b>     | -0,191 | <b>Singapore</b>   | -0,197 |
| <b>Brunei</b>      | -0,213 | <b>Singapore</b>   | -0,191 | <b>Laos</b>        | -0,198 |
| <b>Vietnam</b>     | -0,222 | <b>Laos</b>        | -0,192 | <b>Myanmar</b>     | -0,198 |
| <b>Cambodia</b>    | -0,236 | <b>Brunei</b>      | -0,196 | <b>Brunei</b>      | -0,202 |
| <b>Laos</b>        | -0,238 | <b>Cambodia</b>    | -0,207 | <b>Cambodia</b>    | -0,214 |

Table 6: Taylor Influence Index Ranking for the main analysis (2014, 2018 and 2022)

Table 7 shows the results for the Taylor influence index for the extended sample. This step was not undertaken by the seminal paper, from which this study originates. However, it sheds lights on the influence dynamics between ASEAN and top creditors. It is therefore a valuable addition to this study.

As it can be observed in both Tables, the negative influenced index calculated in the Hubbell index, had a positive effect in the net influence. Therefore, a country's capacity to not receive any influence from others can be positive for country's influence overall. The capacity to deflect influence increases a country's net influence.

| 2016           |        | 2020           |        |
|----------------|--------|----------------|--------|
| Countries      | Taylor | Countries      | Taylor |
| United States  | 0,807  | United States  | 0,796  |
| China          | 0,318  | China          | 0,336  |
| ASEAN          | 0,144  | ASEAN          | 0,135  |
| India          | 0,105  | Germany        | 0,105  |
| Germany        | 0,074  | India          | 0,103  |
| France         | 0,040  | France         | 0,039  |
| Russia         | 0,036  | Russia         | 0,024  |
| United Kingdom | 0,010  | United Kingdom | 0,022  |
| Indonesia      | -0,045 | Australia      | -0,051 |
| South Korea    | -0,049 | South Korea    | -0,053 |
| Australia      | -0,050 | Indonesia      | -0,056 |
| Turkey         | -0,078 | Turkey         | -0,075 |
| Malaysia       | -0,120 | Malaysia       | -0,121 |
| Philippines    | -0,123 | Philippines    | -0,127 |
| Thailand       | -0,130 | Thailand       | -0,131 |
| Vietnam        | -0,151 | Vietnam        | -0,153 |
| Myanmar        | -0,153 | Singapore      | -0,154 |
| Singapore      | -0,153 | Myanmar        | -0,156 |
| Brunei         | -0,156 | Brunei         | -0,157 |
| Cambodia       | -0,162 | Cambodia       | -0,163 |
| Laos           | -0,163 | Laos           | -0,164 |

Table 7: Taylor Influence Index Ranking for the robustness test (2016 and 2020)

Both Taylor index rankings show consistency with the main results because the ranking are fairly similar, with some variations when expanding the sample and changing the period measured. A comparison between Hubbell and Taylor influence indexes shows that the influence ranking for the sixteen-country sample remained unchanged. Furthermore, Table 7 shows consistency with the Hubbell index shown in Table 4. This suggests that both results are robust. A more nuanced analysis of the results will take place in the following section.

## 9. Analysis of the results

Following the logic that large shareholders are influential members of MDBs, the analysis of the results takes place in three different pillars: First, the relationship of creditor among themselves highlights tensions underlying the political interests between emerging creditors and traditional creditors. Second, the disparity of influence of creditors' and borrowers' voting power can be a symptom of a hegemonic relationship. Creditor-borrower relationships have undergone a historical trend of the first being far more influential than the latter. MICs and particularly China are surging

as new influential actors. Seeing that most of the countries in both samples are MICs, this issue will play a significant role in the analysis. Third, the relationship between the ASEAN countries and the AIIB will be discussed. Additionally, the robustness test will be further discussed.

As explained in the literature review, MDBs are subject to internal and external tensions that are comprised by their institutional framework and shareholder structure. While there are some MDBs that are owned solely by borrowers, the majority of the MDBs studied are controlled by creditor countries, thus the AAA financial rating. The results show that AIIB's creditors are highly influential with their capacity to influence others being higher in sum than the influence they received. China, India, Germany, Russia and South Korea are the top five creditors of this bank and they are positioned in the upper third of the ranking all years and have influence values surpassing the influenced values calculated for the Hubbell index. With the exception of the ASEAN and Indonesia in 2014, these countries were able to exert more influence than all the others in the sample, even after the creation of the AIIB. This might come as no surprise because of their rapid decision to join the bank. However, it proves that their decision has fulfilled the purpose to keep influence in the system overall and also within the AIIB as creditors.

Table 3 shows that despite this trend, the top five creditors' individual influence did not develop evenly. Overall, China and Russia became more influential between 2014 and 2022, while Germany and South Korea lost influence. In the case of India, the rank in this period remained constant. This shows how the creation of the AIIB, had an effect on the relationship between creditors with MICs like China, India and Russia, already situated in the ranks' upper third, gaining influence.

Further, the Influenced index, or the index measuring the influence being received, also changed. For example, while Germany had a negative value in 2014 that became positive in 2018 and 2022. This reflects on Germany's initial capacity to not only to deflect any influence but also use this to increase its net influence, as shown with the Taylor index in Table 6. After the creation and expansion of the AIIB, Germany became more susceptible to influence, which reduced its net influence. South Korea found itself in a comparable situation with influence index consistently decreasing while the influenced index increased. The Taylor index suggests that by 2022 South Korea's net influence was negative, with the influenced index being greater than the influence index. As will be further discussed when examining the rest of the sample in detail, this is characteristic that all borrowers share.

The robustness test illustrates a mixed effect for the different samples and periods. The Taylor influence values show that loss of ranking is consistent with the loss of influence from both creditors, with Germany almost halving its net influence and South Korea reaching negative values. This suggests consistency with the main results. On the other hand, Table 4 and 7, measuring the expansion period of the AIIB between 2016 and 2020, suggest a partial gain of influence for Germany and a constant for South Korea. This shows how the emergence and expansion of the bank had different effects on the influence of these donors. The emergence had a negative effect on these countries' influence, while the expansion period had a positive effect. Further the addition of countries could have also played a role in this variation because countries' ability to indirectly influence by turning to other countries has to be considered. A larger presence of creditors, like France and the United Kingdom may explain Germany's and South Korea's increased influence capacity and the net influence expressed in Table 7 seems to suggest this. However, the present study has not tested for this as it lies outside of the research scope.

Creditors remained stable across different samples and periods. The robustness test also shows subtle dynamics among them. The AIIB's emergence appears to have reduced Germany's and South Korea's influence -due to their weaker presence in new MDBs like the NDB- the expansion period shows recovery, which suggests that the inclusion of additional creditors like France and the United Kingdom had a positive effect on these countries' influence. This underpins that traditional creditors are established powers that continue to shape MDB governance even within China-led institutions.

The second pillar of the analysis focuses on voting power structures and the role of MICs, in particular China. The literature review explains that creditor-controlled MDBs are permeable to the political agendas of large shareholders. Although the depth of these power relationships is debated, none of the literature reviewed refuses that there is a relation between MDBs and their largest shareholders. Whether this relationship is hegemonic is determined by the nature of it. Factors like veto power and share amounts, staff and management composition and lending behaviour determine this relationship. In the cases of the results, the influence originating from shareholding size illustrates how countries owning large numbers of shares in different MDBs are overwhelmingly influential. After the creation of the AIIB, China's influence grew to occupy the first place in the ranking.

In this measurement, China is a far more influential actor than in Ye's (2023) sample of the G20 + BRICS. China is the most influential country in the sample after the formation of the AIIB. Table 3 shows that in terms of projecting influence China became the most influential country in the 16-

country sample, with influence increasing slightly between 2014 and 2022. Additionally, this interpretation is supported by the negative values of the influenced index. In 2014 China received influence from other countries, however after the creation of the AIIB, the country was able to deflect influence. As with Germany, this reflects then positively on the country's net influence as presented by its Taylor index values in Table 6.

China's ascension to the ranking's top is a consequence of the AIIB's creation. The results suggest that China achieved this by introducing a shareholding structure that excluded other powerful actors while favourable to its own influence. For China, the AIIB represented a moment of influence consolidation in which its ability to influence other countries became structural. China is therefore a remarkably successful emerging donor at consolidating power within the system.

Both robustness tests corroborate these findings. The change of period and sample in Table 4 portrays China as the AIIB's most influential member, only surpassed by the United States. In both indexes China was able to increase its influence and its capacity to deflect influence during the AIIB's expansion period between 2016 and 2020. Furthermore, the country's net influence doubled between 2014 and 2022, as shown by the Taylor influence index in Table 6. Table 7 also shows that for the 21-country sample, China was able to slightly gain net influence. Overall, China's increasing influence discussed in the literature review can be corroborated.

The remaining two creditors examined by the results in Table 3 are Russia and India. The AIIB's emergence had slightly different effects on their influence. While Russia moved from the seventh to the sixth position of the influence ranking between 2014 and 2022, India's position remained unchanged in this period. Therefore, the creation of the AIIB had a positive effect on these countries' capacity to influence others, although for India this meant to keep its position and to Russia this meant to increase its influence. This is also visible in their capacity to receive influence from others. Although both have positive values from the beginning, the values decreased through time. In sum, both countries were capable to influence other countries and receive less influence after the emergence of the AIIB.

The Taylor index showed in Table 6 supports these findings. For Russia, net influence in 2014 was negative, meaning that the influence received was greater than the influence exerted. By 2022 the value is positive, showing that overall Russia gained influence. For India, the emergence of the AIIB represented slight change for its net influence with the ranking remaining the same in 2014 as in 2022, showing consistency with the main results. The expansion period examined between 2016 and 2020 in Table 4 shows that India lost one place in the influence ranking, and this is consistent with the loss of net influence suggested in Table 7. On the other hand, Russia's rank

remained unchained in terms of Hubbell and Taylor influence rankings for the same period. Therefore, the robustness test only partially coincides with the findings of the main analysis. The analysis of net influence for the 16-countries sample shows consistency with the main results, illustrating increasing influence for both countries. On the other hand, a larger sample and different years shows that the expansion period had a negative effect on the influence of these countries.

The overall effect of the AIIB on its top five creditor countries is characterized by continuance, supporting the arguments that discard the formation of new MDBs as disrupting actors. For the creditor countries, this means that they are still the most influential for the sample measured. However, the effect had different effects for different donors. While Germany and South Korea lost influence after the creation and expansion of the AIIB, China, Russia and India managed to keep their influence, in the case of the latter, and increase it. This finding shows MICs becoming more influential than traditional creditors like Germany and South Korea. The emergence of the bank had an influence on how creditors interact with each other when it comes to the AIIB and the sample measured.

The third pillar of this analysis is centred around the borrowers of the sample, namely the ASEAN countries. As explained in the literature review, borrowers are less likely to influence an MDB's loan allocation or influence operative decisions. Borrowers, mostly middle to low-income economies, are thus dependant on MDBs' provision of financial means. However, this is not necessarily reproducible to all MDBs because their shareholding structure varies, with MDBs being either controlled by creditors or borrowers. Thanks to this MDBs can be categorized in a spectrum between strong creditor control, like the IBRD, and strong borrower control. This analysis contributes to this by showing that the AIIB is situated in the creditor-controlled side of the spectrum. Creditors are the most influential countries of the sample, with China being at the top.

The ASEAN, conformed in its majority by MICs, shares deep economic relations with global powers like the United States and China and has to manage international relations to balance geopolitical tensions. Especially their relationship with China has been discussed. China, wanting to increase its influence in Southeast Asia, views the region as a priority. The ASEAN countries, attracted by the Chinese markets and investment capacity, are also interested in keeping a close partnership with the country. In this context, the AIIB can be seen as an instrument of Chinese influence and the analysis seems to suggest so until now.

The analysis assumes that ASEAN countries coordinate their collective votes on all banks to project influence, following Ye's (ibid) method to examine the BRICS. This shows how the ASEAN countries have lost their capacity to influence others after the creation of the AIIB. This group was

replaced by China as the most influential actor of the sample between 2014 and 2022. Table 3 shows this movement while making clear that the ASEAN's influenced index was negative throughout the years examined. Meaning that although China gain more influence, these countries' collective force allowed them to potentially deflect influence throughout the period studied.

The robustness test corroborates these findings. The enlarged sample shows that the expansion period did not have an effect on the ASEAN's influence, being ranked third after the United States and China in 2016 and 2020 (Table 4). Further, the Taylor influence ranking shows a loss of influence after the creation of the AIIB, with China surpassing the ASEAN as the most influential actor of the entire sample (Table 6).

As for the ASEAN countries individually, the effects of the AIIB are mixed, with countries gaining, losing and maintaining influence. The results show that Laos, Thailand and Vietnam increased their influence, Indonesia, Singapore and the Philippines maintained their position, and Brunei, Cambodia, Malaysia and Myanmar decreased rankings. These countries are more prone to receive influence than to project it, which is illustrated by both values of the Hubbell index. For all individual countries, the influence index tends to be lower than the influenced index. This is illustrated in the main results of Table 3 and translates in a general individual incapacity to influence other members of the AIIB. This is further supported by the findings shown in Table 6, where the Taylor index is negative for all, except Indonesia.

Indonesia is the most influential among ASEAN countries. As shown in Table 3, after having an influence index larger than its corresponding influenced index in 2014, the country lost influence in 2018 and regained it in 2022, showing a similar pattern to other creditor countries. The emergence of the AIIB seems to have allowed Indonesia to retain its influence in the system. Singapore and the Philippines follow a similar pattern, in which no alternation of their influence ranking can be observed during the period studied.

The robustness test suggest a more nuanced effect. The Taylor index illustrated in Table 6 shows Indonesia recovering its position from 2014 in 2022, suggesting consistency with the main results. However, the same Table shows the Philippines gaining and Singapore losing influence in 2022, which suggests there are variation of the influence received, with the first one having reduce it and the latter having increased it. Further, the extended sample delivers completely different results. According to Table 4, between 2016 and 2022 Indonesia decreased its ranking by two positions, Philippines maintained its ranking and Singapore moved up by one position. These findings of the robustness test differ from the main results, suggesting that the AIIB's expansion had the opposite effect on their influence. While in terms of net influence Indonesia maintained its position, the

period of expansion of the AIIB was detrimental for its influence. In the case of the Philippines, the expansion period did not have an effect, while in terms of net influence, the country increased its ranking. For Singapore, the opposite is shown: the expansion period had a positive effect while the net influence decreased.

Laos, Thailand and Vietnam gained influence between 2014 and 2022 as showed in Table 3. During this period, Laos went from being the least influential country in 2014 to the eleventh position in 2022. Thailand advanced one position to the tenth and Vietnam increased its influence from the fourteenth position to the twelfth. In terms of influence received, a slight decrease can be observed for these countries. The robustness tests shown in Table 6 corroborates these findings. Further, the extended sample shows that the expansion period of the AIIB did not have a significant effect on these countries as their ranking remained unchanged.

Brunei, Cambodia, Malaysia and Myanmar lost influence between 2014 and 2022 according to the main results of Table 3. Cambodia, Brunei and Myanmar became the three least influential countries of the sample and Malaysia dropped from the eight position in 2014 to the tenth in 2022. These countries were also subject to the one of the largest influenced index values. This is especially visible in the robustness test shown in Table 6, where they have the same rank except for Malaysia that occupies the ninth position and all have negative Taylor indexes values. Tables 4 and 7 illustrate that during the expansion period, these countries retained their rankings with the exception of Myanmar that moved down one position.

Overall, the emergence and expansion of the AIIB had mixed effects on the ASEAN countries collectively and individually. A decrease of the ASEAN's influence as group is observed. However, the capacity to collectively deflect external influence remained a unique characteristic that none of the individual ASEAN countries possess. The individual influence of ASEAN countries shows fragmentation and reflects the absence of coordinated voting strategies. Countries such as Indonesia maintained stable levels of influence, due to their significant shareholding, while smaller economies like Cambodia or Brunei saw their position decline. Therefore, ASEAN's latent potential remains underutilized, which highlights its limitations as a regional multilateral institution.

For these countries, the robustness test showed mixed results, with varying rankings and net influence values. However, it tends towards suggesting consistency with the main results as the Taylor index from Table 6 shows the same movements as Table 3 (meaning that when a country is shown to lose or win influence in the main analysis, it is also shown to do so in the net influence analysis). The change of sample and period points out more discrepancies with the main results.

The robustness tests also sheds light on the ASEAN's collective influence remaining more stable than its individual members. The group maintains a higher rank even after AIIB's expansion, while the individual influence of these countries fluctuates significantly through time and samples. The ASEAN has the potential to be an influential actor in the system, should it act collectively. However, the Tylor influence suggests that most countries still receive more influence than they project, showing that translating collective potential into influence may prove challenging.

Recalling the three pillars of the analysis, the results have contributed to the discussion introduced in the literature review by examining the influence of ASEAN countries and the top donors of the AIIB. First this study has found that creditors of the AIIB are influential and that the emergence and expansion of the bank allowed creditors to remain the most influential group, with internal China, Russia and India having gained influence and South Korean and Germany losing influence. Second, the rise of China as the most influential actor of the sample after the emergence and expansion of the AIIB shows that this country is not only more capable of projecting influence but also capable to deflect it. Third, acting collectively, the ASEAN as a collective can be a force larger than any other creditor but China and the United States. However, the emergence and expansion had a mixed effect on these countries' influence overall with a slight majority being subject to influence ranking decreases.

### **9.1. Discussion**

This analysis has brought together voting power data to compare each country's influence on the multilateral development financial system and in particular at the AIIB in 2014, 2018 and 2022. It is therefore crucial to understand the analysis constraints and identify areas where future research could keep examining the relationship between AIIB's members.

One of the main characteristics of MDBs is their institutional autonomy and financial independence. The present analysis does not capture the effect of MDB as such. It assumes that their capacity to influence countries is void and that only countries can influence countries. In addition, it views voting power as the only channel through which countries can influence each other. Other forms of projecting influence like military power, economic sanctions or soft power are not considered.

The methods used also do not allow for a smooth analysis of a continuous evolution of influence through time of countries in the multilateral development financial system because it uses discrete data. Further, the analysis needs to include a larger sample of countries if generalizations about the multilateral development financial system are to be made. For example, other key players and

in the region and major shareholder in the multilateral development financial system like Japan could be incorporated. This is particularly relevant to investigate in depth the relationship between creditors, emerging creditors and borrowers.

The years studied in the robustness test could be extended further to follow the changes after the AIIB's expansion. This would allow for more robust results as it would give more information about influence fluctuations. The weight of the United States could be an issue, however as it was shown in Table 21, they had an effect on the magnitudes of the Hubbell index, not on the ranking.

This constraints could be incorporated in future research to keep contributing to the study of countries' influence within the system. Future research could extend the analysis to AIIB's loan allocation, contributing to the reviewed literature on MDBs' lending behaviour and potentially unveiling lending bias. The issue of debt trap diplomacy could be included in a framework that investigates AIIB's loan allocation, which could further unveil influence dynamics between China and the ASEAN. Additionally, the spectrum between creditors-led and borrowers-led MDBs could be further studied using this influence analysis but introducing a comparative analysis between members of different MDBs.

## **10. Conclusion**

This thesis set out to examine the influence dynamics within the multilateral development financial system by exploring the emergence and evolution of the AIIB. At the core was the question of whether the AIIB represents a structural rupture or a continuation of historical MDB patterns and how its creation has affected the influence distribution of emerging powers like China and actors like the ASEAN.

Through the analysis, the AIIB can be considered a continuance of the system because creditors maintained their primacy. The analysis showed that although the emergence of the AIIB affected negative some traditional creditors like Germany and South Korea, the creditors' influence still overcomes by borrowers' influence. Similarly, borrowers have remained less influential with some emerging creditors like China, India or Indonesia. Overall, the AIIB has replicated the influence dynamics that underly the institutional framework of MDBs. This introduces a shift between traditional and emerging creditors. China's ascent to the top of influence ranking suggest that China has used the AIIB to consolidate its influence while replicating the institutional framework.

For the ASEAN, the results are more ambivalent. Collectively, the bloc has the latent capacity to rival major shareholders. This potential remains underutilized due to the absence of cohesive voting behaviour. A regional strategy is needed, should the ASEAN countries want to exploit this latent potential. Otherwise, they risk remaining uninfluential as the individual cases show.

In sum, the AIIB does not represent a rupture with the multilateral development financial system. Creditor's primacy, the unutilized capacity of the collective power of the ASEAN and the subsequent marginalization of its individual members support this. However, the rise of China and other MICs shows that influence between emerging and traditional donors is being redistributed.

## Bibliography

African Development Bank. 2015. "Annual Report 2014."

———. 2019. "Annual Report 2018."

———. 2023. "Annual Report 2022."

Alfani, Guido. 2023. *As Gods among Men: A History of the Rich in the West*. Princeton, NJ Oxford: Princeton University Press. <https://doi.org/10.1515/9780691227122>.

Asian Infrastructure Investment Bank. 2025. "Members and Prospective Members of the Bank." 2025. <https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html>.

Ba, Alice D. 2014. "Is China Leading? China, Southeast Asia and East Asian Integration." *Political Science* 66, no. 2 (December): 143–65. <https://doi.org/10.1177/0032318714557142>.

Babb, Sarah, and Alexander Kentikelenis. 2021. "Markets Everywhere: The Washington Consensus and the Sociology of Global Institutional Change." *Annual Review of Sociology* 47, no. 1 (July): 521–41. <https://doi.org/10.1146/annurev-soc-090220-025543>.

Bazbauers, Adrian Robert, and Susan Engel. 2021. *The Global Architecture of Multilateral Development Banks: A System of Debt or Development?* 1st ed. Abingdon, Oxon ; New York, NY : Routledge, 2021. | Series: Routledge explorations in development studies: Routledge. <https://doi.org/10.4324/9781003007128>.

Beeson, Mark. 2013. "Living with Giants: ASEAN and the Evolution of Asian Regionalism." *TRaNS: Trans -Regional and -National Studies of Southeast Asia* 1, no. 2 (July): 303–22. <https://doi.org/10.1017/trn.2013.8>.

Bhowmik, Roni, Yuhua Zhu, and Kuo Gao. 2021. "An Analysis of Trade Cooperation: Central Region in China and ASEAN." Edited by László Vasa. *PLOS ONE* 16, no. 12 (December): e0261270. <https://doi.org/10.1371/journal.pone.0261270>.

Bi, Shihong. 2021. "Cooperation between China and ASEAN under the Building of ASEAN Economic Community." *Journal of Contemporary East Asia Studies* 10, no. 1 (January): 83–107. <https://doi.org/10.1080/24761028.2021.1888410>.

Bull, Benedicte, and Morten Bøås. 2003. "Multilateral Development Banks as Regionalising Actors: The Asian Development Bank and the Inter-American Development Bank." *New Political Economy* 8, no. 2 (July): 245–61. <https://doi.org/10.1080/13563460307176>.

Chairil, Tangguh, Ratu Ayu Asih Kusuma Putri, and Sukmawani Bela Pertiwi. 2023. "Road to ASEAN Political Security Community Vision 2025: Understanding Convergence and Divergence in ASEAN Voting Behaviors in the UNGA." *JAS (Journal of ASEAN Studies)* 10, no. 2 (May). <https://doi.org/10.21512/jas.v10i2.8175>.

Creutz, Katja. 2023a. "The Asian Infrastructure Investment Bank (AIIB) and Rights Protection: Revisionist or Just Another Kid on the Block?" *The International Journal of Human Rights* 27, no. 7: 1107–32. <https://doi.org/10.1080/13642987.2022.2033727>.

———. 2023b. "Multilateral Development Banks as Agents of Connectivity: The Asian Development Bank (ADB) and the Asian Infrastructure Investment Bank (AIIB)." *East Asia* 40, no. 3 (September): 335–56. <https://doi.org/10.1007/s12140-023-09408-6>.

De Jonge, Alice. 2017. "Perspectives on the Emerging Role of the Asian Infrastructure Investment Bank." *International Affairs* 93, no. 5 (September): 1061–84. <https://doi.org/10.1093/ia/iix156>.

Delikanli, Ihsan Ugur. 2018. *Multilateral Development Banks: Governance and Finance*. Cham: Palgrave Macmillan US.

Dreher, Axel, Jan-Egbert Sturm, and James Raymond Vreeland. 2009. "Development Aid and International Politics: Does Membership on the UN Security Council Influence World Bank Decisions?" *Journal of Development Economics* 88, no. 1 (January): 1–18. <https://doi.org/10.1016/j.jdeveco.2008.02.003>.

Faude, Benjamin, and Michal Parizek. 2021. "Contested Multilateralism as Credible Signaling: How Strategic Inconsistency Can Induce Cooperation among States." *The Review of International Organizations* 16, no. 4 (October): 843–70. <https://doi.org/10.1007/s11558-020-09398-7>.

Foo, Nam, Hooi Hooi Lean, and Ruhul Salim. 2020. "The Impact of China's One Belt One Road Initiative on International Trade in the ASEAN Region." *The North American Journal of Economics and Finance* 54, no. November (November): 101089. <https://doi.org/10.1016/j.najef.2019.101089>.

Gardner, Richard N. 1980. *Sterling-Dollar Diplomacy in Current Perspective: The Origins and the Prospects of Our International Economic Order*. New, Expanded ed., with Rev. introd. New York: Columbia University Press.

- Gray, Kevin, and Barry K. Gills. 2016. "South–South Cooperation and the Rise of the Global South." *Third World Quarterly* 37, no. 4 (April): 557–74.  
<https://doi.org/10.1080/01436597.2015.1128817>.
- Gutner, Tamar. 2023. "Why Create Another Development Bank? China and the Asian Infrastructure Investment Bank." In *Contestation and Polarization in Global Governance*, edited by Michelle Egan, Kolja Raube, Jan Wouters, and Julien Chaisse, 94–107. Edward Elgar Publishing. <https://doi.org/10.4337/9781800887268.00011>.
- Hanneman, Robert A., and Mark Riddle. 2005. *Introduction to Social Network Methods*. Riverside: University of California. <https://faculty.ucr.edu/~hanneman/nettext/>.
- Heldt, Eugénia C., and Henning Schmidtke. 2019. "Explaining Coherence in International Regime Complexes: How the World Bank Shapes the Field of Multilateral Development Finance." *Review of International Political Economy* 26, no. 6 (November): 1160–86.  
<https://doi.org/10.1080/09692290.2019.1631205>.
- Himmer, Michal, and Zdeněk Rod. 2022. "Chinese Debt Trap Diplomacy: Reality or Myth?" *Journal of the Indian Ocean Region* 18, no. 3 (September): 250–72.  
<https://doi.org/10.1080/19480881.2023.2195280>.
- Humphrey, Chris. 2012. "Shopping for Development: Multilateral Lending, Shareholder Composition and Borrower Preferences." *World Development* 44: 142–55.
- . 2014. "The Politics of Loan Pricing in Multilateral Development Banks." *Review of International Political Economy* 21, no. 3: 611–39.
- . 2022. *Financing the Future: Multilateral Development Banks in the Changing World Order of the 21st Century*. 1st ed. Oxford University Press Oxford. <https://doi-org.uaccess.univie.ac.at/10.1093/oso/9780192871503.001.0001>.
- IMF. 2025. "Annual – United States – Exchange Rates, Domestic Currency per Euro, Period Average, Rate." DB Nomics. April 22, 2025. [https://db.nomics.world/IMF/IFS/A.US.ENEA\\_XDC\\_EUR\\_RATE?tab=table](https://db.nomics.world/IMF/IFS/A.US.ENEA_XDC_EUR_RATE?tab=table).
- Islamic Development Bank. 2015. "Annual Report 2014."
- . 2019. "Annual Report 2018."
- . 2023. "Annual Report 2022."

- Jang, Jinhyeok, and Yueh-ching Chen. 2019. "Divergence amid Consensus in Southeast Asian Foreign Policy: Roll Call Voting Analysis across International Issues in the United Nations General Assembly (1991–2018)." *Asian Affairs: An American Review* 46, no. 2–3 (July): 47–62. <https://doi.org/10.1080/00927678.2019.1685268>.
- Johnston, Lauren A. 2018. "The Belt and Road Initiative: What Is in It for China?" *Asia & the Pacific Policy Studies* 6, no. 1: 40–58. <https://doi.org/10.1002/app5.265>.
- Kahler, Miles. 2021. "The Bretton Woods Moment: Hierarchies, Networks, and Markets in the Long Twentieth Century." In *Global Governance in a World of Change*, edited by Michael N. Barnett, Jon C. W. Pevehouse, and Kal Raustiala, 1st ed., 77–108. Cambridge University Press. <https://doi.org/10.1017/9781108915199.003>.
- Kaya, Ayse, Christopher Kilby, and Jonathan Kay. 2021. "Asian Infrastructure Investment Bank as an Instrument for Chinese Influence? Supplementary versus Remedial Multilateralism." *World Development* 145, no. September (September): 105531. <https://doi.org/10.1016/j.worlddev.2021.105531>.
- Kaya, Ayse, and Byungwon Woo. 2022a. "China and the Asian Infrastructure Investment Bank (AIIB): Chinese Influence Over Membership Shares?" *The Review of International Organizations* 17, no. 4 (October): 781–813. <https://doi.org/10.1007/s11558-021-09441-1>.
- . 2022b. "China and the Asian Infrastructure Investment Bank (AIIB): Chinese Influence Over Membership Shares?" *The Review of International Organizations* 17, no. 4 (October): 781–813. <https://doi.org/10.1007/s11558-021-09441-1>.
- Kellerman, Miles. 2019. "The Proliferation of Multilateral Development Banks." *The Review of International Organizations* 14, no. 1 (March): 107–45. <https://doi.org/10.1007/s11558-018-9302-y>.
- Keohane, Robert O. 1984. *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton University Press. <https://doi.org/10.1515/9781400820269>.
- Kilby, Christopher. 2009. "The Political Economy of Conditionality: An Empirical Analysis of World Bank Loan Disbursements." *Journal of Development Economics* 89, no. 1 (May): 51–61. <https://doi.org/10.1016/j.jdeveco.2008.06.014>.
- King, Michael R. 2001. "Who Triggered the Asian Financial Crisis?" *Review of International Political Economy* 8, no. 3 (January): 438–66. <https://doi.org/10.1080/09692290110055830>.

- Koremenos, Barbara, Charles Lipson, and Duncan Snidal. 2001. "The Rational Design of International Institutions." *International Organization* 55, no. 4,: 761–99.
- Kundnani, Hans. 2017. "What Is the Liberal-International Order?" The German Mashall Fund of the United States.
- Kyaw, Phyu Phyu. 2021. "Analysis on Cooperation between Asian Infrastructue Investment Bank (AIIB) and ASEAN Countries." *J. Myanmar Acad. Arts Sci.* 21, no. 7: 245–55.
- Leech, Dennis, and Robert Leech. 2005. "Voting Power in the Bretton Woods Institutions." *Homo Oeconomicus* 22, no. 4: 605–27.
- Lindbaek, Jannik, Guy Pfeffermann, and Neil Gregory. 1998. "The Evolving Role of Multilateral Development Banks: History and Prospects." *EIB Papers* 3, no. 2: 60–82.
- Matisoff, Adina. 2022. "Multilateralism with Chinese Characteristics The Emergence of the Asian Infrastructure Investment Bank and Its Place in the International Economic Order." UCLA. <https://escholarship.org/uc/item/63g0w4c3>.
- McMahon, Darrin M. 2024. *Equality: The History of an Elusive Idea*. London: Ithaka Press.
- Morris, Scott. 2023. "Development Finance Cooperation amidst Great Power Competition: What Role for the World Bank?" *Oxford Review of Economic Policy* 39, no. 2 (April): 379–88. <https://doi.org/10.1093/oxrep/grad006>.
- Muno, Wolfgang, and Alexander Brand. 2014. "Farewell to Leadership? Ideas of Hegemony and Counter-Hegemony in the Americas." *International Area Studies Review* 17, no. 4 (December): 375–93. <https://doi.org/10.1177/2233865914550728>.
- Nițescu, Dan Costin, Valentin Murgu, and Simona Beatrice Manolache. 2023. "Multilateral Development Banks – Strategic Actors in the New Economy?" *E+M Ekonomie a Management* 26, no. 3 (September): 145–57. <https://doi.org/10.15240/tul/001/2023-3-009>.
- Noble, Greory W., and John Ravenhill. 2000. "Causes and Consequences of the Asian Financial Crisis." In *The Asian Financial Crisis and the Architecture of Global Finance*, edited by Gregory W. Noble and John Ravenhill, 1st ed., 1–35. Cambridge University Press. <https://doi.org/10.1017/CBO9781139171328.002>.
- Park, Susan. 2022. *The Good Hegemon: US Power, Accountability as Justice, and the Multilateral Development Banks*. Oxford Scholarship Online. New York, NY: Oxford University Press. <https://doi.org/10.1093/oso/9780197626481.001.0001>.

- Pedersen, Susan. 2015. *The Guardians: The League of Nations and the Crisis of Empire*. First edition. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199570485.001.0001>.
- Prizzon, Annalisa, M. Josten, and H. Gyuzalyan. 2021. "Country Perspectives on Multilateral Development Banks: A Survey Analysis." ODI Report. [www.odi.org/en/publications/country-perspectives-on-multilateral-development-banks-a-survey-analysis](http://www.odi.org/en/publications/country-perspectives-on-multilateral-development-banks-a-survey-analysis).
- Ray, Rebecca. 2021. "Who Controls Multilateral Development Finance?" *Global Governance: A Review of Multilateralism and International Organizations* 27, no. 1 (February): 118–43. <https://doi.org/10.1163/19426720-02701006>.
- Reisen, Helmut. 2015. "Will the AIIB and the NDB Help Reform Multilateral Development Banking?" *Global Policy* 6, no. 3 (September): 297–304. <https://doi.org/10.1111/1758-5899.12250>.
- Ren, Xiao. 2016. "China as an Institution-BUILDER: The Case of the AIIB." *The Pacific Review* 29, no. 3 (May): 435–42. <https://doi.org/10.1080/09512748.2016.1154678>.
- Renard, Thomas. 2015. "The Asian Infrastructure Investment Bank (AIIB)." *Security Policy Brief* 63: 1–7.
- Scott-Smith, Giles, and J. Simon Rofo, eds. 2017. *Global Perspectives on the Bretton Woods Conference and the Post-War World Order*. Cham: Springer International Publishing. <https://doi.org/10.1007/978-3-319-60891-4>.
- Sharma, Patrick. 2015. "Between North and South: The World Bank and the New International Economic Order." *Humanity: An International Journal of Human Rights, Humanitarianism, and Development* 6, no. 1 (March): 189–200. <https://doi.org/10.1353/hum.2015.0006>.
- Stephen, Matthew D, and David Skidmore. 2019. "The AIIB in the Liberal International Order." *The Chinese Journal of International Politics* 12, no. 1 (March): 61–91. <https://doi.org/10.1093/cjip/poy021>.
- Strand, Jonathan R., and Tina M. Zappile. 2015. "Always Vote for Principle, Though You May Vote Alone: Explaining United States Political Support for Multilateral Development Loans." *World Development* 72, no. August (August): 224–39. <https://doi.org/10.1016/j.worlddev.2015.02.013>.

- Suehiro, Akira. 2017. "China's Offensive in Southeast Asia: Regional Architecture and the Process of Sinicization." *Journal of Contemporary East Asia Studies* 6, no. 2 (July): 107–31. <https://doi.org/10.1080/24761028.2017.1391619>.
- Vestergaard, Jakob, and Robert H. Wade. 2013. "Protecting Power: How Western States Retain The Dominant Voice in The World Bank's Governance." *World Development* 46, no. June (June): 153–64. <https://doi.org/10.1016/j.worlddev.2013.01.031>.
- Wang, Hongying. 2017. "New Multilateral Development Banks: Opportunities and Challenges for Global Governance." *Global Policy* 8, no. 1 (February): 113–18. <https://doi.org/10.1111/1758-5899.12396>.
- Wang, Raymond. 2025. "Instrument of Influence? Assessing the Impact of the Asian Infrastructure Investment Bank." Massachusetts Institute of Technology Political Science Department.
- Wilson, Jeffrey D. 2017. "The Evolution of China's Asian Infrastructure Investment Bank: From a Revisionist to Status-Seeking Agenda." *International Relations of the Asia-Pacific*, September (September). <https://doi.org/10.1093/irap/lcx015>.
- Woods, Ngaire. 2006. *The Globalizers: The IMF, the World Bank, and Their Borrowers (Cornell Studies in Money): The IMF, the World Bank, and Their Borrowers*. Cornell Studies in Money. Ithaca, NY: Cornell University Press. <https://doi.org/10.7591/9780801456022>.
- World Bank. n.d. "Middle Income Countries Overview." The World Bank in Middle Income Countries. Accessed February 5, 2025. <https://www.worldbank.org/en/country/mic/overview>.
- Ye, Fang. 2023. "The New Development Bank and the Structure of the Multilateral Development Financial System." *Review of Development Economics* 27, no. 3 (August): 1957–72. <https://doi.org/10.1111/rode.12995>.
- Yu, Hong. 2024. *Understanding China's Belt and Road Initiative*. Vol. 26. Asia in Transition. Singapore: Springer Nature Singapore. <https://doi.org/10.1007/978-981-99-9633-9>.
- Zhai, Huafeng. 2023. "Evaluation of China-ASEAN Trade Status and Trade Potential: An Empirical Study Based on a Gravity Model." Edited by Hoang Phong Le. *PLOS ONE* 18, no. 9 (September): e0290897. <https://doi.org/10.1371/journal.pone.0290897>.

## Appendix

| Countries/ MDBs | ADB  | AFDB | EBRD | IBRD | IADB | ISDB | AIIB  | NDB  | SUM 18 = $x_j$ |
|-----------------|------|------|------|------|------|------|-------|------|----------------|
| ASEAN           | 7,30 | 0    | 0,00 | 3,05 | 0,00 | 1,06 | 2,57  | 0,00 | 13,98          |
| Brunei          | 0,31 | 0,00 | 0,00 | 0,10 | 0,00 | 0,07 | 0,02  | 0,00 | 0,49           |
| Cambodia        | 0,18 | 0,00 | 0,00 | 0,02 | 0,00 | 0,00 | 0,02  | 0,00 | 0,22           |
| China           | 2,88 | 0,39 | 0,01 | 4,59 | 0,00 | 0,00 | 10,64 | 3,57 | 22,07          |
| Germany         | 1,98 | 1,35 | 1,08 | 4,16 | 1,20 | 0,00 | 1,60  | 0,00 | 11,37          |
| India           | 2,83 | 0,09 | 0,00 | 3,14 | 0,00 | 0,00 | 2,99  | 0,00 | 9,05           |
| Indonesia       | 2,46 | 0,00 | 0,00 | 0,99 | 0,00 | 0,58 | 1,20  | 0,00 | 5,22           |
| Laos            | 0,16 | 0,00 | 0,00 | 0,01 | 0,00 | 0,41 | 0,02  | 0,00 | 0,60           |
| Malaysia        | 1,31 | 0,00 | 0,00 | 0,45 | 0,00 | 0,00 | 0,04  | 0,00 | 1,80           |
| Myanmar         | 0,39 | 0,00 | 0,00 | 0,15 | 0,00 | 0,00 | 0,09  | 0,00 | 0,63           |
| Philippines     | 1,16 | 0,00 | 0,00 | 0,43 | 0,00 | 0,00 | 0,35  | 0,00 | 1,94           |
| Russia          | 0,00 | 0,00 | 0,51 | 2,87 | 0,00 | 0,00 | 2,33  | 3,57 | 9,28           |
| Singapore       | 0,30 | 0,00 | 0,00 | 0,24 | 0,00 | 0,00 | 0,09  | 0,00 | 0,63           |
| South Korea     | 2,28 | 0,00 | 0,13 | 1,62 | 0,00 | 0,00 | 1,34  | 0,00 | 5,37           |
| Thailand        | 0,73 | 0,00 | 0,00 | 0,48 | 0,00 | 0,00 | 0,51  | 0,00 | 1,72           |
| Vietnam         | 0,30 | 0,00 | 0,00 | 0,18 | 0,00 | 0,00 | 0,24  | 0,00 | 0,72           |

Table 8: Adjusted voting rights for 2018 of country  $i$  at MDB  $j$

| Countries/ MDBs | ADB  | AfDB | EBRD | IBRD | IADB | ISDB | AIIB | NDB  | SUM 22 = $x_j$ |
|-----------------|------|------|------|------|------|------|------|------|----------------|
| ASEAN           | 6,32 | 0,00 | 0,00 | 3,06 | 0,00 | 0,99 | 3,73 | 0,00 | 14,10          |
| Brunei          | 0,26 | 0,00 | 0,00 | 0,09 | 0,00 | 0,06 | 0,07 | 0,00 | 0,48           |
| Cambodia        | 0,15 | 0,00 | 0,00 | 0,02 | 0,00 | 0,00 | 0,07 | 0,00 | 0,24           |
| China           | 2,42 | 0,79 | 0,01 | 5,88 | 0,00 | 0,00 | 8,11 | 3,21 | 20,43          |
| Germany         | 1,67 | 2,57 | 0,85 | 4,31 | 1,05 | 0,00 | 1,27 | 0,00 | 11,71          |
| India           | 2,81 | 0,18 | 0,00 | 3,23 | 0,00 | 0,00 | 2,65 | 0,00 | 8,88           |
| Indonesia       | 2,07 | 0,00 | 0,00 | 1,01 | 0,00 | 0,54 | 2,32 | 0,00 | 5,93           |
| Laos            | 0,32 | 0,00 | 0,00 | 0,01 | 0,00 | 0,39 | 0,07 | 0,00 | 0,79           |
| Malaysia        | 1,10 | 0,00 | 0,00 | 0,40 | 0,00 | 0,00 | 0,03 | 0,00 | 1,53           |
| Myanmar         | 0,32 | 0,00 | 0,00 | 0,13 | 0,00 | 0,00 | 0,09 | 0,00 | 0,54           |
| Philippines     | 0,98 | 0,00 | 0,00 | 0,45 | 0,00 | 0,00 | 0,32 | 0,00 | 1,75           |
| Russia          | 0,00 | 0,00 | 0,40 | 3,00 | 0,00 | 0,00 | 1,82 | 3,21 | 8,43           |
| Singapore       | 0,25 | 0,00 | 0,00 | 0,27 | 0,00 | 0,00 | 0,08 | 0,00 | 0,60           |
| South Korea     | 1,92 | 0,00 | 0,10 | 1,66 | 0,00 | 0,00 | 1,07 | 0,00 | 4,75           |
| Thailand        | 0,62 | 0,00 | 0,00 | 0,49 | 0,00 | 0,00 | 0,44 | 0,00 | 1,55           |
| Vietnam         | 0,25 | 0,00 | 0,00 | 0,19 | 0,00 | 0,00 | 0,24 | 0,00 | 0,68           |

Table 9: Adjusted voting rights for 2022 of country  $i$  at MDB  $j$

|             |       | ASEAN    | Brunei | Cambodia | China  | Germany | India | Indonesia | Laos  | Malaysia | Myanmar | Philippines | Russia | Singapore | S. Korea | Thailand | Vietnam |
|-------------|-------|----------|--------|----------|--------|---------|-------|-----------|-------|----------|---------|-------------|--------|-----------|----------|----------|---------|
|             |       | 13,76292 | 0,37   | 0,10     | 20,87  | 11,97   | 8,88  | 6,28      | 0,47  | 1,64     | 0,46    | 1,83        | 8,43   | 0,50      | 5,07     | 1,54     | 0,58    |
| ASEAN       | 13,76 | 0,00     | 13,39  | 13,67    | -7,10  | 1,79    | 4,89  | 7,48      | 13,29 | 12,12    | 13,31   | 11,93       | 5,33   | 13,26     | 8,70     | 12,23    | 13,19   |
| Brunei      | 0,37  | -13,39   | 0,00   | 0,28     | -20,50 | -11,60  | -8,51 | -5,91     | -0,10 | -1,27    | -0,09   | -1,46       | -8,06  | -0,13     | -4,70    | -1,17    | -0,21   |
| Cambodia    | 0,10  | -13,67   | -0,28  | 0,00     | -20,77 | -11,87  | -8,78 | -6,18     | -0,38 | -1,55    | -0,36   | -1,73       | -8,33  | -0,41     | -4,97    | -1,44    | -0,48   |
| China       | 20,87 | 7,10     | 20,50  | 20,77    | 0,00   | 8,90    | 11,99 | 14,59     | 20,40 | 19,22    | 20,41   | 19,04       | 12,44  | 20,37     | 15,80    | 19,33    | 20,29   |
| Germany     | 11,97 | -1,79    | 11,60  | 11,87    | -8,90  | 0,00    | 3,09  | 5,69      | 11,50 | 10,32    | 11,51   | 10,14       | 3,54   | 11,47     | 6,90     | 10,43    | 11,39   |
| India       | 8,88  | -4,89    | 8,51   | 8,78     | -11,99 | -3,09   | 0,00  | 2,60      | 8,40  | 7,23     | 8,42    | 7,05        | 0,45   | 8,38      | 3,81     | 7,34     | 8,30    |
| Indonesia   | 6,28  | -7,48    | 5,91   | 6,18     | -14,59 | -5,69   | -2,60 | 0,00      | 5,81  | 4,63     | 5,82    | 4,45        | -2,15  | 5,78      | 1,21     | 4,74     | 5,70    |
| Laos        | 0,47  | -13,29   | 0,10   | 0,38     | -20,40 | -11,50  | -8,40 | -5,81     | 0,00  | -1,17    | 0,01    | -1,36       | -7,96  | -0,03     | -4,60    | -1,07    | -0,11   |
| Malaysia    | 1,64  | -12,12   | 1,27   | 1,55     | -19,22 | -10,32  | -7,23 | -4,63     | 1,17  | 0,00     | 1,19    | -0,18       | -6,78  | 1,14      | -3,42    | 0,11     | 1,07    |
| Myanmar     | 0,46  | -13,31   | 0,09   | 0,36     | -20,41 | -11,51  | -8,42 | -5,82     | -0,01 | -1,19    | 0,00    | -1,37       | -7,97  | -0,04     | -4,61    | -1,08    | -0,12   |
| Philippines | 1,83  | -11,93   | 1,46   | 1,73     | -19,04 | -10,14  | -7,05 | -4,45     | 1,36  | 0,18     | 1,37    | 0,00        | -6,60  | 1,33      | -3,24    | 0,29     | 1,25    |
| Russia      | 8,43  | -5,33    | 8,06   | 8,33     | -12,44 | -3,54   | -0,45 | 2,15      | 7,96  | 6,78     | 7,97    | 6,60        | 0,00   | 7,93      | 3,36     | 6,89     | 7,85    |
| Singapore   | 0,50  | -13,26   | 0,13   | 0,41     | -20,37 | -11,47  | -8,38 | -5,78     | 0,03  | -1,14    | 0,04    | -1,33       | -7,93  | 0,00      | -4,57    | -1,04    | -0,08   |
| S. Korea    | 5,07  | -8,70    | 4,70   | 4,97     | -15,80 | -6,90   | -3,81 | -1,21     | 4,60  | 3,42     | 4,61    | 3,24        | -3,36  | 4,57      | 0,00     | 3,53     | 4,49    |
| Thailand    | 1,54  | -12,23   | 1,17   | 1,44     | -19,33 | -10,43  | -7,34 | -4,74     | 1,07  | -0,11    | 1,08    | -0,29       | -6,89  | 1,04      | -3,53    | 0,00     | 0,96    |
| Vietnam     | 0,58  | -13,19   | 0,21   | 0,48     | -20,29 | -11,39  | -8,30 | -5,70     | 0,11  | -1,07    | 0,12    | -1,25       | -7,85  | 0,08      | -4,49    | -0,96    | 0,00    |

Table 10: State-State matrix C (2014)

|             |       | ASEAN  | Brunei | Cambodia | China  | Germany | India | Indonesia | Laos  | Malaysia | Myanmar | Philippines | Russia | Singapore | S. Korea | Thailand | Vietnam |
|-------------|-------|--------|--------|----------|--------|---------|-------|-----------|-------|----------|---------|-------------|--------|-----------|----------|----------|---------|
|             |       | 14,10  | 0,48   | 0,24     | 20,43  | 11,71   | 8,88  | 5,93      | 0,79  | 1,53     | 0,54    | 1,75        | 8,43   | 0,60      | 4,75     | 1,55     | 0,68    |
| ASEAN       | 14,10 | 0,00   | 13,62  | 13,85    | -6,33  | 2,38    | 5,22  | 8,16      | 13,31 | 12,56    | 13,56   | 12,35       | 5,67   | 13,50     | 9,35     | 12,55    | 13,42   |
| Brunei      | 0,48  | -13,62 | 0,00   | 0,24     | -19,95 | -11,23  | -8,40 | -5,45     | -0,31 | -1,05    | -0,06   | -1,27       | -7,95  | -0,12     | -4,27    | -1,07    | -0,20   |
| Cambodia    | 0,24  | -13,85 | -0,24  | 0,00     | -20,18 | -11,47  | -8,63 | -5,69     | -0,55 | -1,29    | -0,30   | -1,51       | -8,19  | -0,36     | -4,51    | -1,31    | -0,44   |
| China       | 20,43 | 6,33   | 19,95  | 20,18    | 0,00   | 8,71    | 11,55 | 14,49     | 19,64 | 18,89    | 19,89   | 18,68       | 12,00  | 19,82     | 15,67    | 18,88    | 19,75   |
| Germany     | 11,71 | -2,38  | 11,23  | 11,47    | -8,71  | 0,00    | 2,84  | 5,78      | 10,92 | 10,18    | 11,17   | 9,97        | 3,29   | 11,11     | 6,96     | 10,17    | 11,04   |
| India       | 8,88  | -5,22  | 8,40   | 8,63     | -11,55 | -2,84   | 0,00  | 2,94      | 8,09  | 7,34     | 8,34    | 7,13        | 0,45   | 8,28      | 4,13     | 7,33     | 8,20    |
| Indonesia   | 5,93  | -8,16  | 5,45   | 5,69     | -14,49 | -5,78   | -2,94 | 0,00      | 5,14  | 4,40     | 5,39    | 4,19        | -2,49  | 5,33      | 1,18     | 4,39     | 5,26    |
| Laos        | 0,79  | -13,31 | 0,31   | 0,55     | -19,64 | -10,92  | -8,09 | -5,14     | 0,00  | -0,74    | 0,25    | -0,96       | -7,64  | 0,19      | -3,96    | -0,76    | 0,11    |
| Malaysia    | 1,53  | -12,56 | 1,05   | 1,29     | -18,89 | -10,18  | -7,34 | -4,40     | 0,74  | 0,00     | 0,99    | -0,22       | -6,90  | 0,93      | -3,22    | -0,01    | 0,86    |
| Myanmar     | 0,54  | -13,56 | 0,06   | 0,30     | -19,89 | -11,17  | -8,34 | -5,39     | -0,25 | -0,99    | 0,00    | -1,21       | -7,89  | -0,06     | -4,21    | -1,01    | -0,14   |
| Philippines | 1,75  | -12,35 | 1,27   | 1,51     | -18,68 | -9,97   | -7,13 | -4,19     | 0,96  | 0,22     | 1,21    | 0,00        | -6,68  | 1,15      | -3,00    | 0,20     | 1,07    |
| Russia      | 8,43  | -5,67  | 7,95   | 8,19     | -12,00 | -3,29   | -0,45 | 2,49      | 7,64  | 6,90     | 7,89    | 6,68        | 0,00   | 7,83      | 3,68     | 6,88     | 7,75    |
| Singapore   | 0,60  | -13,50 | 0,12   | 0,36     | -19,82 | -11,11  | -8,28 | -5,33     | -0,19 | -0,93    | 0,06    | -1,15       | -7,83  | 0,00      | -4,15    | -0,95    | -0,08   |
| S. Korea    | 4,75  | -9,35  | 4,27   | 4,51     | -15,67 | -6,96   | -4,13 | -1,18     | 3,96  | 3,22     | 4,21    | 3,00        | -3,68  | 4,15      | 0,00     | 3,20     | 4,07    |
| Thailand    | 1,55  | -12,55 | 1,07   | 1,31     | -18,88 | -10,17  | -7,33 | -4,39     | 0,76  | 0,01     | 1,01    | -0,20       | -6,88  | 0,95      | -3,20    | 0,00     | 0,87    |
| Vietnam     | 0,68  | -13,42 | 0,20   | 0,44     | -19,75 | -11,04  | -8,20 | -5,26     | -0,11 | -0,86    | 0,14    | -1,07       | -7,75  | 0,08      | -4,07    | -0,87    | 0,00    |

Table 11: State-State matrix C (2018)

|             |       | ASEAN  | Brunei | Cambodia | China  | Germany | India | Indonesia | Laos  | Malaysia | Myanmar | Philippines | Russia | Singapore | S. Korea | Thailand | Vietnam |
|-------------|-------|--------|--------|----------|--------|---------|-------|-----------|-------|----------|---------|-------------|--------|-----------|----------|----------|---------|
|             |       | 13,98  | 0,49   | 0,22     | 22,07  | 11,37   | 9,05  | 5,22      | 0,60  | 1,80     | 0,63    | 1,94        | 9,28   | 0,63      | 5,37     | 1,72     | 0,72    |
| ASEAN       | 13,98 | 0,00   | 13,49  | 13,76    | -8,09  | 2,61    | 4,93  | 8,76      | 13,38 | 12,19    | 13,35   | 12,04       | 4,70   | 13,35     | 8,61     | 12,26    | 13,26   |
| Brunei      | 0,49  | -13,49 | 0,00   | 0,27     | -21,58 | -10,87  | -8,56 | -4,73     | -0,11 | -1,30    | -0,14   | -1,45       | -8,79  | -0,14     | -4,88    | -1,23    | -0,23   |
| Cambodia    | 0,22  | -13,76 | -0,27  | 0,00     | -21,85 | -11,15  | -8,83 | -5,00     | -0,38 | -1,57    | -0,41   | -1,72       | -9,06  | -0,41     | -5,15    | -1,50    | -0,50   |
| China       | 22,07 | 8,09   | 21,58  | 21,85    | 0,00   | 10,71   | 13,03 | 16,85     | 21,47 | 20,28    | 21,44   | 20,13       | 12,79  | 21,44     | 16,71    | 20,35    | 21,36   |
| Germany     | 11,37 | -2,61  | 10,87  | 11,15    | -10,71 | 0,00    | 2,32  | 6,14      | 10,76 | 9,57     | 10,74   | 9,43        | 2,08   | 10,74     | 6,00     | 9,65     | 10,65   |
| India       | 9,05  | -4,93  | 8,56   | 8,83     | -13,03 | -2,32   | 0,00  | 3,82      | 8,44  | 7,25     | 8,42    | 7,11        | -0,24  | 8,42      | 3,68     | 7,33     | 8,33    |
| Indonesia   | 5,22  | -8,76  | 4,73   | 5,00     | -16,85 | -6,14   | -3,82 | 0,00      | 4,62  | 3,43     | 4,59    | 3,28        | -4,06  | 4,59      | -0,14    | 3,50     | 4,51    |
| Laos        | 0,60  | -13,38 | 0,11   | 0,38     | -21,47 | -10,76  | -8,44 | -4,62     | 0,00  | -1,19    | -0,03   | -1,34       | -8,68  | -0,03     | -4,76    | -1,12    | -0,11   |
| Malaysia    | 1,80  | -12,19 | 1,30   | 1,57     | -20,28 | -9,57   | -7,25 | -3,43     | 1,19  | 0,00     | 1,16    | -0,15       | -7,49  | 1,17      | -3,57    | 0,07     | 1,08    |
| Myanmar     | 0,63  | -13,35 | 0,14   | 0,41     | -21,44 | -10,74  | -8,42 | -4,59     | 0,03  | -1,16    | 0,00    | -1,31       | -8,65  | 0,00      | -4,74    | -1,09    | -0,09   |
| Philippines | 1,94  | -12,04 | 1,45   | 1,72     | -20,13 | -9,43   | -7,11 | -3,28     | 1,34  | 0,15     | 1,31    | 0,00        | -7,34  | 1,31      | -3,43    | 0,22     | 1,22    |
| Russia      | 9,28  | -4,70  | 8,79   | 9,06     | -12,79 | -2,08   | 0,24  | 4,06      | 8,68  | 7,49     | 8,65    | 7,34        | 0,00   | 8,65      | 3,92     | 7,56     | 8,56    |
| Singapore   | 0,63  | -13,35 | 0,14   | 0,41     | -21,44 | -10,74  | -8,42 | -4,59     | 0,03  | -1,17    | 0,00    | -1,31       | -8,65  | 0,00      | -4,74    | -1,09    | -0,09   |
| S. Korea    | 5,37  | -8,61  | 4,88   | 5,15     | -16,71 | -6,00   | -3,68 | 0,14      | 4,76  | 3,57     | 4,74    | 3,43        | -3,92  | 4,74      | 0,00     | 3,65     | 4,65    |
| Thailand    | 1,72  | -12,26 | 1,23   | 1,50     | -20,35 | -9,65   | -7,33 | -3,50     | 1,12  | -0,07    | 1,09    | -0,22       | -7,56  | 1,09      | -3,65    | 0,00     | 1,00    |
| Vietnam     | 0,72  | -13,26 | 0,23   | 0,50     | -21,36 | -10,65  | -8,33 | -4,51     | 0,11  | -1,08    | 0,09    | -1,22       | -8,56  | 0,09      | -4,65    | -1,00    | 0,00    |

Table 12: State-State matrix C (2020)

| Countries/ MDBs          | ADB  | AfDB | EBRD | IBRD  | IADB  | ISDB | AIIB  | NDB  | SUM 16 = $x_j$ |
|--------------------------|------|------|------|-------|-------|------|-------|------|----------------|
| <b>ASEAN</b>             | 7,85 | 0    | 0,00 | 3,18  | 0,00  | 1,10 | 2,64  | 0,00 | 14,78          |
| <b>Australia</b>         | 2,63 | 0,00 | 0,12 | 1,42  | 0,00  | 0,00 | 1,37  | 0,00 | 5,54           |
| <b>Brunei Darussalam</b> | 0,31 | 0,00 | 0,00 | 0,11  | 0,00  | 0,07 | 0,02  | 0,00 | 0,51           |
| <b>Cambodia</b>          | 0,18 | 0,00 | 0,00 | 0,02  | 0,00  | 0,00 | 0,02  | 0,00 | 0,22           |
| <b>China</b>             | 2,89 | 0,35 | 0,01 | 4,78  | 0,21  | 0,00 | 11,07 | 3,72 | 23,03          |
| <b>France</b>            | 1,15 | 1,10 | 1,05 | 4,06  | 1,21  | 0,00 | 1,26  | 0,00 | 9,82           |
| <b>Germany</b>           | 1,99 | 1,21 | 1,05 | 4,33  | 1,21  | 0,00 | 1,67  | 0,00 | 11,46          |
| <b>India</b>             | 2,85 | 0,08 | 0,00 | 3,14  | 0,00  | 0,00 | 3,11  | 3,72 | 12,89          |
| <b>Indonesia</b>         | 2,89 | 0,00 | 0,00 | 1,03  | 0,00  | 0,60 | 1,25  | 0,00 | 5,77           |
| <b>Laos</b>              | 0,16 | 0,00 | 0,00 | 0,01  | 0,00  | 0,00 | 0,02  | 0,00 | 0,19           |
| <b>Malaysia</b>          | 1,31 | 0,00 | 0,00 | 0,47  | 0,00  | 0,43 | 0,00  | 0,00 | 2,22           |
| <b>Myanmar</b>           | 0,39 | 0,00 | 0,00 | 0,16  | 0,00  | 0,00 | 0,10  | 0,00 | 0,65           |
| <b>Philippines</b>       | 1,26 | 0,00 | 0,00 | 0,44  | 0,00  | 0,00 | 0,36  | 0,00 | 2,07           |
| <b>Russia</b>            | 0,00 | 0,00 | 0,49 | 2,98  | 0,00  | 0,00 | 2,43  | 3,72 | 9,62           |
| <b>Singapore</b>         | 0,30 | 0,00 | 0,00 | 0,25  | 0,00  | 0,00 | 0,09  | 0,00 | 0,65           |
| <b>South Korea</b>       | 2,30 | 0,00 | 0,12 | 1,68  | 0,13  | 0,00 | 1,39  | 0,00 | 5,62           |
| <b>Thailand</b>          | 0,74 | 0,00 | 0,00 | 0,50  | 0,00  | 0,00 | 0,53  | 0,00 | 1,77           |
| <b>Turkey</b>            | 0,29 | 0,11 | 0,13 | 1,11  | 0,00  | 1,68 | 0,88  | 0,00 | 4,20           |
| <b>United Kingdom</b>    | 1,03 | 0,51 | 1,05 | 4,06  | 0,61  | 0,00 | 1,14  | 0,00 | 8,40           |
| <b>United States</b>     | 6,78 | 1,92 | 1,24 | 17,25 | 19,07 | 0,00 | 0,00  | 0,00 | 46,26          |
| <b>Vietnam</b>           | 0,30 | 0,00 | 0,00 | 0,19  | 0,00  | 0,00 | 0,25  | 0,00 | 0,74           |

Table 13: Adjusted voting rights for 2016 of country  $i$  at MDB  $j$

| Countries/ MDBs          | ADB  | AfDB | EBRD | IBRD  | IADB  | ISDB | AIIB  | NDB  | SUM 20 = $x_j$ |
|--------------------------|------|------|------|-------|-------|------|-------|------|----------------|
| <b>ASEAN</b>             | 7,08 | 0    | 0,00 | 3,05  | 0,00  | 1,03 | 2,42  | 0,00 | 13,58          |
| <b>Australia</b>         | 2,53 | 0,00 | 0,12 | 1,35  | 0,00  | 0,00 | 1,24  | 0,00 | 5,23           |
| <b>Brunei Darussalam</b> | 0,30 | 0,00 | 0,00 | 0,12  | 0,00  | 0,07 | 0,02  | 0,00 | 0,50           |
| <b>Cambodia</b>          | 0,17 | 0,00 | 0,00 | 0,05  | 0,00  | 0,00 | 0,02  | 0,00 | 0,24           |
| <b>China</b>             | 2,80 | 0,71 | 0,01 | 5,03  | 0,00  | 0,00 | 10,65 | 3,36 | 22,56          |
| <b>France</b>            | 1,11 | 1,02 | 0,98 | 3,91  | 1,13  | 0,00 | 1,13  | 0,00 | 9,28           |
| <b>Germany</b>           | 1,93 | 2,44 | 0,98 | 4,23  | 1,13  | 0,00 | 1,51  | 0,00 | 12,21          |
| <b>India</b>             | 2,75 | 0,17 | 0,00 | 3,05  | 0,00  | 0,00 | 2,81  | 3,36 | 12,14          |
| <b>Indonesia</b>         | 2,39 | 0,00 | 0,00 | 0,95  | 0,00  | 0,56 | 1,13  | 0,00 | 5,03           |
| <b>Laos</b>              | 0,16 | 0,00 | 0,00 | 0,04  | 0,00  | 0,00 | 0,01  | 0,00 | 0,21           |
| <b>Malaysia</b>          | 1,27 | 0,00 | 0,00 | 0,43  | 0,00  | 0,40 | 0,04  | 0,00 | 2,14           |
| <b>Myanmar</b>           | 0,38 | 0,00 | 0,00 | 0,10  | 0,00  | 0,00 | 0,09  | 0,00 | 0,56           |
| <b>Philippines</b>       | 1,13 | 0,00 | 0,00 | 0,41  | 0,00  | 0,00 | 0,33  | 0,00 | 1,87           |
| <b>Russia</b>            | 0,00 | 0,00 | 0,46 | 2,57  | 0,00  | 0,00 | 2,19  | 3,36 | 8,58           |
| <b>Singapore</b>         | 0,29 | 0,00 | 0,00 | 0,28  | 0,00  | 0,00 | 0,08  | 0,00 | 0,66           |
| <b>South Korea</b>       | 2,22 | 0,00 | 0,12 | 1,58  | 0,00  | 0,00 | 1,26  | 0,00 | 5,17           |
| <b>Thailand</b>          | 0,71 | 0,00 | 0,00 | 0,48  | 0,00  | 0,00 | 0,48  | 0,00 | 1,67           |
| <b>Turkey</b>            | 0,29 | 0,11 | 0,13 | 1,11  | 0,00  | 1,68 | 0,88  | 0,00 | 4,20           |
| <b>United Kingdom</b>    | 0,99 | 1,05 | 0,98 | 3,91  | 0,57  | 0,00 | 1,03  | 0,00 | 8,53           |
| <b>United States</b>     | 6,56 | 1,80 | 1,15 | 15,77 | 17,81 | 0,00 | 0,00  | 0,00 | 43,09          |
| <b>Vietnam</b>           | 0,29 | 0,00 | 0,00 | 0,19  | 0,00  | 0,00 | 0,22  | 0,00 | 0,70           |

Table 14: Adjusted voting rights for 2020 of country  $i$  at MDB

|             | ASEAN | Australia | Brunei | Cambodia | China | France | Germany | India  | Indonesia | Laos  | Malaysia | Myanmar | Philippines | Russia | Singapore | S. Korea | Thailand | Turkey | UK    | US    | Vietnam |       |
|-------------|-------|-----------|--------|----------|-------|--------|---------|--------|-----------|-------|----------|---------|-------------|--------|-----------|----------|----------|--------|-------|-------|---------|-------|
| ASEAN       | 14.78 | 0.00      | 9.24   | 14.27    | 14.55 | -8.26  | 4.96    | 3.32   | 1.88      | 9.01  | 14.59    | 12.56   | 14.13       | 12.71  | 5.15      | 14.13    | 9.16     | 13.01  | 10.58 | 6.38  | -31.48  | 14.04 |
| Australia   | 5.54  | -9.24     | 0.00   | 5.03     | 5.32  | -17.49 | -4.28   | -5.92  | -7.35     | -0.23 | 5.35     | 3.33    | 4.89        | 3.47   | -4.08     | 4.90     | -0.08    | 3.77   | 1.34  | -2.86 | -40.72  | 4.80  |
| Brunei      | 0.51  | -14.27    | -5.03  | 0.00     | 0.29  | -22.52 | -9.31   | -10.95 | -12.39    | -5.26 | 0.32     | -1.71   | -0.14       | -1.56  | -9.11     | -0.14    | -5.11    | -1.26  | -3.69 | -7.89 | -45.75  | -0.23 |
| Cambodia    | 0.22  | -14.55    | -5.32  | -0.29    | 0.00  | -22.81 | -9.60   | -11.24 | -12.67    | -5.55 | 0.03     | -1.99   | -0.43       | -1.85  | -9.40     | -0.42    | -5.40    | -1.54  | -3.98 | -8.18 | -46.04  | -0.52 |
| China       | 23.03 | 8.26      | 17.49  | 22.52    | 22.81 | 0.00   | 13.21   | 11.57  | 10.14     | 17.26 | 22.84    | 20.82   | 22.38       | 20.96  | 13.41     | 22.39    | 17.42    | 21.27  | 18.83 | 14.63 | -23.23  | 22.29 |
| France      | 9.82  | -4.96     | 4.28   | 9.31     | 9.60  | -13.21 | 0.00    | -1.64  | -3.07     | 4.05  | 9.63     | 7.60    | 9.17        | 7.75   | 0.20      | 9.17     | 4.20     | 8.05   | 5.62  | 1.42  | -36.44  | 9.08  |
| Germany     | 11.46 | -3.32     | 5.92   | 10.95    | 11.24 | -11.57 | 1.64    | 0.00   | -1.43     | 5.69  | 11.27    | 9.25    | 10.81       | 9.39   | 1.84      | 10.82    | 5.84     | 9.69   | 7.26  | 3.06  | -34.80  | 10.72 |
| India       | 12.89 | -1.88     | 7.35   | 12.39    | 12.67 | -10.14 | 3.07    | 1.43   | 0.00      | 7.12  | 12.70    | 10.68   | 12.25       | 10.82  | 3.27      | 12.25    | 7.28     | 11.13  | 8.69  | 4.49  | -33.37  | 12.15 |
| Indonesia   | 5.77  | -9.01     | 0.23   | 5.26     | 5.55  | -17.26 | -4.05   | -5.69  | -7.12     | 0.00  | 5.58     | 3.55    | 5.12        | 3.70   | -3.85     | 5.13     | 0.15     | 4.00   | 1.57  | -2.63 | -40.49  | 5.03  |
| Laos        | 0.19  | -14.59    | -5.35  | -0.32    | -0.03 | -22.82 | -9.63   | -11.27 | -12.70    | -5.58 | 0.00     | -2.03   | -0.46       | -1.88  | -9.43     | -0.46    | -5.43    | -1.58  | -4.01 | -8.21 | -46.07  | -0.55 |
| Malaysia    | 2.22  | -12.56    | -3.33  | 1.71     | 1.99  | -20.82 | -7.60   | -9.25  | -10.68    | -3.55 | 2.03     | 0.00    | 1.57        | 0.15   | -7.41     | 1.57     | -3.40    | 0.45   | -1.98 | -6.18 | -44.05  | 1.48  |
| Myanmar     | 0.65  | -14.13    | -4.89  | 0.14     | 0.43  | -22.38 | -9.17   | -10.81 | -12.25    | -5.12 | 0.46     | -1.57   | 0.00        | -1.42  | -8.98     | 0.00     | -4.97    | -1.12  | -3.55 | -7.75 | -45.61  | -0.09 |
| Philippines | 2.07  | -12.71    | -3.47  | 1.56     | 1.85  | -20.96 | -7.75   | -9.39  | -10.82    | -3.70 | 1.88     | -0.15   | 1.42        | 0.00   | -7.55     | 1.42     | -3.55    | 0.30   | -2.13 | -6.33 | -44.19  | 1.33  |
| Russia      | 9.62  | -5.15     | 4.08   | 9.11     | 9.40  | -13.41 | -0.20   | -1.84  | -3.27     | 3.85  | 9.43     | 7.41    | 8.98        | 7.55   | 0.00      | 8.98     | 4.01     | 7.86   | 5.42  | 1.22  | -36.64  | 8.88  |
| Singapore   | 0.65  | -14.13    | -4.90  | 0.14     | 0.42  | -22.39 | -9.17   | -10.82 | -12.25    | -5.13 | 0.46     | -1.57   | 0.00        | -1.42  | -8.98     | 0.00     | -4.97    | -1.12  | -3.55 | -7.75 | -45.62  | -0.09 |
| S. Korea    | 5.62  | -9.16     | 0.08   | 5.11     | 5.40  | -17.42 | -4.20   | -5.84  | -7.28     | -0.15 | 5.43     | 3.40    | 4.97        | 3.55   | -4.01     | 4.97     | 0.00     | 3.85   | 1.42  | -2.78 | -40.64  | 4.88  |
| Thailand    | 1.77  | -13.01    | -3.77  | 1.26     | 1.54  | -21.27 | -8.05   | -9.69  | -11.13    | -4.00 | 1.58     | -0.45   | 1.12        | -0.30  | -7.86     | 1.12     | -3.85    | 0.00   | -2.43 | -6.63 | -44.50  | 1.03  |
| Turkey      | 4.20  | -10.58    | -1.34  | 3.69     | 3.98  | -18.83 | -5.62   | -7.26  | -8.69     | -1.57 | 4.01     | 1.98    | 3.55        | 2.13   | -5.42     | 3.55     | -1.42    | 2.43   | 0.00  | -4.20 | -42.06  | 3.46  |
| UK          | 8.40  | -6.38     | 2.86   | 7.89     | 8.18  | -14.63 | -1.42   | -3.06  | -4.49     | 2.63  | 8.21     | 6.18    | 7.75        | 6.33   | -1.22     | 7.75     | 2.78     | 6.63   | 4.20  | 0.00  | -37.86  | 7.66  |
| US          | 46.26 | 31.48     | 40.72  | 45.75    | 46.04 | 23.23  | 36.44   | 34.80  | 33.37     | 40.49 | 46.07    | 44.05   | 45.61       | 44.19  | 36.64     | 45.62    | 40.64    | 44.50  | 42.06 | 37.86 | 0.00    | 45.52 |
| Vietnam     | 0.74  | -14.04    | -4.80  | 0.23     | 0.52  | -22.29 | -9.08   | -10.72 | -12.15    | -5.03 | 0.55     | -1.48   | 0.09        | -1.33  | -8.88     | 0.09     | -4.88    | -1.03  | -3.46 | -7.66 | -45.52  | 0.00  |

Table 16: State-State matrix C (2016, robustness)

|             | ASEAN | Australia | Brunei | Cambodia | China | France | Germany | India  | Indonesia | Laos  | Malaysia | Myanmar | Philippines | Russia | Singapore | S. Korea | Thailand | Turkey | UK    | US    | Vietnam |       |
|-------------|-------|-----------|--------|----------|-------|--------|---------|--------|-----------|-------|----------|---------|-------------|--------|-----------|----------|----------|--------|-------|-------|---------|-------|
| ASEAN       | 13.58 | 0.00      | 8.35   | 13.08    | 13.34 | -8.97  | 4.31    | 1.37   | 1.44      | 8.55  | 13.37    | 11.44   | 13.02       | 11.72  | 5.00      | 12.93    | 8.41     | 11.91  | 9.38  | 5.05  | -29.50  | 12.88 |
| Australia   | 5.23  | -8.35     | 0.00   | 4.73     | 4.99  | -17.33 | -4.04   | -6.98  | -6.91     | 0.20  | 5.02     | 3.09    | 4.67        | 3.36   | -3.35     | 4.58     | 0.06     | 3.56   | 1.03  | -3.30 | -37.85  | 4.53  |
| Brunei      | 0.50  | -13.08    | -4.73  | 0.00     | 0.26  | -22.06 | -8.78   | -11.71 | -11.64    | -4.53 | 0.29     | -1.64   | -0.06       | -1.37  | -8.08     | -0.16    | -4.67    | -1.17  | -3.70 | -8.03 | -42.59  | -0.20 |
| Cambodia    | 0.24  | -13.34    | -4.99  | -0.26    | 0.00  | -22.32 | -9.03   | -11.97 | -11.90    | -4.79 | 0.03     | -1.90   | -0.32       | -1.63  | -8.34     | -0.41    | -4.93    | -1.43  | -3.96 | -8.29 | -42.84  | -0.46 |
| China       | 22.56 | 8.97      | 17.33  | 22.06    | 22.32 | 0.00   | 13.28   | 10.35  | 10.42     | 17.53 | 22.35    | 20.42   | 21.99       | 20.69  | 13.98     | 21.90    | 17.39    | 20.89  | 18.36 | 14.03 | -20.53  | 21.85 |
| France      | 9.28  | -4.31     | 4.04   | 8.78     | 9.03  | -13.28 | 0.00    | -2.93  | -2.87     | 4.25  | 9.07     | 7.14    | 8.71        | 7.41   | 0.69      | 8.62     | 4.10     | 7.61   | 5.08  | 0.74  | -33.81  | 8.57  |
| Germany     | 12.21 | -1.37     | 6.98   | 11.71    | 11.97 | -10.35 | 2.93    | 0.00   | 0.07      | 7.18  | 12.00    | 10.07   | 11.64       | 10.34  | 3.63      | 11.55    | 7.04     | 10.54  | 8.01  | 3.68  | -30.88  | 11.50 |
| India       | 12.14 | -1.44     | 6.91   | 11.64    | 11.90 | -10.42 | 2.87    | -0.07  | 0.00      | 7.11  | 11.93    | 10.00   | 11.58       | 10.27  | 3.56      | 11.49    | 6.97     | 10.47  | 7.94  | 3.61  | -30.94  | 11.44 |
| Indonesia   | 5.03  | -8.55     | -0.20  | 4.53     | 4.79  | -17.53 | -4.25   | -7.18  | -7.11     | 0.00  | 4.82     | 2.89    | 4.46        | 3.16   | -3.55     | 4.37     | -0.14    | 3.36   | 0.83  | -3.50 | -38.06  | 4.32  |
| Laos        | 0.21  | -13.37    | -5.02  | -0.29    | -0.03 | -22.35 | -9.07   | -12.00 | -11.93    | -4.82 | 0.00     | -1.93   | -0.35       | -1.66  | -8.37     | -0.44    | -4.96    | -1.46  | -3.99 | -8.32 | -42.87  | -0.49 |
| Malaysia    | 2.14  | -11.44    | -3.09  | 1.64     | 1.90  | -20.42 | -7.14   | -10.07 | -10.00    | -2.89 | 1.93     | 0.00    | 1.58        | 0.27   | -6.44     | 1.49     | -3.03    | 0.47   | -2.06 | -6.39 | -40.95  | 1.44  |
| Myanmar     | 0.56  | -13.02    | -4.67  | 0.06     | 0.32  | -21.99 | -8.71   | -11.64 | -11.58    | -4.46 | 0.35     | -1.58   | 0.00        | -1.30  | -8.02     | -0.09    | -4.61    | -1.11  | -3.64 | -7.97 | -42.52  | -0.14 |
| Philippines | 1.87  | -11.72    | -3.36  | 1.37     | 1.63  | -20.69 | -7.41   | -10.34 | -10.27    | -3.16 | 1.66     | -0.27   | 1.30        | 0.00   | -6.71     | 1.21     | -3.30    | 0.20   | -2.33 | -6.66 | -41.22  | 1.16  |
| Russia      | 8.58  | -5.00     | 3.35   | 8.08     | 8.34  | -13.98 | -0.69   | -3.63  | -3.56     | 3.55  | 8.37     | 6.44    | 8.02        | 6.71   | 0.00      | 7.93     | 3.41     | 6.91   | 4.38  | 0.05  | -34.50  | 7.88  |
| Singapore   | 0.66  | -12.93    | -4.58  | 0.16     | 0.41  | -21.90 | -8.62   | -11.55 | -11.49    | -4.37 | 0.44     | -1.49   | 0.09        | -1.21  | -7.93     | 0.00     | -4.52    | -1.01  | -3.54 | -7.88 | -42.43  | -0.05 |
| S. Korea    | 5.17  | -8.41     | -0.06  | 4.67     | 4.93  | -17.39 | -4.10   | -7.04  | -6.97     | 0.14  | 4.96     | 3.03    | 4.61        | 3.30   | -3.41     | 4.52     | 0.00     | 3.50   | 0.97  | -3.36 | -37.91  | 4.47  |
| Thailand    | 1.67  | -11.91    | -3.56  | 1.17     | 1.43  | -20.89 | -7.61   | -10.54 | -10.47    | -3.36 | 1.46     | -0.47   | 1.11        | -0.20  | -6.91     | 1.01     | -3.50    | 0.00   | -2.53 | -6.86 | -41.42  | 0.97  |
| Turkey      | 4.20  | -9.38     | -1.03  | 3.70     | 3.96  | -18.36 | -5.08   | -8.01  | -7.94     | -0.83 | 3.99     | 2.06    | 3.64        | 2.33   | -4.38     | 3.54     | -0.97    | 2.53   | 0.00  | -4.33 | -38.89  | 3.50  |
| UK          | 8.53  | -5.05     | 3.30   | 8.03     | 8.29  | -14.03 | -0.74   | -3.68  | -3.61     | 3.50  | 8.32     | 6.39    | 7.97        | 6.66   | -0.05     | 7.88     | 3.36     | 6.86   | 4.33  | 0.00  | -34.55  | 7.83  |
| US          | 43.09 | 29.50     | 37.85  | 42.59    | 42.84 | 20.53  | 33.81   | 30.88  | 30.94     | 38.06 | 42.87    | 40.95   | 42.52       | 41.22  | 34.50     | 42.43    | 37.91    | 41.42  | 38.89 | 34.55 | 0.00    | 42.38 |
| Vietnam     | 0.70  | -12.88    | -4.53  | 0.20     | 0.46  | -21.85 | -8.57   | -11.50 | -11.44    | -4.32 | 0.49     | -1.44   | 0.14        | -1.16  | -7.88     | 0.05     | -4.47    | -0.97  | -3.50 | -7.83 | -42.38  | 0.00  |

Table 15: State-State matrix C (2020, robustness)

| Countries          | Influence | Influenced | Net Influence | (Net Influence) <sup>2</sup> | Taylor |
|--------------------|-----------|------------|---------------|------------------------------|--------|
| <b>China</b>       | 1,936     | -0,838     | 2,773         | 7,690                        | 0,697  |
| <b>ASEAN</b>       | 1,225     | -0,127     | 1,352         | 1,827                        | 0,340  |
| <b>Germany</b>     | 1,018     | 0,080      | 0,939         | 0,881                        | 0,236  |
| <b>Russia</b>      | 0,924     | 0,174      | 0,750         | 0,563                        | 0,189  |
| <b>India</b>       | 0,835     | 0,263      | 0,572         | 0,327                        | 0,144  |
| <b>S. Korea</b>    | 0,544     | 0,554      | -0,010        | 0,000                        | -0,002 |
| <b>Indonesia</b>   | 0,533     | 0,566      | -0,033        | 0,001                        | -0,008 |
| <b>Philippines</b> | 0,273     | 0,825      | -0,552        | 0,304                        | -0,139 |
| <b>Malaysia</b>    | 0,262     | 0,836      | -0,575        | 0,330                        | -0,144 |
| <b>Thailand</b>    | 0,256     | 0,842      | -0,586        | 0,344                        | -0,147 |
| <b>Vietnam</b>     | 0,177     | 0,922      | -0,745        | 0,555                        | -0,187 |
| <b>Myanmar</b>     | 0,170     | 0,928      | -0,759        | 0,576                        | -0,191 |
| <b>Singapore</b>   | 0,170     | 0,929      | -0,759        | 0,576                        | -0,191 |
| <b>Laos</b>        | 0,167     | 0,931      | -0,763        | 0,583                        | -0,192 |
| <b>Brunei</b>      | 0,159     | 0,939      | -0,781        | 0,610                        | -0,196 |
| <b>Cambodia</b>    | 0,137     | 0,961      | -0,824        | 0,679                        | -0,207 |

Table 17: Calculating the Taylor Influence Index for 2018

| Countries          | Influence | Influenced | Net Influence | (Net Influence) <sup>2</sup> | Taylor |
|--------------------|-----------|------------|---------------|------------------------------|--------|
| <b>China</b>       | 1,882     | -0,728     | 2,610         | 2,610                        | 0,660  |
| <b>ASEAN</b>       | 1,292     | -0,137     | 1,429         | 1,429                        | 0,362  |
| <b>Germany</b>     | 1,143     | 0,012      | 1,130         | 1,130                        | 0,286  |
| <b>India</b>       | 0,885     | 0,269      | 0,616         | 0,616                        | 0,156  |
| <b>Russia</b>      | 0,848     | 0,306      | 0,542         | 0,542                        | 0,137  |
| <b>Indonesia</b>   | 0,669     | 0,485      | 0,184         | 0,184                        | 0,047  |
| <b>S. Korea</b>    | 0,569     | 0,586      | -0,017        | -0,017                       | -0,004 |
| <b>Philippines</b> | 0,300     | 0,855      | -0,556        | -0,556                       | -0,141 |
| <b>Malaysia</b>    | 0,284     | 0,871      | -0,586        | -0,586                       | -0,148 |
| <b>Thailand</b>    | 0,275     | 0,879      | -0,604        | -0,604                       | -0,153 |
| <b>Vietnam</b>     | 0,195     | 0,959      | -0,764        | -0,764                       | -0,193 |
| <b>Singapore</b>   | 0,189     | 0,966      | -0,777        | -0,777                       | -0,197 |
| <b>Laos</b>        | 0,187     | 0,968      | -0,781        | -0,781                       | -0,198 |
| <b>Myanmar</b>     | 0,185     | 0,969      | -0,784        | -0,784                       | -0,198 |
| <b>Brunei</b>      | 0,178     | 0,976      | -0,798        | -0,798                       | -0,202 |
| <b>Cambodia</b>    | 0,155     | 0,999      | -0,844        | -0,844                       | -0,214 |

Table 18: Calculating the Taylor Influence Index for 2022

| <b>Countries</b>      | <b>Influence</b> | <b>Influenced</b> | <b>Net Influence</b> | <b>(Net Influence)<sup>2</sup></b> | <b>Taylor</b> |
|-----------------------|------------------|-------------------|----------------------|------------------------------------|---------------|
| <b>United States</b>  | 1,705            | -1,292            | 2,997                | 8,982                              | 0,807         |
| <b>China</b>          | 0,797            | -0,384            | 1,181                | 1,395                              | 0,318         |
| <b>ASEAN</b>          | 0,475            | -0,061            | 0,536                | 0,287                              | 0,144         |
| <b>India</b>          | 0,401            | 0,013             | 0,388                | 0,151                              | 0,105         |
| <b>Germany</b>        | 0,345            | 0,069             | 0,277                | 0,076                              | 0,074         |
| <b>France</b>         | 0,281            | 0,133             | 0,148                | 0,022                              | 0,040         |
| <b>Russia</b>         | 0,273            | 0,140             | 0,133                | 0,018                              | 0,036         |
| <b>United Kingdom</b> | 0,225            | 0,188             | 0,037                | 0,001                              | 0,010         |
| <b>Indonesia</b>      | 0,123            | 0,291             | -0,168               | 0,028                              | -0,045        |
| <b>South Korea</b>    | 0,117            | 0,297             | -0,180               | 0,033                              | -0,049        |
| <b>Australia</b>      | 0,114            | 0,300             | -0,186               | 0,035                              | -0,050        |
| <b>Turkey</b>         | 0,061            | 0,352             | -0,291               | 0,085                              | -0,078        |
| <b>Malaysia</b>       | -0,016           | 0,430             | -0,446               | 0,199                              | -0,120        |
| <b>Philippines</b>    | -0,022           | 0,436             | -0,458               | 0,210                              | -0,123        |
| <b>Thailand</b>       | -0,034           | 0,447             | -0,481               | 0,232                              | -0,130        |
| <b>Vietnam</b>        | -0,074           | 0,488             | -0,562               | 0,315                              | -0,151        |
| <b>Myanmar</b>        | -0,078           | 0,491             | -0,569               | 0,324                              | -0,153        |
| <b>Singapore</b>      | -0,078           | 0,491             | -0,569               | 0,324                              | -0,153        |
| <b>Brunei</b>         | -0,083           | 0,497             | -0,580               | 0,336                              | -0,156        |
| <b>Cambodia</b>       | -0,094           | 0,508             | -0,602               | 0,362                              | -0,162        |
| <b>Laos</b>           | -0,095           | 0,509             | -0,605               | 0,365                              | -0,163        |

*Table 19: Calculating the Taylor Influence Index for 2016*

| Countries      | Influence | Influenced | Net Influence | (Net Influence) <sup>2</sup> | Taylor |
|----------------|-----------|------------|---------------|------------------------------|--------|
| United States  | 1,756     | -1,301     | 3,056         | 9,342                        | 0,796  |
| China          | 0,873     | -0,418     | 1,292         | 1,669                        | 0,336  |
| ASEAN          | 0,488     | -0,033     | 0,520         | 0,271                        | 0,135  |
| Germany        | 0,428     | 0,026      | 0,402         | 0,162                        | 0,105  |
| India          | 0,426     | 0,029      | 0,396         | 0,157                        | 0,103  |
| France         | 0,302     | 0,152      | 0,150         | 0,023                        | 0,039  |
| Russia         | 0,273     | 0,182      | 0,090         | 0,008                        | 0,024  |
| United Kingdom | 0,270     | 0,184      | 0,086         | 0,007                        | 0,022  |
| Australia      | 0,129     | 0,326      | -0,198        | 0,039                        | -0,051 |
| South Korea    | 0,126     | 0,329      | -0,203        | 0,041                        | -0,053 |
| Indonesia      | 0,120     | 0,335      | -0,215        | 0,046                        | -0,056 |
| Turkey         | 0,084     | 0,371      | -0,286        | 0,082                        | -0,075 |
| Malaysia       | -0,004    | 0,459      | -0,463        | 0,215                        | -0,121 |
| Philippines    | -0,016    | 0,471      | -0,487        | 0,237                        | -0,127 |
| Thailand       | -0,025    | 0,479      | -0,504        | 0,254                        | -0,131 |
| Vietnam        | -0,066    | 0,521      | -0,587        | 0,344                        | -0,153 |
| Singapore      | -0,068    | 0,523      | -0,591        | 0,349                        | -0,154 |
| Myanmar        | -0,072    | 0,527      | -0,599        | 0,359                        | -0,156 |
| Brunei         | -0,075    | 0,530      | -0,604        | 0,365                        | -0,157 |
| Cambodia       | -0,086    | 0,541      | -0,627        | 0,393                        | -0,163 |
| Laos           | -0,087    | 0,542      | -0,629        | 0,396                        | -0,164 |

Table 20: Calculating the Taylor Influence Index for 2020

| 2016           |           |            | 2020           |           |            |
|----------------|-----------|------------|----------------|-----------|------------|
| Countries      | Influence | Influenced | Countries      | Influence | Influenced |
| China          | 1,888     | -0,959     | China          | 1,930     | -0,971     |
| ASEAN          | 1,198     | -0,269     | ASEAN          | 1,156     | -0,196     |
| India          | 1,040     | -0,111     | Germany        | 1,037     | -0,078     |
| Germany        | 0,921     | 0,008      | India          | 1,031     | -0,072     |
| France         | 0,783     | 0,146      | France         | 0,784     | 0,175      |
| Russia         | 0,767     | 0,162      | Russia         | 0,724     | 0,235      |
| United Kingdom | 0,665     | 0,264      | United Kingdom | 0,720     | 0,240      |
| Indonesia      | 0,445     | 0,484      | Australia      | 0,435     | 0,525      |
| South Korea    | 0,432     | 0,497      | South Korea    | 0,429     | 0,530      |
| Australia      | 0,426     | 0,503      | Indonesia      | 0,417     | 0,542      |
| Turkey         | 0,313     | 0,616      | Turkey         | 0,345     | 0,614      |
| Malaysia       | 0,148     | 0,781      | Malaysia       | 0,168     | 0,792      |
| Philippines    | 0,135     | 0,794      | Philippines    | 0,144     | 0,815      |
| Thailand       | 0,110     | 0,819      | Thailand       | 0,127     | 0,832      |
| Vietnam        | 0,024     | 0,905      | Vietnam        | 0,044     | 0,915      |
| Myanmar        | 0,016     | 0,913      | Singapore      | 0,039     | 0,920      |
| Singapore      | 0,016     | 0,913      | Myanmar        | 0,032     | 0,928      |
| Brunei         | 0,005     | 0,924      | Brunei         | 0,026     | 0,933      |
| Cambodia       | -0,019    | 0,948      | Cambodia       | 0,004     | 0,955      |
| Laos           | -0,022    | 0,951      | Laos           | 0,001     | 0,958      |

Table 21: Change of period and samples without the United States (2016 and 2020)