

## GLOBAL ECONOMIC GOVERNANCE INITIATIVE

# Who Controls Multilateral Development Finance?



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## ABSTRACT

Multilateral development banks (MDBs) are a crucial – and growing – avenue for long-term development finance, and globally account for nearly two trillion dollars in assets: \$695 billion in global MDBs, \$1.2 trillion in regional development banks (RDBs), and \$76 billion in sub-regional development banks (SRDBs). They have developed a wide array of governance structures, with important implications for the distribution of members' control over MDB assets. This paper measures that power distribution in 28 MDBs using Penrose-Banzhaf and Shapley-Shubik power indices, which calculate member countries' usefulness as coalition partners within bank boards, based on relative vote shares. The paper then uses those calculations to explore these research questions:

1. Globally and across all types of MDBs, how is power distributed among countries?
2. Do RDBs and SRDBs tend to share power differently from global MDBs?
3. How does the establishment of two new RDBs – the Asian Infrastructure Investment Bank (AIIB) and New Development Bank (NDB) – affect the global distribution of power over MDB assets?

Overall, this analysis finds that about 60% of MDB assets are controlled by countries that are permitted to borrow from them. On a de facto basis, though, there is only a moderate correlation (about 0.40, as a weighted average among MDBs) between countries' voting shares at MDBs and their shares of MDB lending portfolios.

In particular, RDBs and SRDBs have created multilateral fora that give much greater voice to borrowing countries than do their global MDB counterparts. They also maintain significantly more equality among members on their boards of directors. For example:

- *De jure* borrowers (members with borrowing privileges) control less than 1/3 of global MDBs capital, but over three-fourths of RDB capital and over 90% of SRDB capital.
- Measured in a *de facto* way (as correlations between members' vote shares and portfolio shares), borrower representation is still substantially lower at global MDBs (with a weighted average correlation of 0.12) than at RDBs (0.57) and SRDBs (between 0.66 and 0.68, depending on which power index is used).
- Inequality (measured through Gini coefficients on vote shares) is also much higher at global MDBs (with a weighted average between 0.71 and 0.81, depending on the index used) than at RDBs (between 0.49 and 0.71) and SRDBs (between 0.2 and 0.22).

The newest MDBs – the AIIB and NDB – have received much attention by scholars. They are relatively small (accounting for just \$29 billion in assets together at the end of 2017) and so their creation has not dramatically altered the global MDB landscape. Nonetheless, it has substantially increased the development finance assets under the control of particular members. The creation of these two MDBs has:

- Reduced high income countries' control over total MDB assets by about one percentage point, increased upper middle income countries' control over total MDB assets by between 0.6 and 0.8 percentage points, depending on the power index used, increased lower middle income countries' control over total MDB assets by about 0.1 percentage point, and not significantly altered low income countries' control over MDB assets.
- Increased the amount of MDB assets under the control of BRICS countries (Brazil, Russia, India, China, and South Africa) by between 13 and 15.7%, depending on the power index used. Individually, BRICS countries have seen the assets under their control rise from between 5.3 and 6.8 percent for Brazil (again, depending on the power index) to 30.7 to 38.3% for South Africa.

Finally, this paper develops a typology of MDBs based on the governance differences that emerge here. MDBs generally fall into one of three categories:

- Creditor-led MDBs, with low borrower representation and high inequality,
- Core borrower-led MDBs, with high borrower representation but also high inequality among members, indicating that one or a few borrowers has a core role, and
- Mutual aid-oriented MDBs, with high borrower representation and low inequality.

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## Introduction

The 21<sup>st</sup> century has seen a surge in interest in development banking, characterized by waves of capital increases in existing banks and the creation of two new regional development banks (RDBs): the Asian Infrastructure Investment Bank (AIIB) and New Development Bank (NDB). Scholars have noted these banks' creation was motivated in part by a perceived lack of voice by their core members (and particularly China) as borrowers at existing MDBs. While significant attention has been paid to the lack of emerging market and developing country voice and representation on *individual* MDB boards, no similar analysis exists to date regarding country voice and representation across the entire MDB regime globally.

This paper approaches the question by using recognized power indices to examine borrower representation and the equality (or inequality) of member vote distribution on MDB boards. As corollaries, it inquires as to differences among global MDBs, RDBs, and SRDBs, and the differences made by the creation of the AIIB and NDB. It finds that RDBs and SRDBs have much greater borrower representation than global MDBs. It also finds that RDBs and SRDBs share governance more equally among members, as measured through Gini coefficients of member votes on the boards of directors that make lending decisions. This finding holds not only when "borrower" is defined in *de jure* terms, based on members' borrowing privileges, but also in *de facto* terms, based on a correlation between voting power and lending portfolio share. It also finds that the AIIB and NDB have not dramatically altered the global landscape of MDB governance overall, but have made a significant difference in the amount of development finance under the control of smaller BRICS countries (and particularly South Africa).

This paper then uses the results of those calculations to create a typology of MDBs, including "creditor-led" banks (with low borrower representation and high inequality among members), "core borrower-led" banks (with high borrower representation but also high inequality among members), and "mutual aid-oriented" MDBs (with high borrower representation and low inequality). Perhaps not surprisingly, no MDBs in this study have low borrower representation and *also* low inequality among members. While global MDBs are consistently creditor-led, RDBs and SRDBs are distributed among all three categories according to the purpose behind their creation.<sup>1</sup>

## Theoretical Context and Empirical Background: Hegemony vs Collaboration, Voice vs Exit

For decades researchers have recognized the necessity of multilateral fora for the pursuit of what Kindleberger (1986) referred to as international public goods, including long-term development lending through multilateral development banks. Nonetheless, and with apologies to Orwell, all MDBs are multilateral but some are decidedly more multilateral than others. To

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<sup>1</sup> The term "creditor" is used for simplicity here to indicate country members that are shareholders but not borrowers. Technically, in most MDBs, all country members are shareholders and therefore act as both creditors and borrowers. Countries without borrowing privileges relate to the banks solely in their creditor role. The term "mutual aid" is not intended to carry positive, normative connotations, but simply a horizontality of governance, centered around borrowers.

delve into the array of multilateral governance arrangements, this analysis draws on frameworks of multilateral cooperation established by Wade (2011) and Hirschman (1970). It aims to bring those frameworks into the context of empirical MDB research and thus complement existing MDB panoramas and power analyses such as Engen and Prizzon (2018) and Strand (2003).

### *Hirschman and Wade: Cooperation and leadership*

As this analysis is contextualized within the branching out of multilateral institutions, it relies on the central dilemma of *exit* and *voice* as described by Hirschman (1970). Countries whose perceived needs go unmet through existing MDBs may advocate for quota and voting reform *within* those MDBs and/or branch out with other countries to form their own MDBs. Unlike Hirschman's model of group members opting between mutually-exclusive options of choosing "voice" or "exit," however, countries may be members of *multiple* MDBs. This lowers the cost of the "exit" option dramatically. Unsurprisingly, then, the last fifty years have seen the development of many regional and sub-regional MDBs form to meet perceived needs of particular blocs of countries.

Of course, that a subset of MDB membership should have outsized influence is not intrinsically negative. For example, Kindleberger (1981, 1986) aptly points out that the coordination of certain international public goods – such as the long-term development finance provided by MDBs – can often function better with the introduction of one or more dedicated international hegemon(s). However, as Kindleberger (1981) himself notes, "leadership can degenerate into exploitation," particularly in the presence of asymmetric economic power among members of a common trading or finance bloc. This paper does not attempt to differentiate between benign or exploitative leadership. It takes a more modest task of measuring the power distribution among MDB members and testing whether newer and more focused entities tend to have differently-distributed power relations.

This paper considers the distribution of power on MDB governance boards through the framework established by Wade (2011), who envisions three types of multilateral cooperation: hegemonic incorporation, multilateral cooperation, and Westphalian assertion. The analysis here concerns itself predominantly with the first two categories: *hegemonic incorporation*, which relegates peripheral actors to nominal roles in institutions that predominately serve the interests of core members, and *multilateral cooperation*, a deeper form of collaboration based on shared goals among like-minded and relatively equally-burdened members. *Westphalian assertion*, or multilateral cooperation with the goal of *excluding* a non-present party, is undoubtedly present in MDB governance, but is better measured through who *is* and *is not* represented on MDB boards. This paper examines the distribution of power *within* MDB member boards. By definition, then, all represented members are *included*, but to varying extents. Thus, the calculations here aim to estimate MDBs' governance approaches on a spectrum from hegemonic incorporation to multilateral cooperation.

Nonetheless, astute readers will undoubtedly still find abundant evidence of exclusion in these pages. For example, while China is a significant member of the Caribbean Development Bank (CaDB), Taiwan is the largest non-borrowing member of the Central American Bank for Economic Integration (CABEI). As China and Taiwan compete for recognition among these countries, MDB participation can be one avenue for reinforcing relationships and exerting influence.

#### *Existing empirical literature on MDB design and governance*

A deep and varied literature exists on the extent to which international organizations (IOs) reflect political relationships between member countries. For example, Andersen, Hansen, and Markussen (2005) and Dreher, Sturm, and Vreeland (2009) find that countries' temporary membership on the United Nations Security Council is significantly associated with their ability to attract greater IBRD and IDA lending. Kilby and (2006) and Lim and Vreeland (2013) find similar results for the ADB with regard to US and Japanese trade and political interests, and UN Security Council membership, respectively. Most of these works examine large samples of actual MDB voting records to seek correlations with borrowers' political and economic connectivity. However, while this method yields important results, it cannot be extended to smaller MDBs, which do not publicize actual voting records. This paper attempts to complement this literature by extending the underlying research questions to the entire MDB sector to the extent possible, by measuring countries' ability to form successful coalitions at MDB boards.

Another central research question in this analysis relates to the extent to which newer MDBs differ in their governing structure than existing bodies. In doing so, it attempts to join a growing and illuminating body of work on these two new organizations. Research on the AIIB (including Chin, 2016; Gere, Pálvölgyi-Polyák, and Simigh, 2018; Hilpert and Wacker, 2015; Huijskens, Turcsanyi and Ujvari, 2017; and many others) has included important analyses of the motivations behind its founding, the extent to which its emergence reflects changing global geopolitics and whether it is likely to operate in concert or in competition to the existing MDB paradigm. NDB-focused research (including Chin, 2014; Cooper and Farouk, 2015; Griffith-Jones, 2014; Qobo and Soko, 2015; and many others) have covered the same questions as well as whether the geographically and economically disparate BRICS countries will be able to unite behind one institutional mission. Furthermore, Engen and Prizzon (2018) and Delikanli, Dimitrov, and Agolli (2018) both provide analysis of how the AIIB and NDB fit into the global landscape of MDBs, through comprehensive panoramas of governance, performance, and safeguards at all of the MDBs described here.

However, relatively less research has been done on the extent to which newer and more specialized MDBs offer different governance representation opportunities for their member countries than previous generations of MDBs. This paper aims to fill that gap by measuring MDB member voice through power indices and asking to what extent the AIIB and NDB change the global distribution of nations' power over multilateral development finance.

The power indices used here include the Penrose-Banzhaf and Shapley-Shubik indices, two similar but not identical measures meant to shed light on the relative coalition-forming power of members in unequally representative governance arenas. These indices have been used to examine voters' representation at US state legislatures and the Electoral College as well as national representation in the European Community and European Union (see for example Banzhaf 1965; Hosli, 1996; Laruelle and Widgrén 1998; and many other).

Critics of the use of power indices in multilateral fora (such as Garrett and Tsebelis, 2001) point out that they are inadequate for incorporating voting blocs between members. However, the very purpose of power indices is to measure the potential usefulness of a given country in forming a bloc with enough support to ensure a proposal's success. As explained below, MDB boards often avoid bringing proposals to a vote without near-certainty of their passing, and do not publish the results of those votes, making bloc formation invisible to outside observers. Relatively fewer banks publicize their voting records, allowing analysis of actual voting patterns such as that found in Dreher, Sturm, and Vreeland (2009). In this context, then, power indices can give insight into how useful a given country is in forming a majority coalition.

A few scholars (including Strand, 2003; and Ray and Kamal, 2019) have applied power indices to the arena of multilateral development finance, especially in the context of examining a particular MDB or comparing a handful of banks. However, to the best of my knowledge, this is the first attempt to apply them to all major MDBs to search for trends among particular types and generations of institutions.

#### *Principal agent theory: important caveats to any MDB analysis*

A number of recent important analyses have added depth and nuance to the field of applying principal-agent (PA) analysis to multilateral development banks. While a *prima facie* interpretation may suggest that MDBs solely reflect the interests of their most powerful core members, Lyne, Nielson, and Tierney (2009) challenge this assertion by showing that MDBs do not operate as agents of their core principals alone. To do so would in fact jeopardize continued collaboration. This is particularly the case where multiple countries are represented by a director from one core member of the group: in some cases, smaller members can request a re-assignment to another group if their designated director does not effectively represent their interests. Instead of coalescing around core members' interest, then, these authors' empirical work shows that MDB lending mirrors the aggregate political interests of *all* of their principals, when those interests are measured through a weighted average based on relative voting shares. This paper hopes to extend their frame of analysis by further exploring the relative decision-making power distributions.

Perhaps just as importantly, another line of research has focused on the importance of MDB staff bureaucracy as a driver of policy. Weaver (2007) explores both the World Bank's decisions as the result of a complex PA relationship with both member countries represented at the board of directors and the internal intellectual culture of Bank staff. Lyne, Nielson and Tierney (2009) observe that the Inter-American Development Bank (IDB) shows signs of "extreme

shirking” on the part of IDB staff and “fecklessness” on the part of the purported principal – the US government – in reigning in such behavior (47). Easterly (2002) offers an even more blistering critique of MDB bureaucracy, detailing the many layers and steps of decision-making involved in World Bank projects, and advocating for a radically new approach outside of the current MDB framework altogether to more efficiently meet the needs of borrowing countries and their citizens. Nonetheless, developing country governments continue to operate within the realm of MDBs, opting to create new institutions when older ones are deemed insufficient. Incorporating the roles of internal bank staff culture is well beyond the scope of this paper, which takes a broader look at a wide swath of MDBs. However, it is worth pointing out and remembering that there are myriad reasons why member countries may choose to branch out and form new RDBs and SRDBs, some of which are based on external relationships as mediated through boards of directors – the topic of this paper – and some of which are not.

Of course, nations are not monoliths. The extent to which a national government is represented in an MDB is not equivalent to the extent to which that country’s private banks, contractors, and affected communities are able to participate in decisions affecting them. This paper limits its scope to cooperation among member country *governments*, not among the *people* in those countries. The countries represented in these MDBs vary tremendously in access to participation in development planning for stakeholders and communities affected by development bank projects. Incorporating this additional layer of complexity is beyond the scope of the present analysis, though readers are encouraged to explore existing literature on this subject (including Fox and Brown, 1998; Nelson, 2000; Ray, Gallagher, and Sanborn, 2018; and many others).

Finally, it should be noted (as in Delikanli, Dimitrov, and Agolli 2018) that in many MDBs, measures seldom arrive at boards unless passage is all but certain. For example, the Eurasian Development Bank’s Executive Board is frequently considered to rule by consensus, though as their articles of agreement requires (and as Delikanli, Dimitrov, and Agolli themselves report), its legal structure allows decisions to be passed with a simple majority of votes on the executive board. This fact does not render MDB vote distributions meaningless, as evidenced by decades of advocacy by developing countries for quota reform within large MDBs and the establishment of new, more focused bodies with distinct governance patterns. Nonetheless, this aspect of MDB governance renders measurement of actual voting patterns less useful than researchers might hope. Thus, attempts at measuring intra-bank power distributions must be limited to voting allocation, the subject of the present analysis.

### **A Brief Explanation of Power Indices**

The power indices used in this analysis are similar in purpose and in results, but are both included here for the sake of transparency and completeness. This section provides a brief overview of these two indices’ measurement methods. The Penrose-Banzhaf index is the combination of separate efforts by two different scholars, while the Shapley-Shubik index is the result of collaborative research.



The Penrose-Banzhaf index is based on work by Penrose (1946) and Banzhaf (1965). The *Penrose* index examines all combinations of passing coalitions, and identifies the share of these coalitions in which a given country is a necessary member for its success. Of course, many coalitions can have more than one necessary member, so the *Penrose-Banzhaf* index divides the Penrose score by the total of all countries' Penrose indices, so that all countries' index scores will sum to 100% and each country's score can be interpreted as a share of total coalition-building power.

The Penrose-Banzhaf score may show a more – or less – equal distribution of power than the basic vote distribution, depending on the relative size of a country's vote share to other countries' vote shares. For example, in a three-member arrangement where members A, B, and C have 40%, 40%, and 20% of the vote share respectively, and passing measures require majority support, any successful proposal needs at least two members to support it. Any two of the three members represent over 50% of the total, and any third member is never necessary. Thus, the Penrose-Banzhaf index score for all three countries is 33.3%: a more equal distribution of power than the basic vote distribution.

However, if in that same three-member arrangement, the votes were distributed as 50%, 25%, and 25% to A, B, and C respectively, the result would be significantly different. In this case, no majority is possible without the participation of A. Of the three possible passing combinations (AB, AC, and ABC), A is necessary for all three combinations to retain their majority. B and C are necessary only once each (B is necessary in AB and C is necessary in AC but neither are necessary in ABC). Thus, A is necessary in three combinations and B and C are necessary in one combination each, resulting Penrose-Banzhaf index scores of 60%, 20%, and 20%, respectively.

The Shapley-Shubik index (based on Shapley-Shubik, 1954) relies on *permutations* rather than combinations. It envisions a scenario in which members decide to support a proposal one at a time, until the motion has enough support to pass a board vote. Essentially, it asks: if members line up randomly behind a proposal one at a time until it has enough support to pass, how often is a particular country the pivotal "yes" vote, putting it above the passing threshold?

In a three-party scenario with members A, B, and C, six possible permutations exist: ABC, ACB, BAC, BCA, CAB, and CBA. If, as in the first example above, A, B, and C have vote shares of 40%, 40%, and 20% respectively, the pivotal votes are the second member to vote in each scenario: B, C, A, C, A, B. In other words, each member is pivotal twice, and power is shared equally among all three members (as above).

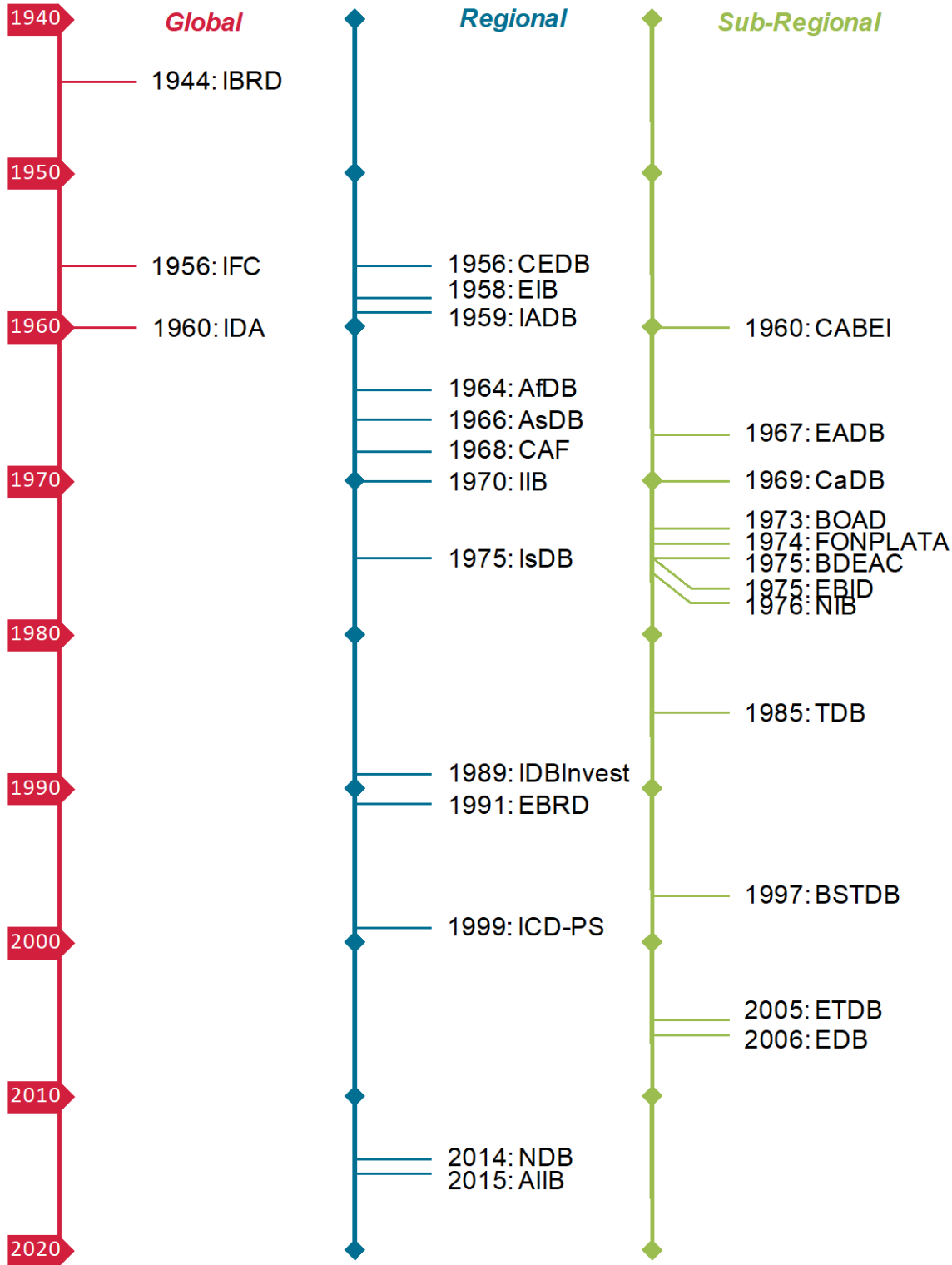
If, as in the second example above, members A, B, and C have vote shares of 50%, 25%, and 25% respectively, the pivotal votes are B, C, A, A, A, and A. Member A is the pivotal vote in two-thirds of the possible outcomes, while B and C each swing the vote one-sixth of the time. Thus, the members A, B, and C have Shapley-Shubik power index scores of 66.7%, 17.7%, and 17.7%, respectively: comparable but slightly more skewed than the Penrose-Banzhaf result.

Further complicating matters, MDBs frequently employ what Lyne, Nielson, and Tierney (2006) refer to as “nested agency” in which multiple countries are represented by a single voice at board meetings. Thus, this analysis takes into account these multiple levels of decision-making, where appropriate.

### **The Post-War 20<sup>th</sup> Century and the Development of RDBs and SRDBs**

Figure 1 traces the creation of global, regional, and sub-regional MDBs since 1940. Europe led the creation of RDBs with the establishment of the Council of Europe Development Bank (CEDB) and the European Investment Bank (EIB) in the late 1950s, in reaction to a perceived need for more intra-regional development finance to coordinate post-war rebuilding and alleviate burdens posed by new migration patterns from Eastern to Western Europe (CEDB, 2016). In the 1960s, newly-independent states in Africa and developmentalist states in Latin America led the creation of a wave of RDBs, which were then supplemented with SRDBs in the 1970s. Notably, as Griffith-Jones, Griffith-Jones, and Hertova (2008) point out, Asia did not follow this trend and is still characterized by a relative dearth of SRDBs. The 1980s and 1990s saw a shift toward MDBs with a special focus on private sector development, including IDB Invest (associated with the Inter-American Development Bank and formerly known as the Inter-American Investment Corporation), EBRD (European Bank for Reconstruction and Development), and the ICD (Islamic Corporation for the Development of the Private Sector). The 1990s also saw several new SRDBs with a particular focus on Eastern Europe and Western Asia, as Commonwealth of Independent States (CIS) governments developed regional alliances as newly independent states. Finally, since 2010 two major new MDBs have formed, the AIIB and NDB, reigniting discussion of the role of MDBs as an avenue for collaboration among governments that were left unsatisfied by the existing MDB landscape.

**FIGURE 1: Timeline of MDB creation**



## Globally, who controls multilateral development finance?

Table 1 shows an overview of MDBs worldwide. Table 2 explores how these MDBs divide the vote among member representatives on their boards of directors (who decide on lending operations). Globally, these MDBs represent \$1.98 trillion in assets, divided among global MDBs (\$695 billion), RDBs (\$1.2 trillion), and SRDBs (\$76 billion). This section examines general differences in the governing systems typical of these different levels of MDBs, in both the borrower representation that they incorporate into their governance and the level of equality or inequality among members on their boards.

When RDBs emerge, a frequently-mentioned justification is to allow greater voice for regional borrowing countries. The use of power indices allows a new perspective on the extent to which they have accomplished a greater total borrower representation on their boards. Table 3 shows the extent to which borrowers and creditors share MDB voting power, measured through members' basic voting share and through the two power indices described above. As Table 3 shows, the use of power indices can change the distribution of voices a great deal (as in the case of the CaDB and the Inter-American Development Bank – IDB) or nearly imperceptibly (as in the case of the African and Asian Development Banks – AfDB and ADB), and it can raise or lower the resulting borrower representation. This difference is related to the purpose of power indices, which measure the extent to which each member can be necessary in forming winning coalitions, based on its voting power relative to the voting power of other members. In a few cases, such as the Eastern and Southern African Trade and Development Bank (TDB, formerly known as the PTA Bank), small members can be important tie-breakers, allowing them to “punch above their weight” and making the distribution of power more equal than the simple distribution of votes. In far more cases, though, the borrower share is smaller when measured through power-weighted indices, indicating that members with low levels of votes have a mostly symbolic presence on MDB boards, and are very seldom necessary in majority coalition building.

**Table 1: Overview of MDBs at year-end 2017**

	Est.	Headquarters	Assets (mill. USD)	Members		
				Total	Governments <sup>1</sup>	Borrowers
<b>Global</b>			<b>695,193</b>			
IBRD	1944	Washington, DC, USA	405,898	189	189	85
IDA	1960	Washington, DC, USA	197,041	173	173	75
IFC	1956	Washington, DC, USA	92,254	184	184	158
<b>Regional <sup>2</sup></b>			<b>1,212,045</b>			
AiIB	2015	Beijing, CHN	18,973	68	68	68
AfDB	1964	Abidjan, CIV	46,392	80	80	54
ADB	1966	Mandaluyong, PHL	182,381	67	67	45
CAF	1968	Caracas, VEN	38,112	20	19	19
CEDB	1956	Paris, FRA	28,553	41	41	41
EBRD	1991	London, GBR	67,420	68	68	39
EIB	1958	Kirchberg, LUX	659,343	29	28	28
ICD	1999	Jedda, SAU	3,001	61	54	54
IDB	1959	Washington, DC, USA	126,240	48	48	26
IDB Invest	1989	Washington, DC, USA	2,185	45	45	26
IIB	1970	Moscow, RUS	1,200	9	9	9
IsDB	1975	Jeddah, SAU	28,021	57	57	57
NDB	2014	Fortaleza, BRA	10,224	5	5	5
<b>Sub-Regional <sup>2</sup></b>			<b>76,196</b>			
BDEAC	1975	Brazzaville, COG	768	11	9	6
BOAD	1973	Lomé, TGO	4,856	17	13	8
BSTDB	1997	Thessaloniki, GRC	12,000	11	11	11
CABEI	1960	Tegucigalpa, HND	9,721	13	13	9
CaDB	1969	St. Michael, BRB	1,641	24	29	19
EADB	1967	Kampala, UGA	394	13	4	4
EDB	2006	Almaty, KAZ	3,320	6	6	6
EBID	1975	Lomé, TGO	862	15	15	15
ETDB	2005	Istanbul, TUR	595	6	6	6
FONPLATA	1974	Santa Cruz, BOL	852	5	5	5
NIB	1976	Helsinki, FIN	35,922	8	8	8
TDB	1985	Bujumbura, BDI	5,265	36	23	21
<b>Total:</b>			<b>1,983,165</b>	<b>210</b>	<b>203</b>	<b>201</b>

Source: The most recent publicly-available financial statements, which are from 2017 in all cases but EADB (2016).

1. Governments are defined as countries or territories that are members. This excludes private investors and multilateral organizations that have membership, as in the case of several African SRDBs, where AfDB is a member. In the case of CaDB, it *includes* territories grouped together for membership purposes: Anguilla, the BVI, the Cayman Islands, Montserrat, and Turks and Caicos Islands.

2. An RDB is defined here as a development bank with a special focus on one group of countries, grouped by geographic region (as in the AiIB for example), income level (as in the NDB), or culture (as in the IsDB). An SRDB is defined here as a bank whose membership list is a subset of an existing RDB's membership.

**Table 2: MDB Board Vote Calculations**

MDB	Shared Dir's?	Types of Votes			Additional Comments
		Equal	Share	Other	
<b>Global</b>					
IBRD	Yes	X	X		Equal ("basic") votes sum to 5.5% of the total.
IDA	Yes	X	X		Varies each replenishment
IFC	Yes	X	X		Equal ("basic") votes sum to 5.5% of the total.
<b>Regional</b>					
AfIB	Yes <sup>1</sup>	X	X	X	Founding members have equally-shared founding votes. Equal ("basic") votes sum to 12% of the total.
AfDB	Yes	X	X		Equal votes sum to approximately 1% of the total.
ADB	Yes	X	X		Equal ("basic") votes equal 20% of the total.
CAF	No		X		Members can be "A/B" shareholders (which each have both "A" and "B" shares) or "C" shareholders. A, B, and C votes are allocated according to A, B, and C shares. Passing measures must receive 60% of "A" votes and a majority of B and C votes, giving "A/B" shareholders representation in both votes.
CEDB	No		X		
EBRD	No		X		The EIB and EU both have membership and voting rights, so country members have votes directly on the board as well as indirectly through their representation at the EIB and EU.
EIB	No		X		Votes are allocated by share, but passing proposals must have the support of at least 1/3 of directors as well as votes representing at least half of the bank's capital.
ICD	Yes		X		The IsDB has membership and voting rights, so member countries have direct and indirect representation. Several state-owned banks from member countries also have (slight) representation, giving those members additional voice.
IDB	Yes		X		Borrowers must represent a majority; the US must have at least 30%.
IDB Invest	Yes		X		
IIB	No		X		Vote shares are capital shares, but passing proposals must have the support of a majority of directors as well as directors representing ¾ of bank capital.
IsDB	Yes <sup>1</sup>	X	X		Equal votes sum to approximately 1% of the total.
NDB	No	X			Vote shares and capital shares are both equal.
<b>Sub-Regional</b>					
BDEAC	No		X		The AfDB and BEAC (Bank of Central African States) have membership and voting rights, so member countries have direct and indirect representation.
BOAD	No	X		X	The 8 borrowing shareholders equally split half of the vote. Another 25% represents the BCEAO (the Central Bank of Western African States), which in turn represents the same 8 countries. So they have direct as well as indirect representation. Non-borrowing members institutions share the remaining 25% of the vote.
BSTDB	No		X		

**Table 2, Continued: MDB Board Vote Calculations**

MDB	Shared Dir's?	Types of Votes			Additional Comments
		Equal	Share	Other	
CABEI	Yes		X		Only Argentina and Colombia share a director
CaDB		X	X		Equal votes sum to approximately 1% of the total. Five small territories (Anguilla, the British Virgin Isles, the Cayman Islands, Montserrat, and Turks and Caicos Islands) share one membership. Their director is shared with Belize, which has its own membership.
EADB	Yes <sup>2</sup>				The AfDB has membership and voting rights, so member countries have direct and indirect representation.
EDB	No		X		The Board is comprised of EDB managers from each department, plus a chair and two deputy chairs. Managers answer to the chair, who in turn answers to the Council (the EDB's supreme governing body). Given this unique arrangement, this paper follows Engen and Prizzon (2018), who measure EDB member voice through Council votes, which are allocated according to capital share.
EBID	Yes		X	X	EBID directors have equal votes, but only 3 members (Nigeria, Ghana, and Côte D'Ivoire) have their own director. The remaining 12 members are split into 3 groups with 2 directors each (giving an average of one-half director per member). The bank President also has a vote, and represents the Board of Governors, where countries vote according to capital share. Thus, countries have direct, semi-equal votes and indirect votes by capital share.
ETDB	No		X		All matters require 85% majorities to pass. The largest 3 members (Iran, Pakistan, and Turkey) each have over 30% of ETDB shares, and thus effective veto power. Initially, the ETDB only had these 3 members and so votes were equal.
FONPLATA	No	X			Votes are equal even though capital shares are not.
NIB	No	X			Votes are equal even though capital shares are not.
TDB	Yes		X		By default, decisions are made by a show of hands in which directors have equal voice. Upon request, votes may be taken. In those cases, directors vote according to the shares they represent, and members have several avenues of indirect as well as direct representation. The charter allows for 5 directors to represent the 20 regional state members, 1 director to represent the 2 non-regional state members (Belarus and China), 1 director to represent the 10 regional, institutional (non-national) members (including the AfDB), 1 director to represent all other members (including the TDB Directors Provident Fund and the TDB Staff Provident Fund), 2 independent directors (elected by <i>all other</i> directors), and the TDB President, representing the Board of Governors, which votes according to capital share.

<sup>1</sup> These MDBs' EDs can split their vote so the votes are not necessarily united.

<sup>2</sup> In the EADB, only institutional (non-national) members share an ED. That ED's votes may be split accordingly.

### *Are RDBs and SRDBs different?*

Globally, a small majority of multilateral development finance is controlled by countries that have access to those funds. When all MDBs are aggregated by their asset size, about 60% of MDB funds are controlled by borrowers. However, this varies dramatically across the scope of bank. Less than one-third of the capital represented by the World Bank Group is controlled by countries with borrowing privileges. In contrast, over three-fourths of RDB capital is controlled by borrowers, as is over 90% of SRDB capital. Many of the RDBs and SRDBs shown in Table 3 are controlled entirely by countries with borrowing privileges. It should be noted that Table 3 defines “borrowing” MDB member as those with *de jure* borrowing privileges as allowed in banks’ charters. A more nuanced approach examining members *de facto* borrowing histories follows below.

RDBs and SRDBs are also likely to prioritize a more equal distribution of voice on their boards. Several ways of accomplishing this goal exist. Some banks, like the NDB (at least in its current state) require all members to supply an equal level of equity for the bank. Others, like the Nordic Investment Bank (NIB), ensure that all bank members have equal voice on the board regardless of their level of equity. Still others have multi-stage board vote allocation process to temper the inequality intrinsic in varying levels of equity. For example, the AIIB has three kinds of votes: share votes, based on a member’s relative share of the bank’s equity; founding votes, which give founding members additional representation; and “basic” votes, which equally distribute 12 percent of the bank’s total vote share.



**TABLE 3: De Jure Total Borrower Share <sup>1</sup>**

	Vote Share	Power Indices		
		Penrose-Bahzhaf	Shapley-Shubik	Average
All MDBs, together <sup>2</sup>	62.9%	60.2%	61.6%	60.9%
<i>Global MDBs <sup>2</sup></i>	<i>29.3%</i>	<i>25.0%</i>	<i>27.4%</i>	<i>26.2%</i>
IBRD	33.1%	29.0%	32.1%	30.5%
IDA	15.7%	13.6%	14.2%	13.9%
IFC <sup>3</sup>	41.4%	32.2%	34.8%	33.5%
<i>Regional MDBs <sup>2</sup></i>	<i>80.4%</i>	<i>78.4%</i>	<i>79.2%</i>	<i>78.8%</i>
AIIB	100.0%	100.0%	100.0%	100.0%
AfDB	59.1%	59.0%	58.7%	58.8%
ADB	45.8%	42.6%	42.5%	42.6%
CAF	100.0%	100.0%	100.0%	100.0%
CEDB	100.0%	100.0%	100.0%	100.0%
EBRD	17.4%	16.5%	16.3%	16.4%
EIB	100.0%	100.0%	100.0%	100.0%
IDB	50.0%	36.4%	44.4%	40.4%
ICD	99.9%	99.8%	99.8%	99.8%
IDBI	50.3%	49.2%	48.6%	48.9%
IIB	100.0%	100.0%	100.0%	100.0%
IsDB	100.0%	100.0%	100.0%	100.0%
NDB	100.0%	100.0%	100.0%	100.0%
<i>Sub-Regional MDBs <sup>2</sup></i>	<i>92.2%</i>	<i>91.8%</i>	<i>91.9%</i>	<i>91.9%</i>
BDEAC	97.8%	100.0%	100.0%	100.0%
BOAD	75.2%	75.5%	76.3%	75.9%
BSTDB	100.0%	100.0%	100.0%	100.0%
CABEI	72.3%	72.6%	72.7%	72.6%
CaDB	89.3%	64.1%	66.0%	65.1%
EADB	90.6%	100.0%	100.0%	100.0%
EBID	100.0%	100.0%	100.0%	100.0%
EDB	100.0%	100.0%	100.0%	100.0%
ETDB	100.0%	100.0%	100.0%	100.0%
FONPLATA	100.0%	100.0%	100.0%	100.0%
NIB	100.0%	100.0%	100.0%	100.0%
TDB	65.3%	66.1%	66.2%	66.2%

## Notes:

1. "Borrower" here means member with borrowing privileges, not member with current operations.
2. Groups of MDBs are weighted averages, based on each MDB's total assets.
3. IFC borrowers are defined based on the location of projects, as the IFC does not offer sovereign loans and firms may not be based in the countries where a given project operates. BDEAC and BOAD do not publish portfolio distributions across member countries in their annual report. Instead, these figures reflect available data: the distribution of projects approved since 2011 and 2012, respectively.

Table 4 explores the extent to which RDBs and SRDBs have achieved more equal representation on their decision-making bodies. It shows the Gini coefficients of members' voices on each bank's board. It also aggregates these measure by type of bank, using bank size as weights. It shows that RDBs and SRDBs have largely succeeded in creating more equal governance spaces for multilateral development finance. Three MDBs (the NDB, NIB, and the Plata Basin Financial Development Fund – FONPLATA) all have perfectly equal representation from all members, resulting in Gini indices of zero.

One unusual example bears more discussion. At the Eurasian Development Bank (EDB), ordinary lending decisions are made by the executive board, comprised of the head of each of the bank's staff departments (legal, finance, project development, and the chief economist) as well as a chair and two co-chairs named by the council (the highest bank authority, comprised of government representatives from each member country). Each board member has one equal vote and majority support is necessary for proposals to be approved. Board members who are staff answer to the board chair, and the board chair and co-chairs all answer to the bank council, the bank's highest authority. Thus, this analysis follows Engen and Prizzon (2018) in relying on the council, rather than the board, for power distribution. Since Russia has the majority of the bank's shares, it also has the majority of votes on the council, giving Russia the potential to force through any measures it supports over the opposition of its peers. Thus, the EDB is reported as having a power-weighted Gini of 1.000, though this result is not strictly comparable to other MDBs.

**TABLE 4: Gini coefficients of member representation on board**

	Vote Share	Power Indices		
		Penrose-Bahzhaf	Shapley-Shubik	Average
All MDBs, together <sup>1</sup>	0.5615	0.7308	0.7238	0.7273
<i>Global MDBs</i> <sup>1</sup>	<i>0.7272</i>	<i>0.8204</i>	<i>0.8050</i>	<i>0.8127</i>
IBRD	0.7521	0.8340	0.8167	0.8254
IDA	0.6438	0.7583	0.7446	0.7514
IFC <sup>2</sup>	0.7961	0.8930	0.8826	0.8878
<i>Regional MDBs</i> <sup>1</sup>	<i>0.4887</i>	<i>0.7112</i>	<i>0.7086</i>	<i>0.7099</i>
AIIB	0.6425	0.7638	0.6843	0.7241
AfDB	0.6202	0.7370	0.7377	0.7373
ADB	0.6051	0.8270	0.8288	0.8279
CAF	0.5503	0.3822	0.4753	0.4288
CEDB	0.7289	0.7329	0.7465	0.7397
EBRD	0.7247	0.7269	0.7311	0.7290
EIB	0.3479	0.6752	0.6720	0.6736
IDB	0.7515	0.8392	0.8079	0.8236
ICD <sup>2</sup>	0.8543	0.8548	0.8461	0.8505
IDBI <sup>2</sup>	0.2857	0.2082	0.2027	0.2055
IIB	0.2718	0.4680	0.5238	0.4959
IsDB	0.8086	0.8316	0.8231	0.8274
NDB	0.0000	0.0000	0.0000	0.0000
<i>Sub-Regional MDBs</i> <sup>1</sup>	<i>0.2049</i>	<i>0.2238</i>	<i>0.2254</i>	<i>0.2246</i>
BDEAC	0.4756	0.4773	0.4849	0.4811
BOAD	0.2535	0.2566	0.2647	0.2607
BSTDB	0.4075	0.3610	0.3693	0.3652
CABEI	0.2535	0.2406	0.2439	0.2423
CaDB	0.5341	0.6149	0.5806	0.5978
EADB	0.7007	0.7692	0.7692	0.7692
EBID	0.3251	0.5792	0.5789	0.5791
EDB	0.7162	1.0000	1.0000	1.0000
ETDB	0.4315	0.5000	0.5000	0.5000
FONPLATA	0.0000	0.0000	0.0000	0.0000
NIB	0.0000	0.0000	0.0000	0.0000
TDB	0.4958	0.6437	0.6440	0.6439

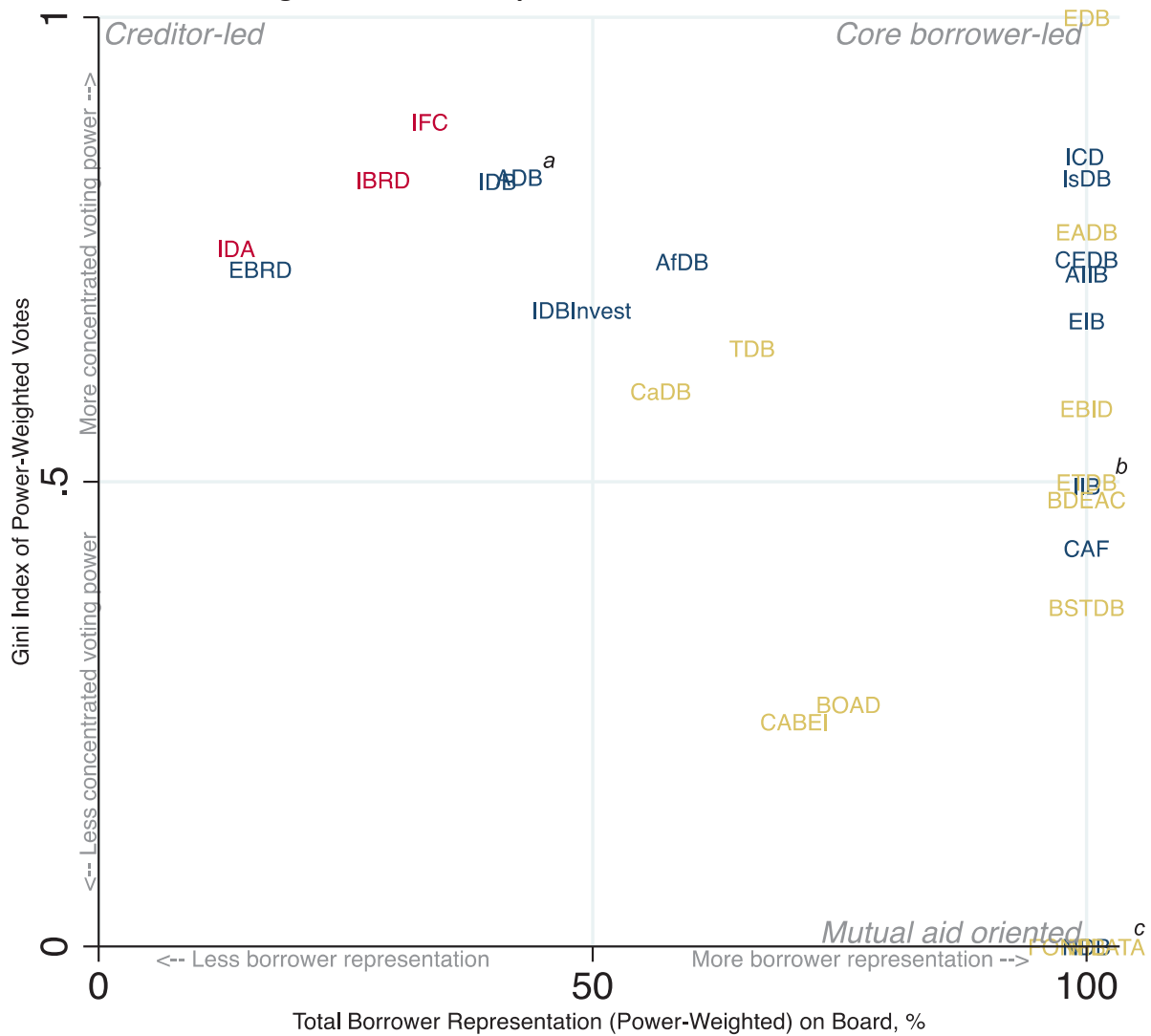
## Notes:

1. Groups of MDBs are weighted averages, based on each MDB's total assets.
2. Private-sector borrowers are defined based on the location of projects, as above.

## A typology of MDB governance

Combining the results of Tables 3 and 4 allows a comparison among the entire collection of MDBs studied here, on two axes of governance structure: total borrower representation and (in)equality of voice on MDB governing boards. Figure 2 shows these results, measured as the power index averages in Tables 3 and 4. MDBs are not evenly distributed across the possibilities, but rather tend to settle into clusters. These groupings allow MDBs to be considered in three main categories: creditor-led MDBs, MDBs led by core borrowers and mutual aid-oriented MDBs with horizontal, borrower-centered governance.

**FIGURE 2: De Jure MDB governance board power distribution**



Note: Global MDBs are shown in red, RDBs are shown in blue, and SRDBs are shown in tan. Overlapping institutions include (a) ADB and IDB; (b) ETDB and IIB; and (c) FONPLATA, NDB, and NIB.

In Figure 2's northwest quadrant are creditor-led MDBs. These banks have a relatively low level of total borrower representation (less than half). They also have a relatively unequal

distribution of member decision-making power, measured through Gini coefficients among member vote shares. Global MDBs (those associated with the World Bank Group) are located in this quadrant, as are the EBRD, ADB, and IDB. Interestingly, the ADB and IDB occupy nearly an identical spot. (The IDB has one member, the US, with much more power than its peers, while in the ADB decision-making power is concentrated in a few members: the US, Japan, and Australia.) This result coincides well with Bull and Bøås' (2003) finding that the ADB and IDB relate to global MDBs in similar ways and have similar internal balances between the influences of regional and non-regional members.

In the opposite, southeast quadrant of Figure 2 are MDBs that follow a “mutual aid” approach in which all board members represent borrowers and have a relatively even distribution of decision-making power. Three MDBs overlap at the extreme corner: the newcomer NDB as well as FONPLATA and the NIB. Other SRDBs, representing West Africa and Central America, have a moderated version of this model and appear in the middle of the quadrant. Several additional RDBs and SRDBs, including the Development Bank of Latin America (CAF), the Black Sea Trade and Development Bank (BSTDB), the Development Bank of the Central African States (BDEAC), the ECO Trade and Development Bank (ETDB), and the International Investment Bank (IIB) are shown in the southeast quadrant but well above the southeast corner. However, these banks do not necessarily have boards where the smallest borrowers are disadvantaged on governance boards. Instead, in some cases, these banks are mutual aid-oriented MDBs with additional financial support from non-borrowing members that have no real decision-making power. For example, the BDEAC has four non-borrowing members (France, Libya, Kuwait, and the AfDB) but these have so little vote share (a total of 2.3 percent) that they are never needed in majority coalitions and therefore have power indices of zero. Thus, the only “disenfranchised” members are non-borrowing members that participate to contribute external support to a borrower-led institution. Thus, it is shown as a mutual aid-oriented MDB, but to a less extreme degree than its peers such as CAF or the NDB.

In the northeast quadrant are MDBs that are borrower led, but with decision-making power that is concentrated in the hands of a small number of regional hegemon(s). As mentioned above, the EDB is an extreme case, in that Russia has the majority of voting power in the bank's highest decision-making body. Also in this quadrant are the Islamic Development Bank (IsDB) and its private-sector affiliate, the ICD (with Saudi Arabia as the strongest member of each) as well as the newcomer AIIB, in which China has a leading position. The East African Development Bank (EADB) appears here, though its situation is similar to the BDEAC, described above. Of the EADB's members, four are borrowing countries that control the bank (Kenya, Uganda, Tanzania, and Rwanda) and ten are non-borrowing, institutional members (public and private banks from across Europe and Africa) with such little vote share that they are never needed in majority coalitions and therefore have no power. This arrangement is the result of external support for a borrower-led bank.

These classifications of MDBs create a spectrum between Wade's extremes of *hegemonic inclusion* and *multilateral cooperation*. As Wade himself asserted, Figure 2 shows that Bretton-Woods and legacy RDB institutions often fall into a governance framework that prioritizes the

voice of creditors, shown in the northwest quadrant of Figure 2. On the opposite extreme are banks that prioritize equality in decision making, typifying his concept of multilateral cooperation. It is noteworthy that global MDBs are all creditor led, while RDBs are more likely to be led by core borrowers, and SRDBs constitute the majority of mutual aid-oriented MDBs.

### **Incorporating *de facto* Borrower Representation**

It is important to note Table 3 and Figure 2 define “borrowers” as countries with borrowing *privileges* at each bank, not members with current borrowing *operations*. This definition serves two purposes. First, it allows for the fact that newer banks such as the AIIB and NDB are in initial phases and their current portfolios can realistically be expected to change significantly as they expand operations. Second, many MDBs include very small members that borrow infrequently, but should still be considered as borrowing countries because they are permitted to borrow, even though their borrowing has not been continuous in the past.

However, using *de jure* lending privileges also introduces major drawbacks. First, it is a binary variable. It does not incorporate differences between members that borrow heavily and those that borrow in marginal amounts. Thus, for example, France and Canada are considered to be borrowers in the AIIB to the same extent as are China and India, though few observers expect these countries to use the resources equally.

Nor does it differentiate between lending privileges and practices. If an MDB’s assets are largely controlled by the same countries that do most of the borrowing from that bank, that arrangement may reasonably be interpreted as exhibiting greater borrower representation on the governing board than if that MDB’s assets are mostly controlled by countries that legally *may* borrow from that MDB – but in practice never *do*. In other words, countries that represent large shares of a region’s economy may be reasonably expected to control a larger share of that region’s RDB assets – and also borrow more from that RDB – than smaller regional members. But if the reverse is true – if an MDB’s assets are largely controlled by countries that rarely or never borrow from it, that bank can reasonably be considered to be “creditor-led.”

With this distinction in mind, Table 5 displays the *de facto* borrower share of governance at each MDB. These shares are shown as coefficients of correlation between each bank’s members’ vote shares and their shares of the lending portfolio. MDBs with high correlation coefficients are directed by the same members that borrow the most heavily from them. As was noted above, it should be reiterated that the newer MDBs – the AIIB and NDB – may exhibit changing correlations as their portfolios grow in the next few years.

**TABLE 5: De Facto Borrower Representation: Correlations between Members' Voting and Borrowing Shares**

	Vote Share	Power Indices		
		Penrose-Bahzhaf	Shapley-Shubik	Average
<b>All MDBs, together <sup>1</sup></b>	<b>0.4025</b>	<b>0.3958</b>	<b>0.4032</b>	<b>0.3995</b>
<b>Global MDBs <sup>1</sup></b>	<b>0.1256</b>	<b>0.1102</b>	<b>0.1335</b>	<b>0.1219</b>
IBRD	0.1587	0.1315	0.1603	0.1459
IDA	0.0506	0.0680	0.0721	0.0701
IFC <sup>2</sup>	0.1404	0.1069	0.1469	0.1269
<b>Regional MDBs <sup>1</sup></b>	<b>0.5754</b>	<b>0.5739</b>	<b>0.5726</b>	<b>0.5732</b>
AiIB	0.2828	0.2266	0.2408	0.2337
AfDB	0.4563	0.4135	0.4131	0.4133
ADB	0.2484	0.2591	0.2579	0.2585
CAF	0.8154	0.7590	0.7715	0.7653
CEDB	0.5331	0.5120	0.5159	0.5140
EBRD	-0.1174	-0.1190	-0.1203	-0.1196
EIB	0.8129	0.8470	0.8287	0.8379
IDB	0.2699	0.1185	0.1949	0.1567
ICD <sup>2,3</sup>	0.6173	0.6214	0.6181	0.6198
IDBI <sup>2</sup>	0.2857	0.2082	0.2027	0.2055
IIB	0.9155	0.8015	0.9182	0.8598
IsDB <sup>3</sup>	0.2722	0.2380	0.2484	0.2432
NDB <sup>4</sup>	--	--	--	--
<b>Sub-Regional MDBs <sup>1</sup></b>	<b>0.6853</b>	<b>0.6617</b>	<b>0.6611</b>	<b>0.6614</b>
BDEAC	0.7738	0.7682	0.7723	0.7703
BOAD <sup>3</sup>	0.9159	0.9160	0.9159	0.9160
BSTDB	0.6963	0.7343	0.7397	0.7370
CABEI	0.7608	0.7604	0.7605	0.7604
CaDB	0.0640	0.2064	0.2029	0.2047
EADB	0.7169	0.5771	0.5771	0.5771
EBID	0.1996	0.0449	0.0505	0.0477
EDB	0.9045	0.6279	0.6279	0.6279
ETDB	0.9695	0.9727	0.9727	0.9727
FONPLATA <sup>4</sup>	--	--	--	--
NIB <sup>4</sup>	--	--	--	--
TDB	0.3830	0.2839	0.2660	0.2750

Notes:

1. Groups of MDBs are weighted averages, based on each MDB's total assets.
2. Private-sector borrowers are defined based on the location of projects, as above.
3. AiIB, EIB, ICD and IsDB borrowers are shown cumulatively since inception. BOAD borrowers are shown as share of all approvals from 2012-2015.
4. NDB, FONPLATA, and NIB have perfectly-equal voting distributions, and thus undefined correlations.

The resulting typology of MDBs is shown in Figure 3. The y axis is identical to that of Figure 2, so MDBs appear at the same height in both figures. However, in Figure 3 the x axis has been changed to show *de facto* borrower representation on MDB boards, measured as the

correlation between MDB members' shares of the lending portfolio and governing voice. (As above, these are measured as the average of the Penrose-Banzhaf and Shapley-Shubik measures of each variable.)

Several MDBs appear to have shifted toward the left in Figure 3, as the *de jure* borrower representation is replaced by lower levels of *de facto* borrower representation. The only MDB to shift rightward is the West African Development Bank (BOAD), which has several non-regional, non-borrowing members that have very little voice and no borrowing, so its *de facto* borrower representation is greater than its *de jure* borrower representation. Its borrowing members borrow fairly equal amounts, with no member representing less than five percent or more than 21 percent of the lending portfolio. Thus, BOAD's *de facto* borrower representation is actually greater than the *de jure* borrower representation.

**FIGURE 3: De Facto MDB Governance Board Power Distribution**



Notes: Global MDBs are shown in red, RDBs are shown in blue, and SRDBs are shown in tan. Overlapping MDBs include (a) IBRD and IDB and IDB and (b) ADB and IsDB. FONPLATA, NDB, and NIB do not appear because their vote distribution is perfectly equal, leading to undefined correlations. These MDBs are literally “off the chart” on the extreme of mutual aid orientation.



Similar to Figure 2, the northwest corner is populated by banks following a “creditor-led” model. These MDBs have relatively unequal distributions of voice on their governing bodies, and do not lend more to countries with more representation. As in the *de jure* analysis, all global MDBs are found in this quadrant. Here, however, they are joined by MDBs that appear to be core-borrower-led in Figure 2, including the AfDB and smaller SRDBs such as CaDB, the ECOWAS Bank for Investment and Development (EBID) and TDB. Notably, the EBRD is unique in that it has a *negative* correlation between members’ share of governance and their share of the lending portfolio. In other words, the EBRD largely has two separate groups of members: non-borrowers, with relatively high levels of voice, and borrowers, with relatively small levels of voice.

The northeast corner, dedicated to MDBs with governance centered around a small number of regional leaders, is more sparsely populated than in Figure 2, as several MDBs have shifted to the left to reflect less *de facto* than *de jure* borrower representation. The banks that remain in this quadrant have one, or a few, powerful member(s) and mostly lend to those same members. These include the EDB, ICD, EADB, and EIB. As mentioned above, the EADB is an unusual case, as it has significant support from non-borrowing institutional members such as the AfDB.

The southeast quadrant is once again labeled “mutual aid,” and has most of the same members as in Figure 2. However, FONPLATA, NDB, and NIB have disappeared from this quadrant altogether. Their disappearance is due to the fact that their correlation coefficients are undefined, because they have perfectly equal voting distributions. In other words, these three MDBs are quite literally “off the chart” in the extent to which they are organized around a logic of mutual aid.

Overall, then, the *de facto* typology classifies MDBs based on the level of cooperation or hegemony among member countries. The spectrum between Wade’s *hegemonic inclusion* and *multilateral cooperation* may be visualized as a curve that begins in the northwest corner of Figure 3 with creditor-led MDBs, continues clockwise through core-borrower-led MDBs and ends with mutual aid oriented MDBs. On one extreme are MDBs like the EBRD (with a negative borrower-governance correlation) or the IFC (with the highest voting inequality of all creditor-led MDBs). On the other extreme are highly-equal, borrower-led MDBs like BOAD and CABEI, with FONPLATA, NDB, and NIB representing special extreme examples.

It is noteworthy that several MDBs overlap in Figure 3. For example, the two largest MDBs by asset size that are active in Latin America and the Caribbean – the International Bank for Reconstruction and Development (IBRD) and the IDB – are nearly indistinguishable in *de facto* terms. So too are the two largest RDBs active in Asia: the ADB and IsDB. Thus, while the IDB distinguishes itself from the IBRD in its regional focus on integrated development finance in Latin America the Caribbean, it does not represent a significant innovation in its governance structure. Similarly, the creation of the IsDB represented a significant innovation in method of finance – Islamic multilateral finance – but not in its basic governance structure.

## How Newcomers AIIB and NDB fit into the Landscape

Though they arose at nearly the same time, the AIIB and NDB have very different governance structures. On a *de jure* basis, AIIB governance is similar to that of other RDBs that are centered around a small number of regional leaders, such as the IsDB (in which Saudi Arabia has a dominant position) and the EIB (in which leadership is centered around a handful of western European nations). This borrower-centered classification for the AIIB may seem surprising given the participation of European and other non-regional members in the AIIB. However, these non-regional AIIB members are permitted to borrow, though by the end of 2017 only one extra-regional member (Egypt) had done so. Given the benefit to banks' financial soundness and credit rating that can come from lending to extra-regional members with hard currencies, it would be unwise to assume that the AIIB will never lend to higher-income, non-Asian members.

On a *de facto* basis, however, the AIIB appears to be creditor-led. It is largely led by China, which had borrowed very little from the bank by year-end 2017 (just six percent of the cumulative total) but holds 26.6% of the vote and has an average power index of 44.8%, indicating that it holds nearly half of all of the AIIB's coalition-building power. Most of the AIIB's lending by year-end 2017 went to India, Azerbaijan, Oman, and Pakistan, which together have less than ten percent of board power. Of course, the AIIB's position may change as its long-term lending portfolio expands. If it lends more to China in the coming years, its position will shift from being creditor-led to core-borrower-led. Alternatively, it may remain effectively creditor-led, with China representing the lion's share of governance voice but lending mostly focused outward toward other Asian countries.

The NDB, in contrast, has a pure "mutual aid" model, in which the board is comprised entirely of borrowers and all members have an equal voice on the board. As with the AIIB, the NDB's character may change as it matures. The NDB charter allows for additional countries to join; when and if new members go through this process, the voting share may not stay equal among members. The charter requires the five founding countries to collectively have at least 55% of the bank's capital share (and thus vote share). Thus, if these five members are joined by at least five *other* members, voting power will no longer be equally distributed. Nonetheless, at year-end 2017, the NDB qualifies as a purely mutual aid oriented MDB, together with the NIB and FONPLATA.

As of this writing, the AIIB and NDB occupy opposite ends of the spectrum mentioned above, from hegemony to cooperation. While the AIIB is organized around a unifying principle of expanding development finance for infrastructure across Asia, the NDB has no such single driving purpose other than increasing the voice and development finance available to large emerging-market countries. Thus, there is no one simple way to evaluate their addition to the global landscape of multilateral development finance. Nonetheless, it is possible to evaluate the extent to which the creation of the AIIB and NDB have expanded the control of their members over global development finance, which Tables 5 and 6 attempt to do.

Table 6 explores the extent to which the AIIB and NDB have expanded developing-country voices in multilateral development banking. It shows the vote distribution and the distribution of power indices among countries, with a particular focus on different levels of country income and on the BRICS countries specifically. Overall, creation of these banks raised the BRICS countries' representation in global MDBs by 0.8 percentage points, from 6.5 to 7.3 percent of the total vote. Their collective power-weighted share of MDB governance rose by slightly more: 0.9 or 1.1 percent of the global total, depending on the index used.

**TABLE 6: National representation in global multilateral development banking, with and without the AIIB and NDB**

	Vote Share		Power Indices			
	w/o AIIB, NDB	Actual	Penrose-Banzhaf		Shapley-Shubik	
			w/o AIIB, NDB	Actual	w/o AIIB, NDB	Actual
<i>High income countries:</i>	74.6%	73.9%	78.3%	77.4%	77.2%	76.4%
USA	9.1%	8.9%	11.6%	11.4%	10.2%	10.1%
Germany	6.1%	6.0%	8.3%	8.2%	8.1%	8.1%
France	5.7%	5.6%	7.6%	7.6%	7.4%	7.4%
UK	5.6%	5.5%	7.3%	7.2%	7.1%	7.0%
Italy	5.2%	5.1%	7.3%	7.2%	7.1%	7.0%
Japan	4.5%	4.5%	4.5%	4.4%	4.6%	4.6%
50 other countries	38.4%	38.1%	31.7%	31.4%	32.6%	32.4%
<i>Upper middle income countries:</i>	15.0%	15.6%	12.3%	13.1%	13.0%	13.6%
<b>China</b>	<b>1.9%</b>	<b>2.2%</b>	<b>1.7%</b>	<b>2.3%</b>	<b>1.8%</b>	<b>2.2%</b>
<b>Brazil</b>	<b>1.5%</b>	<b>1.6%</b>	<b>1.8%</b>	<b>1.9%</b>	<b>2.0%</b>	<b>2.0%</b>
<b>Russia</b>	<b>1.2%</b>	<b>1.3%</b>	<b>1.2%</b>	<b>1.3%</b>	<b>1.3%</b>	<b>1.4%</b>
<b>South Africa</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.4%</b>
51 other countries	10.1%	10.0%	7.2%	7.2%	7.7%	7.7%
<i>Lower middle income countries:</i>	8.3%	8.4%	7.6%	7.7%	7.9%	8.0%
<b>India</b>	<b>1.6%</b>	<b>1.8%</b>	<b>2.1%</b>	<b>2.2%</b>	<b>2.1%</b>	<b>2.3%</b>
46 other countries	6.7%	6.7%	5.4%	5.4%	5.7%	5.7%
<i>Low income countries:</i>	2.1%	2.1%	1.8%	1.8%	1.9%	1.9%
33 countries	2.1%	2.1%	1.8%	1.8%	1.9%	1.9%
<b>BRICS countries overall</b>	<b>6.5%</b>	<b>7.3%</b>	<b>7.1%</b>	<b>8.2%</b>	<b>7.4%</b>	<b>8.3%</b>

Source: Author's calculations.

### *Displacement within the BRICS Countries: Pocketed Displacement?*

As Table 6 shows, from a global perspective, the creation of the AIIB and NDB did not dramatically tilt the control of multilateral development finance toward BRICS countries. However, as Table 7 shows, from the perspective of the BRICS countries themselves, these new MDBs significantly increased the resources within their influence. For each country, Table 7

calculates the amount of MDB assets under their influence, based on their share of MDB governing authority, with and without the AIIB and NDB. Each of the five countries has influence over approximately \$2 billion through its participation at the NDB, as well as their varying levels of participation in the AIIB. Together, these new RDBs increase total BRICS control of MDB assets by between 13 and 16 percent, depending on which power index is used.

The BRICS country with the greatest increase is South Africa, rather than China, despite China’s dominant position at the AIIB. This difference is due to the fact that South Africa has much less representation at other MDBs than any other BRICS country, so these new sources of finance represent a larger increase of its share. Brazil is the BRICS country that gains the least through these new RDBs, as it has more representation at traditional MDBs but unlike China, India, or Russia, was not a member of the AIIB at year-end 2017. Brazil is, however, a prospective AIIB member; if and when it joins, that move may have a significant impact on the MDB assets under its influence.

**TABLE 7: AIIB and NDB impact on multilateral development finance controlled by BRICS countries, in billions of USD and percent increase**

	Brazil	China	India	Russia	South Africa	Total
<i>Vote Share:</i>						
w/o AIIB, NDB	\$30.2	\$36.4	\$31.4	\$23.0	\$6.7	\$127.7
Actual	\$32.3	\$43.5	\$34.9	\$26.2	\$8.7	\$145.6
Increase	6.8%	19.5%	11.1%	13.9%	30.7%	14.0%
<i>Penrose-Banzhaf</i>						
w/o AIIB, NDB	\$35.6	\$33.7	\$41.4	\$23.7	\$5.4	\$139.7
Actual	\$37.6	\$46.1	\$44.1	\$26.4	\$7.4	\$161.7
Increase	5.7%	36.9%	6.6%	11.3%	38.3%	15.7%
<i>Shapley-Shubik</i>						
w/o AIIB, NDB	\$38.9	\$34.6	\$42.3	\$24.6	\$5.6	\$145.9
Actual	\$40.9	\$43.2	\$45.7	\$27.7	\$7.6	\$165.1
Increase	5.3%	25.0%	8.0%	12.5%	36.8%	13.2%

Source: Author’s calculations

This scenario – in which new institutions expand the options for some countries without dramatically altering the global landscape – echoes what Kring (2019) calls “pocketed displacement.” Kring examines the rise of regional monetary arrangements and concludes that while they have not dramatically altered the global landscape of liquidity arrangements, they have brought about a displacement in certain geographic “pockets” of countries with little influence over or access to IMF resources. A similar phenomenon appears to be taking place in the arena of MDBs: some developing countries (and especially South Africa) stand to have the resources at their disposal be expanded significantly, though the global paradigm of multilateral development finance has not been much altered.

## Conclusion and Areas for Future Research

This paper has explored the distribution of vote share and coalition-building power among MDB members at the global, regional, and sub-regional levels. It finds that RDBs and SRDBs have largely succeeded in providing borrowers greater voice and a more equal decision-making platform than their global peers. While global MDBs are universally led by creditors, this does not mean that RDBs and SRDBs are all oriented around mutual aid. Instead, these MDBs can be creditor-led, core borrower-led, or mutual-aid oriented, depending on their organizing purposes. For example, the EBRD is unique in that it has a *negative* correlation between members' share of votes and their share of the lending portfolio, reflecting the fact that this RDB is essentially run *by* one group of countries (in Western Europe) in order to finance projects in another group of countries (in Central and Eastern Europe). In contrast, the EIB is run exclusively by borrowers, but Russia's outsized influence makes this RDB centered around one regional leader in particular. Three SRDBs (NDB, NIB, and FONPLATA) all have perfectly equal vote distributions; they are governed so equally as to make their correlations incalculable.

The typology developed here is essentially a foundation upon which future research can be built. For example, this framework can be used in econometric analysis to detect the extent to which the three different types of MDB differ in terms of project selection or the application of environmental and social safeguards. It may be the case that green lending is more common among mutual aid oriented MDBs, suggesting that this new area of lending is demand-driven, or perhaps it is more common among creditor-led MDBs, suggesting that the relatively high environmental safeguards that civil society in their core countries has dampened the appetite for "brown" lending there, leading borrowing countries to pursue those projects elsewhere.

Another potential avenue of future research involves measuring differences in outcomes across these three types of MDBs. "Outcomes" here may apply to the development outcomes of each project, as measured in internal evaluation, or financial outcomes, as measured by repayment rates, credit ratings, and the ability to lend counter-cyclically during times of financial crisis.

Finally, it may be a useful framework for analyzing the likely outcomes of proposed MDB quota reforms. The power indices calculated here may be useful for examining possible changes in vote distribution. The typology categories may enable researchers to determine whether a given proposal will shift an MDB toward a mutual-aid orientation or simply toward greater power for regional leaders.

## APPENDIX A: Individual MDB Governance Overviews

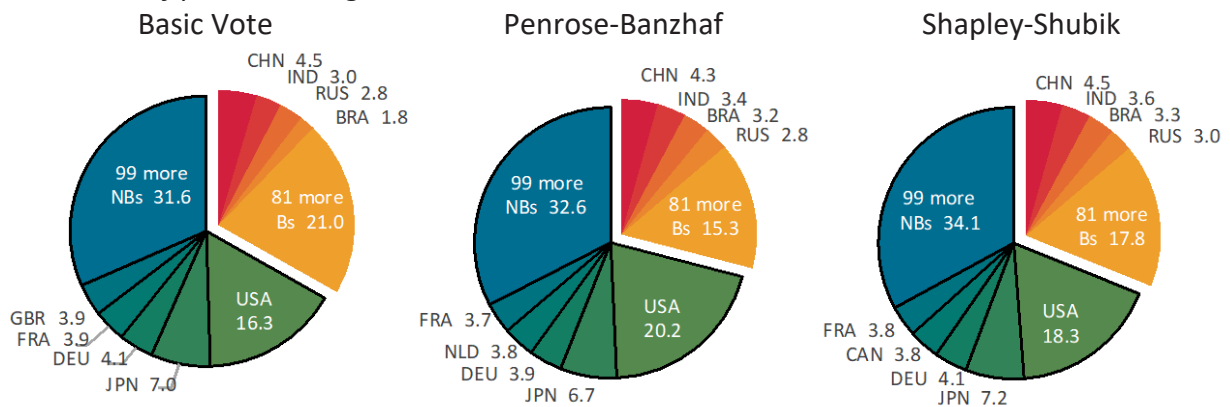
This section presents a brief overview of the governance of each MDB, including the circumstances surrounding its founding and the governance approach it has chosen. In order to facilitate an understanding of how the existing landscape impacted the creation and design of each new MDB, they are presented here in chronological order, based on their year of founding.

### IBRD (International Bank for Reconstruction and Development), 1944

*Overall:* the IBRD can be considered creditor-led with a relatively high level of inequality among members' voting power.

*Political circumstances surrounding the creation of the bank:* The IBRD was formed amid a need to rebuild Europe after World War 2. Over the decades since its creation, its lending has shifted to developing countries, which have acquired greater representation through several rounds of reforms.

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	33.2%	29.1%	32.2%	30.5%
Correlation coefficient, vote and portfolio shares	0.1587	0.1315	0.1603	0.1459
Gini, vote shares	0.7521	0.8340	0.8167	0.8253

The IBRD is creditor-led, with particular power concentrated in the US, which has effective veto power over major decisions. Executive directors can represent several countries each, and the articles of agreement explicitly prohibits them from splitting their group in cases where the countries they represent disagree. This arrangement amplifies the voices of countries that have

significant control over the directors they share with other countries. For example, a simple majority (for ordinary decisions) can be accomplished with the eight strongest executive directors, representing:

- The **US**
- **Japan**
- Central and Eastern Europe (**Belgium** and **Turkey** form a majority of this ED's votes)
- Spain and Latin America (**Spain** and **Mexico** comprise a majority of this ED's votes)
- **China**
- **Germany**
- The Netherlands and Southern Europe (the **Netherlands** and the **Ukraine** form the majority of this ED's votes),
- East Asia and the Pacific (**Australia** and **South Korea** form the majority of this ED's votes).
- **France**

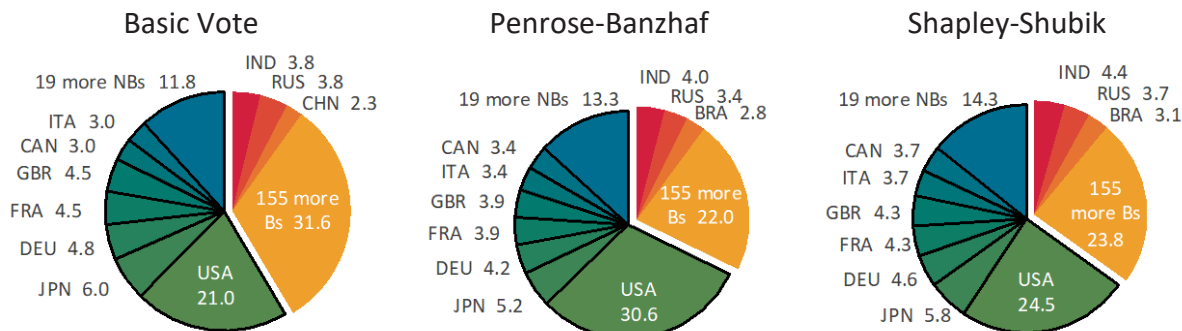
Thus, the agreement of these 13 members (the US, Japan, Belgium, Turkey, Spain, Mexico, China, Germany, the Netherlands, the Ukraine, Australia, South Korea, and France), out of a total of 189 IBRD members, can have the effect of a simple majority of the board of directors.

### IFC (International Finance Corporation), 1956

*Overall:* The IFC is creditor-led with a high level of inequality in members' voting power.

*Political circumstances surrounding the IFC's creation:* This bank's creation was proposed by the Gray Report (Gray, 1950) to U.S. President Truman and reinforced by the subsequent publication of the U.S. International Development Advisory Board (1951) report *Partners in Progress*. Both reports heavily emphasize the importance of development finance as part of a multi-faceted strategy to counter Soviet influence during the Cold War and in light of the intensifying Korean conflict. Both reports recommend the creation of the IFC and IDA. However, both give primacy to the importance of private sector lending, and as such, the IFC was established first.

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

### *Basic governance statistics:*

	Basic vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	41.4%	32.1%	34.7%	33.5%
C.C., vote and port. shares	0.1404	0.1069	0.1469	0.1269
Gini, vote shares	0.7961	0.8930	0.8826	0.8878

The IFC can be considered creditor-led, with a lower correlation between vote share and borrowing than the IBRD, though borrowers have a greater total representation here. The US has effective veto power over major decisions, and has a greater share of voter in the IDA than it has the IBRD. Most decisions require a simple majority, which can be accomplished with the top 8 executive directors, representing:

- **The US**
- **Japan**
- **Germany**
- Central and Eastern Europe (the majority of this ED's votes are represented by **Austria** and **Belarus**)
- South Asia (**India** alone forms the majority of this ED's votes)
- **France**
- **The UK**
- Spain and Latin America (**Spain** and **Mexico** form the majority of this ED's votes)

Thus, the agreement of these ten countries (the US, Japan, Germany, Austria, Belarus, India, France, the UK, Spain, and Mexico), out of a total of 184 IFC members, is enough to form a simple majority.

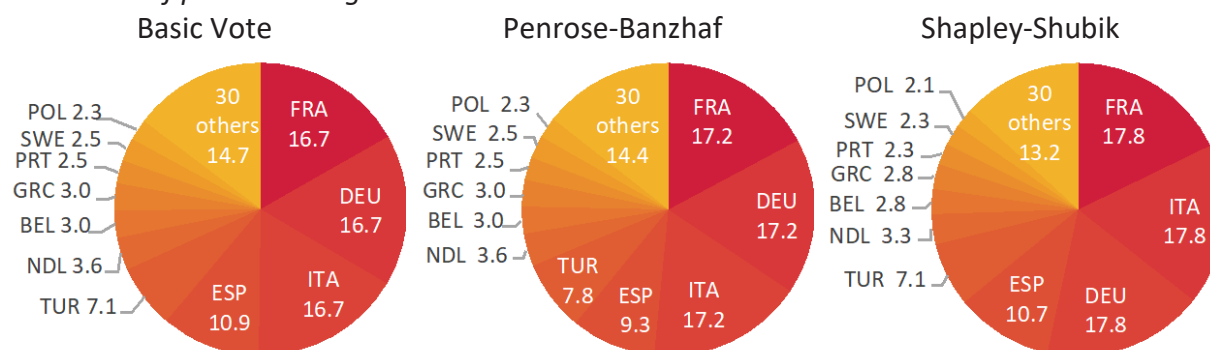
### **CEDB (Council of Europe Development Bank), 1956**

*Overall:* The CEDB is borrower-led but a few central members (France, Germany, and Italy) together comprise a majority vote. Thus, the CEDB has a core borrower-led model.

*Political circumstances surrounding the bank's creation:* The bank was created amid concerns regarding migration, and was initially designed to improve living standards in migrants' countries of origin and assist receiving countries with infrastructure necessary for hosting new migrants (CEDB, 2016).



*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.5331	0.5120	0.5159	0.5140
Gini, vote shares	0.7289	0.7329	0.7465	0.7397

Most CEDB decisions require a simple majority of shares. The three most powerful members – France, Germany, and Italy – jointly have 50.2% of shares. Thus, these three together form a majority and can either pass any proposal they agree on or block any proposal they all disagree with.

The fact that countries do not share members of the Administrative Council means the resulting possibilities (2.2 trillion combinations and  $9.1 \times 10^{49}$  permutations) are too large for existing power index calculators. Thus, these calculations are the result of an estimate using a sample of 2.2 million combinations for Penrose-Banzhaf (resulting in 95% confidence intervals ranging from one to 64 thousandths of a percentage point) and three million for Shapley-Shubik, (resulting in 95% confidence intervals ranging from one to 82 thousandths of a percentage point).

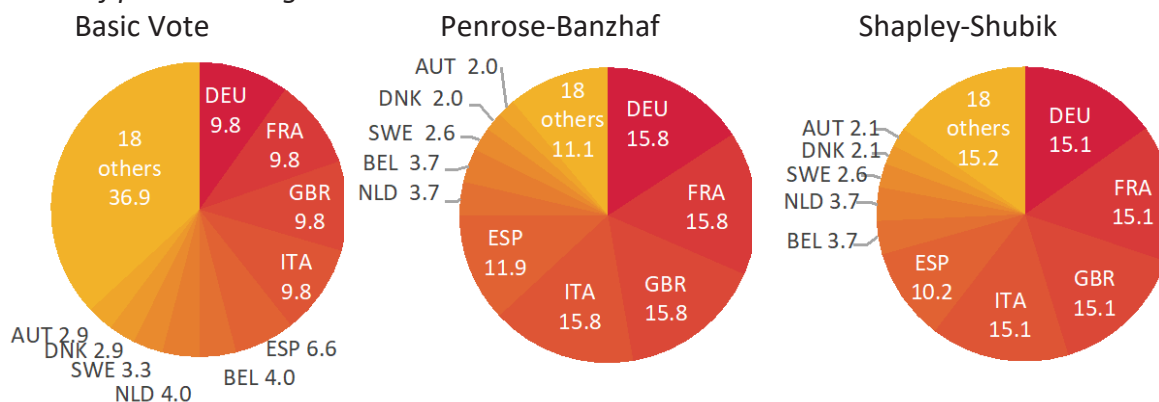
**EIB (European Investment Bank), 1958**

*Overall:* The EIB is borrower-led but has a two-part voting requirement that adds more weight to the largest members. Specifically, four countries together have an effective veto over ordinary lending decisions: Germany, France, Italy, and the UK. Thus, the EIB is a core borrower-led bank.

*Political circumstances surrounding the bank’s establishment:* According to Bussière et al (2008), after the first post-war years, the EIB was formed to coordinate regional industrial re-development plans, encourage greater investment in less-developed Eastern European countries that might struggle to attract it through private markets alone, and raise living standards in those countries sufficiently to deter westward migration. Thus, three types of

loans were originally permitted: development in the least advantaged regions, infrastructure, and investment in private industry that would not attract financing from other lenders.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.8129	0.8470	0.8287	0.8379
Gini, vote shares	0.3479	0.6752	0.6720	0.6736

Members of the EIB do not share directors. Thus, the EIB’s 29 members have 29 separate votes. These 29 members include 28 countries and the European Commission (EC), which in turn is controlled equally by the same 28 countries. Thus, the European Commission vote is essentially an additional 1/28 vote for each of the 28 member countries.

To pass, a proposal must receive support from at least one-third of the directors (in other words, at least 10 members) and *also* receive the support of members representing at least half of the bank’s subscribed capital. The EC does not have its own capital in the EIB, so while the EC representative’s presence counts toward the first requirement, it does not count toward the second.

The “basic vote” chart here represents a simple average of the members’ power in the two stages of voting: 1/28 and their share of the subscribed capital. However, as the power-weighted index charts show, the process of voting is more complicated. A coalition of the 10 most powerful countries is sufficient to represent a majority of subscribed capital. However, if only the *least* powerful countries support a measure, it will take 25 out of the total 28 members to form a majority of the bank’s subscribed capital. In other words, the four most powerful countries (France, Germany, Italy, and the UK) together form an effective veto-wielding bloc.

The EIB is unusual among the MDBs profiled here in that it lends outside of its membership. As of year-end 2017, 11.1% of the EIB's portfolio was outside of its membership. The largest non-member borrower is Turkey, which represented 3.2% of the EIB's lending portfolio.

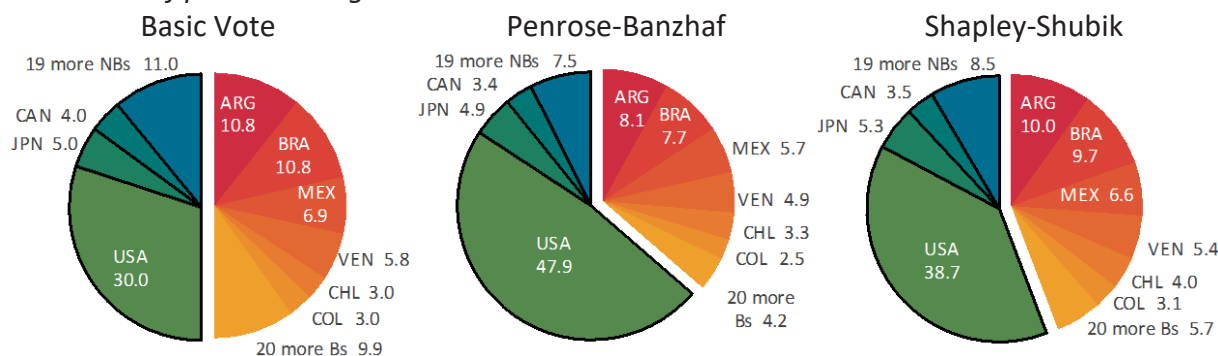
It should be noted that the calculations here are estimates. The two-stage voting process makes the EIB too complex for most power index calculator applications. Furthermore, the size of the board and the fact that members do not share directors creates 268 million possible combinations (for the Penrose-Banzhaf calculations) and  $5.2 \times 10^{29}$  permutations (for the Shapley-Shubik calculations). The calculations here represent a random sample of 2.68 million outcomes for the Penrose-Banzhaf calculations (resulting in 95% confidence intervals of between one and six hundredths of a percentage point) and 2.6 million outcomes for the Shapley-Shubik calculations (resulting in 95% confidence intervals between two and eight hundredths of a percentage point).

### IDB (Inter-American Development Bank), 1959

*Overall:* The IDB governance power is highly concentrated in the hands of one creditor in particular: the US. However, *overall*, it is only moderately creditor-led.

*Political circumstances surrounding the bank's establishment:* The IDB was first proposed at the turn of the 20<sup>th</sup> century and negotiations continued through the OAS. Nonetheless, the proposal languished until the Cold War. According to Dell (1972), at this point Latin American governments gained a new appreciation for the proposal as a method of reducing reliance on European banks, and the US approached it as a way to increase its own influence in the region.

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	50.0%	36.4%	44.4%	40.4%
C.C., vote and port. shares	0.2699	0.1185	0.1949	0.1567
Gini, vote shares	0.7515	0.8392	0.8079	0.8236

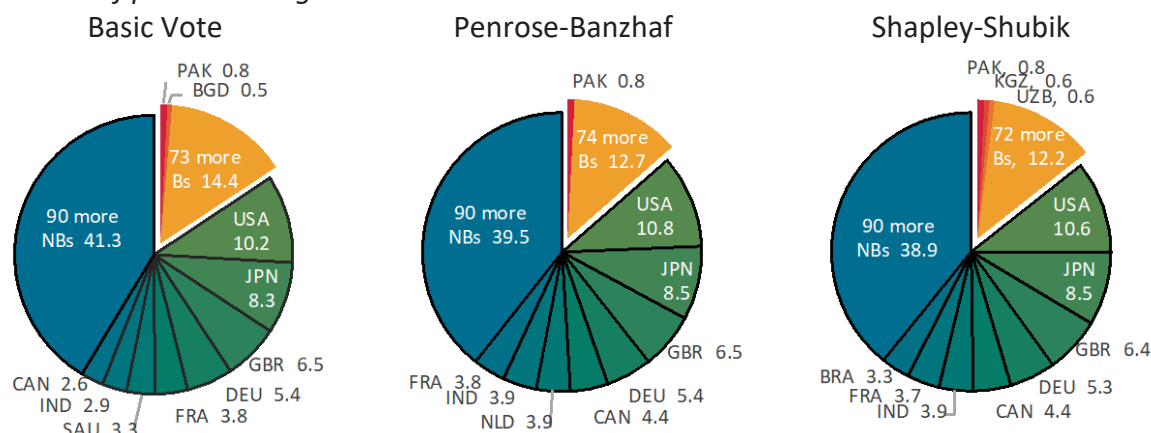
By design, the IDB board gives just over half of the total vote share to borrowers. However, when measured through power indices, creditors hold a clear majority. The US has an effective veto over major board decisions, which require a 75% majority. A simple majority can be accomplished with the top three executive directors, who represent a mix of borrowers and creditors: the **US, Argentina** (also representing Haiti but Argentina is a majority of this ED's votes), and **Brazil** (also representing Suriname, but Brazil represents the majority of this ED's votes).

**IDA (International Development Association), 1960**

*Overall:* The IDA is overwhelmingly creditor-led, with a fairly high degree of inequality in members' voting power. However, it is not dominated by any one member in particular.

*Political circumstances surrounding the creation of the bank:* As mentioned above, the IDA and IFC arose from similar processes in the context of the Cold War, although the IFC was established first.

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

### *Basic governance statistics:*

	Basic vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	15.7%	13.6%	14.2%	13.9%
C.C., vote and port. shares	0.0506	0.0680	0.0721	0.0701
Gini, vote shares	0.6438	0.75827	0.74458	0.7514

IDA is the most creditor-led of all World Bank Group institutions. The most powerful borrower is Pakistan, with less than 1% of the vote. However, unlike the IBRD and IFC, the US does not have a particularly large share of voting power compared to other creditors. Ordinary lending decisions require a simple majority, which takes at least nine executive directors, representing:

- **The US**
- **Japan**
- **The UK**
- Northern Europe (**Sweden** and **Norway** comprise the majority of this ED's votes)
- **Germany**
- The Netherlands and Eastern Europe (the **Netherlands**, the **Ukraine**, and **Romania** make up the majority of this ED's votes)
- Belgium and Central Europe (**Belgium**, **Austria**, and **Hungary** form the majority of this ED's votes)
- Switzerland, Eastern Europe, and Western Asia (**Switzerland** and **Poland** make up the majority of this ED's votes)

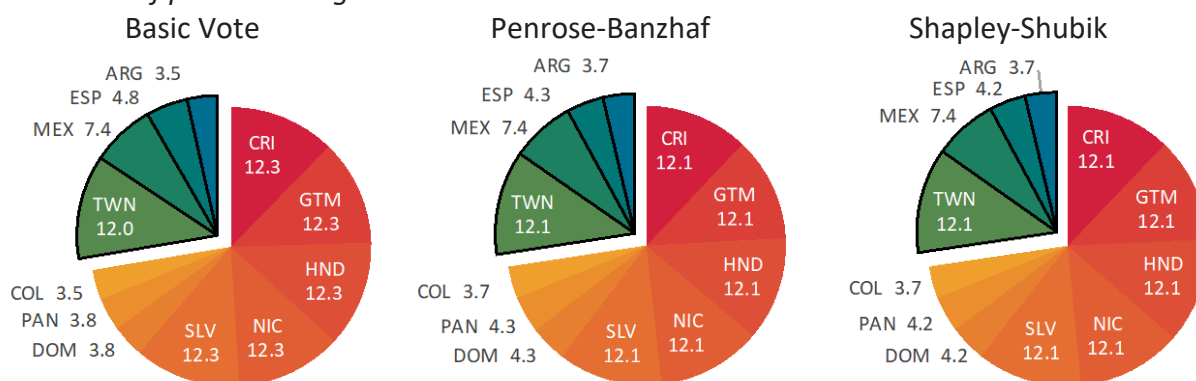
Thus, the agreement of these 14 countries, out of a total of 173 total IDA members, is sufficient to form a simple majority at the board of directors.

### **CABEI (Central American Bank for Economic Integration), 1960**

*Overall:* CABEI has a mostly mutual aid-oriented model. It is largely governed by its five core regional countries with minor participation of periphery countries (the Dominican Republic, Panama, and Colombia) and with additional support and governance by creditors.

*Political circumstances leading to the creation of the bank:* CABEI was formed in the context of the Central American Common Market, as a platform to jointly finance and coordinate regional development plans (Baumann, 2008).

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	72.3%	72.6%	72.7%	72.6%
C.C., vote and port. shares	0.7608	0.7604	0.7605	0.7604
Gini, vote shares	0.2535	0.2406	0.2439	0.2422

The majority of CABEL’s voting power is shared across the five core Central American economies of Costa Rica, Guatemala, Honduras, Nicaragua, and El Salvador. No one country has an effective veto power over ordinary or major decisions. Furthermore, ordinary lending decisions require a simple majority, which can be accomplished by these five countries together, or by four of those core members plus any one additional member. The only two countries to share an executive director at CABEL are the smallest two members in terms of vote share, Argentina and Colombia, which each have 50% of the vote share represented by their ED.

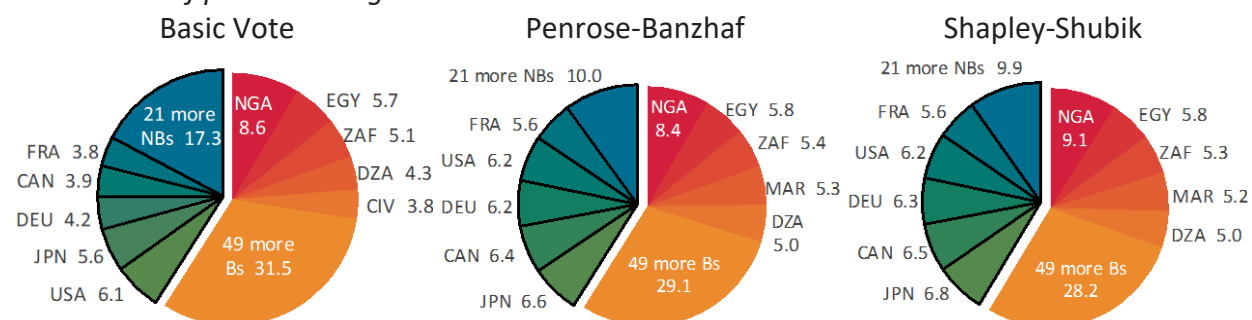
Note: Belize is not included here. It joined in 2016 but did not yet have a director assigned as of year-end 2017.

**AfDB (African Development Bank), 1964**

*Overall:* the AfDB can be characterized as a hybrid bank: borrowers have a small majority collectively and power is shared across a significant number of members, but many members are essentially powerless in board decisions.

*Political circumstances surrounding the establishment of the bank:* The AfDB was organized by newly independent African states, uniting for mutual support through the Organization of African Unity (now the African Union). The bank offered an avenue for self-sufficient collective action for the region, and as such, non-regional membership was initially prohibited. In 1982, non-regional members were admitted to raise additional capital, within strict limits to maintain the bank’s Africa-centered character (English and Mule, 1996).

Distribution of power among members:



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

Basic governance statistics:

	Basic Vote Share	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	59.1%	59.0%	59.1%	58.8%
C.C., vote and port. shares	0.4563	0.4135	0.4131	0.4133
Gini, voting shares	0.6202	0.7361	0.7416	0.7388

AfDB governance is dominated by borrowers, though these borrowers are not represented equally. Furthermore, it incorporates of a significant share of voting power for creditors.

Most board decisions require a two-thirds majority, which helps boost the voices of less-well-represented members, but board members are not allowed to split votes when the countries they represent do not agree, which handicaps those same small members.

The unequal distribution of voting power among members is mostly a function the vanishingly slight voting power of the smallest members: 41 members have less than one half of one percent of the voting power each. However, no one member dominates. A simple majority can be accomplished with the largest eight executive directors, who represent:

- **Nigeria** (and Sao Tome, but Nigeria represents the majority of this ED’s votes)
- **Japan** (and four other creditors, but Japan represents the majority of this ED’s votes)
- **Canada** (and four other creditors, but Canada represents the majority of this ED’s votes)
- Switzerland and Germany (**Germany** represents the majority of this ED’s votes)
- **The US**
- **Egypt** (and Djibouti, but Egypt represents the majority of this ED’s votes)
- **France** (and two other creditors, but France represents the majority of this ED’s votes)
- **South Africa** (and Swaziland and Lesotho, but South Africa represents the majority of this ED’s votes)

Thus, a simple majority at the board of directors can be accomplished through the agreement of these eight members (out of the AfDB’s total of 80 members).

Notes:

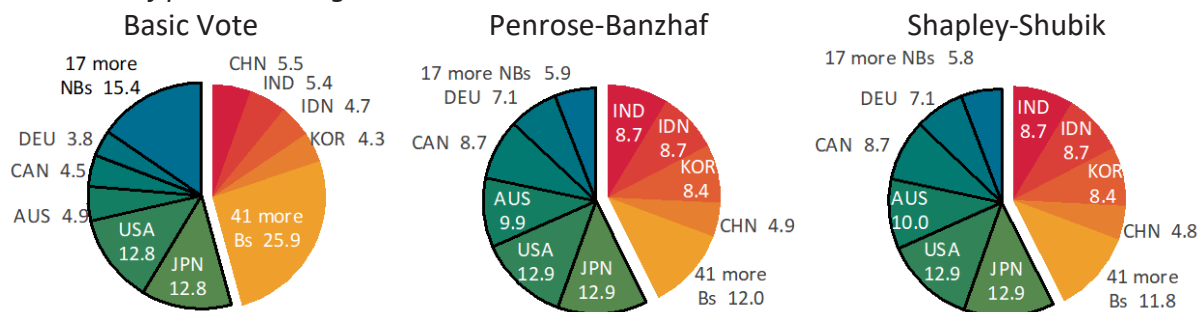
1. Nigeria “graduated” from borrowing status in 2014, and will no longer have access to funds after the end of 2018.
2. According to Humphrey (2019, forthcoming), three SRDBs were formed in conjunction with the AfDB: the West African (BOAD), Central African (BDEAC), and East African (EADB) development banks. The AfDB has a seat on each of these banks’ boards. The Ecowas BID and Eastern and Southern African Trade and Development Bank (TDB), formed later, also have AfDB representation on their boards, though they were not formed under the same rubric.
3. These calculations do not include South Sudan, which had not yet been assigned an executive director by year-end 2017.

## ADB (Asian Development Bank), 1966

*Overall:* The ADB is moderately creditor-led, and while voting power is distributed quite unequally, no one member dominates.

*Political circumstances surrounding the creation of the bank:* The ADB was first proposed through the U.N. Economic Commission for Asia and the Far East (now the Economic and Social Commission for Asia and the Pacific) as a way to coordinate regional integration and cooperation, and to channel more development finance resources – including non-regional resources – toward Asian economic development projects. According to Kappagoda (1995), the governance structure has always reflected a “balance” between regional and non-regional members (such as the U.S. and Japan).

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	45.8%	42.6%	42.5%	42.6%
C.C., vote and port. shares	0.2484	0.2591	0.2579	0.2585
Gini, voting shares	0.6051	0.8273	0.8288	0.8281

All developing regional countries may borrow from the ADB. Thus, while Japan, Australia, and New Zealand are regional members, they are not borrowers.



While the US and Japan each have more than twice the voting power of the next-largest shareholder, they do not have effective veto power individually or together. However, some major decisions (including admitting new members, capital increases, a reduction in the minimum interest rate, the creation of special funds, suspending members, or suspending bank operations) require a three-fourths majority, and in those circumstances, the US and Japan together can block any motion.

A simple majority can be accomplished with the votes of the top five executive directors, representing:

- Japan
- The US
- Australia (and 10 other Pacific members, though Australia has a majority of this ED's votes)
- Indonesia (and seven other members, though Indonesia has the majority of this ED's votes)
- Canada (and six other members, though Canada has the majority of this ED's votes)

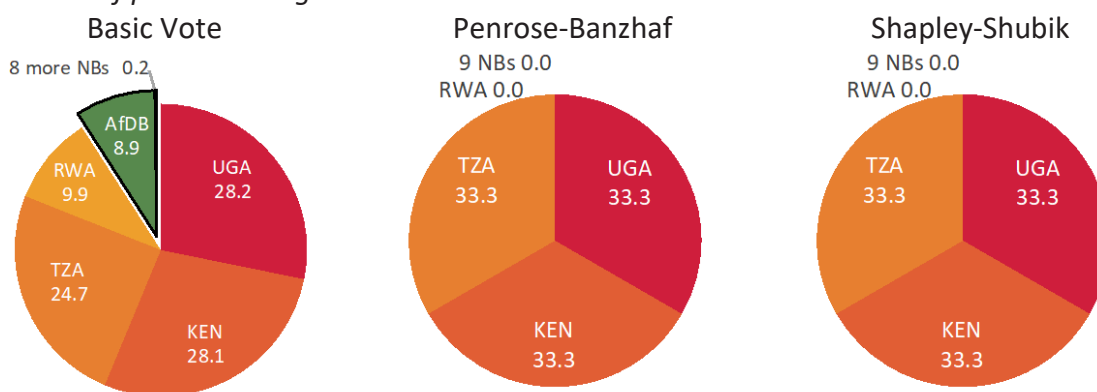
Thus, an agreement among these five members (out of 67 total ADB members) can constitute a simple board majority.

### **EADB (East African Development Bank), 1967**

*Overall:* The EADB is borrower-led. While creditors have a slight presence on the board, they have no effective decision-making power. However, the smallest borrower, Rwanda, also has no effective decision-making power, so the EADB has a *modified* mutual aid-oriented approach.

*Political circumstances surrounding the bank's creation:* The EADB was established by Kenya, Tanzania, and Uganda through the East African Community, in light of common colonial histories and post-colonial goals (Sebalu, 1972). Rwanda and Burundi joined the EAC in 2008, and Rwanda subsequently joined the EADB. Burundi applied for admission in 2013, but as of year-end 2017, had not yet formally joined.

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	90.6%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.7169	0.5771	0.5771	0.5771
Gini, vote shares	0.7007	0.7692	0.7692	0.7692

The EADB is a relatively small SRDB, with approximately \$394 million in assets and just four borrowing members. It was established with cooperation from the AfDB, which has board representation. All four EADB member countries are also AfDB members, and thus have two forms of voting power at the EADB: directly as well as indirectly, through their representative to AfDB board. The calculations here add this indirect power to members' direct power, and subtract it from AfDB power. Thus, "AfDB" should be interpreted as "other AfDB members."

The EADB began with just three borrowing countries: Uganda, Kenya, and Tanzania. Rwanda joined in 2008 but its vote share is too small for it to ever be necessary in a voting coalition. Thus, the power index calculations here show it to have zero decision-making power.

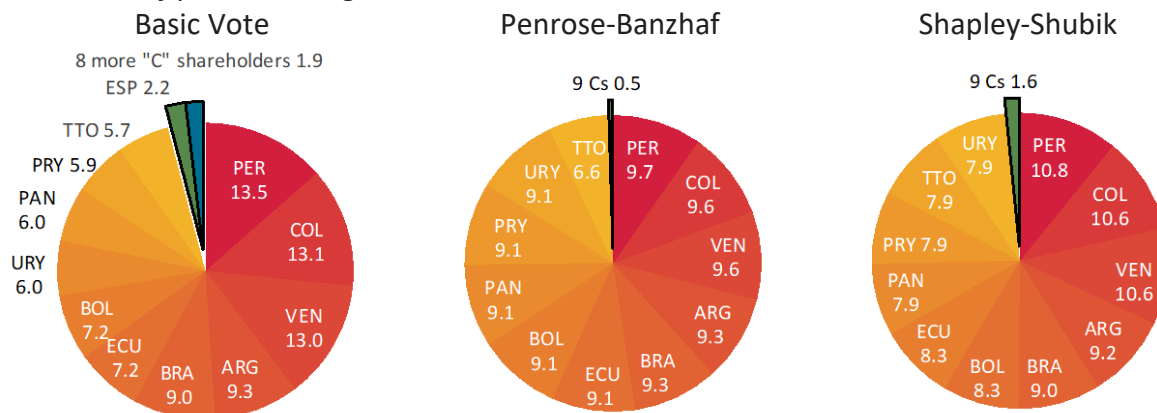
The EADB's membership is comprised of its four borrowing countries, the AfDB, and several public and commercial banks from Africa and Europe. Each borrowing country has two representatives on the board, and the AfDB has one. Commercial banks do not have a vote on the EADB board.

**CAF (Development Bank of Latin America), 1968**

*Overall:* CAF is a borrower-led bank with remarkably equal voting power among its core members ("A/B" shareholders). Non-core members ("C" shareholders) may borrow but have very little decision-making power at CAF. Non-regional members face no penalty in the amount they may borrow, and "C" members may become "A/B" members if they choose to and if the board agrees (as Trinidad and Tobago did in 2012).

*Political circumstances surrounding the bank's creation:* CAF was originally founded as the Corporación Andina de Fomento, (Andean Development Corporation) through the Andean Community, together with a host of other regional bodies including the Andean Reserve Fund (now the Latin American Reserve Fund – FLAR) and several consultative regional bodies for international collaboration among business, labor, and indigenous leaders. Gómez Jutinico, 2010).

*Distribution of power among members:*



Note: "A/B" members have warm colors and no borders; "C" members have cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.8154	0.7590	0.7715	0.7653
Gini, vote shares	0.5503	0.3822	0.4753	0.4288

All CAF member countries may borrow from the bank. Thus, the calculations here do not divide members into borrowers and creditors. Instead, they divide members into "A/B" members and "C" members. CAF's 11 core member countries each have an equal number of "A" shares and a varying level of "B" shares. Other members have varying levels of "C" shares. Most board decisions require 60% of "A" shares (in other words, the agreement of at least seven of the 11 core "A/B" shareholders) plus a simple majority of "B" and "C" shares. Over 90% of "B" and "C" shares are held by "A/B" countries, further cementing the difference in power between core countries and other members. Thus, "C" shareholders have very little actual decision-making power and are almost never needed in coalition-forming, as the power index figures here show. It is worth mentioning, however, that "C" shareholder countries can become "A/B" shareholder countries with the agreement of 80% of existing "A/B" members (in other words, 9 of the 11 current "A/B" member countries).

Among the "C" shareholders are commercial banks, which collectively own approximately 0.05% of CAF shares and have less than 0.01% of the vote share. Commercial banks share one

executive director. CAF does not disclose the number or names of these banks, so they are shown as one member collectively in the calculations here.

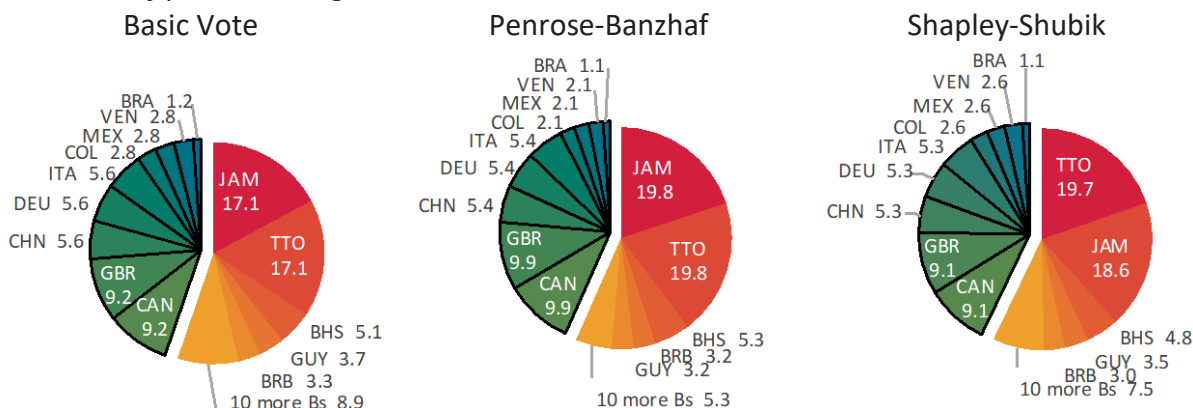
Because of CAF’s two-stage voting process, the possibilities are too complex for power index calculator applications. The Penrose-Banzhaf indices shown here are calculated manually while the Shapley-Shubik indices are calculated using a random sample of 24.4 million possible permutations, yielding 95% confidence intervals ranging between one and 39 thousandths of a percentage point.

### CaDB (Caribbean Development Bank), 1969

*Overall:* CaDB has a hybrid governance model. It is slightly borrower-led, but the largest two borrowers together (Jamaica and Trinidad and Tobago) have effective veto power over major decisions.

*Political circumstances surrounding the creation of the bank:* CaDB was formed by the Canada/Commonwealth Caribbean Conference. According to Ingham and Figueroa (2009) among the factors influencing its creation was a fear of contagion of civil strife and political radicalism among Caribbean islands, as well as a perceived difficulty securing financing from traditional multilateral institutions.

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	55.3%	56.6%	57.1%	56.9%
C.C., vote and port. shares	0.1653	0.2064	0.2029	0.2047
Gini, vote shares	0.5341	0.6149	0.5806	0.5978

CaDB is slightly borrower led, as borrowers have a small majority on the board. No one member has effective veto power, but the two largest borrowers, Jamaica and Trinidad and Tobago, can join together to form an effective veto over major decisions that require a three-fourths

majority. Likewise, if either of these countries joins with either of the largest two creditors (Canada and the UK), they can block major decisions. Together, these four members' directors have a simple majority and can pass ordinary lending decisions. (Haiti shares Trinidad and Tobago's director, but its capital represents only four percent of this director's votes.) Thus, CaDB is a hybrid bank, led by borrowers but without an equal distribution of power across members.

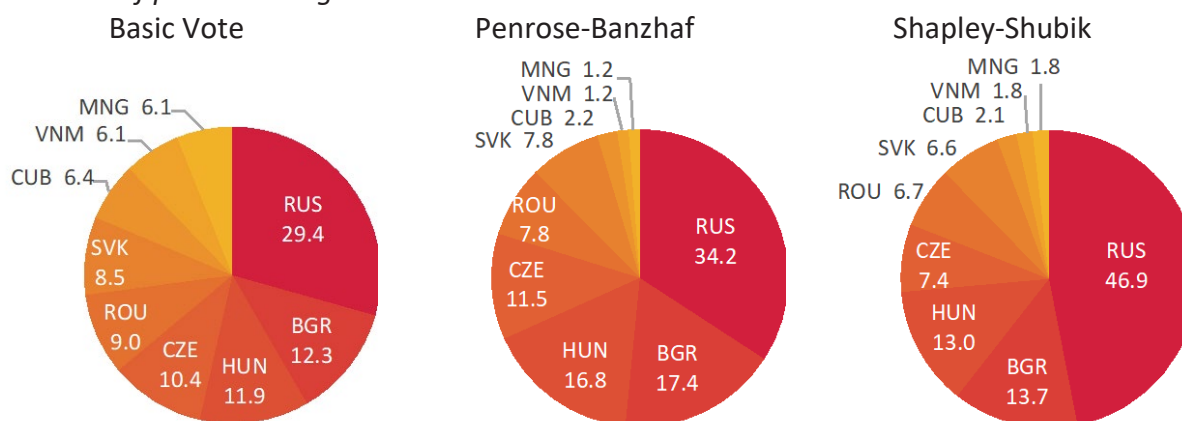
Most members do not share directors on the board. However, several small countries and territories not only share a director but also are considered to be one member collectively: Anguilla, the British Virgin Islands, the Cayman Islands, Montserrat, and Turks and Caicos Islands.

### IIB (International Investment Bank), 1970

*Overall:* The IIB is borrower-led, but Russia has an effective veto over ordinary board decisions. However, other member countries have large enough shares of the board vote to frequently be necessary in coalition building. Thus, the IIB is a hybrid between a mutual aid-oriented and core borrower-led model.

*Political circumstances surrounding the creation of the bank:* According to Stone (2008), the Soviet bloc's Council for Mutual Economic Assistance (CMEA) established the IIB to help integrate and modernize CMEA countries.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.9155	0.8015	0.9182	0.8598
Gini, vote shares	0.2718	0.46801	0.5238	0.4959

Most IIB board decisions require both the support of a majority of directors as well as the support of votes representing at least three-fourths of the paid-in capital of the bank. Since Russia holds 47.6% of bank capital, it has an effective veto power over every resolution. However, the additional requirement that the majority of directors vote in favor of a resolution means that Russia’s voting power is less than its capital share.

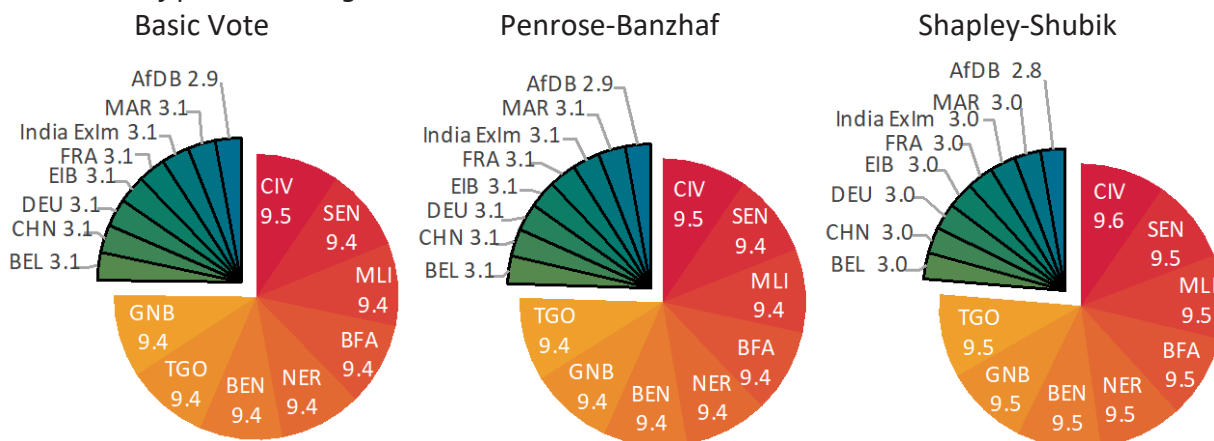
The IIB also lends to non-members. Similar to the EIB, at the end of 2017, 11.1% of its outstanding loans were to borrowers outside of its membership. However, unlike the EIB, IIB non-member loans tend to be extended to borrowers in countries with hard currencies or whose currencies are pegged to hard currencies (including most notably Ecuador and Panama, as well as lesser amounts to the Netherlands, the United States, and Belarus), which can help the financial health of the IIB.

### BOAD (West African Development Bank), 1973

*Overall:* BOAD has a mutual aid-oriented governance structure with additional support from creditors, including other multilateral banks such as the EIB and the AfDB.

*Political circumstances surrounding the banks’ founding:* According to Humphrey (2019), it was founded under the auspices of the AfDB, along with BDEAC (the Central African Development Bank) and the EADB (the East African Development Bank).

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	75.2%	75.5%	76.3%	75.9%
C.C., vote and port. shares	0.9159	0.9160	0.9159	0.9160
Gini, vote shares	0.2535	0.2566	0.2647	0.2607

The West African Development Bank (BOAD) has eight “A” shareholders (the eight regional borrowing country members plus the Central Bank of Western African States, or BCEAO) and nine “B” shareholders (non-borrowing countries and institutions from outside of the immediate region). Each of the “A” shareholder countries has two direct votes on the BOAD board of directors, for a total of 16 direct regional votes. In addition, the BCEAO has eight votes on the BOAD board. The BCEAO is governed equally by the same eight nations that make up the regional members of the BOAD. Thus, in effect, each regional country member has the equivalent of three votes on the BOAD board: two direct votes and the equivalent of one additional vote through the BCEAO representative.

Extra-regional “B” shareholders have two representatives each to the board of directors, but their total vote may not be more than one-third of the total vote of “A” shareholders (ie, no more than the equivalent of eight votes total). Since there are eight “B” shareholders, this means that “B” shareholders have the equivalent of one vote each.

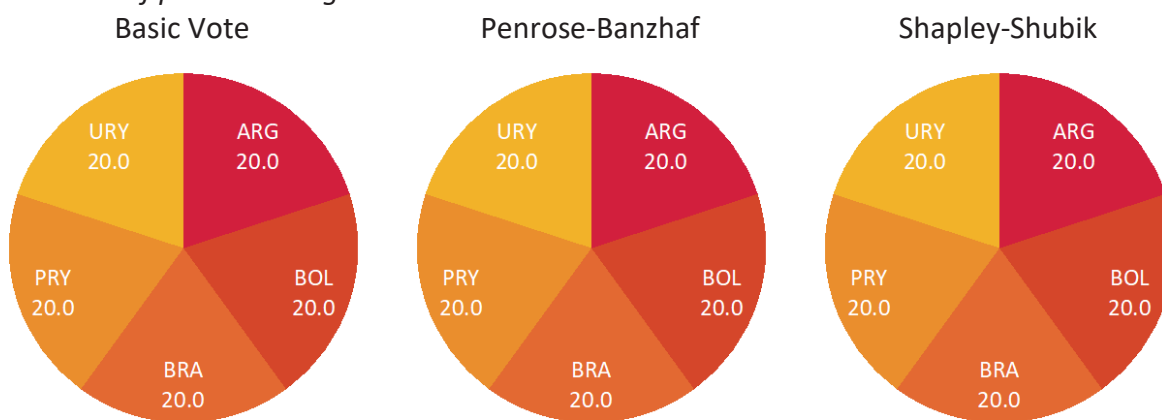
In addition to BCEAO, three other institutional investors are non-borrowing members: the AfDB, the Export-Import Bank of India, and the European Investment Bank. As with the BCEAO, BOAD borrowers are all AfDB member countries. Thus, they each have an additional indirect route of representation on the BOAD board. In these calculations, their indirect vote through AfDB is added to their direct vote. So “AfDB” should be interpreted as “other AfDB shareholders.” Furthermore, though BOAD “A” shareholders all have equal *direct* representation on the BOAD board, they have varying levels of voice on the AfDB board. Thus, the calculations here show slight differences among their total BOAD voting power levels.

#### **FONPLATA (Plata Basin Financial Development Fund), 1974**

*Overall:* FONPLATA has a mutual aid oriented model, with each member having equal vote regardless of capital share and with no creditor representation.

*Political circumstances surrounding the bank’s creation:* FONPLATA was introduced through the Plata Basin Treaty of 1969, which addressed the need for coordinated water resource management. FONPLATA was created as an SRDB to coordinate efforts concerning navigability of the Plata River as well as other integration, economic development, and watershed conservation projects in the region. According to FONPLATA (2012), the fund was also intended to create a multilateral platform to jointly manage water resources in the Plata river basin.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	N/A	N/A	N/A	N/A
Gini, vote shares	0.0000	0.0000	0.0000	0.0000

Note: The correlation coefficients are undefined because of the perfectly equally distributed voting power.

FONPLATA is the smallest SRDB in the Western Hemisphere, with less than \$1 billion in assets. It has an absolute mutual aid model. Argentina and Brazil each have one-third of the bank’s capital, while the other three members have one-ninth each. Nonetheless, all five members have an equal vote on the Board of Directors.

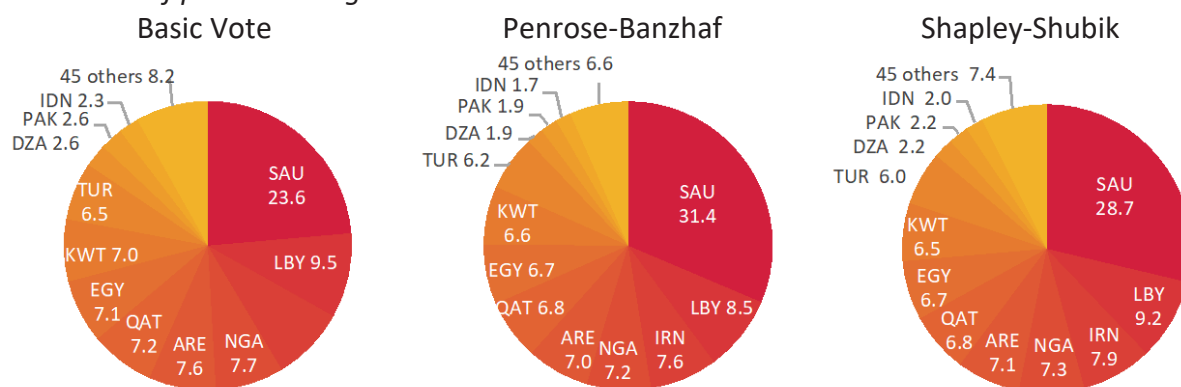
**IsDB (Islamic Development Bank), 1975**

*Overall:* IsDB is borrower-led, but has a high degree of inequality among members’ decision-making power levels. Thus, it has a regional-leader centered governance model.

*Political circumstances surrounding the bank’s creation:* The IsDB was proposed by Pakistan, which hosted the Second Conference of Foreign Ministries of Muslim Countries and there proposed the idea of an “International Muslim Bank for Trade and Development.” It was supported by Egypt, Libya, and Morocco. According to Meenai (1989), the idea arose during the oil price volatility of the early 1970s, which benefited some majority-Muslim countries and hurt others. Furthermore, the 1973 Arab-Israeli War solidified pan-Muslim sentiment and kindled a desire to reduce reliance on Western institutions.



Distribution of power among members:



Basic governance statistics:

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.2722	0.2380	0.2484	0.2432
Gini, vote shares	0.8086	0.8316	0.8231	0.8273

Despite the fact that Saudi Arabia has by far the largest share of votes on the IsDB board, the bank is unlike other banks with similar arrangements in that Saudi Arabia does *not* have an effective veto over major decisions. These decisions require the approval of two-thirds of the Board of Governors and votes equivalent to three-fourths of the bank’s capital. Ordinary capital decisions require the majority of Board of Directors votes. This can be accomplished with the agreement of the largest five members (out of 57 members): Saudi Arabia, Libya, Iran, Nigeria, and the UAE.

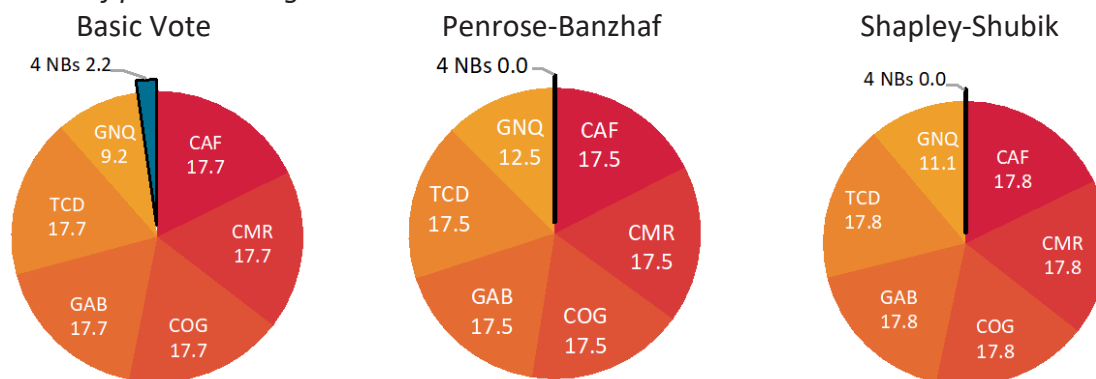
IsDB directors often represent multiple countries, but the articles of agreement explicitly allow them to split their votes if the countries they represent do not agree on a particular measure. Thus, these results are calculated as if all 57 members voted separately, resulting in  $2.9 \times 10^{17}$  possible combinations (for Penrose-Banzhaf calculations) or  $4.0 \times 10^{78}$  permutations (for Shapley-Shubik calculations). These calculations are estimates based on a sample of 2.9 million combinations (resulting in 95% confidence intervals between two and 71 thousandths of a percentage point for Penrose-Banzhaf results) and 4.0 million permutations (resulting in 95% confidence intervals between two and 88 thousandths of a percentage point for Shapley-Shubik results).

## BDEAC (Development Bank of the Central African States), 1975

*Overall:* The BDEAC has a mutual aid model, with additional support from creditors who have very little decision-making power on the board.

*Political circumstances surrounding the bank's creation:* The BDEAC was created under the auspices of the Central African Economic and Monetary Community (CEMAC, for its French initials), along with a common central bank and other regulatory and educational bodies. (Check, 2008).

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	97.8%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.7738	0.7682	0.7723	0.7703
Gini, voting shares	0.4756	0.4773	0.4849	0.4811

The majority of the BDEAC's subscribed capital (53.4%) is through its six borrowing member countries. Another 42.1% of subscribed capital is through the BEAC, controlled equally by the same countries. As with the BOAD and EADB, the AfDB has membership on the BDEAC board. So too does the BEAC (the Bank of Central African States), which has the same national members as the BDEAC. Thus, members have direct representation as well as indirect representation, through their relative power on the boards of the AfDB and the BEAC.

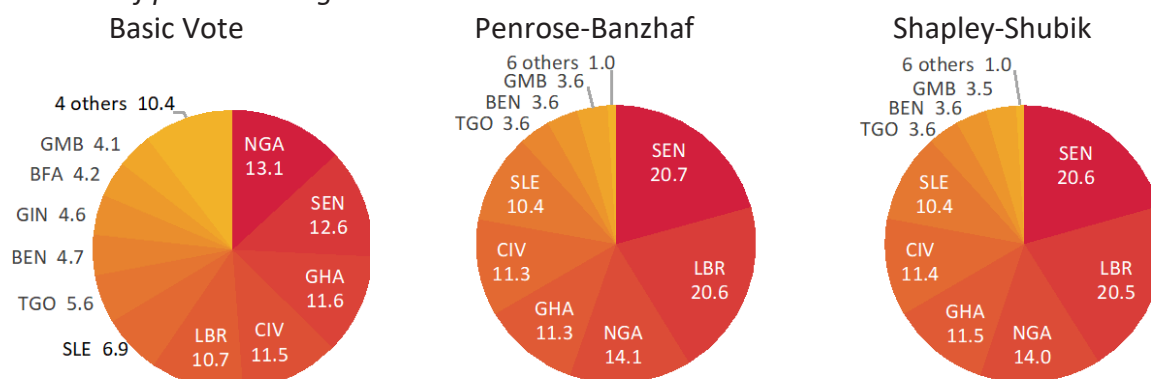
While the BDEAC is definitely borrower-controlled, and has power fairly evenly split among borrowing members, the Gini coefficient listed here is higher than for several other "mutual aid" model MDBs. Unlike in the cases of creditor-led banks, here that result is due to the fact that *creditors* have essentially no power on the BDEAC board.

## EBID (Ecowas Bank for Investment and Development), 1975

*Overall:* EBID is borrower-led. However, the structure of the board is such that a few members have much more power than their neighbors. Thus, its governance is moderately centered around regional leaders.

*Political circumstances surrounding the creation of the bank:* EBID was formed as part of the creation of the Economic Community of West African States (Ecowas). Its membership is larger than that of BOAD, but it is a much smaller institution, with assets of \$727 million compared to BOAD's \$4.0 billion.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.1990	0.0448	0.0506	0.0477
Gini, vote shares	0.3251	0.5792	0.5789	0.5791

Each representative to the EBID board of directors has one, equal vote on the board, but the representatives themselves are not evenly distributed among member countries. Central member countries (Nigeria, Ghana, and Côte D'Ivoire) have one director each. The other 12 member countries are divided into three groups of four countries, each of which is represented by two directors. Together, these representatives make up nine of the board's ten total members.

The EBID president also serves as the chair of the board of directors and has a vote on the board. He or she is named by the Board of Governors, where countries vote according to their capital share. Thus, each member has representation both directly, through their own board member(s), and indirectly, through the board president in relation to their capital share.

These calculations reflect two levels of decision-making, similar to other banks with shared directors: the decision among countries who share directors, and the decision among directors at the board. The calculations also assume that in the cases where pairs of directors represent groups of four countries each, those pairs vote the same way, rather than resolving disagreements by splitting their votes. EBID's *Protocol* (EBID 2001) does not explicitly address the possibility of vote splitting.

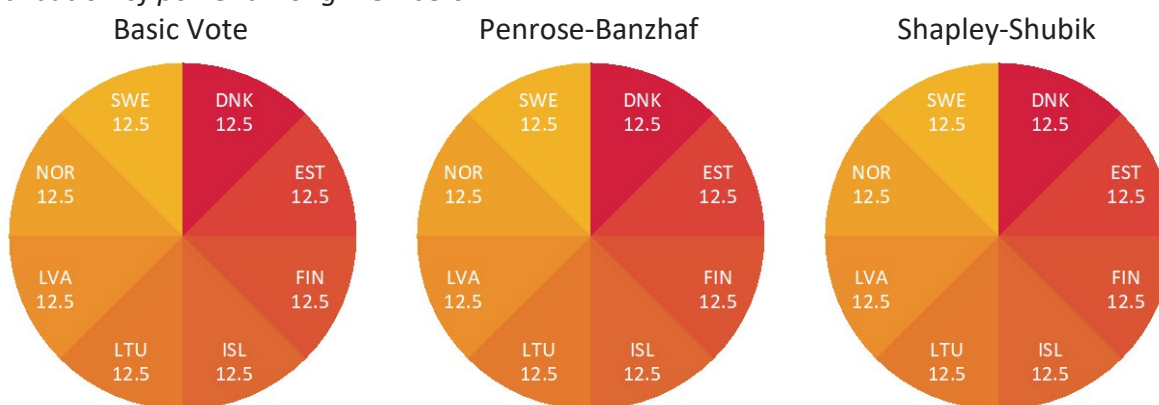
Senegal is an interesting case among EBID members. It is second to Nigeria in its basic vote share, but first in the power indices. This result is due to the fact that while Senegal is part of a group of four countries that together have two board representatives, Senegal has much more bank capital than its other group members, representing 59.4% of the capital supporting those two directors. Thus, if Senegal wished to, it could use its relative power in the Board of Governors to pressure both directors to vote with its interests. This arrangement gives Senegal the potential to direct two board representatives' votes, compared to the one board member representing each of the three largest member countries: Ghana, Liberia, and Nigeria. However, Senegal's power index share is not twice as large as those three central members, because it has significant less capital in the bank and thus less control over the board chairperson's vote.

### NIB (Nordic Investment Bank), 1976

*Overall:* The NIB is a mutual aid-oriented MDB, with equal votes among members. However, it does lend outside of its membership where such lending would benefit NIB members.

*Political circumstances surrounding the bank's founding:* The NIB grew out of the Nordic Council (established in 1952). The Baltic countries of Latvia, Lithuania, and Estonia joined in 2005.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0
C.C., vote and port. shares	N/A	N/A	N/A	N/A
Gini, vote shares	0.000	0.000	0.000	0.0000

Note: the correlation coefficients are undefined because of the perfectly-equal vote distribution.

NIB voting is unusual in that it is completely unrelated to members' shares of the bank's capital. Instead, each of the eight members is represented by one director, and the directors all have equal votes on the board. Ordinary decisions require the agreement of five of the eight directors.

However, the NIB does lend outside of its membership. As of year-end 2017, 9.2% of its total lending was outside of its membership. This level is well below the NIB's stated goal of maintaining "the level of lending to non-Member countries at an average of historical levels of one-fifth of total lending in the long term" (Nordic Investment Bank, 2018). These extra-regional loans include ordinary, special, or environmental lending programs. Ordinary lending programs outside of membership countries include loans for projects outside of a member country but for which the security or the party providing it is inside of the membership countries. Special lending programs include projects outside of the membership countries but intended to benefit member countries, as in financing exports to non-regional countries, especially to developing countries. Environmental lending programs lend to neighboring countries for projects that can improve the region's environment and reduce cross-border environmental stress.

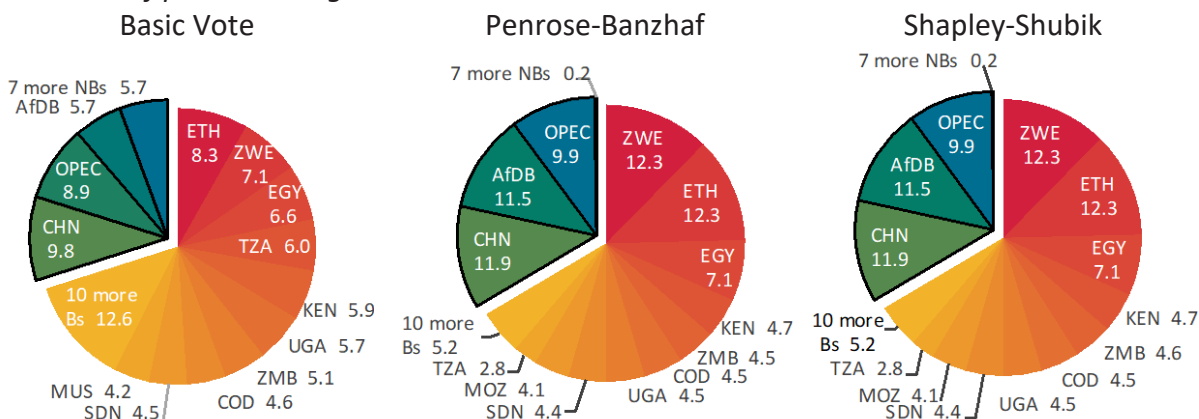
**TDB (Eastern and Southern African Trade and Development Bank, formerly the PTA Bank), 1985**

*Overall:* TDB is a hybrid bank. Borrowers comprise the majority of board voting power, and no one regional leader has outsized bank power. Board decisions are only marginally affected by variations in members' capital stock. However, creditors comprise an important share in decision-making.

*Political circumstances surrounding the bank's origin:* According to Humphrey (2019, forthcoming), TDB was organized in conjunction with the Preferential Trade Agreement of Eastern and Southern Africa. For this reason, TDB was originally known as the PTA Bank. This PTA was recommended by the Lagos Plan of Action, in response to the World Bank's 1981 Berg Report on development challenges in Sub-Saharan Africa (which placed responsibility for lackluster development outcomes on World Bank Structural Adjustment Programs). Crucial in its development was support from UNECA, the United Nations Economic Commission for Africa). Thus, TDB is not one of the core SRDBs organized in conjunction with the AfDB

(including BOAD, EADB, and BDEAC), though AfDB is a TDB shareholder. TDB membership consists of all four EADB member countries, as well as many other AfDB members that are not members of any of the three AfDB-led SRDBs.

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapely-Shubik	Average
Total borrower vote share	65.3%	66.1%	66.2%	66.2%
C.C., vote and port. shares	0.3830	0.2839	0.2660	0.2750
Gini, vote shares	0.4958	0.6437	0.6440	0.6439

The Trade and Development Bank’s charter allows for most decisions to be made by a show of hands among the board of directors, in which each director (including *independent* directors who are named by the rest of the board) has one vote, as does the Bank President (who is named by the Board of Governors, which in turn represents shareholders on a one-governor-per-shareholder basis, with votes proportional to shares). In special cases, directors can request that votes be counted according to the proportion of bank shares represented by each director, in which case the independent directors and Bank President do not have a vote. As the default arrangement is for show-of-hands voting, this paper uses that process as representative of the TDB’s procedures. In that arrangement, each shareholder is represented by the following:

1. Their proportion of a representative (non-independent) director’s vote;
2. Their proportion of the total representative directors’ votes, in selecting the two independent directors; and
3. Their proportion of total bank shares, in representation to the Board of Governors, which names the Bank President.

These calculations assume that representative directors vote based on the proportion of shares of their represented countries or institutions.

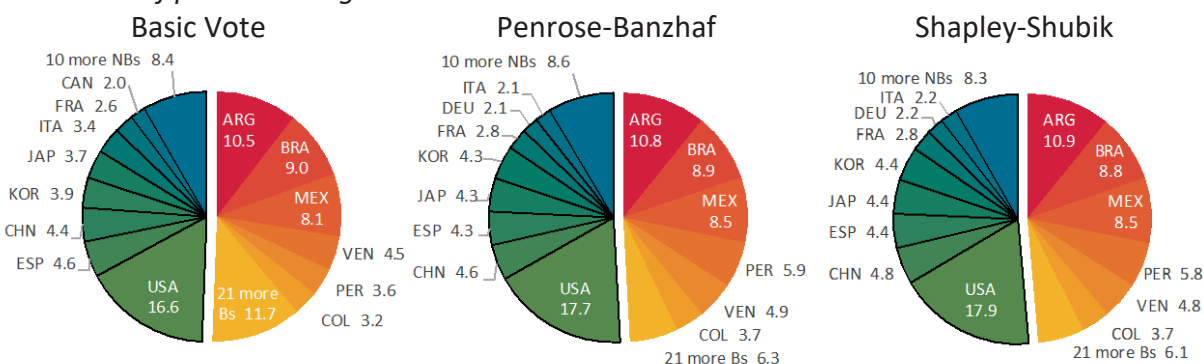
Members not reflected in these calculations include South Sudan, which joined in 2017 but did not yet have an executive director by year-end 2017, and the public banks of several member countries, whose voting power is assigned to those countries in these figures.

### IDB Invest (formerly Inter-American Investment Corporation), 1989

*Overall:* IDB Invest is a hybrid bank. Board power is split roughly in half between borrowers and creditors, whether that power is measured through simple vote shares or through power indices. Inequality between member countries is moderately high.

*Political circumstances surrounding the creation of the bank:* According to Herrera (1983 and Rodríguez-Rozic (2001), IDB Invest is the second manifestation of private support under the IDB. The first, the Corporación Financiera para América Latina (COFIAL), was proposed in the 1970s to avoid the prohibitions on venture capital investment that applied to the IDB itself. However, the United States did not back this effort and it died. In the 1980s, IDB President Ortiz Mena re-initiated negotiations surrounding this initiative, including the United States and other creditors. He successfully got the support of 34 IDB members including with the US’ Reagan administration.

#### Distribution of power among members:



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.

#### Basic governance statistics:

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	50.3%	49.2%	48.6%	48.9%
C.C., vote and port. shares	0.2857	0.2082	0.2027	0.2055
Gini, vote shares	0.6273	0.6833	0.6870	0.6852

Like the IDB itself, IDB Invest’s Board of Directors gives the highest vote share to the United States. However, in this case the US’s share is somewhat less. It does not have an effective veto over major decisions, which require super-majorities of two-thirds of the Board of Directors.

Most Board decisions are taken by a simple majority of votes represented. Executive directors may not split their votes in cases of disagreements among the countries they represent. A simple majority may be accomplished through the agreement of four executive directors, representing:

- The United States
- Spain and South Korea (whose executive director also represents Israel, Japan, and Portugal, but Spain and South Korea form a majority of this director’s vote share)
- China and Italy (whose executive director also represents Germany, the Netherlands, Austria, and Belgium, but China and Italy form a majority of this director’s vote share)
- Argentina (whose executive director is shared with Haiti, but Argentina represents 97% of their vote)

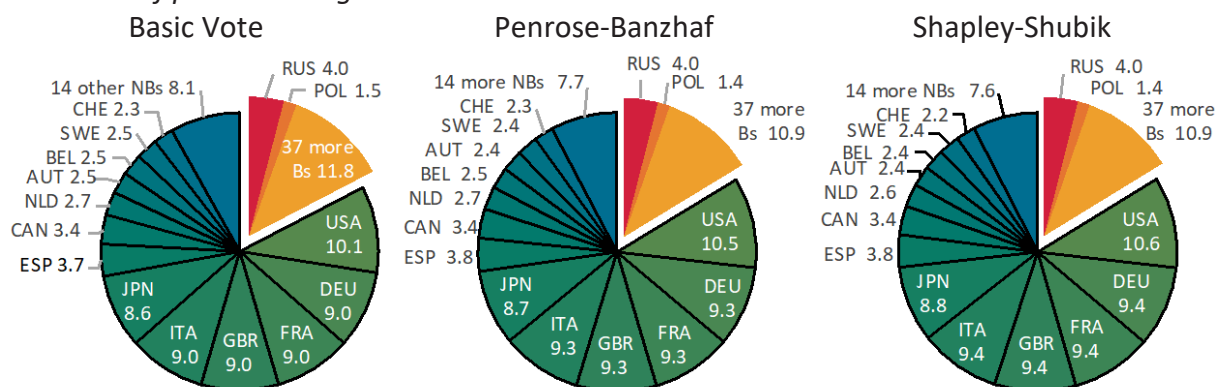
Thus, five non-borrowing and one borrowing member (out of a total of 45 members) are enough to form a majority.

### EBRD (European Bank for Reconstruction and Development), 1991

*Overall:* the EBRD is a strongly creditor-led bank, akin to the IDA. Borrowers have a low level of board decision-making power, and voting power is distributed unevenly. However, power is not concentrated in the hands of any one creditor in particular.

*Political circumstances surrounding the bank’s creation:* The EBRD was suggested by France in 1989, in the context of the dissolution of the Soviet Union. According to the bank’s Articles of Agreement, the EBRD’s mission is limited to “market-oriented economies and the promotion of private and entrepreneurial initiative” in countries “committed to and applying the principles of multi-party democracy [and] pluralism.” Thus, the EBRD was organized to ease and encourage transition in post-Soviet countries.

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are in cool colors and black borders.



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	17.4%	16.5%	16.3%	16.4%
C.C., vote and port. shares	-0.1174	-0.1190	-0.1203	-0.1196
Gini, vote shares	0.7247	0.7269	0.7311	0.7290

The EBRD is unusual in that board voting power is negatively correlated with borrowing. In other words, EBRD decision-making power continues to be concentrated in western Europe, the United States, and Japan, while its lending is concentrated in Eastern and central Europe.

It is not surprising, then, that the six most powerful members of the EBRD are creditors. Together, these six members (the US, France, Germany, Italy, the UK, and Japan) form a simple majority and can pass or block any proposal on which they agree.

EBRD members share directors. However, the articles of agreement explicitly permit directors to split their votes where countries they represent do not agree. Thus, smaller countries do not need to negotiate with larger countries with whom they share a director, in order for their opinion to be registered in a board vote.

EBRD membership includes the EIB as well as the European Union (EU). However, each of these bodies is controlled by members that are also EBRD members. Thus, European members of the EBRD have three forms of representation on the EBRD board: one direct and two indirect routes (through their control of the EIB and the EU). These calculations distribute the voices of the EIB and the EU (measured here through the European Commission) based on their own vote structures and power-weighted calculations. For this reason the EIB and EU do not appear in the figures here, and the number of members in these figures do not sum to the total number of EBRD members.

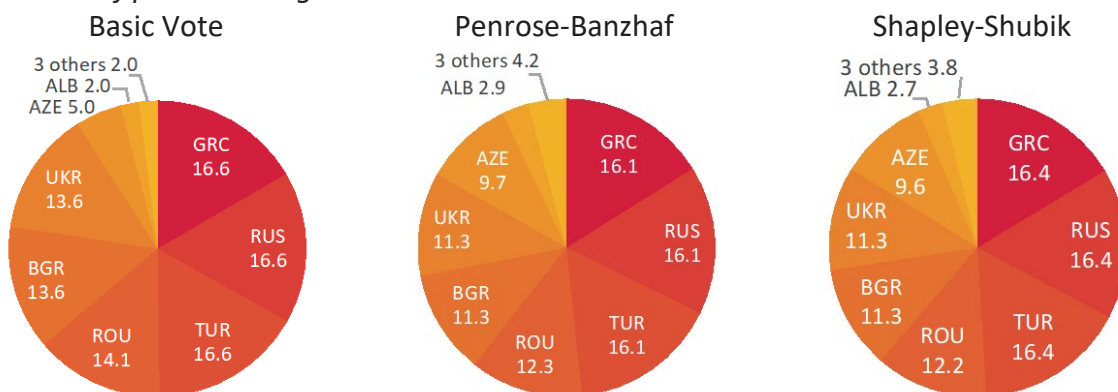
The resulting power index estimates reflect votes from all 68 members (not including India, which joined in 2018) directly to the board. However, this large number of votes creates  $3.0 \times 10^{20}$  possible combinations and  $6.7 \times 10^{96}$  possible permutations. These estimates use a sample of 3.0 million combinations for the Penrose-Banzhaf index (resulting in 95% confidence intervals between one and 35 thousandths of a percentage point) and 6.7 million permutations for the Shapley-Shubik index (resulting in 95% confidence intervals between one and 43 thousandths of a percentage point).

**BSTDB (Black Sea Trade and Development Bank), 1997**

*Overall:* BSTDB is a mutual aid-oriented MDB. It is borrower-run and members have fairly equally distributed voting power on the Board of Directors.

*Political circumstances surrounding the bank's creation:* According to Imre (2006) and Tsantoulis (2009), out of the dissolution of the Soviet Union arose two simultaneous trends that created space for a new SRDB: the need to encourage and invest in a budding private sector, and a demand for new institutional relationships among the nations of the Black Sea region, some of which were newly independent.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.6963	0.7343	0.7397	0.7370
Gini, vote shares	0.4075	0.3610	0.3693	0.3651

BSTDB invests through long-term loans, equity, and debt instruments in the Black Sea region. Its goal is to support SMEs and trade financing. Because of the small scale of many of these investments, most of its operations happen through local financial intermediaries.

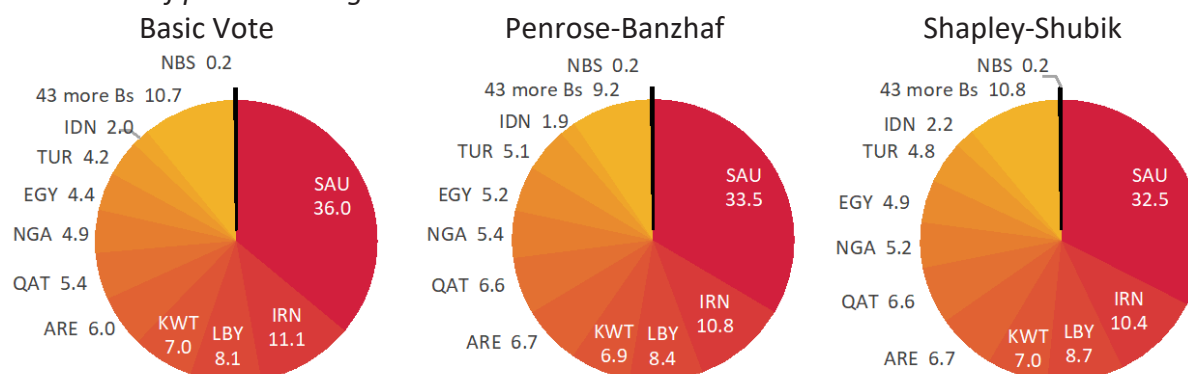
BSTDB is an unusual bank in that its power indices are more equally distributed than its votes. (The difference is particularly notable for the case of Azerbaijan.) Most banks have the opposite relationship. This result is because less-powerful countries have a significant ability to be deciding votes in passing or blocking proposals. Greece, Russia, and Turkey each have the largest vote share, but together they are not quite able to form a simple majority. If these three countries, together with any one of the other eight countries, agree on a measure, they can jointly pass or block it. Major decisions such as temporarily suspending bank operations require a two-thirds majority of directors, which means that any two of the three most powerful countries, together with any other country, have enough voting power to block such a measure.

## ICD (Islamic Corporation for the Development of the Private Sector), 1999

*Overall:* The ICD is borrower-run, but one regional player (Saudi Arabia) has effective veto power over major decisions. Thus, it is a core borrower-led bank.

*Political circumstances surrounding the bank's creation:* According to Iqbal (2007), in the 1990s, IsDB member countries were undergoing a wave of privatization and financial sector reforms. The ICD was developed to help encourage and facilitate this transition.

*Distribution of power among members:*



Note: Borrowers are shown in warm colors and no borders; creditors are shown with black borders.

*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	99.9%	99.8%	99.8%	99.8%
C.C., vote and port. shares	0.6173	0.6214	0.6181	0.6198
Gini, vote shares	0.8543	0.8548	0.8461	0.8505

The ICD is separate from but affiliated with the IsDB. Whereas the IsDB works primarily with supporting member governments, the ICD focuses on providing Islamic finance to the private sector in member countries. The IsDB has the largest share of capital in the ICD and has four representatives at the ICD Board of Directors. Like the EIB and the IIB, the ICD also provides financing outside of its membership countries. In 2017, it reported that 14.3% of cumulative approvals were either regional among ICD groups or extra-regional in nature.

The ICD board consists of four IsDB representatives, one representative from Saudi Arabia, and one representing each of three country groups of remaining member countries: Africa, Asia, and Arab Asia. Votes are counted by members' shares of the bank, so while the IsDB has four board members, its votes are limited to its share of the ICD's capital (originally half, but 45.2% at year-end 2017). The board also includes the ICD general manager as a non-voting member and the board chair, who votes only when needed to break a tie. Additionally, several public financial institutions are ICD members and share a board representative: Bank Keshavarzi and

Bank Melli from Iran, the Banque Nationale d'Algérie, the Iran Foreign Investment Company, and the Saudi Public Investment Company. IsDB membership is largely the same as ICD membership, except for Guyana and Oman (IsDB but not ICD members) and Somalia and Togo (which at the end of 2017 were IsDB members but still in the process of becoming ICD members).

Most ICD member governments have multiple forms of ICD Board representation: directly as well as indirectly through the IsDB, and in some cases, through the public banks listed above. Thus, while Saudi Arabia has only 20.2 percent of the *direct* ICD board vote, once *indirect* influence through the IsDB (in which it is also the most powerful member) and the Saudi Public Investment Company are taken into account, it has 36.0 percent of the vote. Major board decisions require the approval of three-fourths of the board's voting power. Thus, while Saudi Arabia's direct vote is not enough to block major decisions, once its indirect as well as direct voice is considered, it has an effective veto over these votes. The indirect routes for countries' votes also means that the members listed here as creditors should be read as "Somalia, Togo, and other members of the IsDB but not the ICD."

Unsurprisingly, the same countries that are the largest shareholders of the IsDB are also the largest shareholders overall at the ICD. A simple majority at the IsDB board can be accomplished with the agreement of five countries: Saudi Arabia, Libya, Iran, Nigeria, and the UAE. If these same five countries agree at the ICD, they will bring not only their own direct votes but also the votes of the IsDB, which will form 85.8% of the ICD board of directors.

As mentioned above, ICD member countries are represented through three regional groups: Africa, Asia, and Arab Asia. Three member countries are not obviously in any of these groups: Albania, Turkey, and Suriname. The calculations assume the same classification scheme as in the IsDB, where Albania and Suriname share their directors with Asian countries. The 2010 ICD annual report lists Turkey in Asia, though it doesn't explicitly state that Turkey shares a director with the Asia group. However, the group membership of these three countries has very little impact on the calculations here. For example, assigning them to the "Arab Asia" group still yields identical borrower share and Gini index scores. Assigning them to the "Africa" group yields identical borrower shares and nearly identical Gini scores (0.8542 instead of 0.8548 for Penrose-Banzhaf and 0.8511 instead of 0.8461 for Shapley-Shubik).

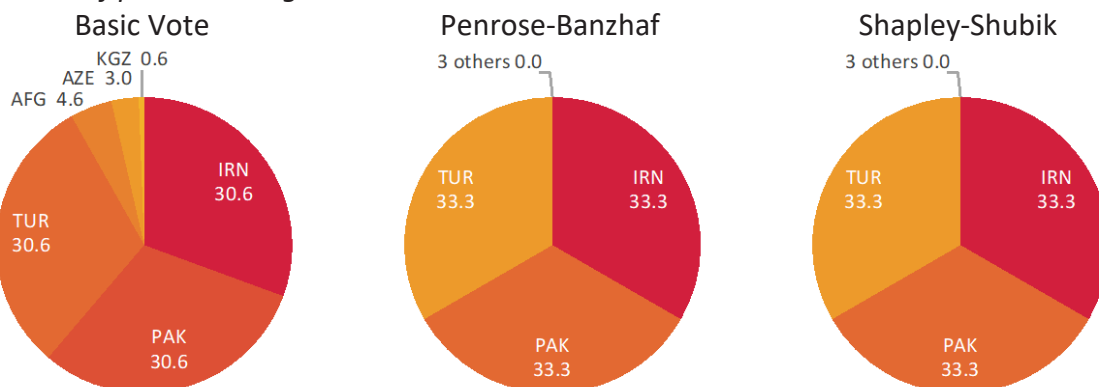
### **ETDB (Economic Cooperation Organization Trade and Development Bank), 2005**

*Overall:* The ETDB has a modified mutual aid model. It is governed entirely by six borrowers, but half of them have essentially no power on the board of directors. Thus, it is hybrid between a purely mutual aid-oriented and leader-centered bank.

*Political circumstances surrounding the bank's creation:* The ETDB was created under the rubric of the Economic Cooperation Organization (ECO), a Eurasian body organized in 1984 with the goal of economic integration. Iran, Pakistan, and Turkey initially formed the ETDB to promote

trade and economic development coordination within the ECO region. Afghanistan, Azerbaijan, and the Kyrgyz Republic joined thereafter. Four other ECO members have not yet joined the ETDB: Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.9695	0.9727	0.9727	0.9727
Gini, vote shares	0.4315	0.5000	0.5000	0.500

The ETDB is made of six regional countries, with one representative each to the board of directors. Votes are measured by the shares that each country have, and proposals require an 85% majority to pass. The largest three shareholders (Iran, Pakistan, and Turkey) each have 30.6% of the bank shares, and thus each has an effective veto over all decisions. The smallest three, meanwhile, have do not have enough shares to ever be needed for coalition building, either separately or as a bloc. Together, they have less than 10 percent of the board vote. Even if two of the larger shareholders agreed with them, they would have less than the 85% needed to pass a measure. In fact, the only way a measure can reach 85% is if all three of the larger shareholders agree. Thus, the smallest three shareholders have zero decision-making power at the board, as represented by their power index scores of zero. The fact that power is distributed equally among half the member countries while the other half have no power yields power index Gini coefficients of exactly half.

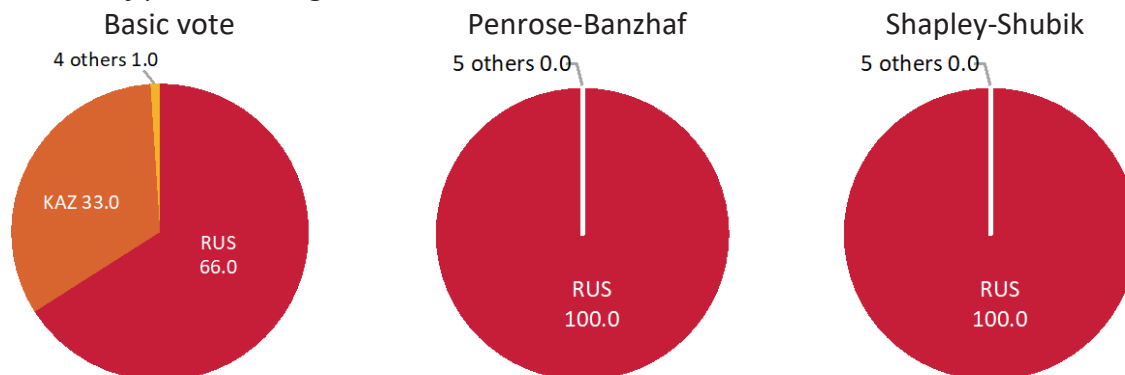
**EDB (Eurasian Development Bank), 2006**

*Overall:* The EDB is a completely core borrower-led bank. It has five members, but Russia has a dominant position on the board.

*Political circumstances surrounding the bank's creation:* The EDB grew out of the Eurasian Economic Community (later replaced by the Eurasian Economic Union), an effort for economic

integration and development cooperation with a long-term institutional goal of creating a regional trade and customs union. According to Vinokurov and Libman (2012) and Valovaya (2012), these integration efforts arose to balance new extra-regional ties that former Soviet states were building, and to work toward some of the same goals as the European Union, without imitating Western European methods.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.9045	0.6279	0.6279	0.6279
Gini, vote shares	0.71617	1.0000	1.0000	1.0000

Russia and Kazakhstan founded the EDB in 2006. Armenia, Belarus, the Kyrgyz Republic, and Tajikistan joined over the course of the next five years. In this aspect the EDB is similar to other SRDBs with core founding members and smaller members who joined later, such as CAF and the EADB.

Similar to other MDBs, the EDB is governed by a high-level Council of the Bank, which in turn appoints an Executive Board for most decisions. However, while the EDB Board is formally named by the Council, it is comprised of the bank management from each major department: the managing directors of the legal, finance, and project business development departments and the chief economist. The board also includes a chair and two deputy chairs. The bank department managing directors answer to the chair, who in turn answers to the Council.

Given this unique arrangement, these calculations follow Engen and Prizzon (2018) in measuring countries' voice in bank governance through their representation on the Council rather than the board. At the Council, each members' votes are counted according to their capital share. Russia has 66.0 percent of EADB capital, and thus an absolute majority on the Council. Thus, none of the other members are necessary for council decisions, and so they have power indices of zero.

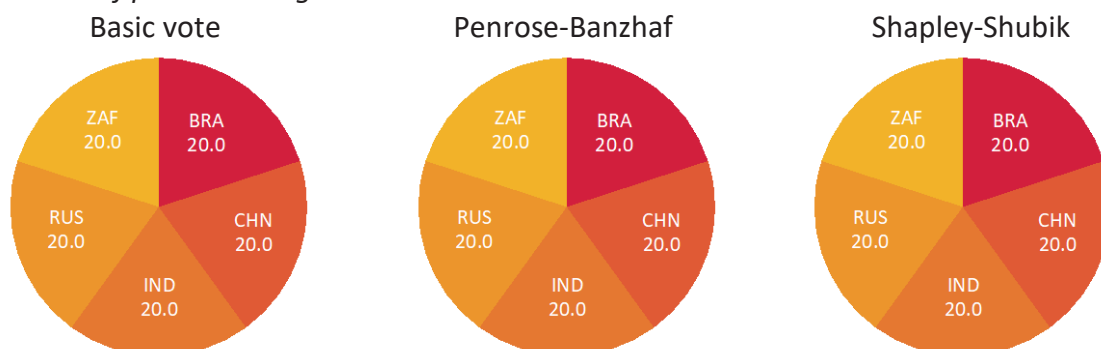
It should be noted that these results would not dramatically change if board composition were used in place of council composition. The board is currently comprised of two members educated in Kazakhstan and five (including the chair) educated in Russia. In board meetings, each member has one equal vote and decisions require simple majorities. Thus, if the power index calculations were based on this simple distribution of board members, Russia would have an absolute majority and 100% of the board power as measured through power indices (if directors are assumed to represent the countries of their education).

### NDB (New Development Bank), 2014

*Overall:* the NDB has a mutual aid model, with each of its five members having equal representation.

*Political circumstances surrounding its creation:* India suggested the creation of the NDB at the 2012 BRICS summit in Delhi, and the proposal was formally adopted the next year at the 2013 BRICS summit in Durbin. According to Griffith-Jones (2014) and Chin (2014), the NDB arose to address the need for finance for infrastructure and sustainable development in these rapidly-growing emerging markets. This perceived need outpaced both the ability and the appetite of traditional MDBs and the G-20, which committed to mobilizing more capital for infrastructure investment but were not able to quickly mobilize for this goal.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	N/A	N/A	N/A	N/A
Gini, vote shares	0.0000	0.0000	0.0000	0.0000

Note: the correlation coefficients are incalculable because of the perfectly-equal vote distribution.

As of year-end 2017, the NDB was too new for the distribution of its portfolio to merit much analysis. However, the perfectly-equal distribution of voting power means that unless the portfolio is also perfectly balanced (an unlikely prospect), lending and voting distributions will appear perfectly uncorrelated. Thus, it is safe to classify the NDB as a mutual aid-oriented MDB.

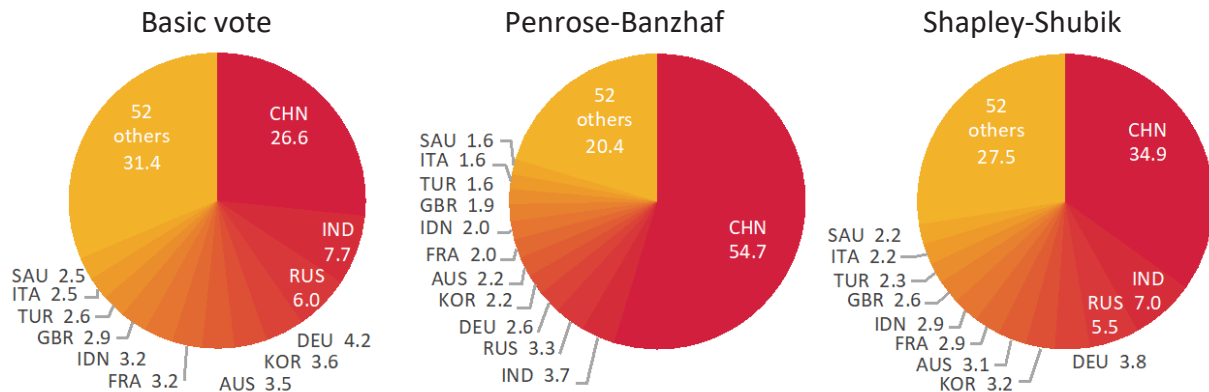
Nonetheless, this classification may still be subject to change based on incoming new members. The NDB articles of agreement allow new members to be admitted but specify that the five founding members must comprise at least 55% of the bank’s capital and voice. If at least five additional members are admitted, if the articles of agreement are not amended, those new members will not be able to have as much voice as the founding five. Nonetheless, until such time as new members are admitted and possibly thereafter, the NDB will continue to fit the mutual aid model of NDBs.

**AIIB (Asian Infrastructure Investment Bank), 2015**

*Overall:* The AIIB is centered around its largest regional leader, China. However, Russia, India, and Germany also have significant power. Thus, based on its *de jure* voting arrangements, the AIIB has a core borrower-led model, though not an extreme one. However, the AIIB lends very little to its largest members, so in practice, its lending follow more of a creditor-led model. It remains to be seen which of these models it will more closely resemble as its lending portfolio expands.

*Political circumstances surrounding the creation of the bank:* As Chin (2016) explains, the AIIB is best seen in the context of a series of Chinese initiatives to broaden its participation and leadership in multilateral spaces, including the G-20, the Belt and Road Initiative, and the NDB.

*Distribution of power among members:*



*Basic governance statistics:*

	Basic Vote Share	Power Indices		
		Penrose-Banzhaf	Shapley-Shubik	Average
Total borrower vote share	100.0%	100.0%	100.0%	100.0%
C.C., vote and port. shares	0.2828	0.2266	0.2408	0.2337
Gini, voting shares	0.6425	0.76382	0.6843	0.7241

AIIB members have three types of votes on the board of directors: share votes (one vote per share in the bank, which range from 72 for the Maldives to 297,804 for China), founding votes (600 additional votes for each AIIB founding member), and “basic” votes (which are distributed



equally and set such that they sum to 12% of the total of basic, share, and founding votes). Most matters require a simple majority, which can be accomplished through the agreement of the top six member countries (China, India, Russia, Germany, Korea, and Australia) out of a total of 64 members. More serious decisions require a two-thirds supermajority, which can be blocked by the joint action of China and India, though no one member has an effective veto over these matters.

The AIIB is like the IDB in that the largest member's voice in decision making is significantly larger when measured through power indices than through their basic vote share. China has about one-fourth of the total AIIB vote, but over half of the coalition-building power as measured through the Penrose-Banzhaf index and about one-third as measured through the Shapley-Shubik index. In each case, the other members' vote shares are so small that they are rarely individually needed as coalition partners for reaching a majority.

The AIIB is a relatively new institution and as of this writing, its membership is continuing to grow. These calculations reflect the membership and voting power as they stood at year-end 2017, excluding members that had not yet had votes assigned at that time such as Bahrain, Cyprus, and Samoa. They also reflect a lending portfolio in its first years, which will undoubtedly change dramatically as the bank matures. The articles of agreement do not prohibit non-regional members from borrowing, so on a *de jure* basis it is a core borrower-led MDB, with China as the leader in question. However, through year-end 2017, it mostly lent *outside* of China, making it a functionally creditor centered bank thus far. As its portfolio grows to its full size, if AIIB's portfolio incorporates more lending within China, its *de facto* categorization may shift back toward a regional-leader focus, or if it continues to mostly be a China-led vehicle for lending *outside* of China, it will continue to have a *de facto* creditor-led model. Non-regional AIIB members may borrow, and as with the IIB, the AIIB may benefit from seeking out opportunities to lend to borrowers with hard currencies.

As with several other large MDBs, AIIB members often share directors. However, the articles of agreement explicitly permit directors to split their votes when the members they represent do not agree. Thus, the calculations here do not take into account any negotiations between members with the same director. The resulting vote size of 64 members (as of year-end 2017) permits  $1.84 \times 10^{19}$  different combinations of votes and  $3.45 \times 10^{89}$  different permutations. The calculations here are estimates based on a random sample of 3.69 million combinations (resulting in Penrose-Banzhaf estimates with 95% confidence intervals between one and eight hundredths of a percent) and 3.45 million permutations (resulting in Shapley-Shubik estimates with 95% confidence intervals between one and ten hundredths of a percent).

## APPENDIX B: Individual Member Representation by MDB

This appendix presents each MDB's members' representation, shown in three ways: vote share and both power indices. As this appendix is intended for reference, MDBs are listed in alphabetical order by their acronyms (as some MDBs do not have official English names). Institutional members are listed separately only when they are private, multilateral, or belonging to a non-member government. Member countries' public institutions (wholly owned by one government) have their representation attributed to their national government.

### ADB: Asian Development Bank

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Afghanistan	0.3%	0.0%	0.0%	Micronesia, Fed. States	0.3%	0.0%	0.0%
Armenia	0.5%	0.0%	0.0%	Mongolia	0.3%	0.2%	0.2%
Australia	4.9%	9.9%	10.0%	Myanmar	0.7%	0.9%	1.0%
Austria	0.6%	0.0%	0.0%	Nauru	0.3%	0.0%	0.0%
Azerbaijan	0.7%	0.0%	0.0%	Nepal	0.4%	0.5%	0.4%
Bangladesh	1.1%	0.0%	0.0%	Netherlands	1.1%	0.0%	0.0%
Belgium	0.6%	0.6%	0.6%	New Zealand	1.5%	0.0%	0.0%
Bhutan	0.3%	0.0%	0.0%	Norway	0.6%	0.0%	0.0%
Brunei Darussalam	0.6%	0.5%	0.4%	Pakistan	2.0%	1.8%	1.8%
Cambodia	0.3%	0.0%	0.0%	Palau	0.3%	0.0%	0.0%
Canada	4.5%	8.7%	8.7%	Papua New Guinea	0.4%	0.0%	0.0%
China	5.5%	4.9%	4.8%	Philippines	2.2%	1.8%	1.8%
Cook Islands	0.3%	0.0%	0.0%	Portugal	0.4%	0.6%	0.6%
Denmark	0.6%	0.0%	0.0%	Samoa	0.3%	0.0%	0.0%
Fiji	0.4%	0.0%	0.0%	Singapore	0.6%	0.5%	0.4%
Finland	0.6%	0.0%	0.0%	Solomon Islands	0.3%	0.0%	0.0%
France	2.2%	2.3%	2.3%	Spain	0.6%	0.6%	0.6%
Georgia	0.6%	0.0%	0.0%	Sri Lanka	0.8%	0.0%	0.0%
Germany	3.8%	7.1%	7.1%	Sweden	0.6%	0.0%	0.0%
Hong Kong	0.7%	0.0%	0.0%	Switzerland	0.8%	0.6%	0.6%
India	5.4%	8.7%	8.7%	Taiwan	1.2%	0.0%	0.0%
Indonesia	4.7%	8.7%	8.7%	Tajikistan	0.5%	0.0%	0.0%
Ireland	0.6%	0.0%	0.0%	Thailand	1.4%	0.9%	1.0%
Italy	1.7%	1.1%	1.2%	Timor-Leste	0.3%	0.2%	0.2%
Japan	12.8%	12.9%	12.9%	Tonga	0.3%	0.0%	0.0%
Kazakhstan	0.9%	1.6%	1.4%	Turkey	0.6%	0.0%	0.0%
Kiribati	0.3%	0.0%	0.0%	Turkmenistan	0.5%	0.0%	0.0%
Korea	4.3%	8.4%	8.4%	Tuvalu	0.3%	0.0%	0.0%
Kyrgyz Republic	0.5%	0.0%	0.0%	United Kingdom	1.9%	0.0%	0.0%
Lao PDR	0.3%	0.0%	0.0%	United States	12.8%	12.9%	12.9%
Luxembourg	0.6%	0.0%	0.0%	Uzbekistan	0.8%	0.0%	0.0%
Malaysia	2.5%	2.7%	2.7%	Vanuatu	0.0%	0.0%	0.0%
Maldives	0.3%	0.2%	0.2%	Vietnam	0.6%	0.0%	0.0%
Marshall Islands	0.3%	0.2%	0.2%				

## AfDB: African Development Bank

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Algeria	4.3%	5.0%	5.0%	Lesotho	0.1%	0.0%	0.0%
Angola	1.2%	0.7%	0.7%	Liberia	0.2%	0.0%	0.0%
Argentina	0.1%	0.0%	0.0%	Libya	2.7%	2.8%	2.7%
Austria	0.5%	0.0%	0.0%	Luxembourg	0.2%	0.0%	0.0%
Belgium	0.7%	0.0%	0.0%	Madagascar	0.7%	0.0%	0.0%
Benin	0.2%	0.2%	0.2%	Malawi	0.2%	0.0%	0.0%
Botswana	1.1%	1.1%	1.0%	Mali	0.4%	0.5%	0.5%
Brazil	0.3%	0.0%	0.0%	Mauritania	0.1%	0.0%	0.0%
Burkina Faso	0.4%	0.5%	0.4%	Mauritius	0.7%	1.1%	1.0%
Burundi	0.2%	0.3%	0.2%	Morocco	3.6%	5.3%	5.2%
Cameroon	1.1%	0.8%	0.7%	Mozambique	0.6%	0.7%	0.7%
Canada	3.9%	6.4%	6.5%	Namibia	0.4%	0.7%	0.7%
Cape Verde	0.1%	0.0%	0.0%	Netherlands	0.9%	1.7%	1.7%
Central African Republic	0.1%	0.0%	0.0%	Niger	0.2%	0.3%	0.2%
Chad	0.1%	0.3%	0.2%	Nigeria	8.6%	8.4%	9.1%
China	1.2%	0.0%	0.0%	Norway	1.2%	1.6%	1.6%
Comoros	0.0%	0.0%	0.0%	Portugal	0.3%	0.0%	0.0%
Congo, Democratic Rep.	1.3%	1.3%	1.3%	Rwanda	0.1%	0.1%	0.1%
Congo, Republic	0.5%	0.8%	0.7%	Sao Tome and Principe	0.1%	0.0%	0.0%
Côte d'Ivoire	3.8%	4.4%	4.3%	Saudi Arabia	0.2%	0.0%	0.0%
Denmark	1.2%	1.6%	1.6%	Senegal	1.1%	1.2%	1.2%
Djibouti	0.0%	0.0%	0.0%	Seychelles	0.0%	0.1%	0.1%
Egypt	5.7%	5.8%	5.8%	Sierra Leone	0.3%	0.0%	0.0%
Equatorial Guinea	0.2%	0.0%	0.0%	Somalia	0.0%	0.0%	0.0%
Eritrea	0.0%	0.1%	0.1%	South Africa	5.1%	5.4%	5.3%
Ethiopia	1.6%	1.5%	1.6%	South Sudan	0.4%	0.0%	0.0%
Finland	0.5%	0.0%	0.0%	Spain	1.1%	0.0%	0.0%
France	3.8%	5.6%	5.6%	Sudan	0.3%	0.0%	0.0%
Gabon	0.9%	0.8%	0.8%	Swaziland	0.1%	0.0%	0.0%
Gambia, The	0.2%	0.0%	0.0%	Sweden	1.6%	1.6%	1.6%
Germany	4.2%	6.2%	6.3%	Switzerland	1.5%	0.0%	0.0%
Ghana	2.2%	3.2%	3.1%	Tanzania	0.8%	1.3%	1.3%
Guinea	0.4%	0.0%	0.0%	Togo	0.2%	0.0%	0.0%
Guinea-Bissau	0.0%	0.0%	0.0%	Tunisia	1.4%	0.0%	0.0%
India	0.3%	0.0%	0.0%	Turkey	0.4%	0.0%	0.0%
Italy	2.5%	1.7%	1.7%	Uganda	0.4%	0.1%	0.1%
Japan	5.6%	6.6%	6.8%	United Kingdom	1.8%	1.7%	1.7%
Kenya	1.5%	1.3%	1.3%	United States	6.1%	6.2%	6.2%
Korea, Republic	0.5%	0.0%	0.0%	Zambia	1.2%	1.1%	1.0%
Kuwait	0.5%	0.0%	0.0%	Zimbabwe	1.9%	2.1%	2.0%

## AIIB: Asian Infrastructure Investment Bank

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Afghanistan	0.3%	0.2%	0.2%	Malaysia	0.3%	0.2%	0.3%
Australia	3.5%	2.2%	3.1%	Maldives	0.2%	0.2%	0.2%
Austria	0.7%	0.4%	0.6%	Malta	0.3%	0.2%	0.2%
Azerbaijan	0.5%	0.3%	0.4%	Mongolia	0.3%	0.2%	0.2%
Bangladesh	0.8%	0.5%	0.7%	Myanmar	0.5%	0.3%	0.4%
Brunei Darussalam	0.3%	0.2%	0.3%	Nepal	0.3%	0.2%	0.3%
Cambodia	0.3%	0.2%	0.3%	Netherlands	1.2%	0.8%	1.0%
Canada	1.1%	0.7%	0.9%	New Zealand	0.6%	0.4%	0.6%
China	26.6%	54.7%	34.9%	Norway	0.7%	0.5%	0.6%
Germany	4.2%	2.6%	3.8%	Oman	0.5%	0.3%	0.4%
Denmark	0.6%	0.4%	0.5%	Pakistan	1.2%	0.7%	1.0%
Egypt	0.8%	0.5%	0.7%	Philippines	1.1%	0.7%	1.0%
Ethiopia	0.2%	0.1%	0.2%	Poland	1.0%	0.6%	0.9%
Finland	0.5%	0.3%	0.4%	Portugal	0.3%	0.2%	0.3%
Fiji	0.2%	0.1%	0.2%	Qatar	0.8%	0.5%	0.7%
France	3.2%	2.0%	2.9%	Russian Federation	6.0%	3.3%	5.5%
Georgia	0.3%	0.2%	0.3%	Samoa	0.2%	0.1%	0.2%
Hong Kong	0.9%	0.6%	0.8%	Saudi Arabia	2.5%	1.6%	2.2%
Hungary	0.3%	0.2%	0.2%	Singapore	0.5%	0.3%	0.4%
India	7.7%	3.7%	7.0%	Spain	1.8%	1.2%	1.6%
Indonesia	3.2%	2.0%	2.9%	Sri Lanka	0.5%	0.3%	0.4%
Ireland	0.3%	0.2%	0.3%	Sweden	0.8%	0.5%	0.7%
Iran	1.6%	1.1%	1.4%	Switzerland	0.9%	0.6%	0.8%
Iceland	0.7%	0.2%	0.2%	Tajikistan	0.3%	0.2%	0.2%
Israel	0.9%	0.6%	0.8%	Thailand	1.5%	1.0%	1.3%
Italy	2.5%	1.6%	2.2%	Timor-Leste	0.2%	0.1%	0.2%
Jordan	0.3%	0.2%	0.3%	Turkey	2.6%	1.6%	2.3%
Kazakhstan	0.9%	0.6%	0.8%	United Arab Emirates	1.3%	0.8%	1.1%
Korea, Republic	3.6%	2.2%	3.2%	United Kingdom	2.9%	1.9%	2.6%
Kyrgyz Republic	0.3%	0.2%	0.2%	Uzbekistan	0.4%	0.3%	0.4%
Lao P.D.R.	0.3%	0.2%	0.2%	Vanuatu	0.2%	0.1%	0.2%
Luxembourg	0.3%	0.2%	0.3%	Vietnam	0.8%	0.5%	0.7%

## BDEAC: Banque de Développement des États de l'Afrique Centrale

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
<i>Countries:</i>				Gabon	17.7%	17.5%	17.8%
Cameroon	17.7%	17.5%	17.8%	Kuwait	0.1%	0.0%	0.0%
Central African Rep.	17.7%	17.5%	17.8%	Libya	0.8%	0.0%	0.0%
Chad	17.7%	17.5%	17.8%				
Congo, Republic	17.7%	17.5%	17.8%	<i>Organizations:</i>			
Equatorial Guinea	9.2%	12.5%	11.1%	AfDB	0.3%	0.0%	0.0%
France	1.0%	0.0%	0.0%	BEAC	0.0%	0.0%	0.0%

**BOAD: West African Development Bank**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
<i>Countries:</i>				Morocco	3.1%	3.1%	3.0%
Belgium	3.1%	3.1%	3.0%	Mali	9.4%	9.4%	9.5%
Benin	9.4%	9.4%	9.5%	Niger	9.4%	9.4%	9.5%
Burkina Faso	9.4%	9.4%	9.5%	Senegal	9.4%	9.4%	9.5%
China	3.1%	3.1%	3.0%	Togo	9.4%	9.4%	9.5%
Côte D'Ivoire	9.5%	9.5%	9.6%	<i>Organizations:</i>			
Germany	3.1%	3.1%	3.0%	AfDB	2.9%	2.9%	2.8%
France	3.1%	3.1%	3.0%	EIB	3.1%	3.1%	3.0%
Guinea-Bissau	9.4%	9.4%	9.5%	BCEAO			
India (ExIm)	3.1%	3.1%	3.0%				

Note: The BCEAO (Central Bank of West African States) is equally owned by its member countries, which also have BOAD membership. Thus, its vote share is here distributed to those countries. The AfDB should be interpreted as *other* AfDB member countries. See Appendix A for more details.

**BSTDB: Black Sea Trade and Development Bank**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Albania	2.0%	2.9%	2.7%	Moldova	0.5%	0.9%	0.8%
Armenia	1.0%	2.4%	2.2%	Romania	14.1%	12.3%	12.2%
Azerbaijan	5.0%	9.7%	9.6%	Russia	16.6%	16.1%	16.4%
Bulgaria	13.6%	11.3%	11.3%	Turkey	16.6%	16.1%	16.4%
Georgia	0.5%	0.9%	0.8%	Ukraine	13.6%	11.3%	11.3%
Greece	16.6%	16.1%	16.4%				

**CABEI: Central American Bank for Economic Integration**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Argentina	3.5%	3.7%	3.7%	Honduras	12.3%	12.1%	12.1%
Colombia	3.5%	3.7%	3.7%	Mexico	7.4%	7.4%	7.4%
Costa Rica	12.3%	12.1%	12.1%	Nicaragua	12.3%	12.1%	12.1%
Dominican Republic	3.8%	4.3%	4.2%	Panama	3.8%	4.3%	4.2%
El Salvador	12.3%	12.1%	12.1%	Spain	4.8%	4.3%	4.2%
Guatemala	12.3%	12.1%	12.1%	Taiwan	12.0%	12.1%	12.1%

### CaDB: Caribbean Development Bank

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Antigua and Barbuda	0.8%	0.5%	0.7%	Haiti	0.8%	0.0%	0.0%
Bahamas	5.1%	5.3%	4.8%	Italy	5.6%	5.4%	5.3%
Barbados	3.3%	3.2%	3.0%	Jamaica	17.1%	19.8%	18.6%
Belize	0.8%	0.0%	0.0%	Mexico	2.8%	2.1%	2.6%
Brazil	1.2%	1.1%	1.1%	Smalls Islands*	1.0%	1.1%	1.7%
Canada	9.2%	9.9%	9.1%	St. Kitts and Nevis	0.8%	0.5%	0.7%
China	5.6%	5.4%	5.3%	St. Lucia	0.8%	0.5%	0.7%
Colombia	2.8%	2.1%	2.6%	St. Vincent and the Gren.	0.8%	1.1%	1.4%
Dominica	0.8%	0.5%	0.7%	Suriname	1.5%	1.1%	1.4%
Germany	5.6%	5.4%	5.3%	Trinidad and Tobago	17.1%	19.8%	19.7%
Grenada	0.7%	0.0%	0.0%	United Kingdom	9.2%	9.9%	9.1%
Guyana	3.7%	3.2%	3.5%	Venezuela	2.8%	2.1%	2.6%

\*Small islands include Anguilla, British Virgin Islands, Cayman Islands, Montserrat, and Turks and Caicos Islands, which are considered to be one member of CaDB collectively.

### CAF: Development Bank of Latin America

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
<i>Countries:</i>				Mexico	0.8%	0.1%	0.3%
Argentina	9.3%	9.3%	9.2%	Panama	6.0%	9.1%	7.9%
Barbados	0.2%	0.0%	0.1%	Paraguay	5.9%	9.1%	7.9%
Bolivia	7.2%	9.1%	8.3%	Peru	13.5%	9.7%	10.8%
Brazil	9.0%	9.3%	9.0%	Portugal	0.1%	0.0%	0.0%
Chile	0.3%	0.0%	0.1%	Spain	2.2%	0.3%	0.9%
Colombia	13.1%	9.6%	10.6%	Trinidad and Tobago	5.7%	6.6%	7.9%
Costa Rica	0.2%	0.0%	0.1%	Uruguay	6.0%	9.1%	7.9%
Dominican Republic	0.4%	0.0%	0.1%	Venezuela	13.0%	9.6%	10.6%
Ecuador	7.2%	9.1%	8.3%				
Jamaica	0.0%	0.0%	0.0%	<i>Commercial banks:</i>	0.0%	0.0%	0.0%

### CEDB: Council of Europe Development Bank

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Albania	0.2%	0.2%	0.2%	Latvia	0.2%	0.2%	0.2%
Belgium	3.0%	3.0%	2.8%	Liechtenstein	0.1%	0.1%	0.0%
Bosnia and Herzegovina	0.2%	0.2%	0.2%	Lithuania	0.2%	0.2%	0.2%
Bulgaria	1.1%	1.1%	1.0%	Luxembourg	0.6%	0.6%	0.6%
Croatia	0.4%	0.4%	0.3%	Macedonia	0.2%	0.2%	0.2%
Cyprus	0.4%	0.4%	0.3%	Malta	0.2%	0.2%	0.2%
Czech Republic	0.8%	0.8%	0.7%	Moldova	0.1%	0.1%	0.1%
Denmark	1.6%	1.6%	1.5%	Montenegro	0.1%	0.1%	0.1%
Estonia	0.2%	0.2%	0.2%	Netherlands	3.6%	3.6%	3.3%
Finland	1.3%	1.3%	1.1%	Norway	1.3%	1.3%	1.2%
France	16.7%	17.2%	17.8%	Poland	2.3%	2.3%	2.1%
Georgia	0.2%	0.2%	0.2%	Portugal	2.5%	2.5%	2.3%
Germany	16.7%	17.2%	17.8%	Romania	1.1%	1.1%	1.0%
Greece	3.0%	3.0%	2.8%	San Marino	0.1%	0.1%	0.1%
Holy See	0.0%	0.0%	0.0%	Serbia	0.5%	0.5%	0.4%
Hungary	0.8%	0.8%	0.7%	Slovak Republic	0.3%	0.3%	0.3%
Iceland	0.2%	0.2%	0.2%	Slovenia	0.2%	0.2%	0.2%
Ireland	0.9%	0.9%	0.8%	Spain	10.9%	9.3%	10.7%
Italy	16.7%	17.2%	17.8%	Sweden	2.5%	2.5%	2.3%
Kosovo	0.1%	0.1%	0.1%	Switzerland	1.0%	1.0%	0.9%
				Turkey	7.1%	7.8%	7.1%

### EADB: East African Development Bank

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
<i>Countries:</i>				<i>Institutions:</i>			
Kenya	28.1%	33.3%	33.3%	AfDB	9.1%	0.0%	0.0%
Rwanda	9.9%	0.0%	0.0%	Consort. Fmr Yug. Inst.	0.0%	0.0%	0.0%
Tanzania	24.7%	33.3%	33.3%	German Inv. and Dev. Co.	0.0%	0.0%	0.0%
Uganda	28.0%	33.3%	33.3%	Neth. Dev. Fin. Co.	0.0%	0.0%	0.0%
				Barclays Bank, London	0.0%	0.0%	0.0%
				Comm. Bank of Africa	0.0%	0.0%	0.0%
				Nordea Bank of Sweden	0.0%	0.0%	0.0%
				SBIC – Africa Holdings	0.2%	0.0%	0.0%
				Standard Chartered Bank	0.0%	0.0%	0.0%

The AfDB should be interpreted as *other* AfDB member countries. See Appendix A for more details.

### EBID: Ecowas Bank for Investment and Development

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Benin	4.7%	3.6%	3.6%	Liberia	10.7%	20.6%	20.5%
Burkina Faso	4.2%	0.2%	0.2%	Mali	3.0%	0.2%	0.2%
Cabo Verde	1.6%	0.1%	0.1%	Niger	3.4%	0.2%	0.2%
Côte D'Ivoire	11.5%	11.3%	11.4%	Nigeria	13.1%	14.1%	14.0%
Gambia, The	4.1%	3.5%	3.5%	Senegal	12.6%	20.7%	20.6%
Ghana	11.6%	11.3%	11.5%	Sierra Leone	6.9%	10.4%	10.4%
Guinea	4.6%	0.2%	0.2%	Togo	5.6%	3.6%	3.6%
Guinea-Bissau	2.4%	0.1%	0.1%				

## EBRD: European Bank for Reconstruction and Development

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
<i>Countries:</i>	0.1%	0.1%	0.1%	Lebanon	0.0%	0.0%	0.0%
Albania	0.1%	0.1%	0.0%	Liechtenstein	0.0%	0.0%	0.0%
Armenia	1.0%	1.0%	1.0%	Lithuania	0.3%	0.2%	0.2%
Australia	2.5%	2.4%	2.4%	Luxembourg	0.4%	0.3%	0.3%
Austria	0.1%	0.1%	0.1%	Macedonia, F.Y.R	0.1%	0.1%	0.1%
Azerbaijan	0.2%	0.2%	0.2%	Malta	0.2%	0.1%	0.1%
Belarus	2.5%	2.5%	2.4%	Mexico	0.2%	0.1%	0.1%
Belgium	0.2%	0.2%	0.2%	Moldova	0.1%	0.1%	0.1%
Bosnia and Herzegovina	1.0%	0.9%	0.9%	Mongolia	0.0%	0.0%	0.0%
Bulgaria	3.4%	3.4%	3.4%	Montenegro	0.0%	0.0%	0.0%
Canada	0.1%	0.1%	0.1%	Morocco	0.1%	0.1%	0.1%
China	0.5%	0.5%	0.5%	Netherlands	2.7%	2.7%	2.6%
Croatia	0.3%	0.2%	0.2%	New Zealand	0.0%	0.0%	0.0%
Cyprus	1.0%	1.0%	1.0%	Norway	1.3%	1.2%	1.2%
Czech Republic	1.4%	1.4%	1.3%	Poland	1.5%	1.4%	1.4%
Denmark	0.1%	0.1%	0.1%	Portugal	0.6%	0.5%	0.5%
Egypt	0.3%	0.2%	0.2%	Romania	0.7%	0.6%	0.6%
Estonia	1.4%	1.4%	1.4%	Russian Federation	4.0%	4.0%	4.0%
Finland	9.0%	9.3%	9.4%	Serbia	0.5%	0.5%	0.4%
France	0.1%	0.1%	0.1%	Slovak Republic	0.6%	0.5%	0.5%
Georgia	9.0%	9.3%	9.4%	Slovenia	0.4%	0.3%	0.3%
Germany	0.8%	0.8%	0.8%	Spain	3.7%	3.8%	3.8%
Greece	1.0%	0.9%	0.9%	Sweden	2.5%	2.4%	2.4%
Hungary	0.1%	0.1%	0.1%	Switzerland	2.3%	2.3%	2.2%
Iceland	0.5%	0.4%	0.4%	Tajikistan	0.1%	0.1%	0.1%
Ireland	0.7%	0.6%	0.6%	Tunisia	0.0%	0.0%	0.0%
Israel	9.0%	9.3%	9.4%	Turkey	1.2%	1.1%	1.1%
Italy	8.6%	8.7%	8.8%	Turkmenistan	0.0%	0.0%	0.0%
Japan	0.0%	0.0%	0.0%	Ukraine	0.8%	0.8%	0.8%
Jordan	0.2%	0.2%	0.2%	United Kingdom	9.0%	9.3%	9.4%
Kazakhstan	1.0%	1.0%	1.0%	United States	10.1%	10.5%	10.6%
Korea, Republic	0.0%	0.0%	0.0%	Uzbekistan	0.1%	0.1%	0.1%
Kosovo	0.1%	0.1%	0.1%				
Kyrgyz Republic	0.3%	0.2%	0.2%	<i>Institutions:</i>			
Latvia	0.1%	0.1%	0.1%	EIB	0.0%	0.0%	0.0%
				EU	0.0%	0.0%	0.0%

## EDB: Eurasian Development Bank

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Armenia	0.0%	0.0%	0.0%	Kyrgyzstan	0.0%	0.0%	0.0%
Belarus	1.0%	0.0%	0.0%	Russia	66.0%	100.0%	100.0%
Kazakhstan	33.0%	0.0%	0.0%	Tajikistan	0.0%	0.0%	0.0%



**EIB: European Investment Bank**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Austria	2.9%	2.0%	2.1%	Italy	9.8%	15.8%	15.1%
Belgium	4.0%	3.7%	3.7%	Latvia	1.8%	0.3%	0.5%
Bulgaria	1.9%	0.3%	0.6%	Lithuania	1.9%	0.3%	0.6%
Croatia	2.0%	0.5%	0.7%	Luxembourg	1.8%	0.3%	0.5%
Cyprus	1.8%	0.3%	0.5%	Malta	1.8%	0.2%	0.5%
Czech Republic	2.2%	0.8%	1.0%	Netherlands	4.0%	3.7%	3.7%
Denmark	2.9%	2.0%	2.1%	Poland	2.8%	1.9%	2.0%
Estonia	1.8%	0.2%	0.5%	Portugal	2.2%	0.8%	1.0%
Finland	2.4%	1.2%	1.4%	Romania	2.0%	0.6%	0.8%
France	9.8%	15.8%	15.1%	Slovakia	1.9%	0.4%	0.6%
Germany	9.8%	15.8%	15.1%	Slovenia	1.9%	0.4%	0.6%
Greece	2.4%	1.2%	1.4%	Spain	6.6%	11.9%	10.2%
Hungary	2.1%	0.8%	1.0%	Sweden	3.3%	2.6%	2.6%
Ireland	2.1%	0.6%	0.9%	United Kingdom	9.8%	15.8%	15.1%

**ETDB: ECO Trade and Development Bank**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Afghanistan	4.6%	0.0%	0.0%	Kyrgyz Republic	0.6%	0.0%	0.0%
Azerbaijan	3.0%	0.0%	0.0%	Pakistan	30.6%	33.3%	33.3%
Iran	30.6%	33.3%	33.3%	Turkey	30.6%	33.3%	33.3%

**FONPLATA: Plata Basin Financial Development Fund**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Argentina	20.0%	20.0%	20.0%	Paraguay	20.0%	20.0%	20.0%
Bolivia	20.0%	20.0%	20.0%	Uruguay	20.0%	20.0%	20.0%
Brazil	20.0%	20.0%	20.0%				

**IBRD: International Bank for Reconstruction and Development**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Afghanistan	0.1%	0.0%	0.0%	Egypt	0.5%	0.4%	0.5%
Albania	0.1%	0.0%	0.0%	El Salvador	0.0%	0.0%	0.0%
Algeria	0.5%	2.2%	0.2%	Equatorial Guinea	0.1%	0.1%	0.1%
Angola	0.2%	0.5%	0.6%	Eritrea	0.1%	0.1%	0.1%
Antigua and Barbuda	0.1%	0.0%	0.0%	Estonia	0.1%	0.1%	0.1%
Argentina	0.9%	0.3%	1.4%	Ethiopia	0.1%	0.1%	0.1%
Armenia	0.1%	0.0%	0.1%	Fiji	0.1%	0.1%	0.1%
Australia	1.4%	1.2%	0.9%	Finland	0.5%	0.3%	0.3%
Austria	0.6%	0.6%	0.6%	France	3.9%	3.7%	3.8%
Azerbaijan	0.1%	0.0%	0.1%	Gabon	0.1%	0.1%	0.1%
Bahamas	0.1%	0.0%	0.0%	Gambia, The	0.1%	0.1%	0.1%
Bahrain	0.1%	0.1%	0.1%	Georgia	0.1%	0.0%	0.1%
Bangladesh	0.3%	0.0%	0.0%	Germany	4.1%	3.9%	4.1%
Barbados	0.1%	0.0%	0.0%	Ghana	0.1%	0.1%	0.2%
Belarus	0.2%	0.2%	0.2%	Greece	0.1%	0.0%	0.0%
Belgium	1.6%	1.7%	1.9%	Grenada	0.1%	0.0%	0.0%
Belize	0.1%	0.0%	0.0%	Guatemala	0.1%	0.0%	0.0%
Benin	0.1%	0.1%	0.1%	Guinea	0.1%	0.1%	0.1%
Bhutan	0.1%	0.0%	0.0%	Guinea-Bissau	0.1%	0.1%	0.1%
Bolivia	0.1%	0.1%	0.1%	Guyana	0.1%	0.0%	0.0%
Bosnia and Herzegovina	0.1%	0.0%	0.0%	Haiti	0.1%	0.0%	0.0%
Botswana	0.1%	0.1%	0.1%	Honduras	0.1%	0.0%	0.0%
Brazil	1.8%	3.2%	3.3%	Hungary	0.5%	0.5%	0.4%
Brunei Darussalam	0.1%	0.1%	0.1%	Iceland	0.1%	0.2%	0.2%
Bulgaria	0.3%	0.0%	0.1%	India	3.0%	3.4%	3.6%
Burkina Faso	0.1%	0.2%	0.1%	Indonesia	1.0%	1.3%	1.4%
Burundi	0.1%	0.1%	0.1%	Iran	1.5%	0.1%	2.1%
Cabo Verde	0.1%	0.1%	0.1%	Iraq	0.2%	0.1%	0.1%
Cambodia	0.1%	0.1%	0.1%	Ireland	0.4%	0.0%	0.0%
Cameroon	0.1%	0.1%	0.1%	Israel	0.3%	0.0%	0.1%
Canada	2.5%	3.4%	3.8%	Italy	2.7%	3.2%	3.6%
Central African Republic	0.1%	0.1%	0.1%	Jamaica	0.2%	0.0%	0.0%
Chad	0.1%	0.1%	0.1%	Japan	7.0%	6.7%	7.2%
Chile	0.5%	0.3%	0.4%	Jordan	0.1%	0.1%	0.1%
China	4.5%	4.3%	4.5%	Kazakhstan	0.2%	0.0%	0.1%
Colombia	0.4%	0.0%	0.0%	Kenya	0.1%	0.1%	0.2%
Comoros	0.0%	0.0%	0.0%	Kiribati	0.1%	0.1%	0.1%
Congo, Dem. Republic	0.1%	0.1%	0.2%	Korea, Republic	1.6%	0.9%	1.5%
Congo, Republic	0.1%	0.1%	0.1%	Kosovo	0.1%	0.1%	0.1%
Costa Rica	0.1%	0.0%	0.0%	Kuwait	0.9%	1.0%	1.1%
Côte D'Ivoire	0.2%	0.1%	0.2%	Kyrgyz Republic	0.1%	0.0%	0.1%
Croatia	0.2%	0.0%	0.1%	Lao P.D.R.	0.0%	0.0%	0.0%
Cyprus	0.1%	0.0%	0.1%	Latvia	0.1%	0.2%	0.2%
Czech Republic	0.4%	0.3%	0.3%	Lebanon	0.1%	0.1%	0.1%
Denmark	0.8%	0.9%	0.9%	Lesotho	0.1%	0.1%	0.1%
Djibouti	0.1%	0.1%	0.1%	Liberia	0.0%	0.0%	0.0%
Dominica	0.1%	0.0%	0.0%	Libya	0.4%	0.3%	0.4%
Dominican Republic	0.1%	0.0%	0.0%	Lithuania	0.1%	0.2%	0.2%
Ecuador	0.2%	0.0%	0.0%	Luxembourg	0.1%	0.1%	0.1%

**IBRD: International Bank for Reconstruction and Development (continued)**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Macedonia	0.0%	0.0%	0.0%	Serbia	0.1%	0.0%	0.1%
Madagascar	0.1%	0.1%	0.1%	Seychelles	0.0%	0.0%	0.0%
Malawi	0.1%	0.1%	0.1%	Sierra Leone	0.1%	0.1%	0.1%
Malaysia	0.5%	0.4%	0.4%	Singapore	0.3%	0.2%	0.2%
Maldives	0.0%	0.0%	0.0%	Slovak Republic	0.2%	0.2%	0.2%
Mali	0.1%	0.1%	0.1%	Slovenia	0.1%	0.1%	0.1%
Malta	0.1%	0.0%	0.0%	Solomon Islands	0.1%	0.1%	0.1%
Marshall Islands	0.0%	0.1%	0.1%	Somalia	0.1%	0.1%	0.1%
Mauritania	0.1%	0.1%	0.1%	South Africa	0.8%	0.5%	0.6%
Mauritius	0.1%	0.1%	0.1%	South Sudan	0.1%	0.1%	0.1%
Mexico	1.6%	1.5%	1.6%	Spain	1.9%	1.5%	1.6%
Micronesia	0.0%	0.1%	0.1%	Sri Lanka	0.2%	0.0%	0.0%
Moldova	0.1%	0.0%	0.1%	St. Kitts and Nevis	0.0%	0.0%	0.0%
Mongolia	0.1%	0.1%	0.1%	St. Lucia	0.1%	0.0%	0.0%
Montenegro	0.1%	0.0%	0.0%	St. Vincent and the Gren.	0.0%	0.0%	0.0%
Morocco	0.3%	0.1%	0.2%	Sudan	0.1%	0.1%	0.1%
Mozambique	0.1%	0.1%	0.1%	Suriname	0.0%	0.0%	0.0%
Myanmar	0.2%	0.1%	0.1%	Swaziland	0.1%	0.0%	0.1%
Namibia	0.1%	0.1%	0.1%	Sweden	0.9%	0.7%	1.0%
Nauru	0.1%	0.1%	0.1%	Switzerland	1.5%	2.7%	2.3%
Nepal	0.1%	0.1%	0.1%	Syrian Arab Republic	0.1%	0.0%	0.0%
Netherlands	2.0%	3.8%	3.3%	Tajikistan	0.1%	0.0%	0.1%
New Zealand	0.4%	0.9%	0.9%	Tanzania	0.1%	0.1%	0.1%
Nicaragua	0.1%	0.0%	0.0%	Thailand	0.5%	0.4%	0.5%
Niger	0.1%	0.1%	0.1%	Timor-Leste	0.1%	0.0%	0.0%
Nigeria	0.7%	0.5%	0.6%	Togo	0.1%	0.1%	0.1%
Norway	0.6%	0.5%	0.5%	Tonga	0.1%	0.0%	0.0%
Oman	0.1%	0.1%	0.1%	Trinidad and Tobago	0.1%	0.0%	0.0%
Pakistan	0.5%	0.1%	0.2%	Tunisia	0.1%	0.1%	0.2%
Palau	0.0%	0.1%	0.0%	Turkey	1.1%	0.8%	1.0%
Panama	0.1%	0.0%	0.0%	Turkmenistan	0.1%	0.0%	0.0%
Papua New Guinea	0.1%	0.1%	0.1%	Tuvalu	0.0%	0.1%	0.1%
Paraguay	0.1%	0.1%	0.1%	Uganda	0.1%	0.1%	0.1%
Peru	0.4%	1.1%	0.4%	Ukraine	0.5%	0.0%	0.1%
Philippines	0.4%	0.0%	0.0%	United Arab Emirates	0.3%	0.2%	0.2%
Poland	0.8%	0.0%	0.1%	United Kingdom	3.9%	3.7%	3.8%
Portugal	0.3%	0.0%	0.0%	United States	16.3%	20.2%	18.3%
Qatar	0.1%	0.1%	0.1%	Uruguay	0.2%	0.3%	0.4%
Romania	0.3%	0.0%	0.1%	Uzbekistan	0.1%	0.0%	0.1%
Russia	2.8%	2.8%	3.0%	Vanuatu	0.1%	0.1%	0.1%
Rwanda	0.1%	0.1%	0.1%	Venezuela	0.9%	1.5%	1.6%
Samoa	0.1%	0.1%	0.1%	Vietnam	0.2%	0.2%	0.2%
San Marino	0.1%	0.0%	0.0%	Yemen	0.1%	0.1%	0.1%
Sao Tome and Principe	0.1%	0.0%	0.1%	Zambia	0.2%	0.2%	0.2%
Saudi Arabia	2.8%	2.7%	2.9%	Zimbabwe	0.2%	0.2%	0.2%
Senegal	0.1%	0.1%	0.1%				

## ICD: Islamic Corporation for the Development of the Private Sector

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
<i>Countries:</i>							
Afghanistan	0.0%	0.0%	0.0%	Maldives	0.1%	0.1%	0.1%
Albania	0.0%	0.0%	0.0%	Mali	0.1%	0.1%	0.1%
Algeria	1.8%	1.5%	1.9%	Mauritania	0.1%	0.1%	0.1%
Azerbaijan	0.2%	0.1%	0.1%	Morocco	0.3%	0.3%	0.4%
Bahrain	0.1%	0.0%	0.0%	Mozambique	0.1%	0.0%	0.1%
Bangladesh	1.0%	0.8%	0.8%	Niger	0.1%	0.1%	0.2%
Benin	0.1%	0.0%	0.1%	Nigeria	4.9%	5.4%	5.2%
Brunei	0.2%	0.2%	0.2%	Pakistan	1.8%	1.7%	1.8%
Burkina Faso	0.2%	0.2%	0.3%	Palestine	0.1%	0.0%	0.0%
Cameroon	0.2%	0.2%	0.2%	Qatar	5.4%	6.7%	6.7%
Chad	0.0%	0.0%	0.0%	Saudi Arabia	36.0%	33.5%	32.5%
Comoros	0.0%	0.0%	0.0%	Senegal	0.2%	0.2%	0.2%
Côte d'Ivoire	0.2%	0.1%	0.2%	Sierra Leone	0.1%	0.0%	0.1%
Djibouti	0.0%	0.0%	0.0%	Somalia	0.0%	0.0%	0.0%
Egypt	4.4%	5.1%	4.8%	Sudan	0.3%	0.3%	0.4%
Gabon	0.1%	0.1%	0.1%	Suriname	0.0%	0.0%	0.0%
Gambia, The	0.1%	0.0%	0.1%	Syria	0.1%	0.0%	0.0%
Guinea	0.1%	0.1%	0.1%	Tajikistan	0.0%	0.0%	0.0%
Guinea-Bissau	0.0%	0.0%	0.0%	Togo	0.0%	0.0%	0.0%
Indonesia	2.0%	1.9%	2.2%	Tunisia	0.1%	0.1%	0.2%
Iran	11.1%	8.4%	8.7%	Turkey	4.2%	5.2%	4.9%
Iraq	0.4%	0.2%	0.2%	Turkmenistan	0.0%	0.0%	0.0%
Jordan	0.4%	0.3%	0.3%	Uganda	0.1%	0.1%	0.1%
Kazakhstan	0.2%	0.1%	0.2%	United Arab Emirates	6.0%	6.9%	7.0%
Kuwait	7.0%	6.6%	6.6%	Uzbekistan	0.0%	0.0%	0.0%
Kyrgyz Republic	0.0%	0.0%	0.0%	Yemen	0.3%	0.3%	0.3%
Lebanon	0.1%	0.0%	0.0%				
Libya	8.1%	10.8%	10.4%				
Malaysia	1.6%	1.5%	1.6%	<i>IsDB:</i>	0.1%	0.2%	0.2%

Note: The IsDB should be interpreted as *other* IsDB member countries. See Appendix A for more details.

## IDA: International Development Association

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Afghanistan	0.2%	0.3%	0.3%	Ethiopia	0.2%	0.2%	0.2%
Albania	0.2%	0.0%	0.0%	Fiji	0.1%	0.1%	0.1%
Algeria	0.4%	0.3%	0.3%	Finland	0.6%	0.7%	0.6%
Angola	0.6%	0.4%	0.4%	France	3.8%	3.8%	3.7%
Argentina	1.2%	2.1%	2.1%	Gabon	0.0%	0.0%	0.0%
Armenia	0.2%	0.1%	0.1%	Gambia, The	0.2%	0.2%	0.2%
Australia	1.2%	1.3%	1.4%	Georgia	0.2%	0.1%	0.1%
Austria	0.9%	0.9%	0.5%	Germany	5.4%	5.4%	5.3%
Azerbaijan	0.3%	0.3%	0.6%	Ghana	0.3%	0.3%	0.3%
Bahamas	0.2%	0.0%	0.0%	Greece	0.2%	0.0%	0.0%
Bangladesh	0.5%	0.0%	0.0%	Grenada	0.1%	0.0%	0.0%
Barbados	0.2%	0.0%	0.0%	Guatemala	0.1%	0.1%	0.2%
Belgium	1.1%	1.2%	0.7%	Guinea	0.1%	0.1%	0.1%
Belize	0.1%	0.0%	0.0%	Guinea-Bissau	0.2%	0.2%	0.2%
Benin	0.2%	0.2%	0.2%	Guyana	0.3%	0.0%	0.0%
Bhutan	0.2%	0.0%	0.0%	Haiti	0.2%	0.0%	0.0%
Bolivia	0.3%	0.0%	0.0%	Honduras	0.2%	0.1%	0.2%
Bosnia and Herzegovina	0.2%	0.1%	0.1%	Hungary	0.7%	0.7%	0.4%
Botswana	0.2%	0.2%	0.2%	Iceland	0.2%	0.1%	0.1%
Brazil	1.7%	3.3%	3.3%	India	2.9%	3.9%	3.9%
Burkina Faso	0.2%	0.2%	0.2%	Indonesia	0.9%	1.1%	1.1%
Burundi	0.2%	0.2%	0.2%	Iran	0.4%	0.3%	0.3%
Cabo Verde	0.2%	0.2%	0.2%	Iraq	0.3%	0.2%	0.2%
Cambodia	0.3%	0.3%	0.2%	Ireland	0.4%	0.0%	0.0%
Cameroon	0.2%	0.2%	0.2%	Israel	0.3%	0.1%	0.2%
Canada	2.6%	4.4%	4.4%	Italy	2.3%	3.3%	3.1%
Central African Republic	0.2%	0.2%	0.2%	Japan	8.3%	8.5%	8.5%
Chad	0.2%	0.2%	0.2%	Jordan	0.1%	0.0%	0.0%
Chile	0.2%	0.0%	0.0%	Kazakhstan	0.1%	0.2%	0.4%
China	2.2%	2.2%	2.2%	Kenya	0.3%	0.3%	0.3%
Colombia	0.3%	0.0%	0.0%	Kiribati	0.2%	0.2%	0.1%
Comoros	0.2%	0.2%	0.2%	Korea, Republic	0.9%	0.6%	0.8%
Congo, Dem. Republic	0.3%	0.3%	0.3%	Kosovo	0.2%	0.2%	0.1%
Congo, Republic	0.2%	0.2%	0.2%	Kuwait	0.4%	0.4%	0.5%
Costa Rica	0.1%	0.0%	0.0%	Kyrgyz Republic	0.2%	0.3%	0.6%
Côte D'Ivoire	0.2%	0.2%	0.2%	Lao P.D.R.	0.2%	0.2%	0.2%
Croatia	0.3%	0.1%	0.2%	Latvia	0.2%	0.1%	0.1%
Cyprus	0.3%	0.1%	0.2%	Lebanon	0.0%	0.0%	0.0%
Czech Republic	0.4%	0.4%	0.3%	Lesotho	0.2%	0.2%	0.2%
Denmark	0.9%	0.8%	0.9%	Liberia	0.2%	0.2%	0.2%
Djibouti	0.2%	0.2%	0.2%	Libya	0.2%	0.2%	0.2%
Dominica	0.2%	0.0%	0.0%	Lithuania	0.2%	0.1%	0.1%
Dominican Republic	0.1%	0.0%	0.0%	Luxembourg	0.3%	0.3%	0.1%
Ecuador	0.2%	0.0%	0.0%	Macedonia	0.2%	0.1%	0.1%
Egypt	0.5%	0.5%	0.5%	Madagascar	0.2%	0.2%	0.2%
El Salvador	0.2%	0.1%	0.2%	Malawi	0.2%	0.2%	0.2%
Equatorial Guinea	0.0%	0.0%	0.0%	Malaysia	0.4%	0.3%	0.3%
Eritrea	0.2%	0.2%	0.2%	Maldives	0.2%	0.2%	0.2%
Estonia	0.2%	0.1%	0.1%	Mali	0.2%	0.2%	0.2%

**IDA: International Development Association (continued)**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Marshall Islands	0.0%	0.0%	0.0%	Slovak Republic	0.3%	0.3%	0.2%
Mauritania	0.2%	0.2%	0.2%	Slovenia	0.2%	0.2%	0.1%
Mauritius	0.3%	0.3%	0.3%	Solomon Islands	0.2%	0.2%	0.1%
Mexico	0.5%	0.1%	0.2%	Somalia	0.0%	0.0%	0.0%
Micronesia	0.1%	0.1%	0.1%	South Africa	0.3%	0.4%	0.4%
Moldova	0.2%	0.1%	0.1%	South Sudan	0.2%	0.2%	0.2%
Mongolia	0.2%	0.2%	0.2%	Spain	1.1%	1.8%	1.6%
Montenegro	0.2%	0.1%	0.1%	Sri Lanka	0.4%	0.0%	0.0%
Morocco	0.4%	0.3%	0.3%	St. Kitts and Nevis	0.0%	0.0%	0.0%
Mozambique	0.2%	0.2%	0.2%	St. Lucia	0.1%	0.0%	0.0%
Myanmar	0.3%	0.3%	0.3%	St. Vincent and the Gren.	0.2%	0.0%	0.0%
Nepal	0.2%	0.2%	0.2%	Sudan	0.2%	0.2%	0.2%
Netherlands	2.0%	3.9%	2.9%	Swaziland	0.1%	0.1%	0.1%
New Zealand	0.3%	0.3%	0.3%	Sweden	2.0%	2.5%	2.5%
Nicaragua	0.2%	0.1%	0.2%	Switzerland	1.3%	0.4%	1.3%
Niger	0.2%	0.2%	0.2%	Syrian Arab Republic	0.0%	0.0%	0.0%
Nigeria	0.4%	0.4%	0.4%	Tajikistan	0.2%	0.2%	0.4%
Norway	1.0%	0.8%	0.9%	Tanzania	0.2%	0.2%	0.2%
Oman	0.2%	0.2%	0.2%	Thailand	0.4%	0.3%	0.3%
Pakistan	0.8%	0.8%	0.8%	Timor-Leste	0.2%	0.0%	0.0%
Palau	0.0%	0.0%	0.0%	Togo	0.2%	0.2%	0.2%
Panama	0.0%	0.0%	0.0%	Tonga	0.2%	0.2%	0.2%
Papua New Guinea	0.2%	0.3%	0.2%	Trinidad and Tobago	0.3%	0.0%	0.0%
Paraguay	0.1%	0.0%	0.0%	Tunisia	0.0%	0.0%	0.0%
Peru	0.3%	0.0%	0.0%	Turkey	0.6%	0.6%	0.4%
Philippines	0.5%	0.0%	0.0%	Tuvalu	0.0%	0.0%	0.0%
Poland	2.0%	2.6%	1.7%	Uganda	0.2%	0.2%	0.2%
Portugal	0.3%	0.0%	0.0%	Ukraine	0.4%	0.1%	0.2%
Romania	0.3%	0.1%	0.2%	United Arab Emirates	0.0%	0.0%	0.0%
Russian Federation	0.3%	0.4%	0.3%	United Kingdom	6.5%	6.5%	6.4%
Rwanda	0.2%	0.2%	0.2%	United States	10.2%	10.8%	10.6%
Samoa	0.2%	0.2%	0.1%	Uzbekistan	0.3%	0.3%	0.6%
Sao Tome and Principe	0.2%	0.2%	0.2%	Vanuatu	0.2%	0.2%	0.2%
Saudi Arabia	3.3%	3.2%	3.2%	Vietnam	0.2%	0.2%	0.2%
Senegal	0.3%	0.3%	0.3%	Yemen	0.2%	0.2%	0.2%
Serbia	0.3%	0.3%	0.6%	Zambia	0.3%	0.3%	0.3%
Sierra Leone	0.2%	0.2%	0.2%	Zimbabwe	0.4%	0.4%	0.4%
Singapore	0.2%	0.2%	0.2%				

## IDB: Inter-American Development Bank

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Argentina	10.8%	8.1%	10.0%	Honduras	0.4%	0.3%	0.4%
Austria	0.2%	0.0%	0.1%	Israel	0.2%	0.0%	0.0%
Bahamas	0.2%	0.2%	0.3%	Italy	1.9%	1.2%	1.3%
Barbados	0.1%	0.1%	0.1%	Jamaica	0.6%	0.3%	0.5%
Belgium	0.3%	0.6%	0.6%	Japan	5.0%	4.9%	5.3%
Belize	0.1%	0.3%	0.4%	Korea, Republic	0.0%	0.0%	0.0%
Bolivia	0.9%	0.6%	0.7%	Mexico	6.9%	5.7%	6.6%
Brazil	10.8%	7.7%	9.7%	Netherlands	0.3%	0.6%	0.6%
Canada	4.0%	3.4%	3.5%	Nicaragua	0.4%	0.3%	0.4%
Chile	3.0%	3.3%	4.0%	Norway	0.2%	0.3%	0.4%
China	0.0%	0.0%	0.0%	Panama	0.4%	0.0%	0.0%
Colombia	3.0%	2.5%	3.1%	Paraguay	0.4%	0.6%	0.7%
Costa Rica	0.4%	0.3%	0.4%	Peru	1.4%	0.0%	0.0%
Croatia	0.1%	0.0%	0.0%	Portugal	0.1%	0.0%	0.0%
Denmark	0.2%	0.3%	0.4%	Slovenia	0.0%	0.0%	0.0%
Dominican Republic	0.6%	0.0%	0.0%	Spain	1.9%	1.0%	1.2%
Ecuador	0.6%	0.0%	0.0%	Suriname	0.1%	0.0%	0.0%
El Salvador	0.4%	0.3%	0.4%	Sweden	0.3%	0.7%	0.7%
Finland	0.2%	0.0%	0.1%	Switzerland	0.5%	0.6%	0.6%
France	1.9%	1.0%	1.2%	Trinidad and Tobago	0.4%	0.2%	0.3%
Germany	1.9%	1.2%	1.3%	United Kingdom	1.0%	0.0%	0.0%
Guatemala	0.6%	0.4%	0.4%	United States	30.0%	47.9%	38.7%
Guyana	0.2%	0.1%	0.1%	Uruguay	1.2%	0.6%	0.7%
Haiti	0.4%	0.0%	0.0%	Venezuela	5.8%	4.9%	5.4%

## IDB Invest

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Argentina	10.5%	10.8%	10.9%	Honduras	0.3%	0.3%	0.3%
Austria	0.6%	0.4%	0.4%	Israel	0.3%	0.0%	0.0%
Bahamas	0.2%	0.2%	0.2%	Italy	3.4%	2.1%	2.2%
Barbados	0.1%	0.2%	0.2%	Jamaica	0.4%	0.4%	0.3%
Belgium	0.2%	0.4%	0.4%	Japan	3.7%	4.3%	4.4%
Belize	0.1%	0.2%	0.1%	Korea	3.9%	4.3%	4.4%
Bolivia	1.0%	0.9%	0.9%	Mexico	8.1%	8.5%	8.5%
Brazil	9.0%	8.9%	8.8%	Netherlands	1.1%	1.3%	1.1%
Canada	2.0%	1.8%	1.8%	Nicaragua	0.5%	0.5%	0.4%
Chile	2.6%	0.0%	0.0%	Norway	0.7%	0.6%	0.6%
China	4.4%	4.6%	4.8%	Panama	0.6%	0.0%	0.0%
Colombia	3.2%	3.7%	3.7%	Paraguay	0.5%	0.9%	0.9%
Costa Rica	0.5%	0.5%	0.4%	Peru	3.6%	5.9%	5.8%
Denmark	1.1%	0.9%	0.9%	Portugal	0.3%	0.0%	0.0%
Dominican Republic	0.6%	0.0%	0.0%	Spain	4.6%	4.3%	4.4%
Ecuador	0.7%	0.0%	0.0%	Suriname	0.1%	0.0%	0.0%
El Salvador	0.3%	0.3%	0.3%	Sweden	0.7%	0.6%	0.6%
Finland	0.7%	0.6%	0.6%	Switzerland	1.7%	1.8%	1.8%
France	2.6%	2.8%	2.8%	Trinidad & Tobago	0.3%	0.4%	0.3%
Germany	1.4%	2.1%	2.2%	United States	16.6%	17.7%	17.9%
Guatemala	0.7%	0.6%	0.6%	Uruguay	1.3%	0.9%	0.9%
Guyana	0.2%	0.2%	0.2%	Venezuela	4.5%	4.9%	4.8%
Haiti	0.3%	0.0%	0.0%				



## IFC: International Finance Corporation

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Afghanistan	0.0%	0.0%	0.0%	El Salvador	0.0%	0.0%	0.0%
Albania	0.1%	0.0%	0.0%	Equatorial Guinea	0.0%	0.0%	0.0%
Algeria	0.2%	0.2%	0.2%	Eritrea	0.1%	0.1%	0.1%
Angola	0.1%	0.0%	0.0%	Estonia	0.1%	0.1%	0.1%
Antigua and Barbuda	0.0%	0.0%	0.0%	Ethiopia	0.0%	0.0%	0.0%
Argentina	1.6%	2.4%	2.6%	Fiji	0.0%	0.1%	0.1%
Armenia	0.1%	0.0%	0.0%	Finland	0.6%	0.4%	0.4%
Australia	1.8%	3.0%	3.3%	France	4.5%	3.9%	4.3%
Austria	0.8%	0.3%	0.4%	Gabon	0.1%	0.0%	0.1%
Azerbaijan	0.1%	0.0%	0.0%	Gambia, The	0.0%	0.0%	0.0%
Bahamas	0.0%	0.0%	0.0%	Georgia	0.1%	0.0%	0.0%
Bahrain	0.1%	0.1%	0.1%	Germany	4.8%	4.2%	4.6%
Bangladesh	0.4%	0.0%	0.0%	Ghana	0.2%	0.2%	0.2%
Barbados	0.0%	0.0%	0.0%	Greece	0.3%	0.0%	0.0%
Belarus	1.9%	2.5%	2.5%	Grenada	0.0%	0.0%	0.0%
Belgium	0.0%	0.0%	0.0%	Guatemala	0.1%	0.0%	0.0%
Belize	0.2%	0.0%	0.0%	Guinea	0.0%	0.0%	0.0%
Benin	0.0%	0.0%	0.0%	Guinea-Bissau	0.0%	0.0%	0.0%
Bhutan	0.1%	0.0%	0.0%	Guyana	0.1%	0.0%	0.0%
Bolivia	0.1%	0.0%	0.0%	Haiti	0.1%	0.0%	0.0%
Bosnia and Herzegovina	0.1%	0.0%	0.0%	Honduras	0.0%	0.0%	0.0%
Botswana	0.0%	0.0%	0.0%	Hungary	0.5%	0.3%	0.4%
Brazil	2.1%	2.8%	3.1%	Iceland	0.0%	0.0%	0.0%
Bulgaria	0.2%	0.0%	0.0%	India	3.8%	4.0%	4.4%
Burkina Faso	0.1%	0.0%	0.0%	Indonesia	1.2%	1.3%	1.3%
Burundi	0.0%	0.0%	0.0%	Iran	0.1%	0.0%	0.0%
Cambodia	0.0%	0.0%	0.0%	Iraq	0.0%	0.0%	0.0%
Cameroon	0.1%	0.0%	0.0%	Ireland	0.1%	0.0%	0.0%
Canada	3.0%	3.4%	3.7%	Israel	0.1%	0.0%	0.0%
Cape Verde	0.0%	0.0%	0.0%	Italy	3.0%	3.4%	3.7%
Central African Republic	0.0%	0.0%	0.0%	Jamaica	0.2%	0.0%	0.0%
Chad	0.1%	0.0%	0.1%	Japan	6.0%	5.2%	5.8%
Chile	0.5%	0.0%	0.0%	Jordan	0.1%	0.1%	0.1%
China	2.3%	2.0%	2.2%	Kazakhstan	0.2%	0.0%	0.0%
Colombia	0.0%	0.0%	0.0%	Kenya	0.2%	0.2%	0.2%
Comoros	0.1%	0.0%	0.1%	Kiribati	0.0%	0.0%	0.0%
Congo, Democratic Rep.	0.0%	0.0%	0.0%	Korea, Republic	1.1%	0.0%	0.0%
Congo, Republic	0.1%	0.0%	0.1%	Kosovo	0.1%	0.0%	0.0%
Costa Rica	0.2%	0.0%	0.0%	Kuwait	0.6%	0.5%	0.5%
Cote D'Ivoire	0.5%	1.0%	0.7%	Kyrgyz Republic	0.1%	0.0%	0.0%
Croatia	0.1%	0.0%	0.0%	Lao P.D.R.	0.0%	0.1%	0.1%
Cyprus	0.1%	0.0%	0.0%	Latvia	0.1%	0.1%	0.1%
Czech Republic	0.4%	0.3%	0.3%	Lebanon	0.0%	0.0%	0.0%
Denmark	0.7%	0.5%	0.6%	Lesotho	0.0%	0.0%	0.0%
Djibouti	0.0%	0.0%	0.0%	Liberia	0.0%	0.0%	0.0%
Dominica	0.0%	0.0%	0.0%	Libya	0.0%	0.0%	0.0%
Dominican Republic	0.1%	0.0%	0.0%	Lithuania	0.1%	0.1%	0.1%
Ecuador	0.1%	0.0%	0.0%	Luxembourg	0.1%	0.1%	0.1%
Egypt	0.5%	0.3%	0.4%	Macedonia	0.0%	0.0%	0.0%

**IFC: International Finance Corporation (continued)**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Madagascar	0.0%	0.0%	0.0%	Serbia	0.1%	0.0%	0.0%
Malawi	0.1%	0.1%	0.1%	Seychelles	0.0%	0.0%	0.0%
Malaysia	0.6%	0.2%	0.3%	Sierra Leone	0.0%	0.0%	0.0%
Maldives	0.0%	0.0%	0.0%	Singapore	0.0%	0.1%	0.1%
Mali	0.0%	0.0%	0.0%	Slovak Republic	0.2%	0.1%	0.1%
Malta	0.1%	0.0%	0.0%	Slovenia	0.1%	0.0%	0.0%
Marshall Islands	0.1%	0.0%	0.0%	Solomon Islands	0.0%	0.0%	0.0%
Mauritania	0.0%	0.0%	0.0%	Somalia	0.0%	0.0%	0.0%
Mauritius	0.1%	0.0%	0.1%	South Africa	0.7%	0.0%	0.0%
Mexico	1.2%	1.2%	1.3%	South Sudan	0.1%	0.1%	0.1%
Micronesia	0.1%	0.0%	0.0%	Spain	1.4%	1.2%	1.3%
Moldova	0.1%	0.0%	0.0%	Sri Lanka	0.3%	0.0%	0.0%
Mongolia	0.0%	0.0%	0.0%	St. Kitts and Nevis	0.1%	0.0%	0.0%
Montenegro	0.1%	0.0%	0.0%	St. Lucia	0.0%	0.0%	0.0%
Morocco	0.4%	0.2%	0.2%	Sudan	0.0%	0.0%	0.0%
Mozambique	0.0%	0.0%	0.0%	Suriname	0.1%	0.0%	0.0%
Myanmar	0.1%	0.1%	0.1%	Swaziland	0.1%	0.0%	0.1%
Namibia	0.0%	0.0%	0.0%	Sweden	1.0%	1.3%	1.5%
Nepal	0.1%	0.1%	0.1%	Switzerland	1.7%	2.5%	2.7%
Netherlands	2.1%	3.2%	3.5%	Syrian Arab Republic	0.0%	0.0%	0.0%
New Zealand	0.2%	0.0%	0.0%	Tajikistan	0.1%	0.0%	0.0%
Nicaragua	0.1%	0.0%	0.0%	Tanzania	0.1%	0.1%	0.1%
Niger	0.0%	0.0%	0.0%	Thailand	0.5%	0.2%	0.3%
Nigeria	1.1%	1.6%	1.7%	Timor-Leste	0.1%	0.0%	0.0%
Norway	0.7%	0.5%	0.6%	Togo	0.1%	0.0%	0.0%
Oman	0.1%	0.1%	0.1%	Tonga	0.0%	0.1%	0.1%
Pakistan	0.8%	1.0%	1.0%	Trinidad and Tobago	0.2%	0.0%	0.0%
Palau	0.0%	0.0%	0.0%	Tunisia	0.2%	0.1%	0.1%
Panama	0.1%	0.0%	0.0%	Turkey	0.6%	0.3%	0.4%
Papua New Guinea	0.1%	0.0%	0.0%	Turkmenistan	0.1%	0.0%	0.0%
Paraguay	0.0%	0.0%	0.0%	Uganda	0.1%	0.0%	0.1%
Peru	0.3%	0.0%	0.0%	Ukraine	0.4%	0.0%	0.0%
Philippines	0.5%	0.0%	0.0%	United Arab Emirates	0.2%	0.2%	0.2%
Poland	0.3%	0.0%	0.0%	United Kingdom	4.5%	3.9%	4.3%
Portugal	0.3%	0.0%	0.0%	United States	21.0%	30.6%	24.5%
Qatar	0.1%	0.1%	0.1%	Uruguay	0.2%	0.0%	0.0%
Romania	0.2%	0.0%	0.0%	Uzbekistan	0.2%	0.0%	0.0%
Russia	3.8%	3.4%	3.7%	Vanuatu	0.0%	0.0%	0.0%
Rwanda	0.0%	0.0%	0.0%	Venezuela	1.0%	1.2%	1.3%
Samoa	0.0%	0.0%	0.0%	Vietnam	0.0%	0.1%	0.1%
Sao Tome and Principe	0.0%	0.0%	0.0%	Yemen	0.1%	0.1%	0.1%
Saudi Arabia	1.9%	1.7%	1.8%	Zambia	0.1%	0.1%	0.1%
Senegal	0.1%	0.0%	0.1%	Zimbabwe	0.1%	0.1%	0.1%

**IIB: International Investment Bank**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Bulgaria	12.3%	17.4%	13.7%	Romania	9.0%	7.8%	6.7%
Cuba	6.4%	2.2%	2.1%	Russia	29.4%	34.2%	46.9%
Czech Republic	10.4%	11.5%	7.4%	Slovakia	8.5%	7.8%	6.6%
Hungary	11.9%	16.8%	13.0%	Vietnam	6.1%	1.2%	1.8%
Mongolia	6.1%	1.2%	1.8%				

**IsDB: Islamic Development Bank**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Afghanistan	0.0%	0.0%	0.0%	Malaysia	1.6%	1.3%	1.5%
Albania	0.0%	0.0%	0.0%	Maldives	0.1%	0.1%	0.1%
Algeria	2.6%	1.9%	2.2%	Mali	0.1%	0.1%	0.1%
Azerbaijan	0.1%	0.1%	0.1%	Mauritania	0.1%	0.1%	0.1%
Bahrain	0.1%	0.1%	0.1%	Morocco	0.5%	0.4%	0.5%
Bangladesh	1.0%	0.8%	0.9%	Mozambique	0.1%	0.1%	0.1%
Benin	0.1%	0.0%	0.0%	Niger	0.2%	0.2%	0.2%
Brunei	0.3%	0.2%	0.2%	Nigeria	7.7%	7.2%	7.3%
Burkina Faso	0.2%	0.2%	0.2%	Oman	0.3%	0.2%	0.3%
Cameroon	0.3%	0.2%	0.2%	Pakistan	2.6%	1.9%	2.2%
Chad	0.0%	0.0%	0.0%	Palestine	0.0%	0.0%	0.0%
Comoros	0.0%	0.0%	0.0%	Qatar	7.2%	6.8%	6.8%
Cote D'Ivoire	0.0%	0.0%	0.0%	Saudi Arabia	23.6%	31.4%	28.7%
Djibouti	0.0%	0.0%	0.0%	Senegal	0.3%	0.2%	0.3%
Egypt	7.1%	6.7%	6.7%	Sierra Leone	0.0%	0.0%	0.0%
Gabon	0.1%	0.1%	0.1%	Somalia	0.0%	0.0%	0.0%
Gambia	0.1%	0.1%	0.1%	Sudan	0.5%	0.4%	0.4%
Guinea	0.1%	0.1%	0.1%	Suriname	0.0%	0.0%	0.0%
Guinea-Bissau	0.0%	0.0%	0.0%	Syria	0.0%	0.0%	0.0%
Guyana	0.0%	0.0%	0.0%	Tajikistan	0.0%	0.0%	0.0%
Indonesia	2.3%	1.7%	2.0%	Togo	0.0%	0.0%	0.0%
Iran	8.3%	7.6%	7.9%	Tunisia	0.1%	0.1%	0.1%
Iraq	0.3%	0.2%	0.2%	Turkey	6.5%	6.2%	6.0%
Jordan	0.4%	0.4%	0.4%	Turkmenistan	0.0%	0.0%	0.0%
Kazakhstan	0.1%	0.1%	0.1%	Uganda	0.1%	0.0%	0.1%
Kuwait	7.0%	6.6%	6.5%	United Arab Emirates	7.6%	7.0%	7.1%
Kyrgyz	0.1%	0.1%	0.1%	Uzbekistan	0.0%	0.0%	0.0%
Lebanon	0.1%	0.1%	0.1%	Yemen	0.5%	0.4%	0.5%
Libya	9.5%	8.5%	9.2%	Malaysia	1.6%	1.3%	1.5%

**NDB: New Development Bank**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Brazil	20.0%	20.0%	20.0%	Russian Federation	20.0%	20.0%	20.0%
China	20.0%	20.0%	20.0%	South Africa	20.0%	20.0%	20.0%
India	20.0%	20.0%	20.0%				

**NIB: Nordic Investment Bank**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
Denmark	12.5%	12.5%	12.5%	Latvia	12.5%	12.5%	12.5%
Estonia	12.5%	12.5%	12.5%	Lithuania	12.5%	12.5%	12.5%
Finland	12.5%	12.5%	12.5%	Norway	12.5%	12.5%	12.5%
Iceland	12.5%	12.5%	12.5%	Sweden	12.5%	12.5%	12.5%

**TDB: Eastern and Southern African Trade and Development Bank**

Member	Vote Share	Power Index		Member	Vote Share	Power Index	
		P-B	S-S			P-B	S-S
<i>Countries:</i>							
Belarus	2.2%	0.1%	0.1%	Sudan	4.5%	4.4%	4.4%
Burundi	1.9%	0.2%	0.2%	Swaziland	0.4%	1.9%	1.9%
China	9.8%	11.9%	11.9%	Tanzania	6.0%	2.8%	2.8%
Comoros	0.1%	0.0%	0.0%	Uganda	5.7%	4.5%	4.5%
Congo, Democratic Rep.	4.6%	4.5%	4.6%	Zambia	0.6%	4.5%	4.5%
Djibouti	0.3%	1.9%	1.9%	Zimbabwe	7.1%	12.3%	12.3%
Egypt	6.6%	7.1%	7.1%	<i>Institutions:</i>			
Eritrea	0.3%	0.0%	0.0%	Africa Reinsurance Corp.	0.4%	0.0%	0.0%
Ethiopia	8.3%	12.3%	12.3%	AfDB	5.7%	9.9%	9.9%
Kenya	5.9%	4.7%	4.7%	Mauritian Eagle Ins. Co.	0.1%	0.0%	0.0%
Malawi	2.0%	0.2%	0.2%	OPED Fund for Int'l. Dev.	8.9%	11.5%	11.5%
Mauritius	4.2%	0.5%	0.5%	Sacos Group Ltd.	0.1%	0.0%	0.0%
Mozambique	2.4%	4.1%	4.1%	TDB Dir, Stakeholders Fund	0.1%	0.0%	0.0%
Rwanda	3.4%	0.3%	0.3%	TDB Staff Fund	2.5%	0.0%	0.0%
Seychelles	0.9%	0.1%	0.1%	ZEP-RE Reinsurance Fund	0.3%	0.0%	0.0%
Somalia	0.3%	0.0%	0.0%				

Note: The AfDB should be interpreted as *other AfDB* member countries. See Appendix A for more details.

## Appendix C: Methodological Notes

A few points merit mentioning to clarify the methodology used here:

- Wherever possible, I have endeavored to rely on MDB histories as presented by the institutions (or their executives) themselves.
- Wherever possible (in cases of no more than 25 voting board members and with only one stage of voting) I rely on the Penrose-Banzhaf calculator developed by Conrad and Reich (2002) and the Shapley-Shubik calculator developed by Leech (2002).
- This work excludes funds with exclusively voluntary contributions as opposed to capital shares. Thus, for example, the OPEC Fund for International Development is absent.
- Many MDBs have subsidiary windows for concessional, private-sector, or other specific types of lending and/or grants. I include those instruments only when they have independent boards of directors and independent financial statements with published assets and equity distributions. Thus, for example, the African Development Fund is excluded for lack of published assets and equity information.

## Appendix C: Glossary of MDB abbreviations

Abbreviation	Name
<b>Global</b>	
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IFC	International Finance Corporation
<b>Regional<sup>2</sup></b>	
AiIB	Asian Infrastructure Investment Bank
AfDB	African Development Bank
ADB	Asian Development Bank
CAF	Development Bank of Latin America (formerly Andean Finance Corporation)
CEDB	Council of Europe Development Bank
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
IDB	Inter-American Development Bank
ICD	Islamic Corporation for the Development of the Private Sector
IDB Invest	IDB Invest (formerly Inter-American Investment Corporation)
IIB	International Investment Bank
IsDB	Islamic Development Bank
NDB	New Development Bank
<b>Sub-Regional</b>	
BDEAC	Development Bank of the Central African States
BOAD	West African Development Bank
BSTDB	Black Sea Trade and Development Bank
CABEI	Central American Bank for Economic Integration
CaDB	Caribbean Development Bank
EADB	East African Development Bank
EBID	ECOWAS (Economic Community of West African States) Bank for Investment and Development
EDB	Eurasian Development Bank
ETDB	ECO (Economic Cooperation Organization) Trade and Development Bank
FONPLATA	Plata Basin Financial Development Fund
NIB	Nordic Investment Bank
TDB	Eastern and Southern African Trade and Development Bank (formerly PTA – Preferential Trade Agreement—Bank)

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A background image for the header section showing a red-tinted globe in the center, with a line graph on the left and a bar chart on the right, all set against a blurred background of documents.

# GLOBAL ECONOMIC GOVERNANCE INITIATIVE

*The Global Economic Governance Initiative (GEGI) is a research initiative at Boston University's Global Development Policy Center.*

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