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**Multilateral Development Banks and Financing for
Development:
The Role of Resource Needs Reviews**

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ABSTRACT

Multilateral development banks (MDBs) play a key role in providing developing countries with affordable, long-term finance. In 2024, to help meet development challenges, the G20 agreed on a roadmap to make the MDBs bigger, better and more effective and recommended MDBs conduct resource needs reviews to assess the adequacy of their resources to meet shareholder objectives and shared global challenges. This paper investigates the extent to which MDBs incorporate resource needs into their reviews of capital requirements. We find that MDBs generally do not have rigorous, evidence-based processes in place. Where they exist, the reviews have been ad hoc and focused on preserving the financial robustness of MDBs. Needs assessments exhibit path dependencies reflecting envelopes used in prior rounds. Our analysis is rooted in MDB documents, G20 communiqués, and case studies of MDBs. Forward-looking resource needs assessments will be crucial to ensure that MDBs have the resources they need to support those objectives. The paper concludes with a set of principles that could govern resource reviews processes.

Keywords: multilateral development banks, G20, development finance, climate finance, development finance institutions.

JEL: F33, O19, H81, Q54.

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1. Introduction

As providers of long-term and affordable finance, multilateral development banks (MDBs) have a vital role to play in supporting the achievement of development and climate change goals. The investment mobilization challenge is urgent and immense. Even lower bound estimates, such as the G20 Independent Expert Group, suggest that countries will need to mobilize an additional \$3 trillion by 2030, with \$1 trillion from a mix of external public and private finance (G20 IEG 2023). With emerging market and developing economies (EMDEs) facing high costs of borrowing, competing demand for scarce public revenue, and weaker than expected private capital mobilization, MDB-driven finance will have to be a major element of the overall financing mix for sustainable development. The new climate finance goal agreed at the UN climate conference in Baku in 2024 anticipates nearly half of the total to be met through MDB finance (UNFCCC 2024).

In recent years, policymakers have responded to calls for the need to reform MDBs and scale up their lending. In 2023, G20 Leaders declared that ‘Stronger MDBs will be important to our efforts to mobilize financing from all sources for a quantum jump from billions to trillions of dollars for development (G20 2023). In 2024, G20 leaders endorsed a “Roadmap towards Better, Bigger, and More Effective Multilateral Development Banks (MDBs), which presents comprehensive recommendations and actions for MDBs to evolve their visions, incentive structures, operational approaches, and financial capacities.” (G20 2024).

In light of these needs and expectations, are the MDBs big enough as a system to supply finance at the scale required to support the achievement of these shared goals? And, what is the process whereby MDBs assess whether they have sufficient capital to meet those goals? MDB reform has been high on the Group of 20’s agenda. The G20 has examined options to strengthen the role of MDBs in the development finance architecture. In 2021, it enlisted experts to conduct an independent review and formulate recommendations on how MDBs could increase their lending by increasing their risk appetite through a range of balance sheet optimization measures and capital adequacy framework reforms which the G20 endorsed in 2022 (G20 2022). Building on these recommendations, under the Brazilian presidency in 2024, the G20 agreed on a “G20 Roadmap on Strengthening

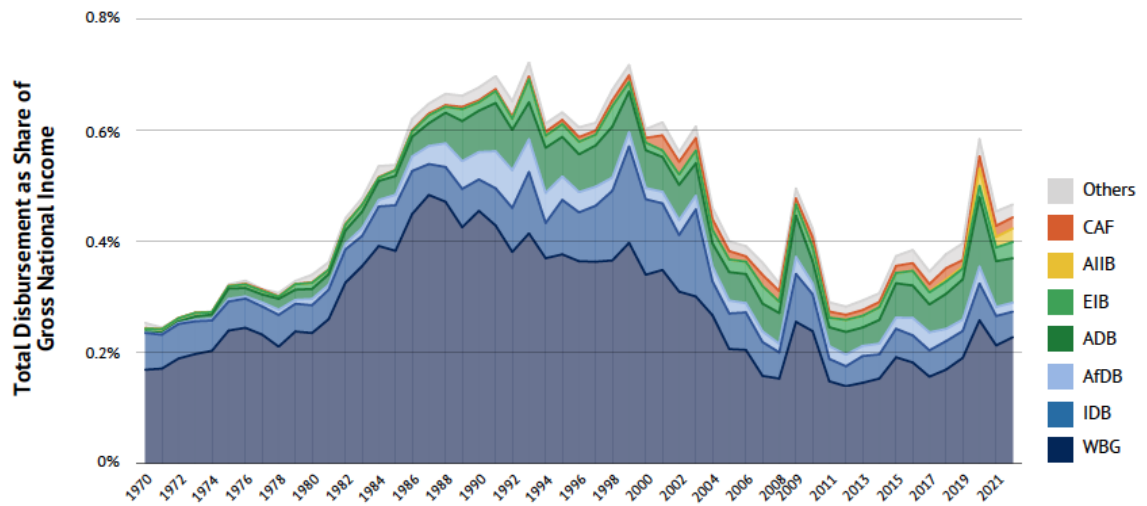
MDBs” which encourages MDBs to implement those recommendations pertaining to capital adequacy framework measures while also undertaking resource reviews to take stock of capital levels of MDBs (G20 2024).

Whether the financing capabilities of MDBs have kept pace with the demand from borrowers and the need to meet shared global challenges as a system has been widely discussed. As illustrated in Figure 1, MDB lending as a fraction of GNI has steadily declined over time, despite disbursement rates accelerating in recent years which reflects the support countries received during the COVID-19 pandemic. Despite this long-term, relative decline in MDB lending, MDBs continue to be important sources of finance for countries that lack access to capital markets as well as emerging markets facing high borrowing costs. Given the capital intensive nature of the transition to a clean energy powered economy, affordable finance has become especially important.

At the global level, there has also been an effort to adopt a more system-wide view of the MDBs and how they could better work together to help their members address shared global challenges. Such a system-wide perspective would not just help unlock synergies across the bank but help assess whether the system of MDBs is fit for purpose to support countries meet their development and shared global challenges. The MDBs already jointly work together on reporting, especially on climate change. The G20 has emerged as the forum for taking stock of how MDBs are working together as a system.

MDBs with their development-focused mandates engage in counter-cyclical lending which involves ratcheting up their financing during economic downturns to help support economic recovery (Ocampo and Griffith-Jones 2008; Munir and Gallagher 2020). Studies have discussed how credit rating downgrades of borrowing governments in turn negatively affects the ability of MDBs to play a counter-cyclical role because MDB capital adequacy rules reflect borrower government credit ratings as a metric (Avellán and Galindo 2018; Galindo and Panizza 2018). Adequate capital is therefore vital to ensure that MDBs have the financial wherewithal to play the counter-cyclical role that they are uniquely capable of.

Figure 1: Low- and Middle-income Countries (excl. China): Multilateral Development Banks' Total Disbursement as a Share of Gross National Income, 1970-2022



Source: World Bank International Debt Statistics 2023.

Note: Includes PPG and Publicly Non-Guaranteed (PNG) debt. Inter-American Development Bank (IDB), African Development Bank (AfDB), Asian Development Bank (ADB), European Investment Bank (EIB), CAF Development Bank of Latin America (CAF). World Bank Group (WBG), which includes the International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA). "Others" include banks which disbursement represented less than 0.01 percent of low- and middle-income countries' GNI: Asian Infrastructure Investment Bank (AIIB), Islamic Development Bank (IsDB), Caribbean Development Bank (CDB), European Bank for Reconstruction and Development (EBRD). Low- and middle-income countries as per World Bank classification for each year.

The mechanics of MDB financing have received sparse attention in the academic scholarship. A number of scholars have explored how MDBs navigate the tension between their development mandates and their financial models (Alacevich 2009; Ben-Artzi 2016; Peitz 2023). Humphrey's comprehensive study of MDBs establishes how MDB financing models and governance arrangements influence their operations (Humphrey 2022). Molinari and Patrucchi trace the impact of borrower dynamics on MDB financing through portfolio concentration risk (Molinari and Patrucchi 2020).

More broadly, existing analysis of MDBs however have largely focused on their contributions to economic growth, how legacy MDBs differ from borrower-led MDBs, how politics impacts resource allocation, the private capital mobilization effects of MDBs, and the social and environmental consequences of lending (Morris, Parks, and Gardner 2020; Broccolini et al. 2021; Dreher and Jensen 2007; Gallagher and Kilby 2018; Kilby 2009).

Heinzel et al. (2024) examine the factors that shape the alignment of MDB policies with recipient preferences. However, there is a clear gap in the academia on the adequacy of MDB resources to meet shareholder objectives and resource needs of borrowing governments.

This paper analyzes the existing processes that MDBs have in place to examine their resource needs against shareholder objectives and borrower country needs. The paper finds that resource needs reviews have largely been ad hoc in nature. When MDBs conduct reviews, capital needs are assessed against risk-related metrics and not against the capital needs required to meet client demand. The paper also establishes the size and frequency of general capital increases and conducts a benchmarking exercise to compare policies and processes governing capital increases.

This paper builds on research that examines capital needs across MDBs (for example, Humphrey (2015), Gallagher et al. (2024), Munir and Gallagher (2020)). Building on estimate identified by the G20 IEG, Gallagher et al. (2024) calculated the total capital increase that will be required across the MDB system. They estimate capital needs to total between \$255 billion to \$572 billion across the MDB system. With increased use of hybrid capital instruments and implementation of capital adequacy framework reform measures, the capital needs could be as low as \$60 billion. The current levels of lending as indicated by disbursements has been captured in Table 1.

We report three major findings. First, that there have been 24 General Capital Increases (GCIs) since the 2008-2013 global financial crisis (GFC) across the sample of MDBs we investigate, resulting in just over \$86.2 billion in new paid-in capital (see Table 2). Secondly, the vast majority of MDBs have similar statutory rules and governance over capital increase decisions. Third, across the system there is a general lack of regular evidence-based reviews of financing needs to meet the strategic objectives of their shareholders as they pertain to the SDGs and Paris commitments without jeopardizing the risk profiles of individual MDBs. By and large, there is a need for regular, evidence- based assessments of financing needs across the system that are linked to shareholder decision- making processes to increase capital when needed. The G20 can play a key role in energizing such an effort as well as tracking and monitoring the extent to which such assessments scale to meet the needs of the system as a whole.

Table 1: MDB Lending Activity and Subscribed Capital

	LENDING ACTIVITY (2022)				SUBSCRIBED CAPITAL (DEC. 2023)	
	Total Disbursement (USD Billion)	Total Commitments (USD Billion)	Commitments to EMDE (excl. China) (USD Billion)	Share Commitments EMDE (excl. China)/Total (%)	Callable (USD Billion)	Paid-in (USD Billion)
EIB	52.7	65.5	8.8	13%	243.1	23.8
IBRD	26.8	35.8	34.1	95%	296.0	21.8
IFC	15.9	25.0	25.0	100%	-	22.6
ADB	18.8	20.2	18.5	92%	135.6	7.2
IDB	11.7	14.7	14.7	100%	164.9	11.9
CAF	7.2	14.1	14.1	100%	1.8	5.6
EBRD	10.3	13.8	12.2	88%	24.0	6.7
IsDB	9.9	10.5	10.5	100%	54.9	9.0
AIIB	6.4	6.8	6.2	91%	77.6	19.4
IDB Invest	4.0	6.6	6.6	100%	-	3.2
CEB	3.7	6.5	1.9	29%	5.5	0.7
AfDB	3.4	4.9	4.9	100%	188.7	8.7
NDB	1.2	2.7	1.5	55%	42.2	10.5
FONPLATA	0.4	0.5	0.5	100%	1.7	1.3
CDB	0.3	0.2	0.2	100%	1.4	0.4
TOTAL	173	228	160	70%	1,237	153

Table 2: MDB Capitalizations since the Global Financial Crisis.

Period	Number of GCIs	Amount of GCIs in USD Billion	Amount of GCIs as % of all GCIs since GFC	Paid-in portion of GCIs in USD Billion	Paid-in portion as % of all paid-in increases since GFC
2009-2013	12	381.8	63.8%	34.2	39.7%
2015-2019	6	185.8	31.1%	26.8	31.1%
2020-2024	6	30.4	5.1%	25.2	29.2%
TOTAL	24	598.1	100.0%	86.2	14.4%

Source: MDBs boards' resolutions, financial statements, annual reports and press releases.

Note: In 2014, there was no GCI, therefore, the second period goes from 2015-2019. Conversion rates to USD used as of the end of December 2023 (EUR = USD 1.1056, SDR = USD 1.34167, given that one ID (Islamic dinar) equals one SDR and one UA equals 1 SDR, only the conversion rates for SDR and Euro to USD were utilized). For IDB Invest and FONPLATA, their last capitalizations were approved in 2024, therefore, the subscription of the new shares are still in progress (expected to end in 2025-2026). For the FONPLATA 2024 GCI, the proportion between paid-in and callable capital is yet to be defined. The management's proposal is to maintain the current structure, with 45 percent paid-in capital. Hence, it was assumed that 45 percent of FONPLATA's GCI was paid-in capital.

In the next section (materials and methods), we elaborate on the methodology used and the data collection process. The major findings are summarized in the results section and a discussion section follows with implications for further research and policy.

2. Materials and Methods

Multilateral development banks are supranational development finance institutions “established via international treaties and are (primarily) owned by three or more sovereign states, that are also their shareholders” (Peitz 2023). MDBs have mandates to support national development and do so by providing long-term capital by leveraging a paid-in capital subscription and reserves to borrow from capital markets (ibid). This study focuses on the 15 MDBs that participate in the G20’s International Financial Architecture Working Group of the Brazilian G20 presidency (see table 3). These 15 MDBs comprise the top largest organizations. To assess if MDBs incorporate an evidence-based client needs and global challenges (or public goods) into their processes for assessing capital adequacy, we conducted a benchmarking exercise across MDBs to understand the frequency of general capital increases, provisions in the Articles of Agreement and associated documents governing capital increases and capital needs assessments, and existing practices of capital needs reviews.

We reviewed primary source material, such as official documents of the MDBs, and conducted interviews with officials of MDBs to understand the process of resource needs reviews. We conducted a total of 13 interviews with MDB officials. To preserve their anonymity, they have not been identified here. However, the table below captures the MDBs that we interviewed. At least two members of the research team were present during the interviews which were conducted via Zoom or Teams. Each interview lasted between 30 minutes to 75 minutes. The semi-structured interviews were designed to understand if and how MDBs conduct resource needs reviews, the process governing capital increases and the decisions that are made to determine the size of the capital increase.

During the research process, we found evidence of ad hoc reviews and more structured reviews by the concessional lending arms of the World Bank and the African Development Bank. The results section includes case studies that capture the existing the practices of resource reviews across

four institutions: International Development Association, African Development Fund, Inter-American Development Bank, and the European Bank for Reconstruction and Development.

Table 3: MDBs examined in the study

African Development Bank (AfDB)
Asian Development Bank (ADB)
Caribbean Development Bank (CDB)
Development Bank of Latin America and the Caribbean (CAF)
Council of Europe Development Bank (CEB)
European Bank for Reconstruction and Development (EBRD)
FONPLATA
International Bank of Reconstruction and Development (IBRD)
International Finance Corporation (IFC)
Multilateral Investment Guarantee Agency (MIGA)
Inter-American Development Bank (IDB)
Inter-American Development Bank (IDB Invest)
Islamic Development Bank (IsDB)

3. Results

We find that there have been 24 general capital increases across the MDB system since the Global Financial Crisis (GFC) which has resulted in \$86.2 billion in new paid-in capital (see table 2). We also find that the MDBs have largely similar statutory rules and governance processes over capital increase decisions. And, finally, we find there to be a lack of regular evidence-based reviews of financing needs to meet the strategic objectives of their shareholders as they pertain to the SDGs and climate change commitments. We did find evidence of resource needs reviews in a handful of cases which we have captured through case studies below. These include World Bank's International Development Association (IDA) replenishment, African Development Fund replenishment, IDB and

EBRD. This section briefly summarizes our findings pertaining to the key trends observed in general capital increases across the MDB system.

Key Trends in General Capital Increases

There have been a significant number of capital increases across the MDB system to manage risk in MDB balance sheets and meet strategic ambitions of shareholders. According to our research, since the GFC, there have been 24 approved GCIs, half of which occurred in the years following the GFC (2009-2013). The total amount of GCI approvals that occurred during 2009-2024 across all MDBs exceeded \$598 billion, with \$86.2 billion as paid-in capital. This means that only 14.4 percent of all GCIs approved since the GFC was made as paid-in capital and the rest was in the form of callable capital. The GCIs largely took place immediately following the Global Financial Crisis (2009-2013), forming 64 percent of the total amount for the period 2009-2024. Only 5 percent of the total amount of GCIs approved from 2009-2024 took place in 2020 or after. The aggregate results are shown in Table 2. There was not an analogous approval of capital increase to meet the SDGs and Paris targets in the 2015-2019 period, nor in the period since the COVID-19 crisis.

The last two decades have been historic in terms capital increase undertaken by MDBs across the board (except for MIGA). Two new MDBs were created: the AIIB and the New Development Bank, founded in 2015 and 2014 respectively. Previously, simultaneous capital increases in MDBs had not occurred since the mid-1970s. As shown in Table 4, the MDBs with GCIs approved between 2020-2024 were: IsDB (2020), CAF (2022), CEB (2022), EBRD (2023), FONPLATA (2024) and IDB Invest (2024). After approval, the subscription period of the new shares generally takes several months and the payment of the paid-in portion of the subscribed shares can be made in several installments, typically within a timeframe ranging from one year to a decade. The total amount approved between 2020-2024 GCIs as paid-in capital was \$25.2 billion and the total increase in the capital subscribed was \$30.4 billion (see table 4.1). As Table 4.1 shows, the proportion of paid-in capital of the GCIs varied across MDBs and time. Paid-in capital represented 14.4 percent of all GCIs from 2009-2024. However, considering the period during and after the COVID-19 pandemic (2020-2024), the banks that agreed on GCIs subscribed a larger percentage of their GCIs as paid-in. Indeed, during 2020-2024, there were six GCIs

approved by six MDBs. For two of them, the capital was subscribed 100 percent as paid-in capital (including the 2022 CAF capitalization and the 2024 capitalization of IDB Invest, which does not have any callable capital), while for the other four, the paid-in portion ranged from 22.6 percent (CEB) to 42 percent (FONPLATA). In comparison, during 2009-2012, there were 12 GCIs, which excluding IFC, CAF and EIB (since they had GCIs with 100 percent as paid-in capital), the paid-in portion of subscribed capital was generally lower, ranging from 2.4 percent to 30 percent.

This part of our benchmarking exercise suggests that while a GCI always signifies a fiscal effort from shareholders, there is flexibility as to how best to adapt these efforts to contextual preferences and requirements. In general, there is no specific legal requirement across MDBs on the percentage that must be paid-in vs callable of the GCI, rather this can be decided by the Board of Governors.

In the late 1980s and 1990s, there was a trend of diminishing proportions of paid-in capital in successive GCIs (Mistry 1995). Since the GFC, however, we have seen increases in the paid-in portion of GCIs: For the older MDBs (IBRD, IDB, AfDB and ADB), even when the percentage of paid-in capital of their most recent capitalizations was low, between 2.4 percent and 12.5 percent, no downward trend in the paid-in portion of these GCIs was observed. On the contrary, in two of these four cases, the paid-in portion of the GCIs increased. For the rest of the MDBs with a capital structure including callable and paid-in capital (CDB, CAF, IsDB, EBRD and FONPLATA), the paid-in portion of their last capitalizations was either higher than the previous one. It should be noted that just two MDBs explain 53 percent of the total amount of all GCIs of the period (2009-2024): AfDB and IBRD (which account for 28.6 percent and 24.5 percent, respectively). CAF has the highest portion of subscribed paid-in capital for the period, representing 16 percent of the total paid-in capital increase. This is not surprising as CAF no longer seeks callable capital from its members (Humphrey 2024).

Table 4: Approved MDB Capital Increases Across the System, 2009-2024

	Number of GCIs since GFC	Year of Last Capital Increase	Amount of GCIs since GFC in USD Billion	Amount of GCIs as % of all GCIs since GFC	Paid-in portion of GCIs in USD Billion	Paid-in portion as % of all paid-in portions since GFC	Paid-in portion as % of all the MDB's GCIs
African Development Bank (AfDB)	2	2019	171.0	28.6%	10.2	11.9%	6.0%
Asian Development Bank (ADB)	1	2009	95.2	15.9%	3.8	4.4%	4.0%
Caribbean Development Bank (CDB)	1	2010	1.0	0.2%	0.2	0.3%	21.7%
Development Bank of Latin America and the Caribbean (CAF)	3	2022	13.5	2.3%	13.5	15.7%	100.0%
Council of Europe Development Bank (CEB)	2	2022	7.1	1.2%	1.6	1.9%	22.6%
European Bank for Reconstruction and Development (EBRD)	2	2023	15.5	2.6%	5.5	6.4%	35.6%
European Investment Bank (EIB)	1	2012	11.1	1.8%	11.1	12.8%	100.0%
FONPLATA	3	2024	6.0	1.0%	2.5	2.9%	41.1%
International Bank for Reconstruction and Development (IBRD)	2	2018	146.3	24.5%	12.6	14.6%	8.6%
International Finance Corporation (IFC)	2	2018	5.7	1.0%	5.7	6.6%	100.0%
Multilateral Investment Guarantee Agency (MIGA)	0	1999	-	-	-	-	-
Inter-American Development Bank (IDB)	1	2012	70.0	11.7%	1.7	2.0%	2.4%
Inter-American Investment Corporation (IDB Invest)	2	2024	5.5	0.9%	5.5	6.4%	100.0%
Islamic Development Bank (IsDB)	2	2020	50.3	8.4%	12.3	14.2%	24.4%
TOTAL	24	-	598.1	100.0%	86.2	100.0%	14.4%

Source: MDBs boards' resolutions, financial statements, annual reports and press releases.

Note: GCI amounts are those approved by each MDB Board of Governors. After approval, the subscription period of the new shares generally takes several months and the payment of the paid-in portion of the subscribed shares can be made in several instalments, typically within a timeframe ranging from one year to a decade (this varies across MDBs, most cases fall between three to seven years). For instance, for IDB Invest and FONPLATA, their last capitalizations were approved in 2024, therefore, the subscription of the new shares are still in progress (expected to end in 2025-2026). IDB Invest and IFC have their GCIs as 100 percent paid-in -always-. NDB and AIIB were excluded from the table as they are recently founded institutions and have not undergone any GCIs yet. Conversion rates to USD used as of the end of December 2023 (EUR = USD 1.1056, SDR = USD 1.34167, given that one ID (Islamic dinar) equals one SDR and one UA equals 1 SDR, only the conversion rates for SDR and Euro to USD were utilized). For the FONPLATA 2024 GCI, the proportion between paid-in and callable capital is yet to be defined. The management's proposal is to maintain the current structure, with 45 percent paid-in capital. Hence, it was assumed that 45 percent of FONPLATA's GCI was paid-in capital.

Similar Statutory Rules

We find that MDBs have similar statutory rules and governance mechanisms pertaining to capital increase decisions (see Table 5). We find that every GCI has to be approved by the Board of Governors and is a decision that cannot be delegated to the MDB's Executive Board of

Directors. When the Board of Governors is making a decision, a qualified majority is required: from 66 percent to 85 percent of the total voting power of the Board of Governors for approval.¹ Only in the European Investment Bank is unanimity required. Additional conditions are required in some cases, such as specific approvals from founding or regional members. This is the case for IDB (at least 66 percent of regional members approval is required), NDB (approval of four of five founding members), CAF (80 percent of Series “A” shares, which are full members) and FONPLATA (four of five votes in favor from the founding members). In some instances, one member has (implicit or explicit) veto power in terms of GCI decisions: IDB (US), AIIB (China), IsDB (Saudi Arabia) and IFC (US).² In the other MDBs, there is no one member with formal veto power over capital increases. Across the MDBs, members have pre-emptive rights over new shares (whenever the capital of the bank is increased, all members have the right to obtain sufficient shares to maintain their relative position should they wish) and no member is obligated to subscribe to any part of such increased capital (there are a few cases of members not taking up all the shares allocated to them, in which case, shares are relocated to other members). Most MDBs have established an indirect constraint on the GCI related to the regional/non-regional shareholding proportion. For instance, the IDB Articles of Agreement do not allow a subscription of capital that reduces the voting power of regional members below 50.005 percent, which would reduce the voting power of the US below 30 percent or Canada’s voting power below 4 percent. This constraint is similar—in nature—for AIIB, AfDB, ADB, EBRD, NDB, CDB and FONPLATA.

¹ In addition, a specific minimum percentage of members approvals is required. Among the 16 MDBs included in this report, eight had a dual condition: the approval of two-thirds of the total number of Governors alongside not less than three-fourths of the total voting power of members.

² This occurs when a member has enough voting power that a negative vote from them would prevent achieving the qualified majority required to approve a GCI.

Table 5: Benchmarking Exercise: Policies and Processes

Capital Structure	<p>Both paid-in and callable capital, with wide differences in the relative shares but callable capital generally dominant (6 MDBs with paid-in capital lower than 12% of subscribed capital, 6 with paid-in portion around 19-27%, one with 45% and the other 3 with values equal or proximate to 100% of paid-in capital)</p> <p>Share of callable capital from highly-rated shareholders differs significantly across MDBs.</p>
Statutory Provisions	<p>Decision of the Board of Governors (cannot be delegated to the Executive Board of Directors).</p> <p>Qualified majority required & veto power in some cases.</p> <p>Members' rights over new shares: pre-emptive right (members retain the right to subscribe enough shares in General Capital Increase (GCI) to maintain its percentage of total shareholdings) and no member shall be obligated to subscribe to any part of such increased capital.</p> <p>Indirect constraints on the GCI: the regional/non-regional share-holding proportion.</p> <p>Other specifications over the subscription of new shares: payment schedule (e.g. the number of installments), currency of payment, proportion of paid-in and callable, value to be paid per share (e.g. par value).</p>
Resource Needs Reviews	<p>The launch of the capitalization discussions had been ad-hoc and depended on external dynamics and occasional shareholder appetite.</p> <p>No regular assessment (except for ADB, AIIB, NDB, EBRD, AfDB and concessional funds IDA and AfDF). No agreed criteria across MDBs on how to assess capital needs.</p>

Capital Increase Process	No formal process. No pre-established formula or model to determine the amount of the capital increase. Limited explanation ex-post announcement.
Voting Power	In general, there are no major changes, but there are exceptions. These exceptions include cases where: 1.A GCI is done together with a Selective Capital Increase (SCI) - as with IBRD; 2.Members reject subscription to all allocated new shares, significantly altering voting power distribution; and 3. New members are added substantially changing the voting power distribution (although, in general, this is not the case).

Lack of Evidence Based Approach

Across the MDBs, there is a lack of common and structured set of policies and procedures for determining capital needs. MDBs primarily have ad hoc policies and procedures to determine the level of capital needed for risk management and meeting current and expanding objectives. We find that there is a lack of a system-wide perspective on MDB capital needs.

We also find that just five MDBs (ADB, AIIB, NDB, AfDB and EBRD) and two concessional funds (IDA and ADF) have an established calendar for regular capital assessment processes, which vary in frequency across the organizations. We discover that MDBs that had these regular processes of capital assessment do not show a higher frequency of GCIs than those MDBs that do not have pre- established assessments. In general, Boards of Governors decide upon a GCI at the time and under ad-hoc terms and conditions as they see fit. No formal processes are in place as to automatically trigger GCIs or are at least highlighted as an issue to be discussed by the Board.

Rather, according to our research, MDBs conduct internal examinations of financial strength and look at credit rating agency assessment limits on capital adequacy during these assessments. Relatedly, we find that once the Board agrees to support a GCI, there is no formal process to guide implementation, and it can take several years to complete.

Table 6: Illustrative Examples of Resource Needs Reviews

MDB/Fund	Needs Assessment Process	Key Considerations
International Development Association (IDA)	IDA demand volume estimated based on national and regional priorities which anchor the financing scenarios.	Overall volumes of earlier replenishments, contributions from development partners, and target levels of concessional lending Coordination within the World Bank Group and contributions from other development banks and partners
European Bank for Reconstruction and Development (EBRD)	Projected capital capacity and annual business volume reviewed by shareholders against their objectives. Determination made on whether a capital increase is required or not.	Overall objectives include transition impact, market development, and sound banking
African Development Fund (ADF)	Management identifies project pipeline based on country strategies and replenishment round priorities. Three financing scenarios are identified with the full financing of the pipeline forming the high scenario.	Regional development needs and where ADF has a comparative advantage
Inter-American Investment Corporation (IDB Invest)	Need assessment takes into account the level of demand, absorptive capacity, and instruments, alongside capital adequacy, PCM and overarching impact.	Capital needs informed by the need to reinforce strong credit ratings, counter-cyclical buffers, more private sector activity and addressing concentration risk.
African Development Bank (AfDB)	Forward-looking financing requirements are calculated through an iterative process: (1) different scenarios of country's investment needs, based on country partnership frameworks, and member and regional priorities; (2) management and board discussions on strategic priorities for the new round.	Capital Review every 10 years. Capital needs reflect borrower expectations and the ability to absorb higher levels of financing over time as capacity is enhanced. The affordability of the capital increase to shareholders is considered and last capital increase is used as the baseline for quantifying future capital needs

Source: Author' elaboration.

However, in practice, usually it is the Board of Executive Directors together with Management (MDB staff) who elaborate the specific proposals of the GCI to be endorsed by the Board of Governors, which includes the specific amount of the GCI, the proportion of paid-in versus callable capital of the GCI, the number of installments of paid-in portion, etc. To the best of our knowledge, there is not a formula or structured process that explains to the broader public how a concrete GCI figure is reached.

Furthermore, we find that GCIs have impacted voting power in certain MDBs, but that overall the changes in voting distributions were relatively small. This is often due to the non-subscription of new shares by some members and/or the addition of a new member in conjunction with the GCI. There were only a few cases of substantial changes, such as the IBRD (e.g., the 2018 GCI made in conjunction with a Selective Capital Increase (SCI)) and IFC (in its last GCI, US voting power was reduced by 3 percentage points, but its veto power was maintained).

Illustrative Examples of Resource Needs Reviews

In our review of the processes governing general capital increases, we found examples of organic processes from recent capitalizations. These capitalization processes exhibit elements that could be institutionalized to a more regular approach for assessing MDB capital needs. Table 4.4 exhibits five examples, from International Development Associate (IDA), European Bank for Reconstruction and Development (EBRD), African Development Fund (ADF), the African Development Bank (AfDB) and the Inter-American Investment Corporation (IDB-Invest, the private sector arm of the Inter-American Development Bank Group).

Each of these five banks underwent capital needs reviews, some of them on a regular basis (IDA, EBRD, ADF and AfDB) and others in an ad hoc manner such as IDB Invest, CAF and EBRD more recently. There are a handful of common characteristics across the processes that developed in each of these cases. First, there was a discussion within the particular MDB Board about the potential need to increase financing in order to meet the strategic objectives within the MDB. In three cases, the ADF, IDA and AfDB undertook evidence-based estimates of demand volumes based on country diagnostics, national and regional priorities, and any specific priorities of share. In those cases, the projected demand volume anchored a series of financing scenarios informed by previous replenishment rounds and shareholder input to translate the identified demand projections into financing scenarios. In terms of assessing system-wide MDB cooperation, in its demand assessment, IDA also examines how coordination within the World Bank Group (with IFC and MIGA) will help address demand and collaboration opportunities with development partners including other MDBs.

European Bank for Reconstruction and Development

The EBRD's first four regular reviews assessed client demand. In 2014, EBRD decided to change its review process to focus on an assessment of the capital capacity of the bank. In the capital needs review, the strategic and capital framework set the high level objectives (EBRD, 2023). The capital capacity analysis (including annual business volume) is then reviewed by shareholders to assess whether it is in line with shareholder objectives. This analysis helps to answer whether a capital increase is required or not. The primary binding constraint to lending was the statutory

capital limit. While the statutory capital limit was removed, the prevailing practice continues to be an assessment of lending capacity. The EBRD examines its existing capital base and projections on earning and profitability as the core elements in its assessment of capital capacity. The capital review is done every five years for a five-year horizon. EBRD has a three-year business plan which also provides an opportunity to adjust as required. Of the EBRD's four capital reviews, only two have led to capital increases. Its last capital increase was necessitated by unforeseen external circumstances (the War in Ukraine in 2022).

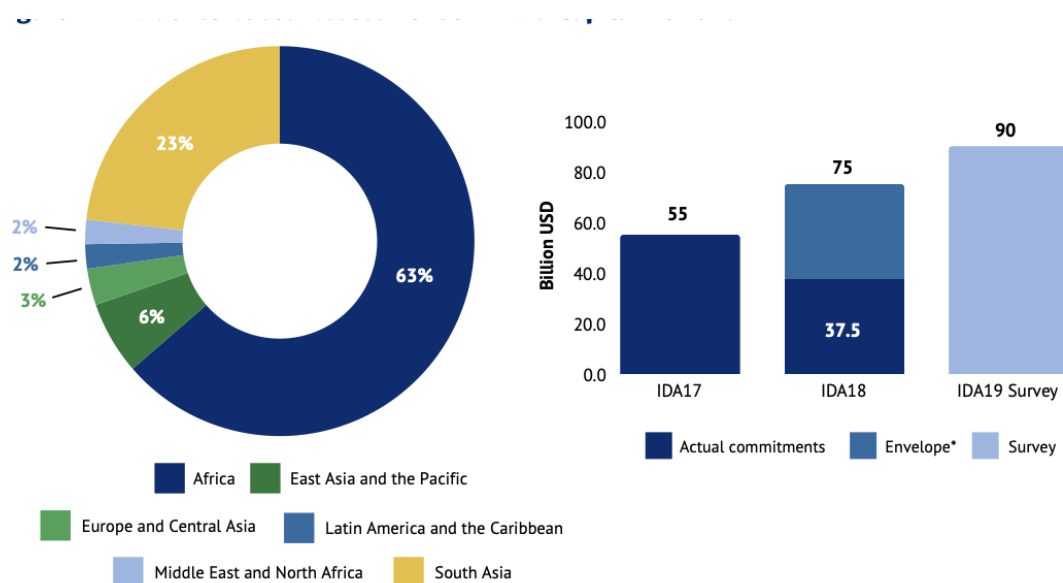
International Development Association

IDA reviews client demand as a part of its regular replenishment process. To estimate the demand for its resources, IDA considers priorities that countries have communicated through their country partnership frameworks with the World Bank and regional priorities. For the 19th replenishment round for IDA (IDA19), IDA identified client demand geared towards reaching the World Bank's twin goals of ending extreme poverty and boosting shared prosperity, the SDGs and regional development goals. Its demand assessment process also considered potential synergies among World Bank arms such as IDA, IFC and MIGA, and collaboration opportunities with other development partners. Figure 4.1 depicts IDA volume by region. It is important to emphasize that IDA assessed client demand, which is distinct from the investment needed to achieve national or global goals.

Anchored in the demand volume, IDA computed three financing scenarios (WBG-IDA 2019). In the base scenario, the volume was kept constant to the IDA18 volumes in real terms. In the high scenario, there was an increase in the IDA18 volume in both per-capita and real terms, with IDA's core resources increasing by 18 percent. In the low scenario, the volume was a decrease from IDA18 in nominal terms, with IDA core resources decreasing by 1 percent.

The target IDA19 replenishment size was shaped by three factors: overall volumes of replenishment, contributions from development partners and target levels of concessional lending. Furthermore, IDA19 replenishment was based on three key tenets: maintaining the primacy of IDA core resources, improving responsiveness and efficiencies across IDA core

allocations and windows, and calibrating the level of non-concessionality to the scaling up window eligibility (WBG-IDA, 2019).



Source: WBG, 2019.

African Development Fund

Like IDA, the ADF also undergoes a client demand review process during its replenishment round. For the ADF (ADF-16), the ADF Deputies report describes the following process (African Development Fund, 2023). Management identified a pipeline estimated at UA 11.2 billion (approximately \$15 billion) comprising of 301 operations and selected these operations based on their linkages with country strategies, as well as alignment with ADF-16 priorities. The overriding considerations for the operations were development needs of clients and operations in areas where ADF has a comparative advantage. Based on the identified pipeline, management constructed financing scenarios. The resources assumed to be available for ADF-16 include: donors' subscriptions, concessional donor loans, ADF internal resources (advance commitment capacity) and carry over from previous replenishment and AfDB net-income transfers. The Deputies note identified three scenarios. The full financing of the pipeline was identified as the high scenario. There was agreement on the medium scenario which was sufficient to support 187 operations with UA 6,941. This medium scenario was a 27 percent increase compared to ADF-15.

African Development Bank

The AfDB conducts a capital needs review every 10 years. Although this review is not mandated in the Bank's Articles of Agreement, it is rooted in the understanding reached by the Bank's board and its management to assess their sustainable level of lending. Forward-looking financing requirements are calculated through an iterative process: (1) different scenarios of country's investment needs, based on country partnership frameworks, and member and regional priorities and (2) management and board discussions on strategic priorities for the new round. Moreover, AfDB uses its last capital increase as the baseline for subsequent capital increase pledges and considers the affordability of the capital increase to shareholders. AfDB carried out an off-cycle capital increase in 2009 to support its members during the GFC and in 2024, underwent a GCI of 100 percent callable capital. It is important to note that relying on a client's previous demand for funding is likely to underestimate the lending volume needs from MDBs. Borrowers' demands for MDB financing also reflect their expectations about the level of financing that will be available. Furthermore, a country's absorptive capacity for MDB lending is not static and may expand as their economy grows.

IDB Invest (The private sector arm of the Inter-American Development Bank)

As noted, IDB Invest shareholders approved a capital increase of \$3.5 billion in early 2024. The IDB President sought to increase the size of the bank to better meet its objectives. Key factors considered in the discussion were the size of demand, absorption capacity, and the instruments that could be deployed. The Board decided to prioritize IDB Invest as opposed to undertaking a capital increase for IDB. Improving impact through private sector engagement was a key consideration. The process for determining capital increase involved the following steps. First, the IDB conducted an analysis to determine the level of demand and the various instruments that might be needed to meet that demand, whether that be debt, equity, guarantees, foreign exchange risk management and grants. IDB Invest then underwent an analysis to determine the extent to which the new ambition could be met by expanding its own balance sheet through Balance Sheet Optimization, hybrid capital and guarantees, efficiency improvement measures and beyond. Following those exercises, IDB Invest

determined there was a need for more capital to meet financing needs and manage the new risks from subsequent capital adequacy measures.

MDB Coordination

The international community, and the G20 in particular called MDBs to foster collaboration and start working as a system. They established Group of Heads of MDBs as an informal forum for dialogue and coordination among the leaders of major MDBs (ViewPoint Note 2024). In the G20 New Delhi Declaration, Leaders of the Group noted the relevance of MDBs and put them at the center of solutions to global challenges.

MDBs' joint work on climate finance is an example of MDBs working as a system to address global challenges. Since at least 2012, MDBs have worked together to bring greater clarity on their financing, harmonize metrics and collaborate on programming and delivery related to climate finance. In 2022, MDBs supplied \$60.9 billion in climate finance to low- and middle-income countries (EIB, 2022). MDBs began to jointly report their climate finance in 2012.¹¹ In 2015, during the 2015 UN Climate Change Conference in Paris, the MDBs committed to increase their climate finance and in 2019, they quantified this commitment in the form of a collective target of mobilizing \$60 billion in climate finance by 2025 (African Development Bank et al. 2015).

MDBs have also made a joint commitment to shift the composition of their financing to support the objectives of the Paris Agreement. In 2017, the MDBs together with the members of the International Development Club (IDFC) issued a joint statement committing to fully align their activities with the Paris Agreement's objectives. In 2018, MDBs articulated a dedicated approach by identifying six areas for Paris alignment: mitigation, adaptation, transition finance, policy development support, reporting, and internal operations (AfDB, 2018).

Table 7 exhibits a number of important kinds of collaboration that can be built upon, anchored in individual MDBs but working as a system with joint commitments and common methodologies for tracking and reporting. While the MDBs have jointly reported climate finance and announced shared goals, these collective commitments are anchored in individual commitments by MDBs. These commitments respect the unique mandates and internal processes of each institution. For example, while the MDBs

collectively committed to aligning their financing with the objectives of the Paris Agreement, MDBs set their own timelines and processes by when they would achieve full alignment. The World Bank committed to Paris alignment by 2023, with IFC and MIGA achieving full alignment of their operations by 2025.

Table 7: MDBs Acting as a System of Climate Finance: Key Milestones

2012	Joint Report on MDB Climate Finance	The first joint MDB report on climate finance (adaptation (6) and mitigation (7)).
2015	Common Principles for Mitigation Finance Tracking	MDBs and IDFC agreed upon a set of common principles for tracking mitigation finance. (8)
2015	Mainstreaming Climate Action within Financial Institutions	Five Voluntary Principles for Mainstreaming Climate Action within Financial Institutions, adopted by MDBs and members of the IDFC. (9)
2017	Joint IDFC-MDB Statement	Joint commitment with IDFC to align financial flows with the objectives of the Paris Agreement, including tracking and reporting
2018	The MDBs alignment approach to the objectives of the Paris Agreement	The approach identifies six areas as building blocks for alignment: mitigation, adaptation, transition finance, policy development support, reporting, and international operations. (5)
2019	High-Level MDB Statement at UNSG Climate Summit	The MDBs committed to increase climate finance to \$65 billion by 2025, private finance mobilization to \$40 billion by 2025 and develop a common framework for Paris alignment and common principles for intermediated financing. (3)
2021	MDB Just Transition High-Level Principles	The MDBs agreed on five principles that capture their common understanding of how just transition can be integrated into MDB policies and activities. (10)
2023	COP28 MDBs Joint Statement	MDBs announced collaboration on: tracking and reporting climate outcomes; scaling up analytics for integration of climate and development; a joint MDB long-term strategy (LTS) program to coordinate efforts to support long-term, low emissions development strategies. (11)
2024	Viewpoint: MDBs Working as a System for Impact and Scale	MDBs agreed to: develop a common approach to measure results on adaptation and mitigation; increase co-financing of public sector projects; and collaborate on joint impact evaluations, harmonization. (12)

Source: Authors' compilation.

The heads of MDBs released a “Viewpoint” note that describes the efforts undertaken by MDBs in implementing balance sheet optimization measures. While there have been ad hoc measures such as exposure swap agreements between IBRD and AIIB, joint efforts are still scarce, there is ample ground for collaboration across MDBs, especially when it comes to managing concentration risk (Belhaj et al. 2017; Molinari and Patrucchi

2020). The MDBs do not yet collectively take stock of their capital needs against shareholder objectives and client needs.

4. Discussion and Conclusions

Our analysis reveals the lack of a formal process across MDBs to review resource needs against client needs and shareholder objectives. We find that resource needs reviews have primarily been ad hoc. We do not find clear guidance from the Articles of Agreements of the MDBs on capital increases. For example, the AfDB conducts a review every ten years which reflects an understanding reached by the senior management and the Board rather than a statutory requirement rooted in its founding documents.

We also find that where capital needs reviews are conducted, the process is often not visible to the outside public. While certain MDBs and their concessional arms have considered client demand in their analysis of capital requirements, how client demand is translated into the levels of capital sought from shareholders or contributors is often unclear. For concessional arms like IDA and ADF, financing scenarios are anchored in past replenishment volumes. If and when there is a capital increase, the rationale behind the specific number is not explained to the broader public.

We also find there to be a lack of a system-wide process and methodology for assessing resource needs across the system of MDBs. MDB collaboration and coordination has been visible in the context of climate change where the banks have been jointly reporting on their climate finance activities since 2012. This joint collaboration on reporting has evolved to include joint methodologies on aligning their financing in support of the goals of the Paris Agreement, joint climate finance mobilization targets, and more recently, measuring impact. However, with the G20 Roadmap on MDB Reform, the G20 has shown the need for a political understanding on how to scale the MDBs to support needs across emerging market and developing economies. There have been earlier calls to convene joint boards of governors meetings, that is, at the ministerial level, every five years to coordinate across the MDB system (Birdsall and Morris 2016). The G20 has begun to function as the space for such coordination, however, the group is yet to formalize how system-wide reviews will be conducted.

Earlier studies, such as Mistry (1995), had observed a long-term decline in the paid-in portion of general capital increases, that is, general capital

increases primarily took the form of increases in callable capital. However, our findings suggest that in the MDB capitalizations following the Global Financial Crisis, paid-in portions of capital increases have again increased. In fact, the decade following the GFC witnessed a major upswing in capital increases across MDBs, however, shareholders did not mount a similar response to increase capital for MDBs following the COVID-19 pandemic.

One of the key findings of this study has been the importance of path dependence in locking in MDBs on previously agreed replenishment volumes or needs assessments. Replenishment processes have used previous replenishment rounds as the anchor. Interviews suggest that there is discursive value in framing new capital increase volumes against previous rounds. Foregrounding shareholder objectives and client needs however will entail starting from those needs first and ascertaining the size of the capital needs gap. As MDBs undertake a close examination of their own capital needs, they should recognize the limitations of anchoring needs reviews in past replenishment rounds or capital increases.

We also find there to be a need for clarity and transparency on how country level estimates are generated and those estimates in turn lead to the options produced by MDBs for their boards.

That is, even where there are estimates of client needs, it is not clear how scenarios for capital increases or replenishments are derived at from those needs. Rather, the gathered evidence, bolstered through interview accounts, suggests that past replenishment volumes form the anchor for the new replenishment round which effectively renders the process a negotiation between senior management and the board in terms of the range that is politically acceptable.

The ability of MDBs to play a counter-cyclical role and help provide inflows to support productive investment when other sources are pulling back makes them essential components of the international financial architecture (Ocampo and Griffith-Jones 2008). The ability to play such a counter-cyclical role however depends on the financial wherewithal of these institutions. However, determining capital needs solely on the basis of preserving financial metrics may be limiting the ability of these institutions play the countercyclical role.

Another key finding has been the lack of concrete guidance from the Articles of Agreement of the MDBs on how to conduct resource needs reviews. This raises the question about how to best supply the guidance so that these reviews can be done systematically and transparently. While the scholarship has examined whether and how to regulate MDBs, for example, (Gianfagna, Crimaldi, and Gallan 2021), the focus has largely been on the applicability of Basel regulations on prudential policies to MDBs.

Finally, by shining a spotlight on the resource needs review processes at various MDBs, this paper adds to the literature on MDBs that has otherwise been focused on allocation decisions, social and environmental consequences of financing, and comparative analyses between legacy and borrower-led MDBs. Likewise, the paper complements the broader policy literature by identifying the existing practices and opportunities for improvement to align the MDB system's scale with global and national goals.

We identify three areas where further research is required. First, there is a clear need for the development of metrics to ascertain client demand that can be independently verified. Client demand should be credible and reliable, thereby providing the MDB boards and senior management with high quality and reliable information to empirically ground resource reviews. Client demand should also be coupled with transparent indicators of absorptive capacity. Absorptive capacity also requires far greater precision and transparency. Clarity on these indicators would also help to identify where targeted support may be required. For example, despite expert estimates consistently indicating a major investment gap, concerns about the lack of 'bankable' projects have raised questions about focusing only on the supply of finance. If project bankability is what is dampening client demand, targeted programs such as pre-feasibility studies and other forms of 'readiness' support could help to fill the gap. In the international climate finance architecture, there is a gap in pre-feasibility support (Musasike et al. 2024).

Relatedly, rigorous ex post evaluations of capital increases would also provide the base of evidence needed for MDB shareholders and senior management to make decisions regarding general capital increases. Similar to the lack of a systematic resource needs reviews across the MDBs, MDBs

also do not have built in mechanisms to evaluate the impact of general capital increases. Where they exist, they tend to be ad hoc (for example, the Independent Evaluation Group of the World Bank conducted an independent validation of the capital increase package of 2018 (World Bank 2023)).

Second, this study focused on the resource reviews pertaining to MDBs. Further work could examine how ‘vertical’ funds such as those dedicated to global health such as the Global Vaccine Alliance (GAVI) or the Global Fund for AIDS, Tuberculosis and Malaria and the climate change funds such as the Green Climate Fund, the Climate Investment Funds, and the Global Environment Facility have conducted resource reviews and the evidence brought to bear to inform such reviews.

Third, far greater analytical work needs to be undertaken to better understand and identify the areas of collaboration across MDBs for system-wide coherence. There have been promising developments such as bilateral exposure agreements, inter-operability of procurement standards, and use of safeguards and standards. However, there is a need for analytical work that can bring rigor to bear on the opportunities for collaboration and the implications of joined up efforts.

Based on the gaps in existing practices across MDBs and the need for a system-wide perspective, we propose the following common principles and metrics that could guide resource needs reviews. The resource needs reviews should be conducted by MDBs but enabled and monitored by the G20. They should be both science and evidence-based with common metrics across the MDBs, consider broad suite of financial measures, consider collaboration with other MDBs on how resource needs could be met, and take into account the absorptive capacity of clients and debt sustainability of borrowing members.

The G20 has an important role to play in shaping the resource needs reviews. The G20 could agree upon a common method and reporting templates to identify new financing needs to meet shareholder objectives and global challenges. This common methodology and standardized reporting would also enable the G20 to track progress on a regular basis and enable an assessment of how the MDBs could help meet the Sustainable Development Goals as the commitments under the Paris Agreement on climate change as a system. Based on the findings, the G20

could make recommendations to its members and the MDBs on advancing resource needs reviews.

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Declaration of Interest Statement

The authors declare no competing interests.

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