



CALLABLE CAPITAL OF THE INTER-AMERICAN DEVELOPMENT BANK



A report based on the MDB-wide
Review of Callable Capital

Acronyms & Abbreviations

ADB	Asian Development Bank
AfDB	African Development Bank
BoD	Board of Executive Directors
BoG	Board of Governors
CAF	Capital Adequacy Framework
CAP	Capital Adequacy Policy
CFO	Chief Financial Officer
CRA	Credit Rating Agency
CRO	Chief Risk Officer
EU	European Union
FRA	Fitch's Usable Capital to Risk-weighted Assets Ratio
G20	Group of Twenty
ICR	Issuer Credit Rating
IDB	Inter-American Development Bank
IMM	Income Management Model
MDB	Multilateral Development Bank
PCT	Preferred Creditor Treatment
RCL	Risk Control Limited (financial consulting firm)
RST	Reverse Stress Testing
SACP	Stand-Alone Credit Profile

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I. EXECUTIVE SUMMARY

- 1.1 This report presents the Inter-American Development Bank's (IDB) results of the Review of Callable Capital exercise, initiated by a group of Multilateral Development Bank (MDB) shareholders, to support efforts related to the G20 Independent Review of Multilateral Development Banks' (MDB) Capital Adequacy Frameworks ("G20 CAF Report"). The G20 CAF Report recognized that clarifying the circumstances and processes around the MDBs making and shareholders responding to a call on callable capital has value and that this clarity is an important part of implementing the report's recommendation on callable capital.
- 1.2 The IDB Review is based on three workstreams.
 - 1.2.1 A legal pillar looking at the IDB's Charter provisions, By-Laws, existing Resolutions of the Board of Executive Directors (BoD), and other Bank policies relevant to clarify the process to call callable capital.
 - 1.2.2 The finance and risk pillar will examine callable capital as part of IDB's capital adequacy framework and undertake a reverse stress testing exercise to estimate the probability of a call on capital.
 - 1.2.3 A shareholder process pillar in which a group of IDB shareholders answered a questionnaire with information on their processes for responding to a call and the legislative, accounting, and budgetary treatment of their subscribed callable capital. The questionnaires sought to clarify the nature of callable capital and the process to respond to a call on callable capital.
- 1.3 The exercise identified takeaways based on all three pillars:
 - 1.3.1 Legal: A call can be necessary if the Bank anticipates it will not be able to meet its obligations as they mature, and the call can be made well in advance of the maturity of the obligations. IDB's Board of Governors (BoG) has delegated the authority to make a call on callable capital to the Board of Directors (BoD) but this authority has not been delegated to Management.
 - 1.3.2 Finance and Risk: The Bank's prudent financial policy framework minimizes the risk of a call on callable capital. Based on the results of reverse stress testing, the probability of financial or rating scenarios that may result in a call on callable capital is extremely remote but possible, particularly upon a fracture of the Bank's preferred creditor treatment (PCT) affecting a large share of the Bank's lending portfolio.

1.3.3 Shareholders: Callable capital represents a valid and legally binding commitment tied to the subscription of the Bank's capital demonstrating strong shareholder support for the institution. Most shareholders who participated in this exercise would require a domestic process for responding to a call that could take from weeks to up to a year, which would be sufficiently fast to respond to a call. However, some shareholders have processes in place that would allow them to disburse on short notice in response to a call.

- 1.4 The document covers these elements in detail and provides further insights regarding callable capital from each perspective.
- 1.5 A key takeaway from this exercise is that given IDB's financial and risk policy framework, proactive long-term financial management, and ability to make a call on capital well before actually being unable to meet its obligations, shareholders would have sufficient time to meet a call on capital before the Bank would default on its obligations. In short, callable capital reduces the Bank's probability of default.
- 1.6 The report contains an annex with background information on how callable capital is considered in credit rating agency methodologies. Recommendations for credit rating agencies on how to better reflect the value of callable capital in their methodologies is beyond the scope of this paper, but Management is working with peer MDBs to advocate for improvements and to encourage a more coherent and consistent approach across agencies regarding the value of this instrument.
- 1.7 The reverse stress testing exercise, to quantify the probability of occurrence and plausibility of extreme tail events¹, comprised an internal approach and a joint effort between IDB, the Asian Development Bank (ADB), and the African Development Bank (AfDB) to engage a financial consulting firm to provide an external assessment of tail events in line with a situation that could result in a call on capital. Both exercises confirmed that credit rating and financial scenarios that may result in a call on callable capital have an extremely low probability of occurrence.
- 1.8 Despite the low probability of a call, the value of callable is evident although it would only be fully visible in times of stress.

¹ Defined as an exceptionally rare negative outcome

II. INTRODUCTION

The MDB Review of Callable Capital – The Process

- 2.1 In September 2023, a group of MDB shareholders² took the initiative to send joint letters to several MDBs³ requesting them to undertake a review of callable capital with a view to clarify the existing legal and financial framework that would be relevant to a call on callable capital, in support of the G20 CAF Report recommendation on callable capital.
- 2.2 This report is an output of that request and provides an overview and analysis of the callable capital policies and practices of the IDB. The report will improve the understanding of callable capital, clarifying the governance of the instrument and processes for making and responding to calls.
- 2.3 The objective of the review and the report is to provide clarity on the circumstances that could lead to a call on callable capital, and the processes for such a call being made by the MDBs and met by shareholders, recognizing that this clarity has value, and is an important part of implementing the G20 CAF Report recommendation on callable capital.
- 2.4 The report is based on a review of relevant literature and documents, as well as discussions and consultations with staff and experts from the IDB and other MDBs. The report does not seek to provide recommendations, but based on interaction and feedback from credit rating agencies, it may lead to further discussions with IDB Management, Board of Executive Directors (BoD), Board of Governors (BoG), and shareholders.
- 2.5 The review includes three main pillars: 1) financial analysis, including reverse stress testing; 2) legal review, including previous decisions regarding the mechanism to call callable capital; and 3) consideration of shareholder processes, in the form of responses to a standard questionnaire provided by shareholders on a voluntary basis.

² United States, Japan, Germany, France, the United Kingdom, Italy, Canada, Netherlands, Switzerland, and Australia. At IDB, the original signatories were joined by other countries in the exercise, including Austria, Belgium, Chile, Denmark, Norway, and Spain. Other countries that are not members of IDB are participating at other MDBs, but they have not been included in this document.

³ IDB, African Development Bank, Asian Development Bank, European Bank for Reconstruction & Development, and the International Bank for Reconstruction and Development

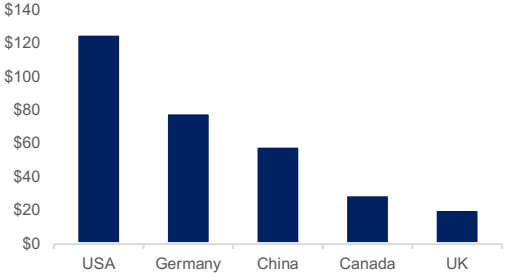
High-Level Overview of Callable Capital

- 2.6 Callable capital is a component of MDBs' capital structure and creditworthiness, as it represents a contingent obligation of shareholders to support MDBs in specific times of financial distress.
- 2.7 Capital adequacy is assessed by various indicators, such as the ratio of equity to loans, the ratio of equity (or capital) to risk-weighted assets, the ratio of impaired loans to total loans, and the level of loan loss reserves. Capital adequacy is also influenced by the quality and diversity of the Bank's portfolio, the macroeconomic and political environment of its borrowers, and the potential impact of shocks and stress scenarios.
- 2.8 But, at its core, capital adequacy is a function of the amount and quality of capital relative to the size and riskiness of the Bank's assets and liabilities. From a capital standpoint, three definitions are needed.
- **Subscribed capital** is the total amount of capital that shareholders have agreed to contribute to the Bank, either in the form of paid-in capital or callable capital. **Subscribed capital is the starting point of IDB's capital adequacy⁴.**
 - **Paid-in capital** is the portion of the subscribed capital that shareholders have actually paid to the Bank.
 - **Callable capital** is the portion of the subscribed capital that shareholders have not paid to the Bank but have committed to providing upon the Bank's request and under certain conditions, specifically the Bank's (present or expected) inability to meet its financial obligations as they come due.
- 2.9 At the MDB-system level, and according to Fitch Ratings⁵, callable capital accounted for 79% of subscribed equity. Despite large amounts of committed callable capital, only a fraction is considered by Credit Rating Agencies (CRAs).

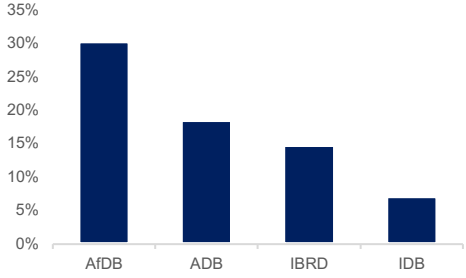
⁴ IDB's equity includes the subscribed capital stock and retained earnings. The subscribed capital stock is divided into i) paid-in capital stock of \$6,039 million, ii) additional paid-in capital of \$5,815 million transferred from the Fund for Special Operations (FSO), and iii) callable capital stock of \$164,901 million. Retained earnings totaled \$26,577 million as of December 31, 2023.

⁵ Source: Fitch Ratings – Understanding Callable Capital, November 2022

COMMITTED CALLABLE CAPITAL FOR SELECTED SHAREHOLDERS⁶



% OF COMMITTED CALLABLE CAPITAL CONSIDERED FOR CAPITAL ADEQUACY⁷



⁶ Source: Fitch Ratings – Understanding Callable Capital, November 2022

⁷ Source: Standard and Poor's: Eligible Callable / Subscribed Callable

III. GOVERNANCE AND LEGAL CONSIDERATIONS

- 3.1 The *Agreement Establishing the Inter-American Development Bank* (the “Charter”) outlines the concept of callable capital within the framework of member-country subscriptions to the Bank’s ordinary capital.⁸ All Bank member countries subscribe to shares of the Bank’s ordinary capital through both paid-in capital and callable capital commitments, subject to the requirements of the Charter.⁹ Specifically, the Charter provides that:
- 3.1.1 Callable capital would be available to the Bank “when required to meet the obligations of the Bank created under Article III, Section 4(ii) and (iii) on borrowings of funds for inclusion in the Bank’s ordinary capital resources or guarantees chargeable to such resources.”¹⁰
- 3.1.2 The Bank may request member countries to contribute a specified part of their respective callable capital “whenever necessary to meet contractual payments of interest, other charges, or amortization on the Bank’s borrowings payable out of its ordinary capital resources, or to meet the Bank’s liabilities with respect to similar payments on loans guaranteed by it chargeable to its ordinary capital resources.”¹¹
- 3.1.3 Any calls must “be uniform in percentage on all shares.”¹²
- 3.1.4 Payments in discharge of the Bank’s liabilities on borrowings and guarantees are to be charged first against the Bank’s “special reserve”¹³ and then against

⁸ Charter, Article II, Section 2(b)

⁹ *Id.* at Article II, Section 3(a)

¹⁰ *Id.* at Article II, Section 4(a)(ii). The provision’s reference to Article III, Sections 4(ii) and (iii) pertains to funds that the Bank borrows in capital markets and guarantees issued by private investors for the Bank’s benefit. The provision further states that, in the event of a call, “payment may be made at the option of the member in gold, United States dollars, fully convertible currency of the member country or in the currency required to discharge the obligations of the Bank for the purpose for which the call is made.”

¹¹ *Id.* at Article VII, Section 3(c). The same provision goes on to state that, “if the Bank believes that a default may be of long duration, it may call an additional part of such subscriptions not to exceed in any one year one per cent of the total subscriptions of the members to the ordinary capital resources” in order to “redeem prior to maturity, or otherwise discharge its liability on, all or part of the outstanding principal of any loan guaranteed by it chargeable to its ordinary capital resources” and to “repurchase, or otherwise discharge its liability on, all or part of its own outstanding obligations payable out of its ordinary capital resources.”

¹² *Id.* At Article II, Section 4(a)(ii)

¹³ *Id.* at Article III, Section 13. The special reserve consists of loan commissions held in investments, which investments may be used only for the purpose of meeting liabilities on borrowings and guarantees in the event of defaults on loans made or guaranteed with ordinary capital resources. The allocation of commissions to the special reserve was discontinued in 1998.

“other reserves, surplus, and funds corresponding to the capital paid in for ordinary capital shares.”¹⁴

3.1.5 Creditors holding claims against the Bank “shall be paid out of the assets of the Bank and then out of payments to the Bank on unpaid or callable subscriptions.”¹⁵

3.2 In 1962, the Bank’s BoD adopted Resolution DE-82/62 concerning callable capital.¹⁶ The Resolution’s four relevant points may be summarized as follows:

3.2.1 The obligation of member countries to pay their respective callable capital is individual, i.e., the failure of one or more members to pay does not affect the obligation of others to make their respective payments.

3.2.2 In the event a call on callable capital does not meet the Bank’s matured or about-to-mature obligations, the Bank may make further calls as needed, within the callable subscription limits, until sufficient funds are collected to meet such obligations.

3.2.3 The Bank is not required to wait until obligations have matured before making a call on the callable capital. The Bank may make calls in advance if it anticipates insufficient funds to meet obligations as they are expected to mature.

3.2.4 Callable capital is considered a part of the Bank’s ordinary capital resources, which the Bank is bound to use as necessary to meet its debt and guarantee obligations as specified in the Charter.¹⁷

3.3 The Charter and Resolution DE-82/62 do not expressly regulate further details concerning the context for a call on callable capital or relevant procedures. However, the Charter, the By-Laws, and further documents adopted by the BoG provide additional guidance relevant to Bank governance. According to the Charter, all the

¹⁴ *Id.* at Article VII, Section 3(b)

¹⁵ *Id.* at Article X, Section 3(b)

¹⁶ Resolution DE-82/62 (approved on December 4, 1962, as amended by Resolution DE-38/78 of March 23, 1978).

¹⁷ The Charter also contemplates the possibility of the termination of the operations of the Bank. In such case, the Board of Governors would have exclusive authority to terminate the Bank operations (Charter, Article X, Section 2). In the context of such termination, the Board of Executive Directors will be responsible to make the necessary arrangements to ensure payment of creditors, on a pro rata basis. The termination of the Bank operations is independent of the financial situation of the Bank and actually, in case of termination, creditors shall, first, be paid out of the assets of the Bank and, as a fallback, out of unpaid capital or callable capital. (Charter, Article X, Section 3 (b)). Thus, the Bank does not have to commence a liquidation process before making a call on capital, but, equally, can commence a liquidation process without calling capital.

Bank's powers are vested in the BoG.¹⁸ Further, the Charter specifies a list of powers that must be reserved for the BoG and that may not be delegated to other authorities.¹⁹ This reserved list does not include a reference to the making of a call on callable capital.²⁰ All other powers of the BoG may be delegated to the BoD,²¹ which the BoG has done through the approval of the Bank's By-Laws.²² Although the BoD, in turn, has delegated several functions to the Bank's President, the authority to make a call on callable capital has not been delegated by the BoD to the President.²³

- 3.4 Notwithstanding the reserved list under the Charter for the BoG and the broad delegation to the BoD under the By-Laws, the BoG retains full power to exercise authority over any matter delegated to the BoD and has actually exercised jurisdiction and retained authority over several strategic, operational and financial matters.²⁴ This policy framework established by the BoG guides the BoD and the President in their work and has an institutional hierarchy over complementary regulations that may be approved by the BoD and the President on related matters as well as on their respective action.
- 3.5 The governance described above has been reflected in the approval by the BoG of broad strategic mandates, such as those concerning the Bank's periodic capital increases and the Institutional Strategy, that outline the institutional objectives for the use of its resources. With respect to financial matters of institutional relevance, the BoG has adopted a Capital Adequacy Policy (CAP) Mandate which provides, among other relevant terms, that "the Bank shall establish regulations, [...], including the definition of appropriate capital buffers, to maintain its firm financial footing and ensure a long-term foreign-currency credit rating of triple-A (or equivalent) level, with all major credit rating agencies".²⁵ In furtherance of this mandate, the BoG has adopted the Regulations Governing the Implementation of the Capital Adequacy Policy²⁶ and the

¹⁸ Charter, at Article VIII, Section 2(a)

¹⁹ *Id.* at Article VIII, Section 2(b)

²⁰ *Idem*

²¹ *Idem*

²² By-laws, Section 4

²³ Pursuant to Article VIII, Section 3, of the Charter, the "Board of Executive Directors shall be responsible for the conduct of the operations of the Bank" and "shall function in continuous session at the principal office of the Bank and shall meet as often as the business of the Bank may require". Therefore, the Board of Executive Directors can deal with immediate concerns confronting the day-to-day management of the Bank.

²⁴ *Id.* at Article VIII, Section 2(c).

²⁵ Document AB-2994, Capital Adequacy Policy Mandate.

²⁶ Document AB-2996, Regulations Governing the Implementation of the Capital Adequacy Policy.

Income Management Model (IMM).²⁷ The IMM determines, *inter alia*, the measures to be taken by Management, by the BoD or by the BoG, as the case may be and depending on the circumstances, in order to comply with the CAP.

- 3.6 In particular, under the IMM, the BoG shall be involved where compliance with the CAP Mandate is at risk. For example, in the event that the Bank's capital ratios fall below specific levels (as defined by applicable policies), Management shall promptly engage the BoD to approve an action plan, which the BoD may submit to the Governors for information. Additionally, if the actions approved by the BoD are insufficient to bring the capital ratios back above the specific level, the BoG shall be engaged to consider alternatives for adjustments to the financial and operational levers of the Bank.
- 3.7 Moreover, the IMM details specific actions that Management and the BoD must take in the event of a credit downgrade decision of the Bank's long-term, foreign currency credit rating, and specific timelines for action. This includes immediate actions to avoid deterioration of the Bank's financial position, consultation with the Committee of the Board of Governors, and possible proposed actions for consideration by the BoG.
- 3.8 The proactive, dynamic measures in the IMM solidify the Bank's financial standing and make it resilient to downturns. Furthermore, the Bank's prudent liquidity policy mandates that the Bank hold sufficient high-quality liquid assets in its investment portfolio to cover at least 12 months' worth of liquidity requirements.
- 3.9 IDB's financial and risk policy framework, proactive long-term financial management, and ability to make a call on capital well before actually being unable to meet its obligations would together provide shareholders with sufficient time to meet a call on capital before the Bank would default on those obligations.

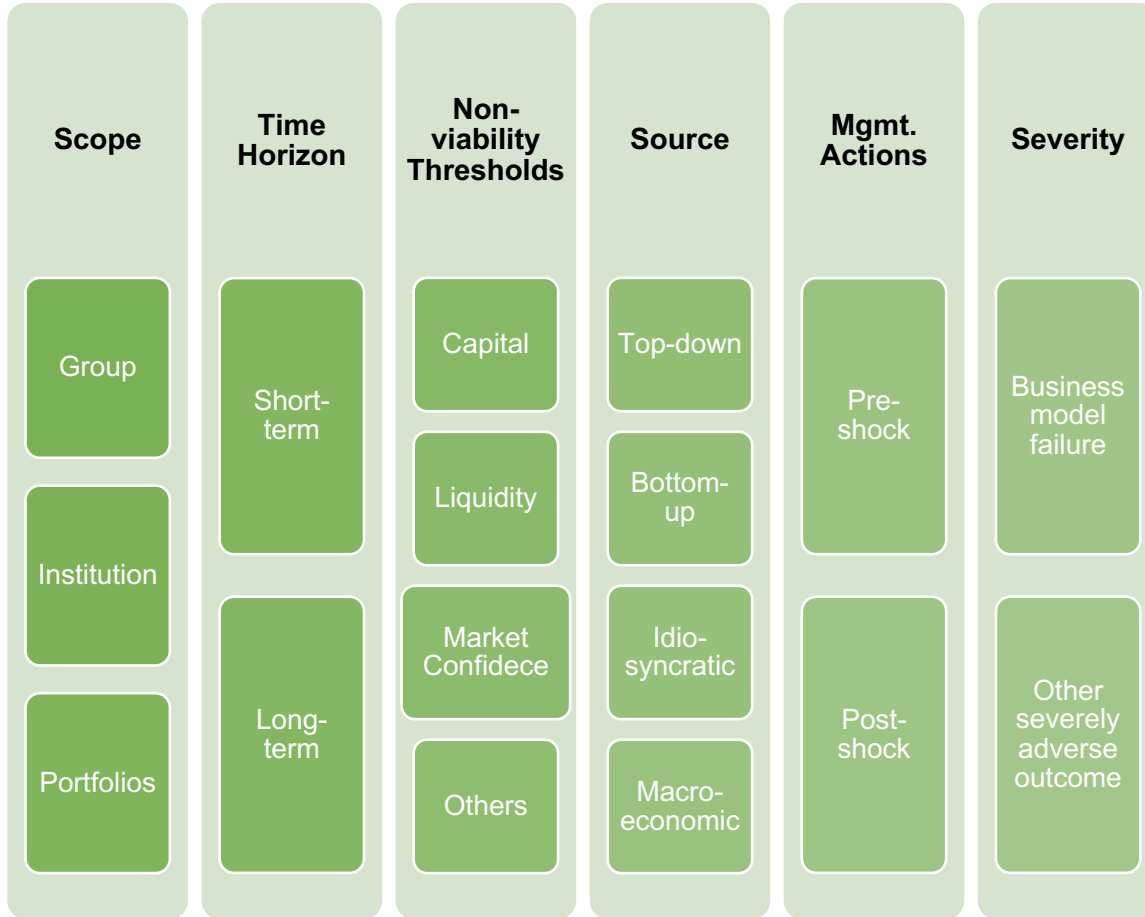
²⁷ Document AB-3044, Amendment and Restatement of the Income Management Model

IV. SYNTHESIS OF IDB'S REVERSE STRESS TEST RESULTS

- 4.1 By definition, a call on capital would only arise in a situation considered an extreme tail event, namely, if the IDB cannot meet its financial obligations as they mature. As a triple-A rated preferred creditor, that is considered extremely unlikely.
- 4.2 However, in order to quantify the probability of such an unlikely event, a technical exercise called reverse stress testing (RST) is needed.
- 4.3 RST refers to inverting cause-effect into effect-cause. This is the primary distinction between scenario-based stress testing and RST. The RST's starting point revolves around the definition of a pre-established outcome (e.g., IDB's rating deteriorating below a certain level that would likely lead to a call on callable capital) that could be caused by an event or a series of events (e.g., the breakdown of the Bank's preferred creditor treatment).
- 4.4 RST encompasses the definition of shocks leading to severe capital losses and/or liquidity disruptions that could lead to business discontinuity. RST scenarios are designed to be so severe that, when tested, would likely lead to the predefined point of non-viability.
- 4.5 RST has evolved significantly in recent years as the regulatory requirements pertaining to stress testing underwent significant transformation following the Global Financial Crisis of 2007-2009 that exposed severe weaknesses and deficiencies in the internal risk management frameworks of financial institutions.
- 4.6 In addition to expanding traditional scenario-based stress testing methods, international and national banking prudential regulatory frameworks introduced RST as an integral part of the financial system's stress testing governance²⁸.
- 4.7 Exhibit 1 provides a general description of the various dimensions that underpin the design of an RST program.

²⁸ See Basel Committee on Banking Supervision (BCBS) – "Principles for sound stress testing practices and supervision," European Banking Authority (EBA) guidelines on institutions' stress testing (EBA/GL/2018/04), Committee of European Banking Supervisors (CEBS) Guidelines on Stress Testing (GL32), European Central Bank (2018a and 2018b).

Exhibit 1 – General Dimensions of Reverse Stress Testing²⁹



- 4.8 In the context of the MDB-wide Review of Callable Capital, the primary objective of the RST exercise was to quantify the probability of occurrence and plausibility of extreme tail³⁰ events, considering contagion risk effects, systemic risk drivers, and feedback and reinforcement loop effects, which, upon materializing, would likely lead to the Bank being forced to make a call on its capital in order to meet its obligations.
- 4.9 The RST assesses the dynamic interplay of a large combination of quantitative and qualitative risk factors not usually considered in the context of conventional stress testing. The combined effect would fundamentally endanger the sustainability of the institution’s business model, defining a point at which a call on IDB’s capital would

²⁹ Reverse Stress Testing in Banking, A Comprehensive Guide. Michael Eichhorn, Tiziano Bellini, Daniel Mayenberger.

³⁰ Defined as an exceptionally rare negative outcome.

most likely be necessary. RST assumes all mitigating management actions have been exhausted³¹.

- 4.10 RST is mainly underpinned by a complex, quantitative modeling exercise. The analytical scope of such exercises involves the study of the central weaknesses of the institution to inform the analysis of historically observed and hypothetically possible combinations and interdependencies among the individual risk factors³².
- 4.11 After the critical risk factors are identified, the quantitative analysis focuses on the structure of the risk profile and the institution's macroeconomic and operating environment to form the basis for the selection of the scenarios. This parametrization process defines stress events leading to capital loss and/or liquidity shortfall, leading to a call on the Bank's capital.
- 4.12 No financial or statistical model will be able to accurately capture all the scenarios and interdependencies that may, in practice, occur. Therefore, the results included in this paper should be considered together with the limitations inherent in such an exercise.

IDB's Internal RST Benchmark Exercise

- 4.13 To complement the RST analysis undertaken by the external consultant retained by IDB Management, Risk Control Limited (RCL), the Bank's finance and risk departments conducted an internal reverse stress testing analysis to produce a reference point for estimating the likelihood of a capital call.
- 4.14 Two definitions of technical concepts are needed to illustrate RST results properly. 1) non-accrual status refers to a sovereign loan that has been in payment arrears for more than 180 days. 2) Exposure at Default (EAD) is a measure of credit risk exposure calculated as the entire amount of outstanding loans plus 50% of signed undisbursed loans. In the following analysis, EAD does not refer to a loan in default, but merely as a share of the loan portfolio.
- 4.15 The approach contemplated an objective function that describes a severe fracture of the Bank's PCT model, at which point the ability of the institution to function normally would be severely impeded (and therefore a disruption in the Bank's access to liquidity and debt refinancing alternatives), thereby defining a point in which a call on capital would likely be made.
- 4.16 To tackle that, estimations of probabilities of multiple non-accrual events taking place simultaneously were undertaken using a stochastic simulation of correlated rating

³¹ This refers mostly to levers defined by IDB's Income Management Model (IMM).

³² Non-accrual events, abrupt changes in market rates, treasury portfolio losses, counterparty losses on derivatives positions, negative swings in pension assets, impaired access to capital markets, etc.

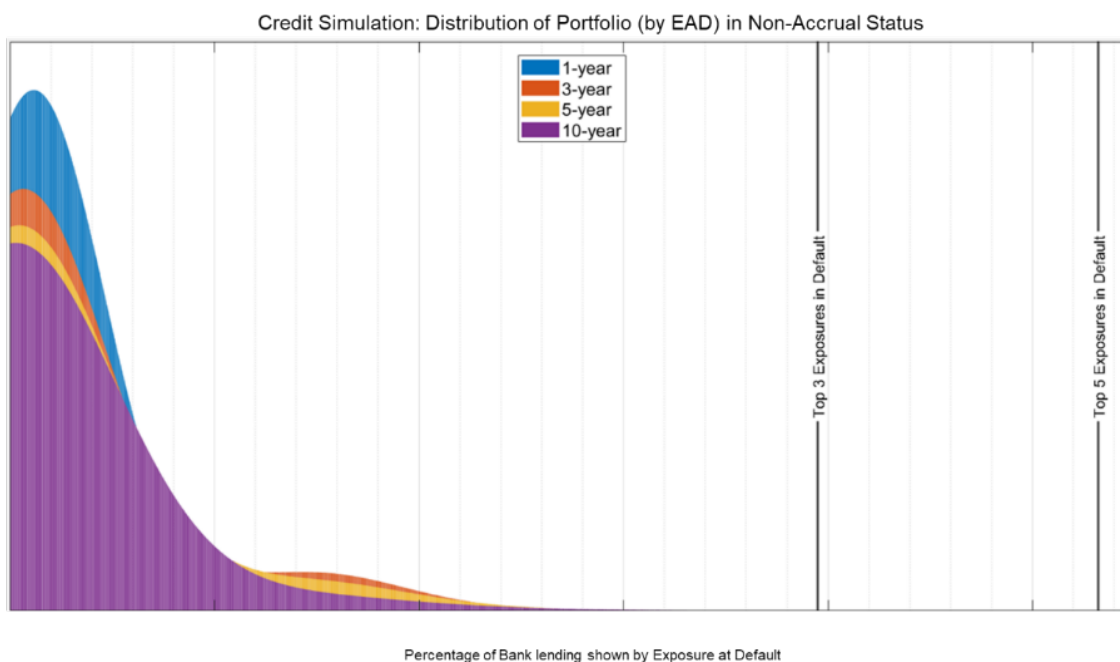
changes of sovereign exposures, whereby the simulated market defaults were converted to non-accrual events via an empirically derived PCT factor as per the following conditional probability statement:

$$P(\text{Non} - \text{Accruals}_{IDB} | \text{Default}_{Mkt}) = \frac{P(\text{Non} - \text{Accruals}_{IDB} \cap \text{Default}_{Mkt})}{P(\text{Default}_{Mkt})}$$

- 4.17 The point of non-viability was subsequently defined in accordance with a numerical threshold described in terms of a predetermined percentage of loan assets in default, at which level the Bank's PCT would be deemed to be severely compromised. This was defined as having non-performing assets in the lending portfolio amounting to a total mass of default equivalent to that of the top 3 exposures, i.e., about 38% of the portfolio in default³³. Note that this does not mean that the top 3 exposures are in default.
- 4.18 Simulated results corresponding with the distributions of exposures in default obtained at multiple time horizons, as well as the associated probabilities of realizing those credit shocks are illustrated in Exhibits 2 and 3.
- 4.19 Exhibit 2 illustrates the distribution of trajectories of the country(ies) defaulting to IDB, simulated over multi-year periods. The x-axis represents the share of the Bank's EAD in non-accrual status to the Bank while the y-axis is normalized such that the area under the curve adds up to 1.

³³ The estimation leverages a multivariate credit risk model that simulates millions of correlated trajectories of the credit ratings of the Bank's sovereign exposures at multiple time horizons using multi-horizon rating transition matrices and sovereign macroeconomic indicators as primary inputs.

Exhibit 2 – Results of Credit Simulation



- 4.20 The results shown in Exhibit 3 suggest a 10-year average probability of experiencing the above-mentioned fracture in the Bank’s PCT model totaling 0.025%, which could be interpreted as a proxy for the corresponding probability of the Bank experiencing a shock sufficiently to the extent where a call on its capital would be required to meet the Bank’s obligations.

Exhibit 3 – Probabilities of Non-Accrual Status

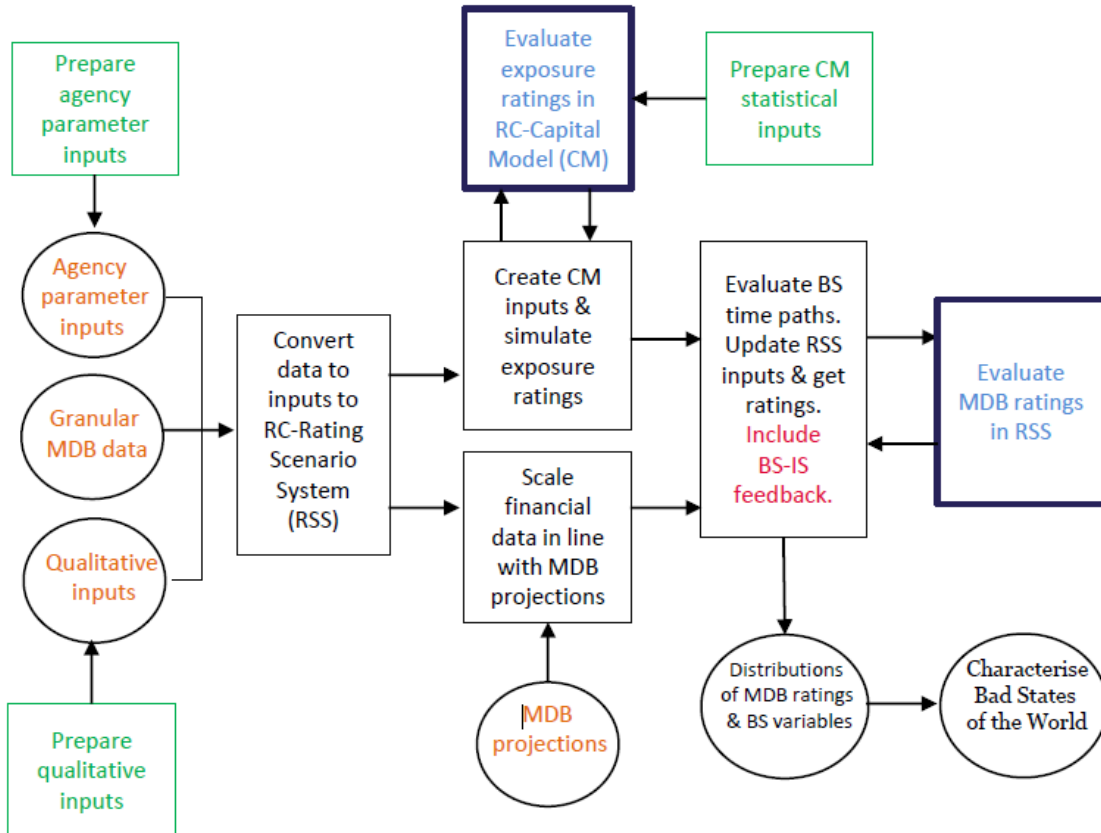
Share of Portfolio in Default (by EAD)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Average Probability
Equivalent of Top 3	0.001%	0.003%	0.009%	0.018%	0.020%	0.029%	0.031%	0.042%	0.040%	0.042%	0.025%
Equivalent of Top 4	0.000%	0.000%	0.002%	0.004%	0.004%	0.007%	0.007%	0.011%	0.010%	0.012%	0.006%
Equivalent of Top 5	0.000%	0.000%	0.000%	0.002%	0.002%	0.002%	0.002%	0.004%	0.003%	0.005%	0.002%
Equivalent of Top 6	0.000%	0.000%	0.000%	0.001%	0.001%	0.001%	0.001%	0.002%	0.001%	0.002%	0.001%
Equivalent of Top 7	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.001%	0.000%	0.001%	0.000%
Equivalent of Top 8	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
Equivalent of Top 9	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
Equivalent of Top 10	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

Reverse Stress Testing by Risk Control Limited

- 4.21 To standardize the RST process, IDB partnered with the Asian Development Bank and the African Development Bank in a joint initiative to engage a common financial consulting firm to provide an external assessment of tail events in line with a situation that could result in a call on capital.

4.22 The three MDBs engaged RCL, a well-known and respected firm with expertise in MDB risk modeling. In coordination with the three MDBs' management, RCL developed an RST framework designed to meet the exercise's terms of reference. The RCL model architecture is presented in Box 1, which is reproduced from an RCL document.

Box 1 – Risk Control Limited’s Model Architecture



4.23 RCL identified a trigger for MDB default lying somewhere between (a) losing the investment grade status, necessary to access substantial funding, and (b) exhausting accounting equity. Falling below investment grade was chosen as a stress situation where market access would be too limited to meet financial obligations, or the pricing would become such that the business model would break down.

4.24 Consistent with IDB’s internal assessment, RCL’s analysis has determined that the probability of hitting a trigger that would likely result in a call of callable capital is extremely small and would only occur if the Bank’s PCT framework were to breakdown.

- 4.25 RCL's preliminary analysis estimates a 0.19% probability of IDB's credit rating falling below BBB- with one rating agency by 2035 or 0.32% by 2050.
- 4.26 RCL's estimate of the probability of IDB falling below an investment grade credit rating is consistent with IDB's internal RST results of the probability of the equivalent weight of the top 3 exposures being placed in non-accrual status.
- 4.27 Since there is no way to know the exact situation requiring a capital call, it is important to use different approaches and incorporate different considerations. Both approaches used for this exercise show the probability of a sufficiently dire series of events, as to require a call of capital, as extremely remote.

V. SHAREHOLDER PROCESSES

- 5.1 To bring greater clarity to IDB's callable capital, IDB Management engaged with a subset of shareholders to better understand the processes that would need to be undertaken to respond to a capital call, including the required approvals and the existing legal, budgetary, and accounting treatment for existing callable capital.
- 5.2 Input from the shareholders was gathered through standardized questionnaires (Shareholder Information Templates, summarized in Box 2 below). Shareholder Information Templates were received from borrowing and non-borrowing member countries representing roughly \$86 billion of subscribed callable capital, more than 50% of the voting power and approximately 99% of the callable capital of non-borrowing members, 75% of which has been subscribed by countries rated at least AA+ (see Exhibit 4). Additional information can be found in the [Annex, on page 32](#).

Box 2: Shareholder Information Template Questions

Shareholding and Callable Capital Commitments by MDB

Processes and Approvals: Describe the process your government would undertake and any approvals it would need to respond to a call on callable capital (or a call that is forthcoming). And, where legislative approval is required to respond to a call on callable capital (or a call that is forthcoming), describe the scope of opportunities for engagement with the legislature to seek this approval.

Timeframes: Describe the timeframes associated with these processes and approvals. If the timeframe is conditional upon specific factors, please describe those factors.

Responsibilities: Describe where the responsibilities for these processes and approval reside within your government. (Table detailing Procedural steps, timeframes, and responsible entities.

Size of Call Response: Describe your government's potential to make available an amount of callable capital above the size of a call that has been made (or is forthcoming), and the associated processes and approvals for the same (if different from the above).

Accelerated Processes: Describe your government's potential to undertake accelerated domestic processes and approvals in response to a call on callable capital (or a call that is forthcoming), including what these processes and approval entail (including any conditions that must be met), their associated timeframes, and whether there are any limitations on the amount of callable capital available through them (recognizing that the existence of these accelerated processes has no effect on the circumstances under which callable capital may be called).

Callable Capital Available for Immediate Disbursement and Process/Timeframe: Describe any amounts of callable capital that are currently available for immediate disbursement in response to a call on callable capital (including, where applicable, funds that have already been made available through existing or previously approved budgets), and the processes, approvals, and timeframes associated with disbursement of such amounts.

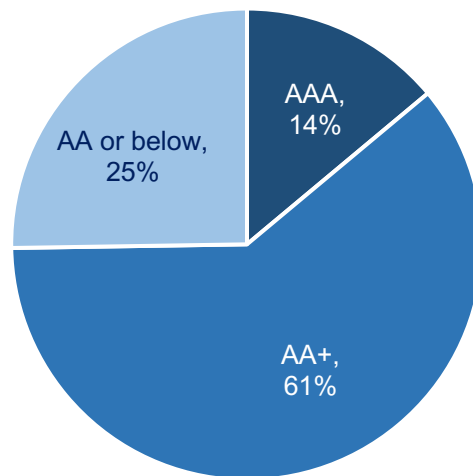
Accounting and Budgeting Procedures: Describe the accounting treatment your government employs when accounting for callable capital, and how callable capital is treated in your government's budget.

Legal Status of Callable Capital Subscriptions: Describe the legal status of your government's callable capital subscriptions, including the legal basis upon which those subscriptions rest.

Cross-MDB Differences: Describe any differences in the way your government treats callable capital from an accounting, legal, or process for responding to a call perspective across the different MDBs.

Other Factors: Cite any other factors affecting your government's ability to promptly respond to a call on callable capital.

Exhibit 4: Surveyed Non-Borrowing Member Countries by Rating



5.3 The information provided by shareholders highlighted substantial homogeneity between countries in legislative mechanisms associated with callable capital. All the countries surveyed highlighted the legally binding nature of callable capital commitments established as part of capital subscriptions to MDBs. In those countries, callable capital is considered a legally binding commitment, and no differences were identified in the treatment of callable capital across MDBs.

- 5.4 Budgetary and accounting treatment are more varied between the countries surveyed. The United Kingdom, Canada, and most European Union (EU) countries account for callable capital as a contingent liability, while the United States refers to callable capital subscriptions to the MDBs as commitments, they are functionally equivalent to contingent liabilities, with a remote likelihood of occurrence, in their respective government statistics and are typically disclosed in the relevant government reports. Due to the low probability of a call, from an accounting and budgetary perspective, most countries surveyed have not appropriated the full amount of their callable capital subscriptions. Legislative approval would generally be required to appropriate such funds in the respective nation's budget. The approval process for appropriation and disbursement approval varies between countries, generally ranging from two to three months to one year, which is within the time period that would likely be available to shareholders for responding to a call if one were made.
- 5.5 Accounting and budgetary treatment for shareholders follow rules-based processes driven by the probability of a call. As a result, in Management's view, resources not being budgeted to respond to a call and financial statements not recognizing a current liability do nothing to indicate a country would not honor a call if it were to be made. In the event that a call were to become likely, the rules-based processes would trigger budgetary and accounting procedures and the treatment would change.
- 5.6 Although most shareholders consider callable capital a contingent liability (or the functional equivalent of a contingent liability) without budget appropriation, heterogeneity still exists, even in countries from the same region such as EU countries.
- 5.7 A few of the governments surveyed indicated that at least some of their callable capital subscriptions have been appropriated and/or funds would be available to meet a capital call without the need for additional legislative approval. Furthermore, most countries indicated that they could undertake accelerated processes that would allow for expedited disbursement to meet a call.
- 5.8 Based on the information provided in the questionnaires, five shareholders (detailed below) noted that a portion of callable capital (totaling over \$18 billion) is available for disbursement without additional legislative approvals required.
- 5.9 The United States noted that \$3.80 billion of callable capital has been authorized and appropriated by the United States Congress for responding to a call from the IDB. That amount is available for payment in response to one or more IDB capital calls without the need for additional action from Congress. Denmark (\$0.29 billion of IDB subscribed callable capital) would also be able to respond to a call immediately and in full without additional Parliamentary approval. Additional member countries, such as Japan (\$8.25 billion of IDB subscribed callable capital), Germany (\$3.13 billion of IDB subscribed callable capital) and France (\$3.10 billion of IDB subscribed callable capital), highlighted their ability to respond to a capital call without requiring additional

Parliamentary approval if there are sufficient funds available within their governments' respective budget for payments of such nature.

- 5.10 Shareholder inputs in the review of the callable capital process have reinforced its value and the impact callable capital has in encouraging ongoing shareholder support. Given the legally binding nature of callable capital commitments, shareholders recognize the large potential obligation tied to callable capital which encourages their support through other corrective and proactive measures, including general capital increases where all shareholders contribute versus possibly being exposed to a call that could far exceed the cost of paid-in capital associated with a general capital increase.
- 5.11 The legally binding nature of callable capital, as recognized by shareholders, provides a clear incentive for shareholders to ensure that MDBs are managed prudently and are well capitalized.
- 5.12 In that way, the fact that MDBs have received dozens of capital increases without the need to resort to a call on callable capital, is clear evidence of shareholders' long-standing and far-reaching support for the organizations. Furthermore, it shows the value of callable capital ensuring proactive measures are enacted to avoid possible situations where a call could be required.

VI. OBSERVATIONS AND NEXT STEPS

- 6.1 This review has provided important clarity on several critical elements of callable capital.
 - 6.1.1 Callable capital is an important feature in the MDB capital structure and common to most MDBs. Callable capital is already incorporated into IDB's financial policy framework both in the definition of IDB's target credit rating and in the definition of the minimum required capital zones.
 - 6.1.2 IDB has the ability to make a call on capital well in advance of not being able to meet its obligations if it anticipates insufficient funds to meet those obligations as they are expected to mature. The Bank maintains sufficient liquidity buffers to remain current on its obligations while a call on capital is being met.
 - 6.1.3 All shareholders that participated in this exercise consider callable capital as a legally binding commitment. While their processes and timeframes for responding to a call vary, the clarification provided by shareholders suggests that they would be able to respond to a call within the time period required in the event additional capital is required to meet Bank obligations.
 - 6.1.4 Some shareholders have mechanisms in place to respond to a call on callable capital immediately – with over \$15 billion of callable capital being available without additional legislative approval, and others have accelerated processes that could be activated.
 - 6.1.5 The probability of a call on callable capital is difficult to assess but reverse stress testing results point to an extremely low probability between 0.025% and 0.19% over a 10-year period.
- 6.2 Clarity on these elements demonstrates that, in the extremely unlikely event of a call, shareholders would have the ability to respond in the time available to prevent IDB from failing to meet its obligations.
- 6.3 An important observation is the critical role of early signaling in the unlikely event that a call on capital might be required, in order to trigger budgetary and fiscal procedures, and to allow time for a call to be implemented or for Governors to consider remedial actions, as necessary. The Bank's IMM and other financial policies provide for both appropriate capital and liquidity buffers and consultation mechanisms to allow for early engagement with BoG if necessary.

6.4 There are merits in advocating for greater consistency among credit rating agencies to be able to further include callable capital in capital regulations. IDB will continue playing a leading role in the interaction with CRAs for the MDB system. Tangible results have already been achieved through consistent and coordinated interactions between MDBs and CRAs. Furthermore, the issue of the treatment of callable capital in credit ratings can usefully be discussed in other forums such as the G20 and the Heads of MDBs, given the importance that ratings have in the expansion of lending capacity given existing amounts of paid-in capital.



ANNEXES



ANNEX: BACKGROUND ON CREDIT RATING AGENCY METHODOLOGY

A. Select Elements Factored into Credit Rating Agency Methodology

- Credit ratings are the opinions of independent rating agencies on the creditworthiness of the Bank and the likelihood of the Bank defaulting on its senior debt obligations. Credit ratings are based on the analysis of various factors, such as the Bank's financial profile, capital adequacy, liquidity, risk management, governance, and shareholder support. Credit ratings affect the Bank's access to and cost of borrowing in the international capital markets, as well as its reputation and credibility among stakeholders.

Important financial considerations in credit rating methodology

- Financial leverage is the ratio of the Bank's total assets to its equity. Financial leverage reflects the extent to which the Bank uses borrowed funds to finance its operations and generate income. Financial leverage can enhance the Bank's development impact and profitability, but it also increases its exposure to market and credit risks. Therefore, financial leverage needs to be balanced with capital adequacy and risk appetite to ensure the Bank's long-term sustainability.
- Risk-adjusted capital limits are the maximum amount of exposure that the Bank can take to a single counterparty or a group of connected counterparties, based on the Bank's available capital and the riskiness of the exposure. Risk-adjusted capital limits ensure that the Bank does not over-concentrate its portfolio or exceed its risk capacity, while allowing it to diversify its lending activities and support its development objectives. Risk-adjusted capital limits are derived from the Bank's risk appetite framework and are calibrated according to the credit rating, sector, and country of the counterparty, as well as the maturity, currency, and collateralization of the exposure.
- Risk appetite is the amount and type of risk that the Bank is willing and able to take in pursuit of its objectives, within its risk capacity and risk tolerance. Risk appetite is expressed by qualitative statements and quantitative metrics that guide the Bank's strategic and operational decisions, such as the allocation of resources, the pricing of products, and the management of risks. Risk appetite is aligned with the Bank's mandate, vision, mission, and values, as well as with the expectations and preferences of its shareholders and stakeholders.

Important non-financial considerations in credit rating methodology

- In addition to financial considerations, MDB credit ratings are influenced by a range of non-financial considerations that can be categorized as policy

importance and business profile. The following summarizes several key factors impacting the non-financial considerations:

- **Development impact:** the extent to which the Bank contributes to the economic and social development of its member countries and regions, by providing financial and non-financial products and services that address their needs and priorities. Development impact is measured by indicators such as the volume and quality of lending and grants, the alignment with the Sustainable Development Goals, the effectiveness and efficiency of operations, and the results and outcomes achieved.
- **Business model:** the way the Bank generates income and covers its expenses, by offering a range of products and services that are competitive and attractive to its clients and partners. Business model is assessed by factors such as the diversity and stability of income sources, the level and structure of operating expenses, the pricing and profitability of products and services, and the innovation and adaptation to changing market conditions and client demand.
- **Strategy and governance:** the vision, mission, and objectives that guide the Bank's activities and decisions, as well as the structures and processes that ensure the accountability, transparency, and integrity of the Bank's management and operations. Strategy and governance are evaluated by criteria such as the clarity and coherence of the strategic plan, the alignment with the shareholders' expectations and interests, the participation and representation of stakeholders, the quality and independence of the board and senior management, and the adequacy and effectiveness of the internal controls and risk management systems.
- While this exercise does not contemplate changes to CRA methodology or changes in how CRAs view callable capital, this annex provides background information on how callable capital is factored into CRA credit rating methodology.
- Callable capital is an important factor in the methodology of S&P, Fitch, and Moody's as it informs the extraordinary shareholder support assessment undertaken by the CRAs.
- CRAs give very different value to MDB callable capital, hence the treatment greatly differs across CRAs. The fact that callable capital has not been tested to date and the absence of clear mechanisms to make the call³⁴ have grounded the different approaches to account for it, as summarized in the following paragraphs and further illustrated in Exhibit 4.

³⁴ With the notable exception of the European Stability Mechanism (ESM), IDB Management is not aware of other supranational institutions with formal mechanisms in place to make a call on its capital.

B. Treatment of Callable Capital by CRAs

- S&P considers callable capital as a benefit only from shareholders that have foreign currency ratings equal to or higher than IDB's stand-alone credit profile (SACP). The extent of the benefit conveyed by callable capital is operationalized by recalculating risk-adjusted capital ratios to include eligible callable capital in the numerator. Based upon the results of such assessment plus other qualitative considerations in relation to shareholder support, S&P caps the maximum uplift at three notches above the SACP.
- Moody's includes callable capital under their willingness to support assessment. Callable capital enters Moody's Strength of Member Support assessment as a quantitative and qualitative factor. The Callable Capital-to-Debt ratio can be adjusted based on the enforcement of mechanisms to call on callable capital. It is unclear how the limits in terms of maximum notch uplift were set. For example, even though Moody's methodology allows for upward adjustments for strong enforcement mechanisms and payment enhancement for callable capital, these adjustments are still capped by the less than one-notch overall uplift on callable capital, hence providing little real difference on the overall rating.
- For Fitch, callable capital serves as a potential adjustment to the intrinsic rating in the assessment of extraordinary shareholder support and can provide up to a three-notch uplift. Fitch measures capacity to provide support by the coverage of net debt by callable capital. Callable capital is only considered for the portion subscribed by shareholders that would provide a rating uplift beyond the Intrinsic Rating. If the amount of net debt exceeds callable capital, then the capacity to support is determined by the average rating of key shareholders (i.e., countries that own the largest shares of subscribed capital). Callable capital also enters Fitch's risk-weighted assets to usable capital ratio (FRA). For the calculation of the FRA ratio, Fitch adjusts reported equity by adding 10% of AAA and AA-rated Callable Capital.

Exhibit 5 – Differentiated Views of Capacity to Support

	Standard and Poor's	Moody's	Fitch Ratings
Callable Capital included in key capitalization metrics	Yes	No	Yes
Callable capital coverage ratios refer to gross/net debt	No	Yes	Yes
Callable capital refers to weighted average rating of shareholders	No	Yes	Yes

C. Callable Capital and the MDB-wide Engagement with CRAs

- IDB Management has led the MDB-wide process bringing together CFOs and CFOs with CRAs to discuss tangible areas of improvement in CRA methodologies. Callable capital has featured prominently in this process and provides a foundation for expanded dialogue building on the MDB-wide review of callable capital.
- Given the collective effort underway to bring more certainty to the process revolving callable capital, one general consideration for all CRAs would be to clarify the conditions under which additional credit would be given to callable capital.
- The following paragraphs highlight key areas where MDB CFOs and CROs have indicated that CRA methodology can be improved by providing increased, and appropriate, value to callable capital. This is a summary stock-taking of efforts and does not reflect new analysis tied to this MDB callable capital exercise.

S&P

- In line with the general proposition regarding the need to bring further clarity to the conditions that would lead to additional credit being afforded to callable capital, we suggest expanding the callable capital's eligibility criteria by considering the capital subscribed by countries that have provided procedural and legislative clarity with regard to the callable capital process. These factors constitute a strong signal of willingness support, which along with the credit fundamentals of the country, they provide for a more holistic view of shareholder support.

Moody's

- As Moody's reviews its supranational rating criteria and assesses the merits of introducing a risk-based metric to anchor its capital adequacy assessment, we see merits in considering bringing callable capital into the capitalization assessment and its primary indicator to provide for consistent treatment across rating methodologies.
- Furthermore, in the context of Moody's willingness to support assessment within the MDB's strength of member support, we propose evaluating the callable capital coverage ratio based on net debt, as opposed to gross debt. Such an approach would be consistent with MDB's conservative approach towards liquidity management, whereby these institutions hold large pools of high quality, short-term liquid assets sufficiently sized to withstand extreme stress scenarios unfolding in developed markets.

Fitch

- Under Fitch's criteria, the value of callable capital, and thus the conditions under which the IDB could receive uplift from shareholder support, is largely capped by the institution's ability to cover net debt by the amount of callable capital subscribed by countries rated at triple-A. This approach remains excessively conservative, as for the purposes of the shareholder support assessment, and the prospect of receiving any credit beyond the intrinsic rating, it renders all callable capital rated below triple-A effectively worthless.
- A less extreme approach to shareholder support could be considered whereby partial credit is afforded to callable capital subscribed by shareholders rated below the corresponding rating threshold.
- Moreover, Fitch could consider affording partial credit through differentiated credit notch uplift whenever the net debt coverage ratio falls below 100%. Such an approach would reduce volatility and uncertainty to the outcome of the shareholder support assessment, bringing more transparency and predictability

to the overall rating process, as declines in the net debt coverage ratio may be due to temporary rating actions, while not being necessarily predictive of willingness and ability to honor a call on capital.

- These suggested improvements, which have already been communicated to CRAs, can be strengthened in light of the review of callable capital process, in particular, the important information provided by shareholders clarifying the nature of their obligations related to callable capital as well as their related processes.

ANNEX: SHAREHOLDER INFORMATION

Input from the MDB shareholders during the callable capital review process was gathered through standardized questionnaires (the format of said templates is summarized in [Box 2, page 20](#)). The countries listed below have participated in the callable capital review exercise. Where publication was authorized, the hyperlinks below will provide access to the respective shareholder information.

- [Austria](#)
- [Belgium](#)
- [Canada](#)
- [Chile](#)
- [Denmark](#)
- [France](#)
- [Germany](#)
- [Italy](#)
- [Japan](#)
- [Korea](#)
- [Netherlands](#)
- [Norway](#)
- [Spain](#)
- [Switzerland](#)
- [United Kingdom](#)
- [United States of America](#)

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