



# MDB Contingent Capital Facility

## Expanding lending capacity and increasing resilience

Christopher A. McHugh  
Eamonn White

September 2025

### Key messages

---

A Contingent Capital Facility (CCF) is a financial instrument being developed for Multilateral Development Banks (MDBs) to create new Tier 2 capital able to support new lending, while minimising the fiscal implications for Governments to support international development objectives at a time of geopolitical fragmentation and competing financial pressures. This work is designed to advance the G20 Capital Adequacy Framework recommendations and priorities of the MDB Global Risk and Finance Forum (GRaFF).

---

The CCF is a legally binding agreement in which highly-rated Governments commit to purchasing a core capital instrument from an MDB if a pre-defined, low-probability financial stress event occurs. The nominal amount of the Government(s) commitment under the CCF will qualify as MDB Tier 2 capital.

---

The underlying capital instrument for the CCF is designed with five key criteria in mind - fully paid-in, loss-absorbing, perpetual, discretionary remuneration, and subordinated - to ensure that the CCF overall would qualify for Tier 2 capital recognition.

---

The Caribbean Development Bank (CDB) launched in 2025 a project to pilot the design of a CCF in collaboration with donors, the MDB Challenge Fund and the Children's Investment Fund Foundation, to enhance CDB's agility and institutional resilience, while creating a standardized solution that can be adopted by other MDBs to increase their lending capacity and financial resilience.

---

## A Cantium & Ardhill Advisory Working Paper

This material is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0 ) licence. It may be reproduced for non-commercial purposes, including use in publications, provided that appropriate credit is given to the authors. No modifications or derivatives may be made. A copy of any publication using the material should be supplied. For online use, please include a citation with a link to the original source using the link provided below.

How to cite: McHugh, C.A. & White, E. (2025) MDB Contingent Capital Facility: increasing lending capacity and enhancing resilience. Cantium/Ardhill Working Paper. London.  
<https://www.caribank.org/publications-and-resources/resource-library/reports/mdb-contingent-capital-facility-expanding-lending-capacity-and-increasing-resilience>.

For further information please contact:

Chris McHugh: [chris.mchugh@cantium.io](mailto:chris.mchugh@cantium.io)  
Eamonn White: [eamonn.white@arhdill.co.uk](mailto:eamonn.white@arhdill.co.uk)  
Krishna Clarke: [krishna.clarke@caribank.org](mailto:krishna.clarke@caribank.org)

# Acknowledgements

The authors gratefully acknowledge the Caribbean Development Bank (CDB) for partnering on this project. The report has greatly benefitted from extensive discussions and feedback from CDB's Chief Risk Officer Stefano Capodagli and Tim Turner, advisor to the CDB, on the integration of a contingent capital facility within the CDB risk and capital adequacy framework.

The project has also benefitted from discussions and insights from our key stakeholders including, amongst others, the CDB President, the senior management of CDB and several other MDBs, and Chris Humphrey of ETH Zurich and ODI Global. We are also grateful to the MDB Challenge Fund for funding this phase of the project.

The project has been structured to receive input and insights from a group of observers. The authors wish to acknowledge the contributions of the Governments of Brazil, Canada, China, Germany, Italy, Jamaica and the United Kingdom, and the following MDBs: Development Bank of Latin America (CAF-DBLA), Banco Centroamericano de Integración Económica (BCIE/CABEI), the European Investment Fund (EIF), and OPEC Fund for International Development.

All views, errors and omissions in this paper are the sole responsibility of the authors and do not represent the views of either CDB, Linklaters or project observers.

## About this publication

Funding for this phase of the design project was provided by the MDB Challenge Fund.

## About the authors

Chris McHugh is the Director of Cantium Limited, and Senior Advisor to the International Association of Credit Portfolio Managers. His principal research interests relate to development and sustainable finance, and the interaction of public and private sector financial markets, in particular private sector capital mobilisation in support of the Sustainable Development Goals (SDGs).

Eamonn White is the Director of Ardhill Advisory, an independent consultancy specialising in supporting international organisations, central banks and financial institutions in financial regulation and financial stability. He focuses on preparing authorities and banks for financial stress including on bank recovery and resolution planning. He has more than 18 years' experience in Government, central banking and financial regulation in the US, the UK, Europe, Asia and Africa.

# Contents

<b>1. EXECUTIVE SUMMARY</b>	<b>6</b>
<b>2. INTRODUCTION</b>	<b>8</b>
PROJECT BACKGROUND	8
<b>3. CCF STRUCTURAL FEATURES</b>	<b>10</b>
KEY FEATURES	10
CAPITAL ELIGIBILITY	12
CONTINGENT CONTRACTS & CAPITAL	14
<b>4. INTEGRATION INTO MDB RISK MANAGEMENT FRAMEWORKS</b>	<b>15</b>
RISK MANAGEMENT BEST PRACTICES	15
RISK MANAGEMENT PRECONDITIONS FOR CCF	17
<b>5. PRECEDENTS - COMMON FEATURES AND RATINGS TREATMENT</b>	<b>21</b>
IBRD ENHANCED CALLABLE CAPITAL	21
SOLVENCY 2 – ANCILLARY OWN FUNDS	22
GUARANTCO	22
IFFEd	23
EUROFIMA	23
OTHER RATINGS CONSIDERATIONS	24
<b>6. FACILITY DESIGN - KEY CONSIDERATIONS/QUESTIONS</b>	<b>26</b>
FACILITY PROVIDER	26
NOTIONAL SIZE OF THE FACILITY	26
MATURITY	27
CALLABLE FEATURES OF THE CCF	27
TRIGGERS	28
REMUNERATION	28
GOVERNING LAW AND OTHER TERMS	29
<b>7. CONCLUSION AND NEXT STEPS</b>	<b>29</b>
<b>APPENDIX 1</b>	<b>31</b>
EU SOLVENCY II FOR INSURES - ANCILLARY OWN FUNDS: SUMMARY OF KEY FEATURES FOR ACHIEVING CAPITAL TREATMENT	31
<b>APPENDIX 2</b>	<b>33</b>
KEY CHARACTERISTICS OF CONTINGENT CAPITAL PRECEDENTS COMPARED TO THE CCF	33
<b>APPENDIX 3</b>	<b>34</b>
CONTINGENT CAPITAL FACILITY (THE ‘FACILITY’)	34
<b>APPENDIX 4</b>	<b>38</b>
MODELLING THE PROBABILITY OF LOSS	38
SETTING THE CCF TRIGGER	40
<b>REFERENCES</b>	<b>41</b>

# List of Tables & Figures

- Figure 1. Illustration of the CCF structure  
Figure 2: Normative structure of risk management  
Figure 3. Illustrative MDB Stress Continuum  
Figure 4. Illustration of MDB PIF Score and Probability of Varying Capital Stresses  
Table 1. Key characteristics of contingent capital precedents compared to the CCF

## Acronyms

AfDB	African Development Bank
AOF	Auxiliary Own Funds
BCIE/CABEI	Banco Centroamericano de Integración Económica
BMC	Borrowing member country
CAF	Capital adequacy framework
CAF-DBLA	Development Bank of Latin America
CAR	Capital adequacy ratio
CCF	Contingent Capital Facility
CDB	Caribbean Development Bank
CRA	Credit rating agency
ECC	Enhanced callable capital
EEA	Exposure Exchange Agreement
EIF	European Investment Fund
IBRD	International Bank for Reconstruction and Development
IFFEd	International Finance Facility for Education
MDB	Multilateral development bank
NBFI	Non-bank financial institution
ODA	Overseas development assistance
PIF	Proactive Intervention Framework
RAC	Risk-adjusted capital
SCR	Solvency Capital Requirement
SDGs	Sustainable Development Goals
SSG	Subsidiary shareholder guarantee

# 1. Executive Summary

In this new, fragmented world order, the foundations of multilateral development finance are being tested. The traditional reliance on paid-in capital, once the bedrock of Multilateral Development Banks (MDBs), is no longer sufficient to meet the ambitious development and poverty reduction goals of the 21st century. As geopolitical tensions mount and fiscal pressures squeeze Governments, the imperative to maximize the impact of every scarce dollar has never been more urgent. The challenge is not merely technical; it is a strategic imperative, demanding a fundamental rethink of how these critical institutions are capitalized.

In response, MDBs and their member Governments are exploring a more agile and resilient toolkit for their balance sheets. On the asset side, we see the prudent use of securitisation and risk transfer mechanisms to amplify existing resources. However, the more profound and transformative shift is on the liability side of the balance sheet, where a combination of paid-in capital instruments and shareholder callable capital commitments have been traditionally used by MDBs. We are seeing a serious, long-overdue re-evaluation of MDB capital structures, leveraging modern capital market practices to unlock latent potential. The issuance of hybrid capital bonds by institutions like the African Development Bank (AfDB) and the Development Bank of Latin America (CAF-DBLA) are early signs of this shift. Now, a more pioneering innovation is taking shape: the Contingent Capital Facility (CCF).

This report details the foundational findings of Phase 1 of a project to create a blueprint for a new MDB CCF. A CCF is not simply another financial product; it is a strategic capital instrument designed to create a new class of Tier 2 capital. It is a legally binding, contractual commitment from highly rated Governments, that guarantees a robust recapitalisation of the MDB in a pre-defined, low-probability stress event. Crucially, the activation of this facility is not subject to a political process; the trigger is an objective financial metric, such as an MDB's capital adequacy ratio. This mechanism ensures that once the trigger is met, the payment is automatic, non-discretionary, and serves to preserve the MDB's status as a going concern. While the process may take weeks or months to complete, its effectiveness is rooted in this contractual certainty and would be executed in a timely manner.

Despite its unfunded, contingent nature, the CCF is a contractually robust and legally enforceable instrument engineered to satisfy the rigorous eligibility criteria for capital recognition by credit rating agencies (CRAs). This recognition is the key that unlocks greater lending capacity and financial resilience. The CCF's contribution to MDB minimum internal capital ratios would be capped at approximately 30-40%, providing a powerful, but disciplined, capital increase.

The CCF is designed to meet the essential criteria for capital eligibility, thereby creating a reliable Tier 2 asset. First, while the commitment is contingent (i.e. no payment until the trigger event occurs), the underlying core capital instruments would be fully "paid in" upon activation. Second, these instruments are designed to be fully "loss-absorbing" on a going-concern basis, either as non-voting equity or as other core capital debt instruments with features like write-down or conversion. Third, the CCF embodies "perpetuity," as the instruments it issues would be perpetual. Fourth, these instruments will have "discretionary remuneration" and no mandatory distributions, ensuring financial flexibility. Finally, they will be "subordinated," sitting senior only to paid in equity capital and junior to any Tier 2 capital and unsecured creditors. These are the non-negotiable design

features that make the CCF a trusted source of Tier 2 capital, enabling MDBs to expand their vital lending today while increasing their financial resilience.

The CCF is an appropriate tool for MDBs precisely because they are not commercial banks. Their mission-driven, non-profit-maximizing model and stable wholesale funding base differentiate them entirely from their commercial peers, which are rightly subject to different regulatory standards. The counterparts to an MDB CCF are highly-rated Governments, whose policy interests are directly aligned with ensuring the continuity and health of the MDB.

The CCF's contractual arrangements specify the legal framework for respecting these capital eligibility criteria. However, to truly operationalize this design and demonstrate its reliability, the CCF must be fully embedded within the MDB's risk management and capital adequacy frameworks. This requires establishing clear, documented policies and governance structures, including a proactive intervention framework and recovery plan, to guide management action when the facility is needed.

This project, conducted in partnership with the Caribbean Development Bank (CDB) and with legal support from Linklaters and key funding partners, is a crucial first step. In the specific case of the CDB, its reverse stress testing highlights CDB's considerable financial strength and prudent capital adequacy policies, illustrating that a call on CDB's callable capital is an extremely unlikely event. This work assessed the hypothetical impact on the CDB in the event of a climate-related natural disaster. Such remote risks highlight the importance of CDB being able to lend counter-cyclically when it is most needed. Rating agencies have also stressed the importance for CDB to consolidate its long-term financial resilience on contingent / systemic stressed scenarios. The CCF could be used to enhance such Bank's long-term capital capacity.

Leveraging the established precedents of contingent capital, MDBs will be able to use the Tier 2 capital created by the CCF to increase their lending capacity. Crucially, from the perspective of Government partners, the triggers for issuance will be calibrated to a remote contingent liability, which should not require fiscal provisioning from a national accounting perspective. Moreover, the CCF, which would be triggered ahead of traditional callable capital, will actually help to de-risk existing Government callable capital guarantee obligations.

The primary outcome of Phase 22 is a blueprint for creating MDB Tier 2 capital: a set of contractual documents and internal risk management policies for a CDB CCF. In addition, the project will also create a broader public good, by providing a range of CCF structures and template contracts that can be adopted and tailored by other MDBs. The CDB's willingness to pilot these standardized operational materials is a significant and transformative contribution to the G20 CAF agenda, acting as an external catalyst for change across the MDB community. This report marks the culmination of Phase 1 (April-September 2025). Phase 2 will focus on developing the specific solution for the CDB and creating generic templates for the wider MDB community from October 2025 to April 2026.

## 2. Introduction

### Project Background

The project to develop a contingent capital facility (CCF) for a multilateral development bank (MDB) was established in response to the review of MDBs capital adequacy conducted by the G20 CAF Panel (2022). This review delivered a series of recommendations for ways in which MDBs could expand lending capacity through enhancement of capital adequacy frameworks and innovation. Amongst the various G20 CAF initiatives, there has been particular focus on the asset side of the MDB balance sheet to diversify lending portfolios and reduce existing risk (i.e. through instruments such as exposure exchange agreements (EEA), guarantees, securitisation). On the liability side of the balance sheet, the principal focus has either been the issuance of paid-in capital securities such as hybrids, or a desire to embed callable capital, as specialised guarantee of MDB bondholders, into the MDBs' risk management frameworks (Humphrey, McHugh, White, & Getzel, 2024).

The CCF fills an important gap in the range of options that have been presented to shareholders given the budget constraints that many face. Hybrid capital requires an immediate capital commitment, so while providing a capital benefit for MDBs it burdens shareholders with the fiscal cost up-front. Conversely, MDB 'callable capital' is not capital – it is a specialised form of guarantee for bondholders (Humphrey et al., 2024). As such, callable capital cannot support lending directly. The CCF is designed to bisect these two instruments – to provide a capital benefit for the MDB, with the financing commitment only necessary in the event of an extreme stress. However, as with other financial innovations to advance the G20 agenda, the CCF needs to be transacted to demonstrate the benefits.

The Caribbean Development Bank (CDB) publicly announced the launch of a joint CCF design project in June 2025 to examine how this example of financial innovation could strengthen capital adequacy, enhance lending capacity, and improve CDB's financial resilience (CDB, 2025). The CDB's *Climate Resilience Strategy 2019-2024* (CDB, 2018) recognised the need for comprehensive and integrated planning to address climate change impacts, emphasizing the importance of assessing vulnerabilities and implementing adaptation measures. However, CDB's borrowing member countries (BMCs) are exposed to significant risks related to natural disasters, climate change and other adverse external events of a systemic nature. These climate-related risks could create downward pressure on CDB's capital resources in a climate stress scenario through the inability of its BMCs to meet their CDB repayment obligations. This would limit the CDB's ability to play its intended counter-cyclical role in the face of systemic climate crisis at the very time when BMCs would need its support the most. Rating agencies have also stressed the need for CDB to demonstrate its long-term financial resilience on contingent /stressed systemic stressed scenarios. The CDB's new strategic vision also encompasses climate resilience as one of the key strategic priorities, alongside an innovation pillar with an imperative to find innovative capital optimisation mechanisms. To address this challenge, the CCF could provide CDB with a solution that will enable it to continue to meet its payment obligations to external creditors in a remote stress scenario, while maintaining its ability to provide the emergency assistance necessary to foster a stronger and quicker recovery for its BMC populations and businesses.



This CDB study has allowed it to explore solutions that can increase capital resources and ensure that it remains responsive to the diverse and dynamic challenges facing the Caribbean. As a design project partner, CDB has informed the findings of the report and ensured the ideas presented are consistent with the risk and capital management processes of an MDB. It has provided the bridge to integrate the CCF concept into the real world operations of an MDB. On risk management, CDB has guided the findings to ensure the CCF proposals set out in this report build on existing policies – such as its established Enterprise Risk Management Framework. With regard to capital management, CDB has worked to ensure that the CCF proposals regarding trigger setting and capital measurement are consistent with its plans for developing an economic capital framework – which the G20 CAF recognise as best practice for MDBs. In particular, a critical part of CDB’s role has been to challenge the thinking behind the report to ensure the CCF leverages CDB’s risk management arrangements and that it is calibrated to reflect established risk appetite and aligned to credit rating agencies methodologies for MDBs.

The overall project is structured as follows.

- **Phase 1** - Initial study (the focus of this report): a study focused on reviewing CDB's existing capital and risk management frameworks to identify the policy and reporting issues related to the establishment of a new contingent capital facility.
- **Phase 2** - Transaction and template development: The key deliverables from this phase will be a set of CCF execution documents which can be adopted by CDB, and a set of generic documents made available to the wider MDB community that would enable them to establish similar facilities tailored to their specific needs. The work for CDB will also serve as a practical demonstration of how to embed solvency recovery capacity into a development bank’s capital structure and risk management framework and policies. The calibration of the CCF triggers will be informed by CDB’s existing stress testing scenarios including climate related risk factors. Legal support for this phase will be provided by the international law firm Linklaters.
- **Phase 3** - Execution: This would involve establishing a CCF between CDB and one or more shareholders using the transaction documentation from Phase 2. While the CCF is a bilateral arrangement and is not rated, CDB may decide to procure a credit rating agency (CRA) review of the CCF to confirm its capital treatment at this point.

In addition to the participation of CDB and Linklaters, there is a group of observers that are providing support and insights during the design process. This group includes the Governments of Brazil, Canada, China, Italy, Jamaica and the United Kingdom, and the following MDBs: Corporación Andina de Fomento (CAF-DBLA), Banco Centroamericano de Integración Económica (BCIE/CABEI), the European Investment Fund (EIF), and OPEC Fund.

This CCF design project is a key component of CDB’s strategy to future-proof its financial framework and expand its ability to deliver high-impact development solutions across the Caribbean. It would not be possible without the understanding and support of donors. This report is a key deliverable of

Phase 1 and has been supported by the MDB Challenge Fund.<sup>1</sup> Phase 2 of the design project will be funded by the UK based, Children's Investment Fund Foundation ("CIFF").<sup>2</sup>

The rest of the paper is organised as follows. Section 3 explains the key attributes of a CCF that enable it to be considered as capital, and then section 4 describes how to embed the CCF into the core risk management processes of an MDB. Section 5 examines the key characteristics of contingent capital arrangements that are in place in other sectors and evaluates their relative strengths, including consideration of credit rating agency treatment. Section 6 explains the principal CCF design questions and considerations, and finally section 7 concludes with an explanation of the next steps in the project.

### 3. CCF structural features

The development of a new MDB capital instrument through a CCF must be based on a transparent explanation of the detailed features of the facility. This must include a robust demonstration of how the structure meets the essential capital eligibility criteria. This section presents the key design requirements of the CCF and sets out the case for why those features clearly meet the preconditions for capital eligibility. It also provides a discussion of how contingent contracts as a basis for meeting capital obligations are well suited to the business model of MDBs.

#### Key Features

A CCF is a financial instrument that creates new MDB tier 2 capital. Tier 2 capital is a type of capital that a bank holds to absorb losses. It is senior to equity and subordinated to a bank's depositors and general creditors. It is a contractual commitment between an MDB and a highly rated Government(s)<sup>3</sup> to buy a core capital instrument<sup>4</sup> issued by the MDB in the event of a pre-defined remote future stress event. This trigger event is defined with respect to a MDB financial risk metric such as its capital adequacy ratio and will be calibrated to be a low probability event. The core capital instrument issued by the MDB to the Government(s) under the CCF would be a non-voting core or Tier 1 capital instrument (e.g. non-voting equity or debt capital). Therefore, the establishment of a CCF does not result in any change to the MDB's governance or shareholder voting rights. The binding contractual nature of the CCF means that the Government(s) support would be automatic if triggered. That is to say, the Government(s) would have no discretion on whether to purchase or not as the buyer. Payment under the CCF would be expected promptly. The CCF contract will set out the

---

<sup>1</sup> The MDB Challenge Fund is coalition comprised of the Bill and Melinda Gates Foundation, the Rockefeller Foundation, and Open Society Foundations.

<sup>2</sup> CIFF is a major, independent philanthropic organization. It focuses on improving the lives of poor and vulnerable children in developing countries in key areas that it with potential for transformative change: health and nutrition, education and welfare, and climate change.

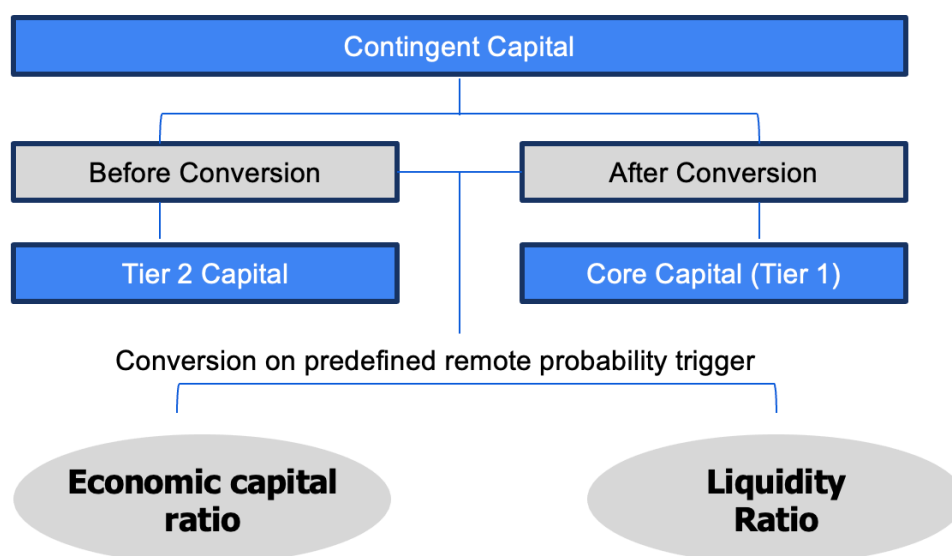
<sup>3</sup> The CCF could have more than one government as a counterpart

<sup>4</sup> A core capital instrument refers to the highest quality, most reliable form of capital a bank holds. This is also known as Tier 1 capital. Its primary purpose is to absorb unexpected losses so a bank can continue operating and remain solvent. It is the most permanent and loss-absorbing type of capital.

process for the completion of the issuance of the core capital instruments to the Government(s) and the payment timetable for those instruments. This could be completed over a number of weeks/months to be considered effective e.g. within three months. What is key is that the contractual obligation to purchase the core capital issued by the CCF would trigger, and be completed, while the bank remains a going concern (i.e. well before any trigger of traditional callable capital guarantee obligations).

Despite being an unfunded contingent commitment, the CCF will be designed to ensure that the nominal amount of the Government(s) commitment under the CCF will qualify as MDB Tier 2 capital and should be recognised by credit rating agencies as such. As a result, the establishment of the CCF will expand an MDB's capital resources, increase its lending capacity and financial resilience necessary to deliver its business priorities on a sustainable basis.

Figure 1. Illustration of the CCF structure



The CCF would need to be integrated into the MDB's risk management, capital adequacy and recovery planning frameworks. To reflect the contingent nature of the Tier 2 capital support under the CCF, the eligibility of the CCF as a Tier 2 contribution to MDB minimum capital ratio would need to be capped at c. 30–40% i.e. minimum capital ratios must be met by a combination of Tier 1 and Tier 2 capital, with Tier 1 making up at least 60–70% of the ratio.

The tenor/maturity of the CCF would need to be consistent with the expectations of capital eligibility criteria. First, any core capital instrument issued under the CCF in the event a trigger event is met would be perpetual with limited call features. Second, the recognition of the nominal value of the CCF as Tier 2 capital prior to any trigger event would need to be phased out as the maturity date of the CCF structure approached. That is to say, an MDB would no longer count the full Tier 2 capital benefit of the nominal value of the CCF towards meeting its capital ratios once the residual maturity of the CCF drops below a specified level. It would be important for the term of the CCF structure pre-trigger to mirror the maturity of the underlying MDB assets being supported by its Tier 2 capital. There are precedents for comparable CCFs to have terms of up to 20 years. While the specific term of the CCF structure would need to be tailored to each individual MDB and its Government counterpart,

this is a design question which we will develop as part of the project. Given MDBs specialize in long-term financing, with maturities generally ranging from 15 to 35 years or more, the term of the CCF will be designed to ensure the credit risk of loans being issued on the basis of CCF Tier 2 capital is appropriately managed.

In addition to the tenor/maturity of the CCF, it would also have discretionary remuneration on both before and after a trigger event. The core capital instrument issued under the CCF once a trigger event is met will be perpetual with minimum call periods linked to well defined capital thresholds being met. A CCF could be designed to have no, or a very low, cost to MDBs between the time it is established and if it were ever to be triggered in the event of a remote future stress event. For example, Governments may have a requirement for their support to MDBs to be overseas development assistance (ODA) eligible which often includes it being unremunerated. Alternatively, given the benefit the MDB is deriving from the establishment of the CCF, MDBs may be happy to accept a small fee for the CCF (i.e. akin to an insurance premium). This could provide an income stream to Governments in reflection of the CCF's consumption of sovereign remote contingent liability or guarantee budgets. The cost assumptions for the different capital instruments issued by the CCF once triggered are a design question. Given current MDB equity is normally unremunerated, it is possible that any core capital instruments issued under the CCF could also be unremunerated.

From a public account perspective, the triggers for issuance of core capital under the CCF would be calibrated to be a sufficiently low probability event so that Government(s) exposure under the CCF would remain a remote contingent liability. As a result, Governments would not need to provision for their exposure under the CCF and instead it would be recorded as akin to a guarantee exposure with a low probability risk of payout.

## Capital Eligibility

The CCF must demonstrate how it meets capital eligibility criteria for MDBs, credit rating agencies and Governments for a range of different reasons. This is a critical requirement for Governments, as without this MDBs will not achieve an expansion in lending capacity needed to advance their development policy objectives. MDBs need the CCF to be a credible source of capital to manage credit risk without which they cannot expand lending that relies on CCF Tier 2 capital in a manner consistent with their risk appetite statements and the fiduciary duties of MDB executives. Finally, credit rating agencies need to protect the interest of bondholders by ensuring that CCF is a credible source of loss absorbing capacity capable of recapitalising MDBs on a going concern basis.

For any financial instrument to qualify as capital it needs to demonstrate how it meets several essential design criteria: 1) paid in (upfront or in event of a pre-defined, future, going concern trigger), 2) available to absorb credit losses across the balance sheet, 3) perpetual or with limited call features, 4) without mandatory distributions, and 5) subordinated to other unsecured creditors. Ensuring CCF capital eligibility to meet the expectations of these key stakeholders requires it to meet these key design criteria, as follows:

1. Paid-in: while the CCF is a contingent commitment and by definition not paid-in, the core capital instruments issued under the facility in the event a trigger being met will be fully paid in. Indeed, the nominal value of the CCF being eligible as Tier 2 capital is dependent on it

issuing such core capital instruments. The next section provides a more in-depth discussion of why a contingent contract should be considered capital subject to certain conditions.

2. Loss absorbing: the core capital instruments issued under the facility will be fully loss absorbing on a going concern basis either in the form of non-voting equity share capital or other core capital debt instruments with write-down or conversion features similar to commercial bank additional Tier 1 capital. To ensure the core capital is available to absorb losses as intended, the CCF must have robust, non-discretionary, legally enforceable contractual arrangements to ensure Government counterparts purchase the instruments. Clearly defined CCF triggers will determine when the core capital instruments are issued. These triggers will need to be objective, clear and observable. Moreover, trigger events must occur while the MDB remains a going-concern. The precise nature of the trigger would be a design consideration for the individual MDB's capital adequacy framework and would be linked to capital ratio thresholds. These capital triggers will be calibrated to be a low probability event. In addition, the Government(s) counterparty to the CCF will need to be highly-rated sovereigns (e.g. A and above). The payments required of Governments in the event of a trigger event being met must be unencumbered and 'prompt'. That is to say, it is an irrevocable commitment which the Government is legally obligated to fulfil but that commitment can be completed over a number of weeks/months to be considered effective.
3. Perpetuality: the CCF itself will have a lengthy maturity but the core capital instruments it will issue in a remote extreme stress event will be either perpetual non-voting shares or other core capital debt instruments with similar features. If the CCF were to issue core capital debt instruments, they will be structured to have no fixed maturity date and instead be perpetual instruments. Such instruments may have call features which would allow the issuer to call the bond, but only if certain conditions are met. These conditions would include the MDB must be well capitalised to exercise a call option. For example, the MDB would not be able to exercise a call unless they replace the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity of the MDB. In addition, the MDB must be able to demonstrate that its capital position is well above the minimum capital requirements after the call option is exercised.
4. No mandatory distribution - the instruments issued under the CCF will be designed to have discretionary remuneration and minimum call periods linked to well defined capital thresholds being met. Such call periods are important to ensure that CCF facility and any core capital issued under the CCF remains a stable and long-term source of funding for the MDB's lending operations. Before the issuing of any core capital instruments under the CCF, the MDB may or may not pay a fee to the counterparty Government(s) - this is a point of negotiation.
5. Subordinated - the core capital instruments issued under the facility would be senior under the creditor hierarchy of MDB statutes or charter only to equity and junior to any Tier 2 capital and unsecured creditors under the statutory creditor hierarchy.<sup>5</sup>

By respecting the above criteria, CCF should be considered a form of capital as it meets the objectives of capital from the perspective of MDB management, Governments and wholesale funders as represented by CRAs.

---

<sup>5</sup> The CDB's own capital structure and the terms of its bonds and other instruments, as outlined in its governing agreements or charter, determine the priority of its creditors' claims in insolvency.

## Contingent Contracts & Capital

Despite the CCF demonstrating that it can meet the above-mentioned capital eligibility criteria, there remains a legitimate question as to whether a contingent capital facility should be given equity like treatment as contingent capital it is not paid in until a trigger event. For example, unpaid capital commitments have not been eligible capital instruments in commercial retail-funded banks since well before the 2008 financial crisis.

There are a number of important characteristics of MDBs which mean such contingent capital structures are appropriate for MDBs where they are not for a retail funded commercial bank. First, contingent capital is considered a poor form of absorbing capacity for commercial banks because their business models and funding structures result in institution specific risks that are less relevant for MDBs. For example, MDBs are not subject to the same profit maximising incentives and the related potential excessive risk-taking problem that motivates banking capital regulations that require all instruments to be fully paid in.

Secondly, MDBs have highly rated business models and low risk funding structures that are more akin to that of an insurer or some non-bank financial institutions (NBFIs) than commercial banks. Research has previously shown that the probability of any MDB experiencing a degree of balance sheet stress that might threaten financial viability are virtually non-existent over a three-year period of sustained stress and with no management actions to recover its position (McHugh, 2024). Conversely, commercial banks are partly or wholly funded by retail deposits which exposes their business model to short-term liquidity or “run risk” that requires all capital to be paid-in.<sup>6</sup> However, MDBs, like some other NBFIs, rely on capital markets for funding, rather than taking deposits like commercial banks. While MDBs typically lend for long-term projects, their strong credit ratings and uniquely sovereign shareholder backing result in high levels of continuity of access to wholesale funding markets which means that MDBs are not as exposed to this kind of “run on the bank” risk.

Finally, it is expected that the counterparts to MDB CCF are large, highly rated Governments. These Governments are considered examples of the highest level of creditworthiness by CRAs when it comes to meeting their financial obligations. In addition, while dependent on the scale of a CCF, the relative size of a Government’s contingent risk of needing to purchase MDB core capital under the CCF relative to their overall fiscal capacity or borrowing capability is not material. Moreover, MDBs are designed by Governments to achieve their national policy priorities with respect to international development. Such Governments have representation on the board MDBs. Therefore, there is a direct alignment between ensuring continuity of an MDB’s lending function through recapitalisation in a remote future stress event and Governments’ policy priorities. This combination of the creditworthiness of CCF counterpart Governments, the manageable scale of any such CCF commitment for more highly-rated Governments, and alignment of policy interests mean that the

---

<sup>6</sup> Bank run risk is the danger that a large number of bank depositors (retail and commercial) will simultaneously withdraw their on-demand deposits, creating a liquidity crisis for the bank. This risk is a fundamental vulnerability of fractional-reserve banking, where commercial banks only hold a fraction of deposits in cash and lend out the rest. Even a bank that is solvent (meaning its assets are worth more than its liabilities) can be forced into insolvency if it cannot quickly sell its long-term assets to meet a sudden wave of depositor withdrawals of on-demand deposits.



contingent nature of a MDB CCF to Government would be significantly different than it would be for a commercial bank.

Taken together, these differences in the MDB business model, stable funding structures, the absence of “run risk”, and the high creditworthiness of the Government counterparts allows the consideration of CCF as a capital instrument despite its contingent nature.

## 4. Integration into MDB Risk Management Frameworks

It is expected that the CCF contractual arrangements will be designed to ensure core capital is provided by the counterpart Government. The CCF contract will specify how the criteria necessary to meet capital eligibility are respected from a legal perspective. This underpins the recognition of the nominal value of the facility as Tier 2 capital. However, in order to demonstrate these CCF designed criteria will be respected and the facility operate as designed, the CCF must be fully integrated into the risk management and capital adequacy frameworks of the MDB. It is this integration of the CCF robust contractual arrangement into the MDB management and governance arrangements which ensures that the CCF contractual commitment is fully operational.

This section describes existing MDB risk management and capital adequacy good practices. Building on these good practises, it describes the key aspects of MDB’s internal operations that need to be in place to fully operationalise the CCF with a focus on: 1) capital and liquidity reporting, 2) well defined escalation and intervention frameworks to address stress events, and 3) clearly defined recovery plans.

### Risk Management Best Practices

A robust bank risk management framework is essential for navigating the complex and ever-evolving financial landscape for any financial institution including MDBs. It provides a structured and systematic approach to identifying, assessing, measuring, monitoring, and controlling risks, ultimately safeguarding the MDB's capital, reputation, and long-term sustainability. A sound risk management system for any financial institution should have:

1. Active board and senior management oversight;
2. Appropriate policies, procedures and limits;
3. Comprehensive and timely identification, measurement, mitigation, controlling, monitoring and reporting of risks;
4. Appropriate management information systems (MIS) at the business and firm-wide level to support risk management; and
5. Comprehensive internal controls

These frameworks operate through a hierarchical structure, typically comprising three distinct tiers that ensure alignment from the overarching strategic objectives down to day-to-day operations. At the apex of this structure lies the **Enterprise Risk Management Framework (ERMF)**, an all-encompassing document at an institutional level. The top tier of the ERMF includes the risk appetite framework (RAF), which allows a bank to operationalise the **Risk Appetite Statement**. The RAF/RAS

represents the bank's high-level strategic view on the amount and type of risk it is willing to accept in pursuit of its business objectives. It is a crucial articulation of the board of directors' and senior management's risk philosophy and tolerance levels. The second tier of the framework consists of **Risk Management Policies and Procedures**. These documents translate the broad principles outlined in the risk appetite statement into specific directives and guidelines for managing particular risk categories. The third and final tier comprises **Operational Procedures and Controls**. This level represents the practical application of the risk management framework in the bank's day-to-day activities. It encompasses the specific processes, systems, and controls implemented within different business lines and support functions to manage the risks they face in accordance with the established policies and procedures. This hierarchical structure ensures that the bank's risk-taking activities are aligned with its strategic objectives and risk tolerance, fostering a culture of risk awareness and contributing to the long-term stability and success of the institution. Each tier plays a vital role in translating the bank's risk philosophy into concrete actions and ensuring that risks are effectively managed at all levels of the organization<sup>7</sup>

*Figure 2: Normative structure of Enterprise Risk Management Framework*

	Governance	Policy	Organisation
Tier 1	Risk Appetite Framework	Risk Appetite Statement	Board / Executive Management
Tier 2	Committee Terms of Reference	Risk Policies and Limits	Executive Management
Tier 3	Risk Management Mechanisms	Technical Methodologies	Business and Risk Units

MDBs have well-established risk management and capital adequacy frameworks (CAFs) that mirror such best practices and are fit for 'business-as-usual' purposes. They limit credit risk consistent with established capital adequacy policies and linked to clearly defined capital adequacy ratios (CAR) at the end of a specific period (one, three and ten years). Some MDBs also conduct stress testing consistent with established internal policies, to examine the potential impact of different borrower defaults, wholesale funding cost increases and other stress scenarios on their internal CAR or ability to sustain planned lending targets.

However, most MDBs have internal arrangements that prioritise monitoring proximity to MDB breach of credit rating which is a much more benign stress scenario than non-viability or default conditions on an on-going basis. A number of MDBs conducted coordinated stress testing exercises in 2024 which was a good example of analysis focused on assessing MDB's probability of reaching non-viability events (Heads of MDBs, 2024).<sup>8</sup> The financial indicators for such events are often not very well defined in internal risk management frameworks. This reflects the reality that MDBs are very low risk institutions with limited or no historical experience of financial stress. Instead, MDB risk management frameworks are often more focused on assessing risks to maintain high credit ratings, minimising the cost of funding and responding to shareholders' direction to maintain AAA ratings

<sup>7</sup> For more detail, see Basel Committee on Banking Supervision (BCBS, n.d.). and *Principles for An Effective Risk Appetite Framework* (FSB, 2013)

<sup>8</sup> In April 2024, 5 MDBs (AfDB, ADB, EBRD, IDB, and WB) respond to shareholders to provide reverse stress testing analysis to quantify the probability of a call on callable capital guarantee obligations.



with credit rating agencies (CRAs). As a result, MDBs do not have a consistent and well documented approach to defining their institutions' stress continuum outside benign market conditions. This would entail having policies that codify the indicators of escalating financial stress and linking those predefined points, or triggers, to the institution intervening or taking action to ensure it can continue to operate. Such clearly defined points of intervention are an expression of the organisation's risk appetite and need to be calibrated to be consistent with the enterprise-wide risk appetite framework. Finally, if MDB management is to be confident that it can continue to operate consistent with its risk appetite in the event of a stress trigger being met, it needs a clearly defined set of management actions documented in a board approved recovery plan.

When considering what it required to operationalise a CCF within the risk management and capital adequacy frameworks of an MDB, it will be essential to ensure that at the risk appetite level (Tier 1), there is a documented explanation of how the CCF is reflected in the capital policy and reporting, so that its benefit is measured and constrained, with clear explanations of risk limit and methodologies. The MDB's governance framework (Tier 2) needs to explain the oversight process, showing how decisions are taken about intervention in the event of stress and how risk is controlled in such circumstances e.g. via recovery plan implementation. Finally, there needs to be clear organisational ownership (Tier 3) to ensure the policies and governance processes are implemented and managed on an on-going basis.

## Risk Management Preconditions for CCF

The implementation of a CCF within an MDB's enterprise risk management and capital adequacy framework will require changes to the three core aspects of MDB governance, policy, and organisation functions. This must be implemented consistently at the different levels of the organisation's hierarchy: board, executive and business unit level. This section outlines those areas requiring particular refinement (or that need to be established) to integrate the CCF, focusing on: 1) capital reporting, 2) well defined escalation and intervention frameworks to address stress events, and 3) clearly define recovery plans to reflect the function of the CCF.

On capital reporting, the MDB community use a variety of capital ratios to articulate their solvency position, such as the equity-to-loan ratio, capital adequacy ratio, and risk-adjusted capital (RAC). These are all different ways of demonstrating their financial strength and justify their solvency and viability to credit ratings to investors and shareholders. The G20 report recommends that MDBs move towards using economic capital ratios because, unlike other capital ratios, they are more sensitive to portfolio-specific risks and therefore provide a more accurate measure of capital adequacy of an institution.<sup>9</sup> To operationalise a CCF, MDBs will need to define a risk sensitive capital metric that is capable of capturing idiosyncrasies of the loan portfolio, the funding structure and other elements of the balance sheet on which to base the CCF trigger. These capital ratios need to be supported by clearly defined capital models, appropriately audited, informed by robust reporting

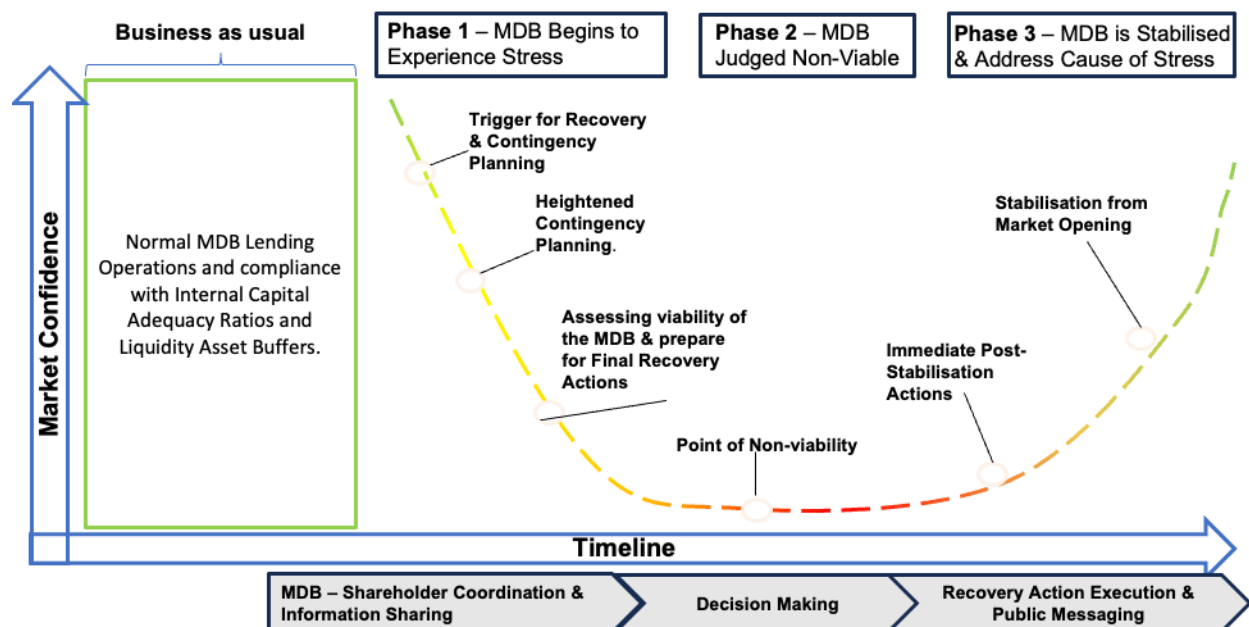
---

<sup>9</sup> Economic capital ratios are internal measures used by a bank to determine the amount of capital it needs to hold to absorb unexpected losses based on its own risk profile. These ratios are a bank's own assessment of its solvency and risk appetite. The MDB CAF Report defines economic capital as "the estimated amount of capital needed to support specific risks, regardless of the existence of assets. It is based on a probabilistic assessment of unexpected future losses at a selected confidence level, and is a forward-looking measure of capital adequacy. Institutions' internal assessment of capital under Basel III (Pillar 2) often rely on economic capital measures".

and monitoring arrangements. Capital stress testing arrangements should also be part of an MDB's capital adequacy framework and enable the MDB to consider sensitivity analyses and scenarios when assessing whether business decisions are consistent with agreed capital risks limits. Such capital adequacy and reporting arrangements provide the infrastructure for defining the capital ratio at which the CCF would be triggered.

Drawing on an established capital reporting framework, MDBs will need to develop a description of what can be referred to as their "stress continuum", namely, what different degrees of capital stress looks like for their individual business models. Such a clear description of an MDB crisis continuum is an important foundational component for identifying the point at which management actions are taken, consistent with the MDB's risk appetite statement including the triggering of CCF. Greater clarity on the MDB stress continuum helps codify the understanding that MDBs need arrangements that allow them to recover from different levels of financial stress.

Figure 3. Illustrative MDB Stress Continuum



Informed by its articulation of the stress continuum, the MDB management can develop reporting and governance arrangements to monitor and judge relative proximity to stress, to be able to identify risks and take timely recovery actions that are proportional to the stress they are experiencing. MDBs' judgements of their position in a stress continuum can then be expressed by assigning a score derived from individual risk elements, for example, capital adequacy, liquidity buffers, operational risk, etc. These metrics capture the MDB's exposure to financial risks including in the case of the CDB, the impact of natural disaster on one or more borrowing member country. The MDB should aim to identify the different stages of such a continuum with reference to deteriorating capital ratios at a minimum. An increasing score means increasing MDB stress. The scoring process is designed to ensure that MDB management: 1) identifies risks to viability early; and 2) takes appropriate action to

reduce the probability of becoming non-viable at an early stage. These scores are often called Proactive Intervention Framework (PIF) scores.<sup>10</sup>

Typically, there should be five PIF stages, each denoting a different level of proximity to non-viability or failure. When an MDB moves to a higher PIF stage, this indicates that the MDB's viability is deteriorating. PIF stages run 1 to 5, with 1 signifying low or no risks to the viability of the MDB and 5 a MDB that has reached the point of non-viability. Decisions to increase the score allow MDB management to consider and deploy appropriate control and recovery actions. The PIF score should be regularly updated (for example, annually, with an interim review every six months). These scores can provide a powerful reporting tool and over time, will become the means for summarising the overall risk position of the MDB to executive management and shareholders. Ultimately, the PIF is an expression of the MDB's risk appetite as it uses different financial thresholds (capital ratios) to describe different levels of stress. These scores can then be useful to inform the timing of management actions including the trigger of CCF in a way that is consistent with its contractual provisions. Figure 2 provides an illustration of the how MDB PIF scores can be linked to different levels of capital stress and the probability of those capital levels arising. Such a scoring framework can allow an MDB to calibrate the triggers of the CCF to reflect a designed level of probability and institutionalise that within its internal risk management framework.

Figure 4. Illustration of MDB PIF Score and Probability of Varying Capital Stresses

		Capital Loss	Probability
PIF 1	<u>Low risk</u> to Viability of MDB	Very Low	~99% of the time
PIF 2	<u>Moderate Risk</u> to Viability of MDB	Low	1 in 100 yrs
PIF 3	<u>Risk to viability</u> of MDB	Medium	1 in 1,000 yrs
PIF 4	<u>Imminent risk</u> to viability of MDB	High	1 in 10,000 yrs
PIF 5	MDB become <u>Non-viable</u>	Very High	1 in 100,000 yrs

Having a defined capital reporting and framework that specifies when intervention should be taken requires a plan that describes the actions available to the MDB so it can recovery from the stress event. A robust recovery plan describes clear and tested strategies for recovering from a range of potential financial stresses. The recovery planning process is dependent on the MDB's early warning system which is based on capital reporting and the PIF framework which defines what different capital levels means relative to the organization risk appetite. A key principle of any institution's recovery plan is to ensure that management identifies actions it can take independently to restore the institution's position and should not assume or require any shareholder support. Recovery plans have become a core part of financial institutions' risk management frameworks and best practice. A good recovery plan should include a range of credible options to cope with a wide range of scenarios,

<sup>10</sup> See Frameworks for early supervisory intervention (BCBS, 2018) for more background information.

including both idiosyncratic and market-wide stress. It should be able to respond to scenarios that address capital shortfalls and liquidity pressures. It is essential for the recovery planning process to be fully integrated into the organisation's risk management framework to ensure timely implementation of recovery options in a range of stress situations. An MDB CCF and its contractual provisions will be designed for stress events linked to low probability capital and liquidity stress events. An established MDB recovery planning process is important to codifying the CCF as a recovery option within the MDB's enterprise-wide risk management framework. The recovery plan will make clear the PIF score and associated capital ratio that would trigger its implementation.

Clear documentation of the above-mentioned capital, PIF and recovery planning arrangements in the MDB's internal risk management and capital adequacy frameworks will enable the MDB to demonstrate that its CCF preconditions are fully operational. Such evidence will be essential to meeting the expectation of MDB executives, Government counterparts, and CRAs.

## 5. Precedents - common features and ratings treatment

There are various precedents that have similar characteristics to the CCF. This section provides a brief explanation of the mechanics of each one, with a comment on the credit rating agency view where one is available. A summary of the characteristics of each is shown in Table 1 below, with a comparison of the features of the CCF.

With the exception of ancillary own funds for insurance companies, the examples all relate to multilateral institutions. The precedents are slightly different in nature, but there are some common features that are recognised by rating agencies as significant when assessing the impact of each structure.

The common features that make for a ‘strong’ structure are:

- Robust, non-discretionary, legally enforceable contractual arrangements
- Triggers linked to a point that ensures the entity remains a going-concern
- Providers of contingent support need to be very creditworthy (i.e. highly-rated)
- Payment of support must be unencumbered and ‘prompt’
- Triggers should be clear and observable

### IBRD Enhanced Callable Capital

In 2024, the World Bank announced the creation of ‘enhanced callable capital’ (ECC),<sup>11</sup> which effectively would convert a portion of its callable capital into ECC if a shareholder voluntarily agreed in line with the G20 CAF Agenda (Hay, 2024). The trigger for ECC is when IBRD faces an imminent threat of losing its AAA rating within a one-year horizon (linked to its Framework of Restoration Measures for Capital Adequacy). All IBRD shareholders can convert their callable capital into the ECC. However, IBRD will only leverage ECC from shareholders rated A- and above. Shareholders are contractually required to pay within a 3 month period.

By creating ECC, the World Bank changed the character and use of that portion of callable capital. The ECC can be called from shareholders on a going concern basis, meaning that it can be used to absorb credit losses well before any potential default of World Bank debt obligations. This is in contrast to traditional callable capital that is only available as a specialist guarantee to MDB bondholders (Humphrey et al., 2024).

---

<sup>11</sup> See IBRD Press notices on Enhanced Callable Capital - <https://www.worldbank.org/en/news/press-release/2024/10/15/world-bank-group-announces-new-financing-adjusts-pricing-terms>.  
<https://www.worldbank.org/en/news/press-release/2024/10/15/world-bank-group-announces-new-financing-adjusts-pricing-terms>

## Solvency 2 – Ancillary Own Funds

Ancillary own funds (AOF) are a specific type of capital resource that insurers can use to meet their solvency capital requirements subject to regulatory approval.<sup>12</sup> AOF are not paid in up-front but can be called upon in times of stress. Firms do not normally disclose AOF structures, and in industry reports the sums would typically be reported within Tier 2 capital (or Tier 3) and not separated out as a line item. Appendix 4 provides a summary of the key features of AOF required to achieve capital treatment.

The provision of AOF is a legally binding commitment in the form of letters of credit, guarantees and other contractual commitments. A report from (Milliman, 2023) on the Irish insurance market reveals outstanding commitments of €1.4 billion of AOF across 18 firms with regulatory approval, the majority of which leverage the instrument to the maximum allowed amount of 50% of the Solvency Capital Requirement (SCR). The data is sourced from the Solvency and Financial Condition Reports repository at the Central Bank of Ireland (n.d.). Another specific example from the marine insurance sector is the UK P&I Club which discloses that the UK has given regulatory approval for it to use \$157m of AOF in addition to basic own funds of \$541m (UKP&I, 2024, p. 42).

However, it should be noted that even if an AOF arrangement is approved by regulators for capital adequacy under Solvency 2, thus far all three major rating agencies tend to exclude AOF from capital for insurance companies as the providers may not be highly-rated, the legal enforceability maybe unclear, the arrangements may not be publicly disclosed or documented, and the payment might be conditional on a Board approval (similar to existing callable capital for MDBs).

## GuarantCo

GuarantCo is a specialist guarantee facility within the Private Infrastructure Development Group (PIDG). Its mission is to mobilise private-sector local-currency investment to support infrastructure projects across low-income and lower-middle-income countries in Africa and Asia. Principal shareholders/funders are national Governments that contribute via PIDG: notably the United Kingdom, Sweden, Switzerland, Australia, the Netherlands (through FMO and PIDG Trust), France (a stand-by facility) and Canada (a repayable facility via Global Affairs Canada).

As part of these support agreements, in 2016 the UK entered into an arrangement ‘*to provide support in the form of unfunded, callable equity-capital*’. It initially provided £40m of support, and this was increased to £130m in 2021 (Hansard, 2021). The agreement was put in place for 20 years and the predefined triggers are linked to liquidity events. The first trigger was set at \$100m and would release the first tranche of callable equity-capital, with two further triggers at lower levels. The argument put before parliament was that this arrangement ‘*would still provide better value for money than FCDO*’.

---

<sup>12</sup> Solvency II defines ‘ancillary own funds’ as comprising any legally binding commitment received by undertakings in the form of a capital instrument that, if called up, will generate an asset, often in the form of cash, while simultaneously creating corresponding interests in the insurance or reinsurance undertaking in the case of shares, or corresponding subordinated liabilities of the undertaking. See: *Guidelines on ancillary own funds (EIOPA, 2015)*

*providing cash now*'. The triggers are monitored using a quarterly reporting process that should inform the UK Government on the probability of the capital being called.

This agreement clearly represents callable capital being linked to explicit triggers with frequent reporting, and that the capital is provided on a going concern basis. This seems to be viewed as a strong arrangement. From Fitch's perspective, it gives 'full credit to contingent facilities in its par-to-capital calculation', recognising the formal support agreement that is place with FCDO (Fitch, 2023, 2024). Moody's also recognises the FDCO callable capital as part of GuarantCo's useable equity (Moody's, 2025). It considers the facilities provided by France and Canada in its assessment of the strength of shareholder support by giving a 1 notch uplift to the intrinsic financial strength score, recognising the increase in the size of the callable capital available and the 'strong enforcement mechanism'. S&P does not rate GuarantCo.

## IFFEd

The International Finance Facility for Education (IFFEd) was established in 2024 as a non-profit entity to facilitate financing of education in lower-middle-income countries (IFFEd, n.d.). IFFEd has a capital structure that exists of partly paid-in capital (15%) from the Governments of the UK, Sweden, and Canada. The remaining 85% of capital is provided in the form of strong, contractual guarantees from the same Governments. There is no debt as part of the funding structure.

IFFEd can provide guarantees to facilitate lending by MDBs for the purpose of education in the form of a partial first-loss guarantee. The precise mechanism is not published, but it is sufficient to receive equity-like treatment from (Moody's, 2024b) which has rated the vehicle AAA. (S&P Global, 2024) takes a different approach using its existing framework for rating multilateral institutions and views the contingent commitments as strong stakeholder support rather than quasi-equity. If IFFEd were to bear losses and capital were to fall below a prescribed threshold, there is a mechanism to make partial calls to replenish the paid-in capital.

Despite the different approaches taken by Moody's and S&P, they both recognise certain features in the structure as beneficial. Support to the facility is ensured through robust legal agreements, and capital calls are designed to be completed on a timely (prompt) basis. Fitch does not provide a rating for IFFEd.

## EUROFIMA

EUROFIMA is a non-profit institution that supports the development of public rail in Europe and to support renewal and modernisation of existing equipment. It is a treaty-based entity (form in 1956) and is composed of 25 members states, with 26 shareholders (EUROFIMA, n.d.). EUROFIMA has callable capital as part of its capital structure in the same way as MDBs. However, there is a critical difference in the nature of the call mechanism. In the case of EUROFIMA, the statutes allow for an immediate call of capital at the discretion of the Board of Directors to be paid 'immediately' (Articles 5 & 21, EUROFIMA, 2024). This flexibility ensures that capital can be called on a going concern basis and is loss-absorbing rather than being ring-fenced to cover the obligations to MDB bondholders and



limiting the ability of MDBs to call capital (Humphrey et al., 2024). A call would have to be linked to a set of clear set of risk metrics to avoid being arbitrary.

S&P, Moody's and Fitch all rate EUROFIMA at a similar level - respectively at AA, Aa2, AA (Fitch, 2025; Moody's, 2024a; S&P Global, 2025). A negative factor on the EUROFIMA ratings has been the gradual withdrawal since 2018 of a subsidiary shareholder guarantee (SSG) mechanism which provided for cross-guarantees. S&P's recognition of shareholders support therefore increasingly focuses on countries that are rated higher than the standalone entity rating for EUROFIMA by providing a 1 notch uplift for callable capital. Fitch seems to take a more negative view of the withdrawal of the SSG and gives no uplift as it focuses on the magnitude of callable capital relative to debt. Moody's recognises that EUROFIMA is able to call capital on a going concern basis, but also constrains the value it gives for shareholder support because of the magnitude of callable capital relative to outstanding debt obligations.

## Other Ratings Considerations

Table 1 shows the relative characteristics of each of the precedents relative to the characteristics that CRAs appear to be taking into account when considering the merits of contingent capital structures. By design, the CCF takes the best case example of each type of characteristic. However, there are examples of other types of financial instrument in the public domain that reinforce this view of how the CCF would be treated. The CCF design in this paper has benefited from feedback from people familiar with credit rating agency evaluation processes for similar capital structures in other sectors and in rating MDBs.

Credit rating agencies (CRAs) are increasingly recognizing the unique characteristics of MDBs and adjusting their methodologies accordingly. They have also updated their MDB methodologies to reflect the recent innovations in the MDB balance sheet. While historically, MDBs capital buffers have typically been composed solely of paid-in equity, the issuance of hybrid capital securities, increased reliance on portfolio guarantees provided by shareholders and proposals to establish new contingent capital facilities are increasing the complexity of MDB's capital structure. Although, they have yet to formally opine on a CCF, all principal credit rating agencies have indicated that they will consider contingent capital as a significant strengthening of capital resources.

Based on prior examples and public statements of their approach, Fitch and Moody's are likely to consider contingent capital as a form of equity capital. For example, Fitch already recognises the impact of first loss guarantees in its calculation of usable capital in the risk-weighted assets ratio. Moody has also stated publicly that that a CCF would get equity-like treatment given that the underlying instrument issued in a stress event is equity-like as long as it would be triggered on a going concern basis, i.e. before non-viability or default.

Table 1 compares the features of the precedents (IBRD ECC, AOF, GuarantCo, IFFEd, EUROFIMA) against our understanding of the key CRA expectations necessary to achieve equity-like treatment. Appendix 2 provides an explanation of the aspects of each precedent in the illustration.



Table 1. – Key characteristics of contingent capital precedents compared to the CCF

<b>CRA Expectations</b>	<b>Precedents</b>					<b>CCF</b>
	<b>IBRD ECC</b>	<b>AOF (Solvency 2)</b>	<b>GuarantCo</b>	<b>IFFEd</b>	<b>EUROFIMA</b>	
<b>Automaticity/Non-discretionary</b>	✓	●	✓	✓	✓	✓
<b>Legal enforceability</b>	✓	✓	✓	✓	✓	✓
<b>Highly-rated support</b>	✓	●	✓	✓	✓	✓
<b>Payment</b>	✓	●	✓	✓	✓	✓
• Unencumbered	✓	●	✓	✓	✓	✓
• Prompt (~ 3 months)	✓	✓	✓	✓	✓	✓
<b>Clear and observable triggers</b>	✓	●	✓	✓	✗	✓

Key: ✗= no, ●= unclear, and ✓= yes

Standard & Poor's has indicated that it would recognise the enhanced contractual strength of the CCF and as a result allow an additional rating notch uplift in standalone ratings – such a one notch uplift would be equivalent to a significant increase in paid-in capital.

Achieving a definitive CRA assessment of the capital treatment of a CCF will require an operational transaction with supporting legal documentation. In the medium term, it is important that an MDB can rely not just on interpreting existing methodologies, but that CRAs will ultimately update their methodologies to give an explicit treatment for CCF that recognises it as equity capital.

The authors acknowledge that the CCF approach asks CRAs to make a conceptual leap in their consideration of eligible capital. It requires them to consider a contingent facility as equity-like which is typically only possible for paid-in capital instruments e.g. equity, hybrid capital etc.

As highlighted in Section 3, there are good reasons why MDBs should be treated differently to commercial banks with regard to contingent capital. Contingent capital is no longer considered equity for commercial banks because contingent instruments are considered to be poor at absorbing losses for institutions funded by industry-insured retail deposits. These types of commercial banks are exposed to deposit runs, and hence heavily regulation for the protection of all stakeholders.

Innovations like the CCF require CRAs to recognise the differences between MDBs and commercial banks and not apply a one-size-fits-all model. MDBs have a stable wholesale funding base with significant liquidity buffers. This long-term, planned, funding stability is consistent with the

consideration of contingent capital facilities as equity, provided that core capital is injected promptly on a non-discretionary, going concern basis once clear and transparent triggers have been met. In the context of the risks of an MDB balance sheet, CCFs are more supportive of an equity-like treatment than for a commercial bank. Second, MDB shareholders are Governments with commitments that transcend those of commercial bank shareholders. These commitments are recognised as extraordinary support by the CRAs, reinforcing the argument that MDBs are fundamentally different types of institution.

It is important that CRAs avoid a one-size-fits-all approach to capital eligibility criteria for MDBs and instead tailor good capital policy principles to reflect the fundamental risks in the balance sheet and the unique nature of the CCF counterparts, both the shareholders and the MDBs.

## 6. Facility design - Key Considerations/Questions

The final configuration of a CCF needs to reflect the transaction characteristics described above and consider the needs of the individual MDB and of the counterparty to the facility. The views of credit rating agencies are material, although should be considered as external assessments of the quality of the CCF as an instrument.

This section highlights the key areas which need to be negotiated and defined as part of an executable transaction and broadly follows the structure of the sample term sheet in Appendix 3.

### Facility provider

The provider of the CCF needs to be highly-rated in order to be viewed favourably by credit rating agencies. Considering the precedents in Section 4, and also the general approach to callable capital, a rating of AA-/Aa3 up to AAA is likely to be the requirement.

The most natural fit for an MDB would be to transact a CCF with an existing sovereign shareholder, although this is not a strict requirement. As the CCF would not affect the voting structure, the facility provider could feasibly be a new potential shareholder that wishes to show support, but may not be at the point of negotiating entry to the voting/capital base of the MDB.

### Notional size of the facility

The CCF ought to have a meaningful size to be relevant to the MDB. Considering the CCF to be form of Tier 2 capital puts a limit on the maximum amount that would be considered reasonable at around 30-35% of total bank capital requirements. While there is no minimum limit on size, anything too small would have no measurable impact on the capital base of the MDB. A CCF with a minimum size of 10% of existing Tier 1 equity capital would be sufficient to make a meaningful difference.

The CCF could also be designed in 'layers', such that there is more than a single trigger (similar to the UK Government callable capital support for GuarantCo). From a shareholder perspective, this

would smooth any funding requirement. It is important to note that the purpose of the facility is to provide capital, and not to provide a guarantee over senior debt obligations. To that end, it has a different purpose to standard MDB callable capital.

## Maturity

There are two maturities to consider – the facility itself, and the underlying Tier 1 capital instrument that would be issued if the CCF were triggered. As explained above in Section 3, the characteristics of the underlying Tier 1 capital instrument need to fulfil the requirements for bank capital. As this instrument is non-voting, the simplest form would be a perpetual bond with callable features.

The CCF that contains the Tier 1 instrument needs to have a notionally fixed maturity to allow the provider (e.g. a shareholder Government) to define and circumscribe its liability. Given most bank capital standards for Tier 2 capital have an amortisation feature for the final 5 years, it is proposed that a CCF should have a minimum initial maturity of at least 10 years to give the MDB multi-year stability in capital planning. However, even longer maturities would be advantageous.

The CCF also needs to be of an appropriate maturity to allow the MDB to lend effectively against it. This would be specific for each MDB considering its anticipated growth and investment plans over a medium to long term basis.

## Callable features of the CCF

Separately from the call feature on the underlying Tier 1 capital instrument, there is an important design decision around the early termination of the CCF and the conditions under which that might happen. There are reasons for both the MDB and the facility provider wanting to terminate the CCF prior to any trigger event.

The most obvious positive scenario would be that if the MDB were to agree a general capital increase (GCI) with shareholders, whereby the existing facility provider may wish to collapse the CCF into that process. In that scenario, the CCF has effectively provided a Tier 2 capital ‘bridge’ in advance of any GCI.

Second, the MDB and the facility provider may wish to either terminate or substitute another counterparty if the facility provider suffers a credit downgrade which might compromise the quality of the CCF. This mutual agreement to collapse the facility might also be applicable if the MDB became significantly over-capitalised and unable to deploy funds effectively.

Third, the MDB may wish to substitute another capital solution (other than a GCI) and no longer requires the CCF. The catalyst for this could be another type of liability transaction such as a hybrid or subordinated debt issuance, or in principle could be an asset side transaction such as a portfolio guarantee. The guiding principle ought to be capital neutrality pre and post the CCF, or at least an agree minimum capital standard for removal of the CCF.

## Triggers

The placement of CCF triggers needs to satisfy the joint requirement that the facility provider has a remote contingent liability, and that if the CCF is triggered it would be on a ‘going-concern’ basis for the MDB. A facility provider would need to determine how a commitment to a CCF would be treated in its national accounts and limit frameworks.

The calibration of the triggers needs to be aligned with the MDB’s measurement and risk management of economic capital, considering any management plans or actions which could de-risk the balance sheet in a time of stress. Economic capital is the recommended best practice approach for MDBs and is superior to other measures (such as the RAC ratio) as it captures institutional idiosyncrasies and special situations.

Placement of the triggers is therefore linked to the risk appetite of the facility provider (a sovereign Government), and the ability of the MDB to measure and report its capital position along a stress continuum. It is envisaged that the placement of the trigger will ensure a very low probability of the CCF being used, albeit on a going concern basis. This low probability should ensure that the CCF can be considered and treated as a remote contingent liability in a shareholder’s fiscal framework. It will be for each facility provider to determine the exact treatment in its framework, however in substance the risk of the CCF should be a similar order of magnitude to callable capital as it exists today. Moreover, given the trigger for the CCF would be ahead of any trigger of callable capital, the presence of a CCF would have the effect of lowering the likelihood of a call on traditional callable capital for all shareholders.

Appendix 4 proposes a process for evaluating trigger positions using a generic MDB credit risk profile, considering the existing risk that shareholders take with callable capital, and the interaction between the CCF and callable capital. This is a critical design consideration as the triggers must be clear and observable at a regular frequency.

Reporting of proximity to triggers needs to be conducted on a timely basis. The precedents suggest that quarterly reporting is sufficient for business-as-usual (e.g. EUROFIMA, GuarantCo), however there would need to be an escalation in frequency in the event of a stress. This process needs definition and should fit into the existing PIF and risk management framework.

## Remuneration

One of the key advantages of the CCF is that it can create capital capacity without the cost of issuance. This compares favourably to a hybrid instrument or traditional subordinated bond. However, it does not imply that the CCF must be free of charge – there may be a requirement from some Governments as facility providers to receive a small fee depending upon their national accounting methods and fiscal constraints.

Similarly, the coupon on the underlying instrument may require a coupon (to cover any fiscal rules that the Government has as facility provider), or potentially may not have a coupon if the underlying instrument is to fit into ODA definitions. That determination will depend upon which country (or countries) act as facility providers.

From a structural perspective, the CCF can be designed so that the underlying Tier 1 capital instrument is tailored in a modular fashion to each facility provider, permitting different Governments to satisfy their requirements in the same transaction structure.

## Governing law and other terms

The choice of legal framework is a matter of agreement between the MDBs and facility providers. However, given that the majority of cross-border capital markets activity is conducted either under English or New York law, there would be consistency for the CCF to be documented similarly. All hybrid instruments issued to date by MDBs have been under English law.

The terms of the underlying Tier 1 capital instrument would need to be defined in advance with appropriate bond documentation being drawn up. As the transaction would be between an MDB and a Government, it is unlikely that there would be any requirement for listing or clearing.

## 7. Conclusion and next steps

This paper has outlined the findings of Phase 1 of the CCF project in partnership with the Caribbean Development Bank. CDB has informed the findings of the report and ensured the ideas presented are consistent with the risk and capital management processes of an MDB, providing the bridge to integrate the CCF concept into the real world operations of an MDB. In addition, the findings have been influenced through broader discussions with Governments, credit rating agencies, and other MDBs. Based on the evidence from precedents and other financial instruments, MDBs should be able to use a CCF to increase their lending capacity and strengthen their resilience through the addition of Tier 2 capital using a commitment from highly rated Governments. The relative risk/benefit for both the MDB and shareholders can be calibrated such that the CCF remains a remote contingent liability, and that the CCF further de-risks existing callable capital.

The key conclusion from Phase 1 of the design project is that the establishment of a CDB CCF is feasible with the right contractual arrangements, supporting risk management frameworks and a highly rated Government counterpart. The implementation of a CCF within the CDB or any MDB requires some work on both policy and risk frameworks, and on modelling and analytical capabilities. Phase 2 of the project entails working with the CDB to develop a specific solution, and to create template contractual documentation and risk management policy templates to give other MDBs a head-start in adopting the technology for their own use. While the characteristics of the CCF itself would be standardised, the placement of triggers and the integration to existing risk management frameworks are likely to be bespoke for each institution.

Phase 2 of the project focuses on the practical implementation and operationalization of the CCF within CDB. This includes developing a comprehensive capital intervention framework that outlines a recovery plan, clear risk management policies, and specific intervention triggers and monitoring systems. The project will also establish the decision-making processes and coordination

arrangements needed with Government counterparts for the CCF to be effective. Additionally, it will involve a detailed analysis of how the CCF aligns with CRA guidelines. This will include a demonstration of how to integrate the CCF into existing capital and liquidity models. The project team will continue its engagement with CRAs to encourage them to update their methodologies to provide explicit treatment of CCFs as part of executing a pilot transaction between the CDB and a highly rated Government. A key output of this phase will be the creation of the final CCF contractual documents, along with generic templates for wider use by other MDBs. The project will also document policy "lessons learned" during the design process to share with the broader MDB community.

Furthermore, the CCF will be specifically tailored to the CDB and its highly-rated Government partners. This tailoring process involves the Governments setting their own design requirements, including the quantum of their support and associated target risk appetite based on the probability of a CCF trigger. The project will also address specific country-level considerations, such as the treatment of the CCF in public accounts and the conditions for its treatment as ODA. Finally, the economic return requirements for the facility, including facility fees and post-issuance terms, will be determined, along with how the CCF will interact with general capital increases

This operational work will start in October 2025 and is anticipated to run until April 2026 and the results delivered at the IMF/World Bank Spring meetings 2026. All project participants are looking forward to this next phase, and to continuing to work closely with the observer forum and other stakeholders.

## Appendix 1

### EU Solvency II for Insurers - Ancillary Own Funds: Summary of Key features for achieving capital treatment

- Contingent capital facility resources may not constitute Tier 1 capital.
- Instrument issued by contingent capital facilities must meet Tier 1 capital eligibility criteria once issuance is triggered.<sup>13</sup>
- Tier 2 contingent capital can include the following instruments:
  - Unpaid/uncalled ordinary or preference share capital (or equivalent).
  - Unpaid subordinated debt.
  - Legally binding contractual commitments provided that provision of the resources is triggered and “on demand” as well as being clear of any other encumbrances.
- In order for the facility resources to qualify as Tier 2 capital provision of the resources by the counterpart to the facility must be provided on demand once objective triggers are met and this means that the provision of resources must not be:
  - Contingent on the occurrence of an event or criteria being met.
  - Subject to the agreement of the counterparty or any third party.
  - Subject to any arrangement or incentive that means the MDB is not permitted or is not likely to call up the item.
  - Subject to any arrangement or combination of arrangements that has the same effect.

---

<sup>13</sup> Own funds must have: 1) “Permanent availability”: a measure of how readily such own funds can be mobilised to absorb losses, 2) “Subordination”: a measure of whether and to what extent the item is accessible to absorb losses in a winding-up, 3) loss absorbing by having a clear mechanic for absorbing losses e.g. a) write-down of the principal amount, b) automatic conversion into ordinary share capital (or equivalent), c) a mechanism with an equivalent outcome, 4) perpetual, 5) free from requirements or incentives to redeem, 6) no mandatory distributions, and 7) unencumbered.

- The on-demand nature of a Tier 2 facility should be supported by an independent legal enforceability opinion.<sup>14</sup>
- Tier 2 contingent capital cannot exceed more than [30-40%] of the resources relied upon to comply with minimum MDB capital ratio/target.

---

<sup>14</sup> This is a legal opinion addressed to the beneficiary of the commitment on the legality, validity and enforceability of the financial arrangements under the relevant governing law.



## Appendix 2

### Key characteristics of contingent capital precedents compared to the CCF

CRA Expectations	Precedents					CCF
	IBRD ECC	AOF (Solvency 2)	GuarantCo	IFFEd	EUROFIMA	
<b>Automaticity/Non-discretionary</b>	<b>YES</b> Contractual commitment to pay	<b>UNCLEAR</b> Board resolution might be required for payment	<b>YES</b> Contractual commitment to pay	<b>YES</b> Contractual commitment to pay	<b>YES</b> Statutory commitment to pay	<b>YES</b> Contractual commitment to pay
<b>Legal enforceability</b>	<b>YES</b> Legally enforceable	<b>YES</b> Commitments should be legally binding	<b>YES</b> Legally enforceable	<b>YES</b> Legally enforceable	<b>YES</b> Legally enforceable through statutes	<b>YES</b> Legally enforceable
<b>Highly-rated support</b>	<b>YES</b> Will leverage Governments rated at A- or above	<b>MAYBE</b> Not a regulatory requirement	<b>YES</b> UK Government rated at AA- or above	<b>YES</b> Governments rated at AA- or above	<b>YES</b> Governments rated at AA- or above	<b>YES</b> Governments rated at AA- or above
<b>Payment</b> • Unencumbered	<b>YES</b> Payment is unencumbered - process not disclosed	<b>UNCLEAR</b> Board resolution might be required for payment	<b>YES</b> Payments have been authorised by UK parliament	<b>YES</b> Grants approved by respective Governments	<b>YES</b> Capital commitments approved by shareholder Governments	<b>YES</b> Commitments pre-approved by facility providers
• Prompt (~ 3 months)	<b>YES</b> Expected within 3 months	<b>YES</b> Payments must be timely	<b>YES</b> Expected within 3 months	<b>YES</b> Expected within 3 months	<b>YES</b> Expected within 3 months	<b>YES</b> Expected within 3 months
<b>Clear and observable triggers</b>	<b>YES</b> Numerical triggers calibrated to loss of AAA within 1 year horizon	<b>UNCLEAR</b> Triggers generally not disclosed	<b>YES</b> Clear numerical triggers linked to liquidity	<b>YES</b> Clear numerical triggers linked to capital shortfall	<b>NO</b> The ability to call is at the discretion of the Board	<b>YES</b> Clear numerical triggers linked to capital shortfall

## Appendix 3

### Contingent Capital Facility (the ‘Facility’)

#### **Transaction Details**

Borrower:	Multilateral Development Bank (“MDB”)
Lenders:	Highly-rated sovereign(s) [expected to be from existing shareholder base]
Facility Notional:	USD [ ] million (tailored to MDB balance sheet size)
Lender Subscription Amount:	The amount that each Lender commits under the terms of the Facility (in total, the Facility Notional)

#### **Perpetual Bond Issuance Facility Description**

Facility Start Date:	[ ]
Facility End Date:	Perpetual, subject to an individual Lender giving [5] years written notice to withdraw from the Facility
Facility Fee:	[•]% p.a., ACT/360
Drawdown Dates:	Monthly, from the Facility Start Date up to and including the Facility End Date
Drawdown:	On each Drawdown Date, the Borrower has the right to issue Perpetual Bonds to the Lenders in proportion to each Lender Subscription Amount, subject to the Minimum Issuance Notional and the Drawdown Constraint
Drawdown Constraint:	The Borrower may only exercise its right to issue under the Facility if the capital adequacy ratio (or equivalent calculated risk-based metric(s)) is below [x%] <sup>15</sup>

---

<sup>15</sup> It is anticipated that the capital trigger will be integrated into MDB’s economic capital model and that at inception the probability of the Facility trigger will be equivalent to the risk that shareholders face with callable capital.

Drawdown Limits: The MDB may issue a maximum of USD [•] million per annum, with the maximum total issuance equal to the Facility Notional

### **Perpetual Bond Terms**

Issuer: Borrower

Minimum Issuance Notional: USD [•] million plus an integral multiple of the Denomination

Denomination: USD [•] million

Issue Date: Drawdown Date + 3 months

Maturity Date: Perpetual

Issue Price: [100%]

Coupon: USD SOFR + [•]% (zero coupon option possible)

Coupon Dates: Semi-annually, starting 6 months after Issue Date subject to Coupon Deferral

Coupon Deferral: Coupons are mandatorily and cumulatively deferred while the Deferral Condition is met

Deferral Condition: [Regularly calculated risk-based metric(s) to be determined by the Issuer. This might include parameters such as (i) percentage of non-accruing loans, (ii) internal capital adequacy calculation, (iii) equity to loans ratio, (iv) credit Value-at-Risk]

Coupon Payment Dates: 2 Business Days after each Coupon Date

Day Count Fraction: ACT/360

Issuer Call: The Issuer has the right to call the Perpetual Bond on the Issuer Call Dates subject to the Capital Adequacy Condition

Capital Adequacy Condition:	The Issuer Call may only be exercised if the capital adequacy ratio (or equivalent calculated risk-based metric(s)) is after the call is above [y%] <sup>16</sup>
Issuer Call Dates:	[•] years from the Issue Date, and annually thereafter
Call Redemption Price:	[100%]

### **Additional Perpetual Bond Terms**

Seniority:	Subordinated to all other debt instruments, senior to any loss-absorbing hybrid capital
Calculation Agent:	[ ]
Governing Law:	English
Listing:	None

### **Disclaimers**

**Discussion purposes only:** The content of this document is for discussion purposes only. It is not intended to constitute legal or other professional advice and should not be relied on or treated as a substitute for specific advice relevant to particular circumstances. The specific terms and conditions of any instruments issued in connection with this document will be set out in and subject to final documentation.

**No warranties, representations or undertakings:** The authors of this document make no warranties, representations or undertakings, whether express or implied, about any of the content of this document (including, without limitation, as to the quality, accuracy, completeness or fitness for any particular purpose of such content).

**No investment advice:** The authors of this document are not authorised to provide any sort of investment advice.

**No offer:** References to financial products in this document neither constitute an offer to purchase or sell securities nor constitute specific advice of whatever form (including tax, legal, environmental, accounting, or regulatory) in respect of any loans, securities or other financial instruments or transactions.

---

<sup>16</sup> A trigger level that is equivalent to a significantly reduced level of stress on the basis of MDB's economic capital modelling and intervention framework.

**Applicable laws and regulation:** Any instruments issued in connection with this document will be structured and issued in accordance with all applicable laws and regulation.

## Appendix 4

### Modelling the probability of loss

The logic of placing the CCF trigger is linked to the structure of the Proactive Intervention Framework (PIF), which in turn is linked to the MDB's view of its point of non-viability. In April 2024, a group of MDBs published reports on the probability of callable capital being required – effectively their collective view of non-viability (ADB, 2024; AfDB, 2024; EBRD, 2024; IADB, 2024; IBRD, 2024).

There were some common themes across the set of analyses:

- Very low probabilities of a call being triggered (approximately 0.02% over a 10-year window, which equates to a 1 in 5,000-year probability)
- Loss of Investment Grade rating as a potential trigger (indicatively losing about 40% of capital)
- Zero probability of losing all capital (i.e. infinitesimally small)
- PCS would be lost

The analytical method for calculating these probabilities mirrors the calculation for economic capital. The MDB needs to parameterise a Monte Carlo model with an appropriate credit rating transition matrix, and a set of correlations between credit exposures. By running a suitable number of scenarios, the MDB can build a picture of the relative probability of losing different amounts of capital in a crisis. The economic capital calculation is unique to each institution and will pick up the idiosyncrasies of the loan portfolio and other elements of the balance sheet. This is generally considered best practice for capital management across the MDBs.

Regardless of the unique nature of each economic capital calculation, the principal can be illustrated in general terms. The Vasicek formula shown in Box 1, which underlies the Basel III capital adequacy framework, can be used to generate a probability of loss distribution with a few parameters.

#### Box 1 - Vasicek Formula (Hull, 2018, p. 587)

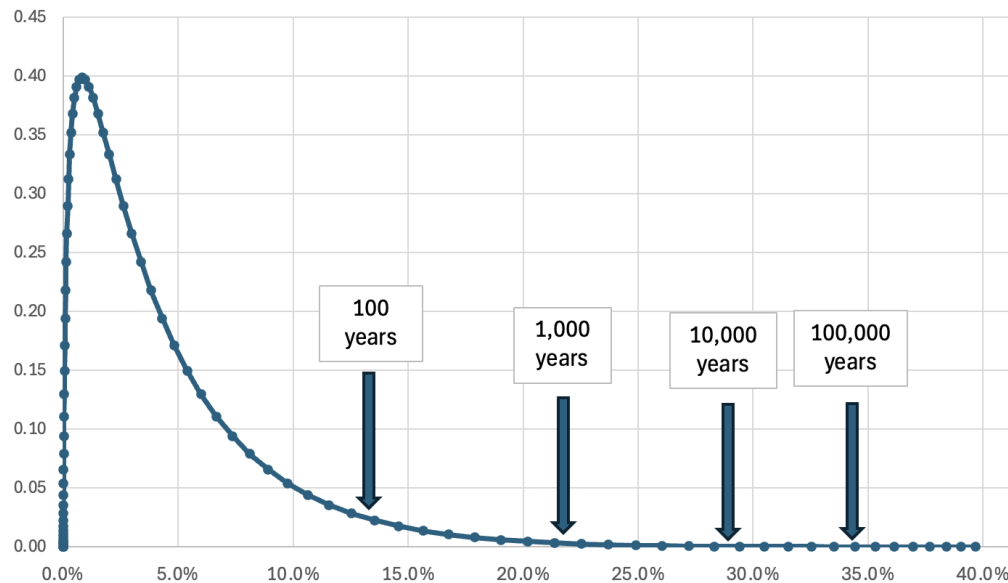
$$V(X) = N\left(\frac{N^{-1}[\lambda] + \sqrt{\rho_L} N^{-1}[X]}{\sqrt{1 - \rho_L}}\right) \quad \dots (1)$$

Where,

- 'N' and 'N-1' are the normal and inverse normal distributions respectively
- 'λ' is the average probability of default over 1 year adjusted for the MDB's sovereign/private sector risk profile
- 'ρL' is the Gaussian copula for the portfolio which assumes a single correlation between all exposures (fixed at 30% for this analysis)
- 'X' is threshold to which Credit VaR is being measured over 1 year (e.g., 0.9999)

The output from this model shows a representative distribution of credit losses in a similar way to economic capital. Figure 1 is an example using the formula that illustrates the expected shape of the probability distribution assuming a fixed loss-given-default (LGD) of 45%. The reference to the number of years in the boxes is how frequently these events might occur (e.g. once in every 'x' years).

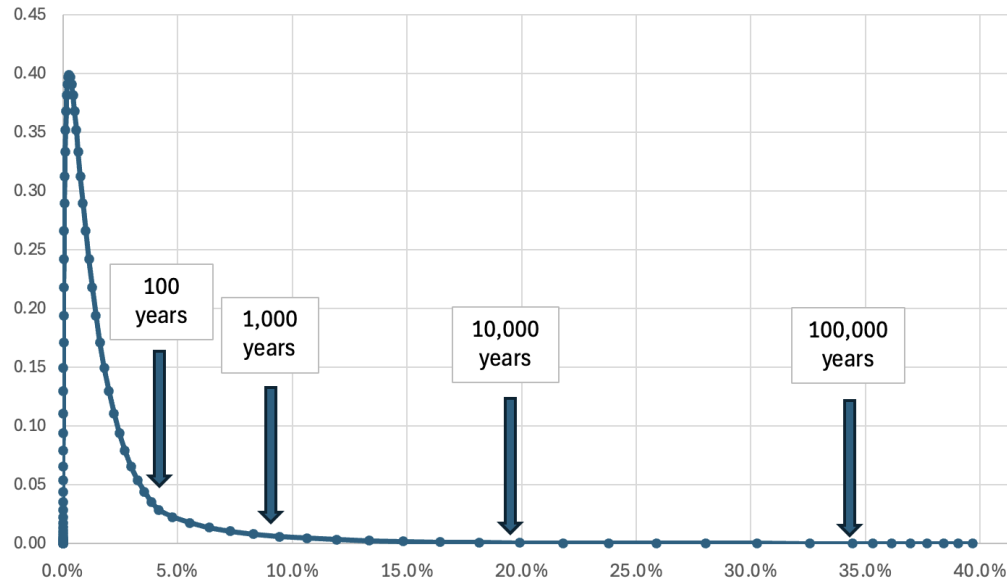
**Figure 2 – Illustrative credit loss distribution with fixed LGD of 45%**



Under the PIF framework, the MDB needs to identify the point of stress where the CCF would need to be triggered and position the trigger accordingly to represent the magnitude of capital loss. For MDBs, the presence of PCS presents an additional problem because the LGD is expected to be significantly lower, perhaps as low as 10-15%, but might increase to 45% in an extreme stress. Figure 2 illustrates how PCS complicates the economic capital calculation. In this example, a minimum LGD of 15% is set, but as the losses increase, the LGD is raised to 45%<sup>17</sup> at the same point of non-viability as in Figure 1 (once in every 100,000 years).

**Figure 3 – Illustrative credit loss distribution with variable LGD from 15% to 45%**

<sup>17</sup> Linearly with respect to the natural logarithm of the probability of loss



Comparing the two charts, the inclusion of PCS in this way shows the very low risk that shareholders are running for business-as-usual and even for medium stress. It is only at the point of extreme stress where the LGDs converge at 45%.

## Setting the CCF trigger

The presence of PCS does not have to complicate the trigger setting process for the CCF. It is through economic modelling, overlaid with management actions that can derisk the balance sheet, that the MDB can articulate its stress continuum on the PIF framework. The key for the trigger is being able to express PIF levels as capital metrics, which in turn facilitates a discussion with shareholders on the probability of the CCF being triggered.



## References

- ADB. (2024). *Callable Capital of the Asian Development Bank*. Retrieved from <https://www.adb.org/documents/callable-capital-asian-development-bank>
- AfDB. (2024). *Analysis of the Call on Callable Capital Process of the African Development Bank*. Retrieved from <https://www.afdb.org/en/documents/analysis-call-callable-capital-process-african-development-bank>
- BCBS. (2018). Frameworks for early supervisory intervention. Retrieved from <https://www.bis.org/bcbs/publ/d439.htm>
- BCBS. (n.d.). The Basel Framework. Retrieved from [https://www.bis.org/basel\\_framework/](https://www.bis.org/basel_framework/)
- CDB. (2018). *Climate Resilience Strategy 2019-2024*. Retrieved from [https://www.caribank.org/sites/default/files/publication-resources/CDB\\_ClimateResilienceStrategy\\_2019-2024.pdf](https://www.caribank.org/sites/default/files/publication-resources/CDB_ClimateResilienceStrategy_2019-2024.pdf)
- CDB. (2025). CDB and MDB Challenge Fund Launch Study on Innovative Contingent Capital Facility. Retrieved from <https://www.caribank.org/newsroom/news-and-events/cdb-and-mdb-challenge-fund-launch-study-innovative-contingent-capital-facility>
- Central Bank of Ireland. (n.d.). 2023 Solvency and Financial Condition Reports. Retrieved from <https://www.centralbank.ie/regulation/industry-market-sectors/insurance-reinsurance/solvency-ii/solvency-and-financial-condition-report-repository/2023-solvency-and-financial-condition-reports>
- EBRD. (2024). *MDB Callable Capital Review*. Retrieved from <https://www.ebrd.com/mdb-callable-capital-review.pdf>
- EIOPA. (2015). Guidelines on ancillary own funds. Retrieved from [https://www.eiopa.europa.eu/publications/guidelines-ancillary-own-funds\\_en#files](https://www.eiopa.europa.eu/publications/guidelines-ancillary-own-funds_en#files)
- EUROFIMA. (2024). Statutes. Retrieved from <https://www.eurofima.org/sites/default/assets/File/investor-relations/Constitutive%20documents/Statutes%202024-3%20e.pdf>
- EUROFIMA. (n.d.). Who we are. Retrieved from <https://www.eurofima.org/about-us/who-we-are/>
- Fitch. (2023). *Fitch Affirms GuarantCo at IFS 'AA-'; Outlook Negative*. Retrieved from <https://www.fitchratings.com/research/insurance/fitch-affirms-guarantco-at-ifs-aa-outlook-negative-16-05-2023>
- Fitch. (2024). Fitch Revises GuarantCo's Outlook to Stable; Affirms IFS at AA-. Retrieved from <https://www.fitchratings.com/research/insurance/fitch-revises-guarantco-outlook-to-stable-affirms-ifs-at-aa-21-05-2024>

- Fitch. (2025). *Fitch Affirms EUROFIMA at 'AA'; Outlook Stable*. Retrieved from <https://www.eurofima.org/sites/default/assets/File/investor-relations/credit-ratings/Fitch%20Affirms%20EUROFIMA%20at%20'AA'%3B%20Outlook%20Stable%20-%2013%20Jun%202025.pdf>
- FSB. (2013). *Principles for An Effective Risk Appetite Framework*. Retrieved from [https://www.fsb.org/uploads/r\\_131118.pdf](https://www.fsb.org/uploads/r_131118.pdf)
- G20 CAF Panel. (2022). *Boosting MDBs' Investing Capacity: An Independent Review of Multilateral Development Banks' Capital Adequacy Frameworks*. Retrieved from <https://cdn.github.org/umbraco/media/5094/caf-review-report.pdf>
- Hansard. (2021). *GuarantCo: Callable Capital Agreement*. Retrieved from <https://hansard.parliament.uk/Commons/2021-02-23/debates/21022367000009/GuarantcoCallableCapitalAgreement>
- Hay, J. (2024). *World Bank finds new ways to expand lending, creates 'enhanced' callable capital*. Retrieved from <https://www.globalcapital.com/globalmarkets/article/2dxdx58uy7b1bfhw737k0/ssa/world-bank-finds-new-ways-to-expand-lending-creates-enhanced-callable-capital>
- Heads of MDBs. (2024). *Viewpoint Note: MDBs Working as a System for Impact and Scale*. Retrieved from [https://www.aiib.org/en/about-aiib/who-we-are/partnership/\\_download/Heads-of-MDBs-Viewpoint-Note-20-April-2024.pdf](https://www.aiib.org/en/about-aiib/who-we-are/partnership/_download/Heads-of-MDBs-Viewpoint-Note-20-April-2024.pdf)
- Hull, J. C. (2018). *Options, Futures and Other Derivatives* (9th ed.). Global Edition: Pearson.
- Humphrey, C., McHugh, C. A., White, E., & Getzel, B. (2024). *Maximising the developmental impact of MDB callable capital: project findings and path forward*. Retrieved from <https://odi.org/en/publications/maximising-the-developmental-impact-of-mdb-callable-capital-project-findings-and-path-forward/>
- IADB. (2024). *Callable Capital of the Inter-American Development Bank*. Retrieved from <https://publications.iadb.org/publications/english/document/Callable-Capital-of-the-Inter-American-Development-Bank--A-Report-based-on-the-MDB-wide-Review-of-Callable-Capital.pdf>
- IBRD. (2024). *IBRD Callable Capital*. Retrieved from <https://documents1.worldbank.org/curated/en/099041224122018248/pdf/BOSIB1f97f66160061aff5128284597b03e.pdf>
- IFFEd. (n.d.). What is IFFEd? Retrieved from <https://iff-education.org/about-us/n.d.>
- McHugh, C. A. (2024). *How likely are multilateral development banks to need callable capital? Implications for risk frameworks and lending capacity*. Retrieved from ODI working paper: <https://odi.org/en/publications/how-likely-are-multilateral-development-banks-to-need-callable-capital-implications-for-risk-frameworks-and-lending-capacity/>

Milliman. (2023). Capital management activities by Irish (re)insurers. Retrieved from <https://ie.milliman.com/en-GB/insight/capital-management-activities-by-irish-reinsurers>

Moody's. (2024a). *Eurofima – Aa2 stable*. Retrieved from [https://www.eurofima.org/sites/default/assets/File/investor-relations/credit-ratings/Credit\\_Opinion-Eurofima-Aa2-stable-Update-01Oct2024-PBC\\_1421094%20\(002\).pdf](https://www.eurofima.org/sites/default/assets/File/investor-relations/credit-ratings/Credit_Opinion-Eurofima-Aa2-stable-Update-01Oct2024-PBC_1421094%20(002).pdf)

Moody's. (2024b). *Rating Action: Moody's Ratings assigns Aaa first-time rating to the International Finance Facility for Education, with a stable outlook*. Retrieved from [https://iff-education.org/wp-content/uploads/2024/11/Press-Release\\_Moodys-Ratings-assigns-Aaa-to-IFFEd-09Aug2024.pdf](https://iff-education.org/wp-content/uploads/2024/11/Press-Release_Moodys-Ratings-assigns-Aaa-to-IFFEd-09Aug2024.pdf)

Moody's. (2025). *Credit Opinion - GuarantCo Limited – A1 Stable*. Retrieved from

S&P Global. (2024). International Finance Facility for Education Assigned 'AA+/A-1+' Ratings; Outlook Stable. Retrieved from [https://iff-education.org/wp-content/uploads/2024/11/RatingsDirect\\_ResearchUpdateInternationalFinanceFacilityforEducationAssignedAAA1RatingsOutlookStable\\_59361721\\_Sep-12-202495.pdf](https://iff-education.org/wp-content/uploads/2024/11/RatingsDirect_ResearchUpdateInternationalFinanceFacilityforEducationAssignedAAA1RatingsOutlookStable_59361721_Sep-12-202495.pdf)

S&P Global. (2025). *EUROFIMA European Co. for the Financing of Railroad Rolling Stock*. Retrieved from [https://www.eurofima.org/sites/default/assets/File/investor-relations/credit-ratings/S%26P\\_RatingsDirect\\_EUROFIMAEuropeanCo\\_fortheFinancingofRailroadRollingStock\\_3408779\\_Jul-18-2025.pdf](https://www.eurofima.org/sites/default/assets/File/investor-relations/credit-ratings/S%26P_RatingsDirect_EUROFIMAEuropeanCo_fortheFinancingofRailroadRollingStock_3408779_Jul-18-2025.pdf)

UKP&I. (2024). Group Solvency and Financial Condition Report. Retrieved from [https://www.ukpandi.com/fileadmin/uploads/ukpandi/Documents/uk-p-i-club/report-and-accounts/2024/Group\\_SFCR\\_Report\\_2024.pdf](https://www.ukpandi.com/fileadmin/uploads/ukpandi/Documents/uk-p-i-club/report-and-accounts/2024/Group_SFCR_Report_2024.pdf)