

Addressing cross-border challenges: what should multilateral development banks do differently?

A review of the literature

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Acronyms

AfDB African Development Bank

AIIB Asian Infrastructure Investment Bank

AMR Antimicrobial resistance AsDB Asian Development Bank

CBDR Common But Differentiated Responsibilities
CCDR Country Climate and Development Reports
CPIA Country Policy and Institutions Assessment

CRF COVID-19 Recovery Facility CRS Creditor reporting system

DAC Development Assistance Committee
DDP Deep Decarbonization Pathways
DFI Development Finance Institution
DPF Development Policy Finance
DPL Development Policy Loan
DSA Debt sustainability analysis

EBRD European Bank for Reconstruction and Development

EIB European Investment Bank
ESRF Energy Subsidy Reform Facility

EU European Union

FAO Food and Agriculture Organisation FCAS Fragile and conflict-affected state FCV Fragility, Conflict & Violence

G20 Group of Twenty
GCF Green Climate Fund
GHG Greenhouse gases
GPG Global public good
GPH Global Public Health
HIC High-income country

IADB InterAmerican Development Bank

IBRD International Bank for Reconstruction and Development

IDA International Development Association

IEG Independent Expert Group

IFC International Finance Corporation
IHR International Health Regulations
IMF International Monetary Fund

IP Intellectual property
IPG International public good
IsDB Islamic Development Bank
LDC Least developed country
LIC Low-income country

LMIC Lower-middle-income country

LTS Long-term strategy

MDB Multilateral development bank

MIC Middle-income country

NDC Nationally Determined Contribution
ODA Official Development Assistance
ODF Official Development Finance

OECD Organisation for Economic Co-operation and

Development

OOF Other official flows

PALM Pathology and laboratory medicine services

PBF Performance-based finance

POC Point of Care

R&D Research and Development

RBF Results-based finance RC Respective Capabilities

SLIPA Stepwise Laboratory Improvement Process Towards

Accreditation

SLMTA Strengthening Laboratory Management Toward

Accreditation

TA Technical assistance

TOSSD Total Official Support for Sustainable Development

UMIC Upper-middle-income country

UNFCCC United Nations Framework Convention on Climate

Change

UNSC United Nations Security Council

WHO World Health Organization

1. Introduction

1.1 The issues at stake

Many global and regional issues require urgent attention. Recent scientific research on climate change highlights the importance of reducing emissions quickly to prevent catastrophic loss and damage caused by extreme weather events, rising sea levels and ecosystem collapse (IPCC, 2022). The Covid-19 pandemic has underscored the need for a coordinated global response to control the spread of viruses and save lives (Sachs et al., 2022). Conflict and violence are increasing and becoming more drawn-out, with their effects extending beyond national borders (Development Initiatives, 2022).

Multilateral development banks (MDBs) are, in principle, wellplaced to help finance and provide solutions to global challenges. MDBs – such as the World Bank and the regional development banks - can use their regional or global reach and share learning across client countries (Kaul, 2017). Their countryspecific operations give MDBs a platform to implement those countrylevel actions that are needed globally (Kanbur, 2016). MDBs have been involved in several areas defined as global public goods (GPGs). These include electricity decarbonisation, vaccination programmes, harmonisation of transboundary transport systems and technical expertise in fragile states. Their staff are directly involved in project negotiation and design and oversee project implementation, as well as advising governments on policy reform. MDBs also bring financing at scale and offer financial terms that are better than countries could usually get from capital markets (Prizzon et al., 2022). At a time when government shareholders are trying to balance the books in the aftermath of the Covid-19 crisis, MDBs offer good value for money as shareholder contributions have a much larger leverage effect than any other financing options (Humphrey and Prizzon, 2020). MDBs also score better than bilateral donors on measures of development effectiveness (Mitchell et al., 2021).

As a result, pressure is mounting on MDBs, especially on the World Bank, to scale up their support to deal with global challenges. The report of the G20-mandated Independent Expert Group (IEG) on strengthening MDBs asked MDBs to triple their finances to help countries significantly scale up their investment in transformative change, particularly to deal with the climate crisis (IEG, 2023). The High-Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response asked the MDBs to ramp up their ability to respond to pandemics via grant financing (High-Level Independent Panel on Financing the Global

Commons for Pandemic Preparedness and Response, 2021). More recently, MDBs were challenged to boost their support to fragile and conflict-affected situations (Ali et al., 2023).

But MDBs were not set up with the provision and financing of global challenges as their core function. While the work of the MDBs in a few areas supporting global action has been important, and often innovative, it has shortcomings. First, MDBs do not have adequate funding to respond to global challenges (Kanbur, 2016). Second, they have approached GPG issues as if they were development issues: relying on their conventional country-based operation model and using country loans as their main instrument. For example, the low uptake of vaccine facilities has shown that the country-based lending model of MDBs does not generate the right incentives for the financing and procurement of GPGs (Hart et al., 2021). MDBs have not been set up to identify areas where global and domestic priorities could come together, e.g. pushing for clean energy as a solution to energy access, highlighting the risk of stranded assets from fossil fuel production, investing in active transport (cycle lanes and sidewalks) that serves the poorest over roads and airports.

Many GPGs are indeed undersupplied because of their characteristics. This can partly be explained by the underlying theory of the under-provision of GPGs (Kaul, 2012). When benefits are non-excludable (it is hard to prevent others from experiencing them) and non-rival (consumption by one party does not reduce the amount to be consumed by others), countries might not be willing to borrow and bear the costs when benefits can extend beyond their own borders. For example, client countries do not prioritise climate change adaptation and mitigation over other issues, such as energy access, agriculture or infrastructure development (Prizzon et al., 2022). Countries might not be willing to pay for the consequences of problems they have not caused directly and have to allocate resources to development issues they perceive as more pressing. The reality is that global challenges such as climate change mitigation, pandemic preparedness, financial stability and peace and security are under-supplied, putting social and economic development at risk (Prizzon et al., 2017).

Grant financing would be the solution, but it is a scarce resource, now more than ever. Most of the recommendations for MDBs to strengthen their role as financiers and providers of GPGs asked shareholders for greater grant financing (CGD, 2016). For example, grants will initially fund the recently established Financial Intermediary Fund for Pandemic Prevention, Preparedness, and Response. Post the Covid-19 crisis, the reality is that grant financing is very unlikely to increase in the medium term or at the scale needed to tackle the global challenges ahead, so alternative options and instruments should be explored.

This is why a lot of attention has been spent on the role of MDBs in providing and financing GPGs in the current reform agenda of these

institutions. Recommendations should aim at addressing the tension that arises due to their multi-country operations and areas of intervention, which make them well-placed to finance GPGs, and their current country-based financing and resource allocation model. Reforms must address the constraints that hinder the provision and financing of GPGs by MDBs, facilitate access of client countries to GPGs, and cater to the demand for GPG-related projects. Additionally, optimising the use of scarce grant resources across countries can be achieved by reviewing instruments and operational models.

1.2 The objective of this report and the main questions

Building on data analyses and an extensive review of the literature and policy documents of the seven largest MDBs (the World Bank and six regional development banks: AfDB, AIIB, AsDB, EIB, EBRD and IADB),¹ this report aims to:

- Define what GPGs are and explain why they are underprovided (Chapter 2).
- Examine whether and how MDBs can provide GPGs, to what extent the strategies and operations of MDBs reflect GPGs, and how GPGs are allocated across client countries (Chapter 3).
- Identify the challenges and limitations of MDBs in financing and providing GPGs and the constrains that limit demand from client countries (Chapter 4).
- Offer reflections on improving the instruments and models used by MDBs in the provision and financing of GPGs, as well as facilitating their access by client countries (Chapter 5).

We have identified three areas within the operations of MDBs that meet the criteria of GPGs, which means that they are non-rival, non-excludable and have an impact across borders, whether positive or negative. These three main areas are core activities of MDBs, and have a strong and direct impact on development. The areas are: climate change mitigation, global public health and peace and security.

 Climate change mitigation. All activities and projects aimed at reducing carbon emissions are beneficial not only to the country undertaking such measures, but also to other countries affected by global warming. These activities create cross-border

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¹ We have limited our scope to MDBs that have a broad client base, either regional or global, and are shareholders of governments, reporting to the OECD, and have data availability. For this reason, some MDBs, such as the IsDB, have been excluded from our analysis.

- externalities and are considered international public goods, making them a crucial area of focus for MDBs. ²
- Global public health. We take GPGs for health to encompass pure public goods preventing the emergence and spread of communicable diseases, research and development of new health products, and policy research on health systems.
 Connected to R&D, the provision of GPH also includes market-shaping for health products. Activities with significant cross-border externalities include investments to prevent or limit disease outbreaks, such as disease surveillance and laboratory systems and outbreak preparedness and response systems, and financing for outbreak response itself. It also encompasses the prevention of anti-microbial resistance and elimination of diseases.
- Peace and security. The converse is not excludable since everyone who lives in an area prone to violence is affected to some extent, and non-rivalrous since becoming a victim does not prevent someone else becoming a victim (Prizzon et al, 2016). While it tends to follow that peace and security would also be GPGs, unresolved distributional issues can mean that peace and security for a majority might not be a public good when it comes at the expense of others, e.g. through repression of grievances, historical injustices and action by security forces.3

2. A definition of global public goods and why they are underprovided

The term 'global public goods' (GPG) is commonly used in policy discussions, especially when it comes to the role of MDBs in providing them. However, unlike national public goods, there is no universally accepted definition of what constitutes a GPG. Debating the criteria for identifying such goods might miss the main issue, which is the lack of provision of goods and services that have cross-border externalities. In this section, we provide a summary of the

² Note, however, that the analysis here does not cover adaptation to transboundary climate risks since this is a new area of policy practice, and more evidence needs to be generated for its conceptual and operational understanding.

³ A country-level example might be the repression of a minority that has suffered from historical injustices and current inequality, that the majority might consider threatening, through aggressive policing of specially crafted laws (e.g. on vagrancy) and mass incarceration. In such a case, the peace and security of the majority might come at a cost to the minority.

main definitions and their challenges, as well as the reasons why GPGs tend to be underprovided.

Defining Global Public Goods. Numerous authors have attempted to define the characteristics of GPGs or international public goods (IPGs) in the literature, particularly in the late 1990s and early 2000s when the concept was first developed (Ferroni and Mody, 2002; Kanbur, 2002; te Velde et al., 2002; Kaul et al., 1999; Sandler, 1998; and more recently Devarajan, 2022). Deverajan (2022) uses the term 'international' public goods as many regional MDBs do not have a global footprint. These definitions largely overlap but may differ in how they interpret and classify sectors/areas that have GPG characteristics and the policy recommendations for their provision and financing. Unlike (national) public goods, GPGs do not have strong theoretical underpinnings.

In general, three elements characterise 'pure' global or regional public goods, such as limiting the spread of infectious diseases or curbing climate change. The first is non-rivalry in consumption, meaning consumption by one party does not reduce the amount to be consumed by others. This raises the challenge of determining the optimal quantity of a public good. The second is non-excludability, meaning it is available to all. This is the main issue because of the incentive to free ride. The third is global or regional reach, meaning externalities reach beyond borders (cross-border challenges).

Why GPGs are underprovided. GPGs tend to be underprovided largely due to the non-rivalry and non-excludability of their benefits. One of the main reasons is the free-rider problem: once a GPG is produced it becomes available to all, making it hard to exclude others from its consumption. This creates a lack of incentive for every party to contribute, resulting in a waiting game for others to produce or contribute. Some GPGs can only be produced when every government meets minimum standards or complies with the problem, which is known as the 'weakest link' problem. For instance, the eradication of infectious diseases requires all countries to meet minimum standards. Another issue is the 'summation' problem, where the production of a GPG is the result of the sum of individual efforts by each participant, such as climate change mitigation. The 'best shot' problem is another challenge. For example, investing in identifying the cure for a communicable disease or inventing a new vaccine requires collective efforts.

Differing preferences and priorities between countries can hinder the provision of GPGs, as what may be highly desirable in one country or group of people may not be so for others. GPGs are also public in their provision, meaning there is no single actor providing them. This often means concerted action at the national and regional level complemented by collective, international action (Kaul, 2020).

The provision and protection of GPGs may clash with the principle of sovereignty and government priorities. GPGs should be perceived by

all concerned parties as mutually beneficial and helping to secure their policy-making sovereignty.

There are also trade-offs between the focus and design of the mechanism at the global level (a GPG) and the implementation of the mechanism at the country level. A smooth progress from design to implementation may be best achieved under one roof (Kanbur, 2002). Lastly, a GPG may be non-excludable and non-rival in principle, but budget constraints might make it rivalrous in consumption, such as peacekeeping operations. Prioritisation and sequencing will shape the provision of different GPGs (Kanbur, 2002).

3. The contribution of MDBs to GPGs

3.1 Overview

MDBs are often recognised in the literature as development partners capable of financing and providing GPGs (Kaul, 2017). As international organisations, they are better-equipped to deal with the tension between national sovereignty and the provision of GPGs, and address the trade-off between the global design of the instruments and national implementation.

The theory of GPGs is however only partly relevant in understanding how MDBs are helping to tackle global challenges. There is much more that MDBs already do – or that they should do differently.

First, while a number of activities in the MDB portfolio are not 'pure' GPGs, i.e. they are either excludable or rival, they still matter in addressing global challenges. Consider investments in renewable energy generation. Access to energy is still excludable and rival, but reductions in carbon emissions can be counted as a GPG.

Second, investments that tackle global challenges might already be driven by national priorities. An example is the creation or expansion of vaccine manufacturing facilities – a strategic national industry that also builds future pandemic preparedness.

Third, projects and programmes of MDBs can also make direct (core) and indirect (complementary) contributions to tackling global challenges. Core activities that produce GPGs are multi-country or transnational in nature, or focused on one country, but with benefits that extend to others. But there are a number of complementary activities that are not strictly defined as GPGs, but that do prepare

countries to produce and consume them. Policy experts refer to this as creating an 'enabling environment'. Examples are greening regulation (building standards, vehicle standards, financial risk disclosure requirements) to facilitate investment in lower-carbon alternatives, or investment in public health systems to enable effective disease surveillance and outbreak preparedness and response systems. The policy advice and technical assistance that MDBs offer to client countries often run along these lines. Table 1 gives a number of examples across the three GPG areas covered in this report.

Table 1 Core and complementary activities of MDBs supporting global public goods

Sector	Core activity	Complementary activity
Climate change mitigation	Research to reduce emissions Investment in lower-carbon alternatives (renewables, mass transit, green tech) Investment in adaptation measures (e.g. emergency warning systems, disaster insurance)	Greening fiscal policy (tax and spending) Greening regulation (e.g. building standards, vehicle standards, financial risk disclosure requirements) Technology transfer Investments in resilience-enhancing measures (e.g. sewers, piped water, healthcare) Institutions to coordinate or mainstream climate action
Global public health	Research to eliminate disease Investment in disease surveillance and outbreak preparedness and response systems	Vaccine distribution system Investment in public healthcare systems
Peace and security	Conflict prevention	Institutions for conflict management

In the rest of this chapter, we will analyse how the mandates, policy priorities and strategies of MDBs address these issues. We will then examine how much of the MDB portfolio is dedicated to supporting the three areas – climate change mitigation, global public health and peace and security – and how it is allocated. We will evaluate the funding sources and instruments used for these activities, and assess to what extent any of the activities, particularly regarding the

impact on climate change, may undermine the overall objectives of providing GPGs.

More specifically, we analyse official development finance (ODF) data between 2013 and 2021 to understand to what extent MDBs allocate resources across the three groups of GPGs: climate change mitigation, global public health and peace and security. The data was reported to the OECD and presented at the project level, then aggregated by sub-sectors, for grants, concessional and non-concessional official loans (official development assistance (ODA) and other officials flows (OOFs)). Our analysis uses the OECD Creditor reporting system (CRS), a common approach for bilateral and multilateral donors, and builds on previous studies (te Velde et al., 2002; Anand, 2004; Reisen et al., 2008).

The most challenging step was matching the CRS sectors to **GPG themes**. We consulted experts to best match CRS codes to the respective GPG theme to cover global public health and peace and security (see Appendix 1). Unlike previous studies (e.g. Development Initiatives, 2016; Oxford Economics, 2023), to measure contributions to climate change mitigation we used the OECD Climate finance dataset, where MDBs have been reporting climate finance data using their own methodology since 2013 (Joint report on multilateral development banks' climate finance, 2022). Only the value of the mitigation component of each project is counted. This reduces the risk of over- or under-estimating climate finance. To compare data over time, we consider constant (2021 prices) US\$ commitments. Adaptation to transboundary climate risks is not covered in this analysis since it is a new area of policy and practice for countries and the international system, and more evidence needs to be generated. High-income countries are missing from CRS data as no ODA data is reported for them, and therefore not captured in our dataset. However, these are now a small number of MDB client countries.

3.3 Climate change mitigation

3.3.1 Mandates, policy priorities and strategies

The mandates, policy priorities and strategies of MDBs with regard to climate change vary. Except for the AllB and the EBRD, climate mitigation is not part of the explicit mandates of MDBs. This is because they were established before climate change became a major global challenge, with the United Nations Framework Convention on Climate Change (UNFCCC) only being established in 1992. The AllB and EBRD indirectly include climate mitigation as part of their purposes and functions to promote sustainable economic development.

Table 2 Climate finance targets across multilateral development banks

Bank	Climate finance targets
World Bank Group	Average of 45% of financing to be climate finance for 2021–2025

IDA 20	Average of 35% of financing to have climate co-benefits for 2023–2025 ⁴
AfDB	40% of project approvals to be climate finance by 2021 (target achievement was 34% in 2020)
	20% of project approvals to be mitigation finance by 2021
	\$25 billion of climate finance for 2020–2025, with adaptation finance as priority
	Climate change and green growth mainstreamed into High 5s ⁵
AsDB	65% of committed operations for climate mitigation and adaptation (three-year rolling average, sovereign and non-sovereign operations) for 2019–2024, and 75% by 2030
	ADB climate finance from own resources to reach \$100 billion for 2019–2030
EBRD	Green finance (climate mitigation, adaptation and environment) to be 50% of portfolio by 2025. There is no disaggregated goal for climate mitigation, but majority of the goal is expected to target climate mitigation and adaptation
EIB	Finance for climate change and environmental sustainability to be >50% of portfolio in 2025. No separate target for climate mitigation
IADB group	40% of financing commitments to be climate and green finance by 2025
	\$150 billion of climate finance for 2023–2033
AIIB	≥50% of financing approvals to be climate finance by 2025
	\$50 billion of climate finance by 2030

Source: Various MDB reports and policy documents as of April 2024

Most MDBs, including the AfDB, AsDB, EIB, IADB and AIIB, prioritise climate change as part of their overarching policy objectives. All MDBs have set strategic priorities for climate in dedicated mid-term climate change strategies or action plans. These strategic priorities include climate finance goals and targets up to 2025 and beyond as a share of their portfolios. For instance, the World Bank seeks to achieve an average of 45% financing to be climate finance for 2021–2025. The EBRD aims for green finance (climate mitigation, adaptation and environment) to be 50% of its portfolio by 2025. The AIIB seeks to have at least 50% of financing approvals as climate finance by 2025, with \$50 billion of climate finance by 2030 (Table 2).

These mid-term plans are not necessarily aligned with the longterm objectives of the Paris Agreement. MDBs are jointly

 $^{^4}$ Based on IDA 20 Final Replenishment Report. There has been no public statement updating IDA 20 climate targets since February 2022.

⁵ Light up and Power Africa investments to account for 22% of climate finance per year by 2020; Feed Africa investments to contribute 6%; Industrialize Africa to contribute 3%; Integrate Africa to contribute 1%; Improve the Quality of Life for People of Africa to contribute 8%.

developing a framework and processes to align with the long-term goals of the Paris Agreement, with principles released in June 2023. The framework is centred around six building blocks to align mitigation goals, adaptation and climate-resilient operations, climate finance, strategy, engagement and policy development support, reporting and internal activities.⁶ Although progress has been made in some of these areas, MDBs have been criticised for being too slow. While they have set themselves a timeline to implement full alignment by 2023–2024, this does not reflect the urgency of the issue. They have not committed to making alignment a precondition for approving projects, but alignment is crucial for achieving the long-term goals of the Paris Agreement.

It is important for MDBs to support climate change mitigation with their projects, but it is also crucial for their entire portfolios to be aligned with the 2015 Paris Agreement. Since the establishment of the Paris Agreement, all MDBs have decreased their funding for fossil fuels and increased their investments in low-carbon energy.

Among the MDBs, the EIB has been the best performer, decreasing its fossil fuel finance from an annual average of \$4.5 billion pre-Paris Agreement to \$1.4 billion post, and increasing its renewable energy finance from \$4.3 billion to \$6.5 billion annually. For non-EU members, the figures also confirm these trends, with a significant fall in fossil fuel finance from pre- to post-Paris Agreement and a rise in renewable energy finance.

It is worth noting that no MDB has financed new coal projects since 2020, which is a positive sign aligned with the Just Transition High-Level Principles they committed to in 2019. However, all MDBs have continued to finance oil and gas fossil projects that undermine the achievement of the Paris Agreement.

3.3.2 Financial flows

When it comes to financial flows, climate change mitigation is by far the global challenge MDBs have spent the most on, as it usually involves large-scale investments in renewable energy and transport. Financing of climate change mitigation across MDBs has risen significantly over time, more than doubling between 2013 and 2021, even without changing the MDB financing model. The World Bank Group as a whole is the largest financial contributor. Between 2019 and 2021, its funding to climate change mitigation amounted to \$37 billion, or about 43% of all finance for climate mitigation across MDBs. This increase is largely in response to greater urgency from shareholders who are contributing to international climate commitments to reduce GHG emissions (and better reporting). However, Miller et al. (2023) shows that most of the

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⁶ The MDBs have collaborated to create an alignment framework consisting of six building blocks (BBs) to support articles 2.1 of the PA and ensure long-term goal alignment. These BBs encompass mitigation goals (BB1), adaptation and climate-resilient operations (BB2), climate finance (BB3), strategy, engagement and policy development support (BB4), reporting (BB5) and internal activities (BB6).

increase is the result of repurposing of projects and programmes (e.g. from fossil fuel to renewable energy projects) rather than expanded finance.

Notable increases in the volume of finance to climate mitigation have been seen in IDA (70.8% increase between 2016–2018 and 2019–2021), AfDB (98.5% increase between 2016–2018 and 2019–2021, albeit from a low base), and IBRD (31.4% increase between 2016–2018 and 2019–2021) (Figure 1).

6 2013-2015 2016-2018 2019-2021 5.1 5 JSD commitments average (bln) 4.2 3.9 3.9 4 3. 3. 3.0 2.<u>9</u>.8 3 2.7 2.5 2.4 2.3 2.3 1.9 1.9 1.9 2 1.6 1.6 0.9 0.8 1 0.7 0.6.5 0 **AfDB AfDF** ADB AIIB EIB **EBRD** IDB **IADB IBRD** IDA **IFC** Invest

Figure 1 Climate mitigation finance by MDB, volume, 2013–2021; three-year average

Source: Authors' calculations based on OECD-CRS database. Accessed January 2024. Constant 2021 prices

Among the three global challenges, and reflecting spending by MDBs, climate change mitigation is by far the most significant in all seven MDB portfolios, ranging from at least 11% of the total portfolio in 2019–2021 of the AfDF to 43% of EBRD and 52% of IDB Invest (Figure 2).

We would expect MDBs with a greater focus on upper-middle income countries/countries borrowing at non-concessional terms to spend more on climate change mitigation as several of their clients are also large GHG emitters. This hypothesis is confirmed as the share of portfolio towards climate change mitigation is larger in MDBs like the EBRD, IADB and IBRD – whose borrowers are largely upper middle-income countries – than IDA or the AfDF – where most clients are low-income countries with greater needs around building resilience to the impact of climate change, rather than mitigation.

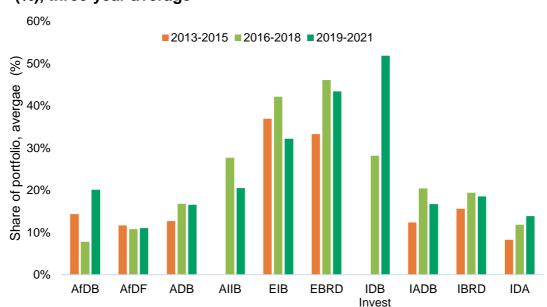


Figure 2 Climate mitigation finance as share of total portfolio (%), three-year average

Source: Authors' calculations based on OECD-CRS database. Accessed January 2024. Note: No data reported for the IFC for the total portfolio. No data available before 2016 for the AIIB and IDB Invest. All bars show the percentage of GPG finance by theme as a share of total portfolio through a rolling average of USD commitments from each MDB.

The majority of the funds for climate change mitigation in lowand middle-income countries comes from core resources of MDBs. In 2021, MDBs funded climate mitigation with \$30.8 billion of core funding and \$2.2 billion of MDB-managed external resources.

The World Bank has the highest number of active climate mitigation-related trust funds and facilities, with over 85 active trust funds in 2019. These funds have a cumulative size of around \$5 billion and are mostly focused on carbon finance and forestry. The AsDB has 17 entities with a cumulative size of \$881 million, while the IADB has 13 entities, for a cumulative size of \$709 million. These are in addition to the funds that the MDBs manage on behalf of others, such as financial intermediary funds. The World Bank is currently consolidating its trust funds as part of the 2021 Climate Change Action Plan.

The main financing modality for climate change mitigation in low-income and middle-income countries (LICs and MICs) across all MDBs is non-concessional loans, 79% of the total allocation in 2020. Concessional loans accounted for 15%, while grants made up only 5%. It should be noted that grant financing is a very limited resource available for climate change mitigation across MDBs, with the vast majority of grants for climate change mitigation reaching low-income countries in Africa.

Investment loans are the most common instrument used across MDBs for mitigation finance, accounting for 76% of the total portfolio in 2021. Policy-based lending followed at 8%. All other instruments, such as grants, equity, guarantees, lines of credit and results-based financing, make up 5% or less of the total portfolio.

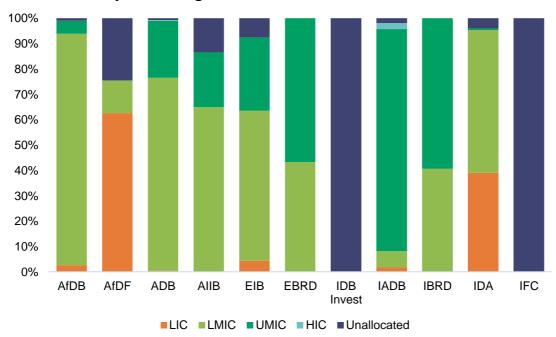


Figure 3 Climate mitigation finance by income classification, share/three-year average

Source: Authors' calculations based on OECD-CRS database. Accessed January 2024

Note: Income classification as per World Bank categorisation. IFC and IDB Invest do not report their contributions to climate change mitigation by income classification.

It is not surprising that most MDBs tend to disburse their climate mitigation finance to Lower Middle-Income Countries (LMICs) and Upper Middle-Income Countries (UMICs), mainly in Asia and Africa. This is because many LICs are low GHG emitters and their group represents smaller and fewer economies. With the exception of the IBRD, IADB and EBRD – which mostly allocate to UMICs – as well as AfDF – whose clients are largely LICs– all other MDBs have committed most of their funds to climate mitigation in LMICs. In fact, between 2019 and 2021, in total the seven MDBs allocated 42.7% (\$12.3 billion) and 29.1% (\$8.4 billion) of their climate mitigation finance to LMICs and UMICs respectively, and 6.9% (\$1.9 billion) to LICs over this period.

Since 2013, allocations to climate change mitigation by income group have not significantly changed. The biggest difference is a falling allocation to LICs and a greater allocation to LMICs: many countries moved up the income per capita ladder.

All MDBs provide technical assistance and capacity-building to raise awareness, create innovative partnerships and reform policies to implement the Paris Agreement's goals. Table 3 highlights key areas of reform where this support is provided, based on analysis of MDBs' Paris alignment by Bingler et al. (2017), Wright et al. (2018) and Larsen et al. (2018).

Table 3 Technical assistance and capacity-building on the implementation of the Paris Agreement's goals

implementation of the Paris Agreement's goals							
	MDB						
Type of support	AfDB	AsDB	EBRD	EIB	IADB	WB	AIIB
NDC mainstreaming/ implementation	Strong	Strong	Strong	Moderate	Strong	Strong	Moderate
Long Term Strategies (LTS)			Moderate		Strong	Strong	
Just transition/coal retirement	Limited	Strong	Strong	Limited	Limited	Strong	Limited
Fossil fuel subsidy reform	Moderate	Moderate	Limited		Moderate	Strong	
Aligning private sector clients to PA				Strong		Strong	

Source: Authors' adaptation of Bingler et al. (2017), Wright et al. (2018) and Larsen et al. (2018)

Note: Strong = dedicated programmes or facilities exist; moderate = individual projects or initiatives have been implemented; limited= issue indicated in policy/strategy/initiative documents but implementation is at early stages; empty = no activity or no data.

It is worth noting that, with the exception of the EIB and the AIIB, all MDBs have launched a 'one-stop shop' NDC support programme to facilitate the translation of Nationally Determined Contributions (NDCs) into investment plans and bankable projects. This effort aims to match financial resources and has been implemented by the IADB with NDC Invest (2016), the World Bank with the NDC Support Facility (2016), the AfDB with the Africa NDC Hub (2017), the EBRD with the NDC Support Program (2018) and the AsDB with NDC Advance (2019). Most MDBs have integrated and aligned NDCs into their country strategic partnership strategies/frameworks.

It is important to note, however, that most MDBs did not have dedicated initiatives targeting Long-Term Strategies (LTS) at the time of our review. The World Bank has developed a dedicated strategy to support countries' LTS - Outlook 2050: Strategic Directions Note. Supporting Countries to Meet Long-term Goals of Decarbonization. The EBRD's Green Economy Transition Approach 2021–2025 also mentions support to countries to develop LTS and implement them. In addition, all MDBs are developing a coordinated framework to provide support to LTS as part of their joint approach to aligning with the Paris Agreement. A \$250 million joint funding facility is being considered to support this effort.

The MDBs have signed the MDB Just Transition High-Level Principles, committing to jointly support a just transition. Most MDBs have also implemented activities supporting client countries to reform fossil fuel subsidies, with the World Bank's Energy Subsidy Reform Facility (ESRF) leading the way. The ESRF has provided over \$14 million of technical assistance grants to more than 70 countries, which informed \$12.6 billion of World Bank lending. The Facility has developed an Energy Subsidy Reform Assessment Framework (ESRAF) to support its work. The AsDB, AfDB, EBRD and IADB have also implemented technical assistance projects and analysis to provide advice to policy-makers on how to reform fossil fuel subsidies.

3.4 Global public health

3.4.1 Mandates, policy priorities and strategies

The mandates of MDBs do not typically include GPH as it is considered too specific and usually falls indirectly within the mandates of MDBs that focus on social development and poverty eradication. While some MDBs, notably the World Bank, have included health in their long-term strategy, it is rare for global public health to be a stand-alone overarching policy objective. While some MDBs have health strategies, they are often not formulated with regional/global scales in mind. Despite this, some MDBs have been involved in funding for health infrastructure, including AIIB and EBRD. However, healthcare is not treated as a distinct sector with an assigned team, budget or institutional home within these MDBs.

AIIB has increased its prominence as a health financier following the launch of its COVID-19 Recovery Facility (CRF), which includes a set-aside for public health. As of 2021, 31.1% of CRF projects were channelled to public health. Of the MDB strategies with highly visible mentions of health, only the AsDB and the World Bank (and the IADB health sector framework) include underlying objectives that aim to provide support or finance to projects and programmes with positive/cross-border externalities. These objectives aim to strengthen health systems and national health financing, strengthen pandemic preparedness, including through prevention, detection and response efforts, and prevent and treat communicable diseases.

3.4.2 Financial flows

Before 2020, the World Bank Group and IADB were the only MDBs providing significant financing for projects and programmes promoting GPH (Figure). However, when the Covid-19 pandemic hit in 2020, support for GPH-related programmes across MDBs significantly increased to provide countries with additional financing for their response. Between 2019 and 2020, total financing to GPH by the seven MDBs more than quadrupled, with almost half of that increase driven by projects and programmes related to pandemic control and prevention. The rest of the increase

was mostly attributed to STD control including HIV, followed by health policy administration and education, medical services and research.

3.0 2013-2015 2016-2018 2019-2021 2.6 2.6 2.5 2.5 USD commitments average (bln)
0.0
0.0
0.0
0.0 1.6 0.9 0.9 0.8 0.**Q**.5 0.3 0.2 0.0.0.1 0.0 0.00.00.0 0.0 **AfDB AfDF** ADB AIIB **EBRD EIB** IDB **IADB IBRD** IDA Invest

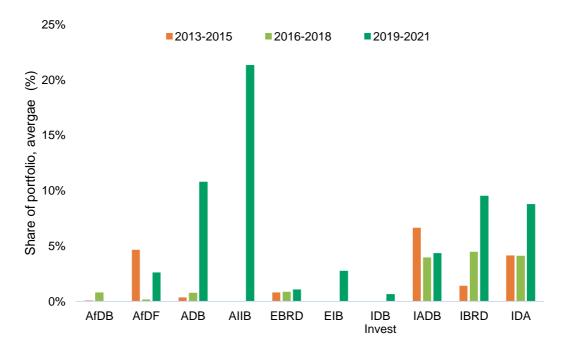
Figure 4 Global public health finance by MDB, volume, 2013–2021; three-year average

Source: Authors' calculations based on OECD-CRS database. Accessed January 2024. Note: All AllB financing for 2019–2020 is assigned to Covid-19. No data available before 2016 for the AllB and IDB Invest, all other MDBs with no data did not report any GPH projects within the relevant time band.

In terms of overall volume in 2020, IDA and the IBRD contributed more than half of funding, accounting for 51.8% of total GPH spending across the seven MDBs. However, the AIIB, the AfDF, the AsDB and the EIB started or significantly ramped up their GPH portfolios when the pandemic hit, while all other MDBs only marginally increased their assistance in this area.

It is worth noting that before the pandemic spending on global public health was greater in IDA countries than IBRD countries in absolute volumes (IDA is smaller than IBRD). In 2013–2015, the IADB spent more than any other MDB on global public health.

Figure 5 Global public health finance as share of total portfolio, three-year average



Source: Authors' calculations based on OECD-CRS database. Accessed January 2024

Note: All AIIB financing for 2019–2020 is assigned to Covid-19. No data available before 2016 for the AIIB and IDB Invest, all other MDBs with no data did not report any GPH projects within the relevant time band.

Core funding remains the primary source of health financing, but there has been a significant increase in non-core resources provided by bilateral donors or private foundations to multilateral organisations such as the MDBs. While this has allowed MDBs to broaden the scope of support in health, it has also brought challenges of further fragmentation (OECD, 2015). The World Bank is the second-largest recipient institution of such funds.

IDA and IBRD trust fund disbursement accounts for 16% of all IDA/IBRD financing to health (see 2021 Annual Report). AsDB finances 22.5% of health investments through co-financing sourced through single-donor and multi-donor trust funds.

Even though most funding is allocated to LMICs, more GPH financing is allocated to LICs (12.3% across all MDBs in 2019–2021) compared to climate change mitigation (6.9% across all MDBs in 2019–2021). Resources towards GPH are not as directly tied to a variable which is highly correlated with a country's level of economic development – like GHG emissions – and much better reflect countries' needs. Between 2019 and 2021, a much larger share was allocated to LICs by the AfDB than the AfDF for GPH when compared to both the previous period between 2016–2018 and when compared to climate change mitigation, where in both cases AfDF allocated more of its portfolio to LICs. The IADB allocated most of its GPH finance to UMICs because of the concentration of its

investments in UMICs – like Argentina and Ecuador – for Covid-19 control.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% **AfDB AfDF** ADB AIIB **EBRD EIB** IDB **IADB IBRD** IDA Invest ■LIC ■LMIC ■UMIC ■HIC ■Unallocated

Figure 6 Global public health finance by income classification, share by three-year average

Source: Authors' calculations based on OECD-CRS database. Accessed January 2024 Note: Income classification as per World Bank categorisation.

3.5 Peace and security

3.5.1 Mandates, policy priorities and strategies

It is worth noting that no MDBs have fragility or peace as part of their direct mandate. However, some include it indirectly or as part of their long-term policy priorities and cross-cutting issues. The AfDB emphasises fragility in its overall 2013–2022 strategy, and the AsDB addresses it throughout Strategy 2030.

Most MDBs have a dedicated fragility strategy, including the WBG (2020–2025), EIB (2022–2027), IADB (recently approved), AfDB (2014–2019) and AsDB (FCAS and Small Island Developing States approach 2021–2025). However, peace and security are not their exclusive focus.

The WBG, AsDB, AfDB and EIB are the most active MDBs in this space (see Table 4). The WBG is the only MDB with a designated conflict prevention strategy (Pathway for Peace 2018), set out jointly with the United Nations. The AfDB and AsDB have regional integration as a key priority within their fragility strategy.

Table 4 Dimensions of peace and security covered in MDB strategies

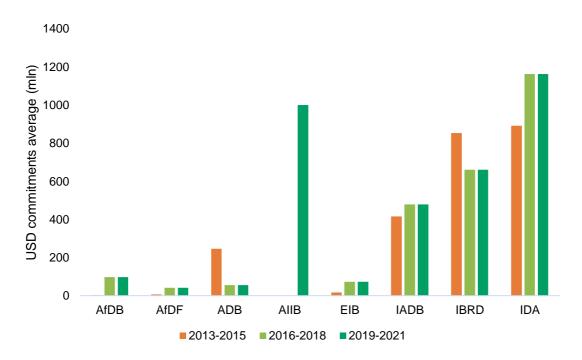
	AsDB	AfDB	WBG	EIB
Jobs, inequality and human capital	•	•	•	•
Institution-building and Rule of law	•	•	•	•
Basic services and shared benefits from natural resources	•	•	Χ	М
Food security	•		•	Χ
Resilience/adaptation	•	•	•	•
Regional integration	•	•		
Climate change	•	M	•	•
Macroeconomic, debt stability	Χ	Χ	•	
Gender	•		•	•
Private sector development	•	Χ	•	Χ

M = mentioned but not included as a key strategic priority X = secondary priority Source: MDB strategy documents

Financial flows

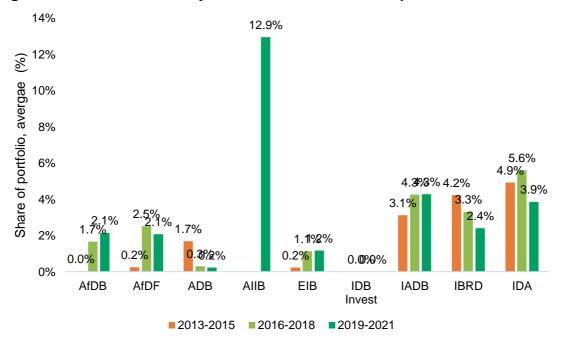
The World Bank and the IADB are the most active MDBs in the case of programmes and projects supporting peace and security, both in terms of overall volumes and shares of their portfolio. Most MDBs spend little or nothing at all. Under this global challenge spending patterns are less clear, mainly as peace and security spending usually responds to sub-regional/country-specific demands rather than regional and global shocks. Activities supporting peace and security are not easy to design and implement but they are usually less (financially) resource-intensive than infrastructure projects – often the main focus of projects linked to climate change mitigation – or can involve non-state actors. Activities often aim to develop institutions that are legitimate, capable and effective; achieving lasting results can take time, and progress can be difficult to measure. It is worth stressing that financing projects and programmes that promote peace and security does not equate to financing fragile and conflict-affected countries (FCAS). Only a subset of activities where MDBs operate in FCAS are counted as financial contributions to peace and security. The case of the AfDB and AfDF is clear: on average between 2018 and 2020, they spent 26.3% of their combined portfolio in FCAS, but each spent only about 2% or less in projects and programmes that directly support peace and security objectives.

Figure 7 Peace and security finance by MDB, volume, 2013–2021 three-year average



Source: Authors' calculations based on OECD-CRS database. Accessed January 2024. Note: All of AIIB financing for 2019–2021 year bands is assigned to immediate post-emergency reconstruction and rehabilitation towards the Henan Flood Rehabilitation and Recovery in China.

Figure 8 Peace and security finance as share of total portfolio



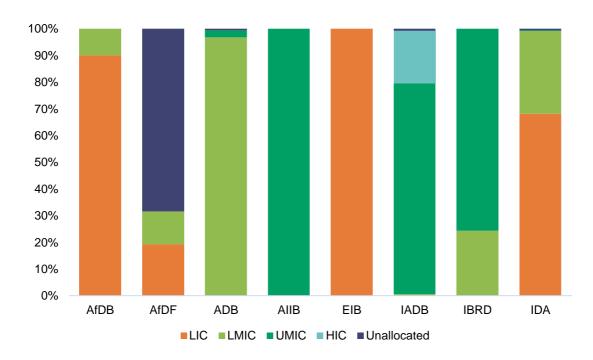
Source: Authors' calculations based on OECD-CRS database. Accessed January 2024 Note: All bars show the percentage of GPG finance by theme as a share of total portfolio through a rolling average of USD commitments from each. All AIIB financing for 2019–2021 is assigned to immediate post-emergency reconstruction and rehabilitation towards the Henan Flood Rehabilitation and Recovery in China.

The concessional windows of each MDBs are the largest contributor to peace and security, averaging around 60% of total financing. Trust funds make up approximately 30% of the contribution, followed by other core funding aside from the concessional windows.

The WBG typically utilises investment project financing (IPF) when dealing with projects in fragile and conflict-affected states (FCAS). This approach is considered less risky than other forms of financing such as development policy finance (DPF). A staggering 94% of all FCS projects are currently funded through IPF – a 17% increase compared to non-FCS projects. It is worth noting that all conflict and prevention, as well as post-conflict reconstruction projects from 2015 to 2021, have been financed through IPF. While DPF can be disbursed faster in FCS contexts, their use has been rapidly declining. In fact, Development Policy Loan (DPL) operations in FCS have decreased from 34% to just 6% over the FY17–18 period.

Generally, a larger share of finance of peace and security finance is allocated to LICs, compared to the other GPGs **covered in this report.** As Figure 9 shows, in 2019–2021 MDBs allocated 19% to LICs, 21% to LMICs and over half of peace and security funding to UMICs. However, income allocation relating to this theme is highly tied to where specific events threatening peace and security have taken place. As an example, all of AIIB financing to peace and security is directed to UMICs since the only investments made during the 2019–2021 period were towards post-emergency reconstruction and rehabilitation following the Henan flood in China. Similarly, the AfDB's large LIC allocation is explained by its support for immediate post-emergency rehabilitation for Cyclone Idai in Malawi and Somalia in 2019. EIB's only commitments between 2019–2021 were senior loans to Ethiopia for women's rights organisations and movements. All of ADB's financing for peace and security was directed to a specific theme, in this case legal and judicial development, concentrated in LMICs.

Figure 9 Peace and security finance by income classification, share by three-year average



Source: Authors' calculations based on OECD-CRS database. Accessed January 2024

Note: Income classification as per World Bank categorisation.

4. Constraints to the provision and financing of global public goods and access by client countries

4.1 Climate change mitigation

4.1.1 Main challenges to the provision and facilitation of climate change mitigation

Article 4.19 of the Paris Agreement urges all countries to develop and share long-term low greenhouse gas emission development strategies. These strategies, known as Long-Term Strategies (LTS), require countries to plan until 2050 or beyond to ensure a consistent approach to support the transition to a net-zero greenhouse gas future and achieve the temperature goals of the PA. However, not all countries may have the necessary resources or data to model decarbonisation pathways and develop PA-aligned LTS (UNFCCC, 2022). As of 23 September 2022, 62 parties had communicated 52 LTS to the UNFCCC, while 22 other parties included some long-term mitigation visions, strategies and targets in their NDCs (UNFCCC, 2022).

Regulatory and policy uncertainty and mitigation technology costs are still high in harder to abate sectors such as industry, aviation and shipping, where proofs of concept are still required. In contrast, solar and wind technologies are generally viable, but deployment at scale (which is dependent on access to finance for scaling) is still required (IPCC, 2022).

Access to funding is a significant challenge for many low- and middle-income economies, despite the availability of finance in global financial markets, with investors holding over \$200 trillion in 2020 (Naran et al., 2022). Several barriers contribute to this challenge, including the higher cost of capital in these economies compared to high-income countries. This higher cost is primarily due to the private sector's perception of high investment risk, caused by uncertain policy settings, high upfront costs of mitigation and adaptation projects, and long time horizons for infrastructure projects, which may lead to cost overruns, delays and permit risk (Prasad et al., 2022; UNEP, 2022).

Another contributing factor is the bias of major credit risk agencies towards assigning higher credit rating scores to entities located in major financial centres, particularly in high-income economies such as the UK (London) and US (New York), leaving lower-rated entities in low- and middle-income economies at a disadvantage (loannou et al., 2021). Investors in high-income economies tend to invest within their borders or other high-income markets due to a home-bias. Exchange rate risks and lack of local currency instruments further exacerbate the problem (Hau and Rey, 2008; Ardalan, 2019; Naran et al., 2022).

Climate vulnerability in low- and middle-income countries is increasing the cost of capital and increasing debt burdens, creating a climate investment trap, especially for least developed countries in sub-Saharan Africa (Ameli et al., 2021; UNEP, 2018). Furthermore, international capital flows towards low- and middle-income countries tend to be pro-cyclical, which can lead to financial and debt crises (Dadush et al., 2000).

Globally, subsidies for fossil fuels continue to exceed those for renewable energy, according to recent reports. In fact, fossil fuel subsidies are estimated to be \$340 billion annually, compared to \$170 billion for renewable energy (IPCC, 2022). Between 2011 and 2020, fossil fuel subsidies for 51 major economies totaled \$6.8 trillion, 40% higher than climate finance (Naran et al., 2022). This is happening in many low- and middle-income countries where scarce public funding is being diverted to support the fossil fuel industry instead of the climate sectors. In Africa, annual climate finance was only \$9.4 billion over 2019–2020 compared to government subsidies for fossil fuel of \$37 billion (Meattle et al., 2022). Export credit agencies from OECD countries provided only \$5.7 billion of climate finance as export credits against \$120.3 billion in support for fossil fuel projects (Tucker and DeAngelis, 2020). Projections show that global fossil fuel subsidies are expected to increase from \$5.9 trillion (or 6.8% of global GDP in 2020) to 7.4% of global GDP in 2025 (IMF, 2022).

Access to Multilateral Climate Funds (MCFs) is crucial for countries to undertake climate mitigation and adaptation efforts. The process of accessing these funds can be challenging for national and subnational entities. National entities experience challenges in almost all aspects of programming climate finance, including governance, legal commitments, access modalities, country engagement and readiness support, regular and simplified project cycles, project concept notes and funding project templates, processes to develop concept notes, full proposal templates and project preparation facilities, best methodologies to map climate impacts, climate risks and options for mitigation and adaptation, environmental, social and gender safeguards, monitoring, logical frameworks and articulating theories of change, evaluation methods and measurement, impact evaluation and control groups (CPDAE, 2019).

The challenges of accessing these funds are exacerbated by the lack of staff to prepare multiple applications for accreditation and collate the necessary evidence to satisfy project approval processes, and proposal development may require one to two years' worth of work and must be funded upfront entirely by the applicant 'without guarantee of producing a bankable project' (Cao et al., 2021). National entities in low-income countries may lack the public financial management systems to manage large sums of money or the public revenues necessary to leverage co-financing and repay loans. The accreditation and approval process is often in English. Multiple iterations are often required due to unclear document requirements.

High co-financing requirements, such as the Global Environment Facility (GEF) requiring portfolio co-funding ratios of 7:1, exacerbate these challenges in 'frontier economies', such as countries affected by conflict or fragility (ICRC et al., 2022).

4.1.2 Are MDBs well placed to support climate change mitigation?

Arguments in favour

MDBs have the potential to assist client countries in aligning their NDCs with their national development priorities. They can provide technical support in the form of investment plans, project pipelines, policy reforms, knowledge management and support in the development of LTS.

- MDBs are already the biggest provider of public climate finance, though the amounts are far from meeting low- and middle-income country needs.
- MDBs have close relationships with governments at the
 national and often at the subnational level, both with their own
 sponsor governments and those of client countries, which enables
 them to influence policy designs and advocate for specific
 solutions (Clark et al., 2019).
- MDBs can leverage established processes for regular country engagement to align development and climate **objectives.** MDBs set mid-term partnership strategies, typically lasting five years, to identify priorities and required support for client countries. The World Bank recently introduced a novel diagnostic tool, the Country Climate and Development Reports (CCDRs), to map out pathways for client countries to invest in climate actions that are consistent with sustainable development objectives. CCDRs serve as a critical input into the World Bank's Country Partnership Frameworks, operational portfolios and support for client countries' NDCs and LTS. They also inform the design of interventions supported by the International Monetary Fund (IMF)'s new Resilience and Sustainability Fund, where applicable. The World Bank also conducts regular debt sustainability analyses (DSAs) jointly with the IMF, enabling it to provide guidance to countries in their debt renegotiation

processes and supporting their borrowing decisions for climate actions.

- MDBs are working to help client countries raise mitigation ambition in their NDCs, but progress has been inconsistent. A 2018 review found that only a quarter of the 92 partnership strategies for 75 countries, finalised with five MDBs (AsDB, AfDB, EBRD, IADB, WB), provided a meaningful description of how the MDB would support NDC implementation, while the rest mentioned NDCs primarily or only as background (Larsen et al., 2018). Despite this, MDBs have often supported NDC implementation, even without directly mentioning them. The AsDB, AfDB, EBRD, IADB and WB have dedicated NDC technical assistance support programmes, but their resources are limited compared to the total investment needs required to meet the NDCs. Consequently, they are unable to meet all the requests for NDC support and do not ensure that the MDBs are supporting NDC implementation (Larsen et al., 2018). These programmes are generally funded through ad hoc trust funds financed by donor governments, raising questions about their sustainability and ability to scale up (Larsen et al., 2018).
- They operate with a wide array of clients and in diverse contexts, including the public and private sectors in different markets, governance systems and geographies. Shifting economies towards net-zero, resilient pathways requires transitioning the work of all actors in a system (Clark et al., 2019). MDBs also manage a wide range of financial instruments essential to encourage the reorientation of private financial flows to address climate goals by sending long-term market signals that climate action is an investment priority (Clark et al., 2019).
- MDBs have been and are credible setters of sustainable finance practices and norms, accomplished through their institutional strength and sources of soft power (their prestige, finance expertise, quality of due diligence and institutional incentives), which they have used to convince other actors in national and international financial systems that their norms and practices are universally applicable (Mendez and Houghton, 2020).
- MDBs are well positioned to support client countries with reforming fossil fuel subsidies. This can be done through two avenues: stopping and/or transitioning their own lending for fossil fuel projects to borrowing countries, and through dedicated fossil fuel subsidy reform technical assistance programmes, which several MDBs have put in place (Wright et al., 2018; Larsen et al., 2018; Bingler et al., 2017).
- MDBs are actively working with client countries' regulators
 to promote environmentally sustainable practices within the
 banking and financial sectors. In addition to issuing their own
 green bonds to finance climate-related projects, MDBs are
 supporting local financial institutions in adopting green practices

through the provision of green credit lines, development of green financial products and facilitation of regional green bond markets (Wright et al., 2018). The EIB and IFC have both established frameworks to ensure that their private sector clients' operations are in line with the goals of the Paris Agreement. Access to funding will be contingent upon compliance with these frameworks. All MDBs are collaborating to develop a unified approach to intermediated lending as part of their joint alignment framework with the Paris Agreement.

MDBs have the potential to play a pivotal role in enabling pioneering projects in frontier economies, which encompass LICs, situations of fragility, conflict and violence (FCV) and LDCs, through blended finance (Lankes, 2021). Frontier economies are characterised by the largest bankability gap for climate investments, as evidenced by Figure XX. In 2019, 91% of the finance deployed to support new clean energy projects in developing countries was directed towards just 10 investmentgraded countries, supporting 96% of investments in wind and solar (Lankes, 2021). Support in this context is indispensable for the project development and preparation stage to attain a minimum level of bankability. MDB Technical Assistance (TA) can be coupled with blended finance for such projects (Lankes, 2021). MDBs have the potential to provide resources to invest in highrisk tranches that support the exposure of Development Finance Institutions (DFIs) and other partners in early-stage finance for firms and infrastructure. They can also underwrite the highest-risk project tranches and local currency products and services (Lankes, 2021: 27).

Challenges for MDBs

MDBs do not have a specific mandate to address climate change, unlike Parties to the UNFCCC, and are also not beholden to the commitment of providing 'adequate and predictable funding'. Developed countries committed to providing 'adequate and predictable funding' to meet 'a goal of mobilizing jointly US\$100 billion per year by 2020 to address the needs of developing countries' in the Copenhagen Accord – this goal will be updated in the New Collective Quantified Goal for climate finance.

The country allocation of resources from MDBs has been subject to criticism due to its adherence to ODA principles, rather than climate needs/vulnerability principles. As pointed out by Pettinotti et al. (2022), the World Bank, for example, employs the Performance Based Allocation for IDA system to allocate funding to countries including Country Performance Institution Assessment. This measures 16 indicators clustered into four categories: economic management, structural policies, policies for social inclusion and equity and public sector management and institutions. However, the CPIA has been criticised for its ideological bias favouring measures

for market liberalisation and deregulation, which reflect the concerns of donor countries rather than borrowing economies. The system has also been reportedly used for the allocation of climate finance, including in the Pilot Programme for Climate Resilience (PPCR) under the Climate Investment Funds (CIFs) (Marston, 2010).

MDBs have been criticised for being risk-averse and overly reliant on their AAA credit ratings. This has limited their ability to use their balance sheets to provide more lending for climate mitigation and sustainable development goals (Humphrey, 2017). To address this issue, the G20 commissioned an independent review of MDBs' capital adequacy frameworks (Boosting MDBs' investing capacity, 2022). The report recommends that MDBs reconsider their capital adequacy policies by factoring in the financial value of their callable capital, in line with the methodology of major credit rating agencies. This would enable MDBs to unlock several hundred billion dollars in additional lending capacity without jeopardising their financial stability and AAA credit rating. This recommendation has sparked discussion and potential resistance in some quarters (Linn, 2022; FitchRatings, 2022).

MDBs have not been making the most of the risk mitigation tools available to them. These institutions have the option to use instruments such as guarantees and equity acquisitions to leverage their financial resources and mobilise public and private finance in low- and middle-income countries to tackle climate change. Despite this, MDBs only managed to mobilise \$50 billion in mitigation finance in 2020 (AfDB et al., 2021), and mobilised private finance has averaged \$48.6 billion between 2018 and 2020 (as per TOSSD in Naran et al., 2022). This suggests that there is a preference for direct funding provision over de-risking and attracting private capital (Hourcade, Dasgupta and Ghersi, 2021; AfDB et al., 2015). This approach falls short of requirements, and there is a need for the ratio of public to private investment and/or public investment to increase further (Meattle et al., 2022). MDBs, along with other multilateral climate funds and development partners, tend to prioritise large-scale results and often avoid small-scale projects due to internal institutional incentives and the higher transaction costs associated with them (Soanes et al., 2017).

4.1.3 The main factors limiting demand from client countries

Client countries have their own preferences for the type of assistance they want to receive from MDBs. According to Prizzon et al. (2022), countries prioritise support from MDBs for sectors such as infrastructure, energy and transport, rather than climate mitigation and adaptation. This might be because countries perceive a crowding out effect of climate over development programming and are hesitant to borrow or use their country allocations to address global issues like climate mitigation, which will provide regional or global benefits, especially when they did not cause the problem. MDB staff are more likely than government officials to propose climate mitigation and adaptation interventions.

The latest NDC synthesis report, which brings together information from 166 NDCs representing 193 Parties to the Paris Agreement and covering 94.9% of total global emissions in 2019, shows that 64% of Parties emphasised the need for policy coherence and synergies between their mitigation measures and development priorities (UNFCCC, 2022). Additionally, 34% of Parties identified their domestic mitigation measures in the context of measures and targets set out in their LTS or other long-term, low-emission development strategies or laws (UNFCCC, 2022). Furthermore, 22% of Parties highlighted the synergies between their mitigation measures and green recovery from Covid-19, including the creation of green jobs in the solar sector for energy access, which aligns with objectives and targets in sustainable economic plans and NDCs (UNFCCC, 2022).

Inequity in the current global climate finance architecture constrains low- and middle-income countries' appetite to borrow for climate mitigation (Pettinotti et al., 2022). Equity in the UNFCCC is rooted in the principle of 'Common but differentiated responsibility based on respective capabilities' (CBDR+RC) (Article 3.1: United Nations, 1992). Paragraph 3 of the Convention's preamble clarifies what differentiated responsibility means, referring to the disproportionate historical and per capita emissions of developed countries, implicitly codifying the 'polluter pays' principle, which requires polluters to pay the costs of cleaning up the pollution they have created (Khan, 2015). The respective capability (+RC) principle adds to CBDR by further clarifying Parties' role in addressing climate change in view of equity and acknowledging that some have greater resources (human, governance, financial, technological and innovation) to lead on mitigation and provide support to developing countries (Article 4.5) in achieving the goals of the convention (Klinsky et al., 2017). The majority of climate finance provided to developing countries is in the form of loans (OECD, 2022), and the strain on public budgets created by the Covid-19 pandemic and the war in Ukraine has increased scrutiny of the risk of debt distress in low- and middle-income countries from borrowing (even at concessional terms) for climate action (Carty, Kowalzig and Zagema, 2020), with the potential for creating a 'vicious circle of debt and climate crises' (Crotti and Fresnillo, 2021).

Many countries lack the necessary policies such as national power sector frameworks and electrification plans to facilitate regulatory certainty and decision-making for investment planning, project implementation and timelines. To address climate change, several policy decisions need to be made to align national plans with this strategic commitment. However, high-carbon sectors such as fossil fuel or agricultural subsidies often have strong vested interests that prevent these policies from being implemented.

Developing nations are enhancing their ability to build capacity to tackle common obstacles in climate financing, such as deficient governance, scarce institutional capability and political risks. According to the NDC synthesis report, 74% of participants

recognised capacity-building as an essential component of NDC implementation, with 46% providing specific insights into their capacity-building requirements and shortcomings in their NDCs. These include policy creation, the integration of mitigation and adaptation into sectoral planning processes and access to financing, as well as the information necessary for monitoring NDCs and ensuring transparency (UNFCCC, 2022). Additionally, 70% of respondents indicated that capacity-building needs were predominantly of a cross-functional nature, highlighting the interconnected nature of climate action (UNFCCC, 2022).

The complex architecture of multilateral climate funds places many demands on the capacity of low- and middle-income countries' national institutions involved in many parallel processes (e.g. NDC and NAP formulation and MCF access), despite their (growing) investments in improving institutional capacities to meet the fiduciary, environmental and social safeguards required to access funds (UNFCCC, 2022b).

4.2 Global public health

4.2.1 Main challenges to the provision and facilitation of access to projects and programmes supporting global public health

Supporting efforts to promote global public health requires interventions on multiple fronts. Here we focus on four dimensions: investment in laboratory systems; R&D for diagnostics and therapeutics, pharmaceuticals and vaccines; pandemic preparedness; and addressing antimicrobial resistance.

Investment in laboratory systems

The major barriers to effective laboratory service delivery are the absence of essential infrastructure, laboratory supplies, basic equipment, skilled personnel, supply chain management, technologies and equipment maintenance (Nkengasong, Yao and Onyebujoh, 2018). More specifically:

- A challenge is the lack of a robust supply chain for laboratory consumables, which is necessary for a well-functioning laboratory. Without commitment by ministries of health towards a robust, systematic supply chain, lab investment solutions in LMICs cannot be implemented. It is essential to establish a standardised and well-coordinated national laboratory logistics system. An example is the Ethiopian Public Health Laboratory System Master Plan (Ethiopian Health and Nutrition Research Institute, Federal Ministry of Health, 2009).
- In addition, LMICs have insufficient capacity for continuing professional development and skill enhancement. Reasons for this low capacity include small numbers of academic medical

centres, no or few systems for tracking continuing professional development and recertification systems, inadequate professional networking systems and insufficient financial support for these activities (Sayed et al., 2018; Kasvosve et al., 2014; Mwaikambo, Ohkubo and Cassaniti, 2013). This results in a reliance on empirical treatment and inadequate quality management systems.

 The lack of quality assurance and accreditation is another significant barrier in pathology and laboratory services (Nkengasong, Yao and Onyebujoh, 2018).

The infrastructure and software costs associated with the introduction of new technologies can have a significant impact on lab service delivery. First, there are the initial investment costs, which are direct costs. These costs are required to establish laboratories and laboratory systems, which demands significant capital implementation costs, especially when implemented comprehensively to fully realise investment benefits. Another category is upgrading costs, which are direct costs. Marginal costs for upgrading can be substantial, and many countries have been unable to further develop facilities after initial investments from international aid providers.

Operational costs are another direct cost that needs to be considered. MDBs could help compensate for the lack of consistent funding, which leads to a significant dip in service delivery performance from understaffing and turnover, which requires frequent recruitment and training (Irurzun-Lopez et al., 2016). Lastly, maintenance costs are direct costs that account for nearly a third of direct laboratory expenses. These costs are spent on activities needed to maintain capacity, often requiring up to \$600,000 per year for quality maintenance alone (Elbireer, Gable and Jackson, 2010).

R&D for diagnostic, therapeutics, biopharmaceuticals and vaccines

The rate of technology adoption presents challenges that lead to decreased returns on R&D investments in low- and middle-income countries (Goñi and Maloney, 2017). For instance, government subsidies to R&D in the absence of high-level technical human capital may yield little return. The concentration of investment flows in many health-related R&D means that countries with the greatest health gaps face the largest hurdles to developing and diffusing appropriate solutions, leading to institutional inertia. This highlights the trade-off between the focus and design of mechanisms at the global level (a GPG) and the implementation of the mechanism at the country level (Kanbur, 2022).

To overcome these challenges, MDBs, impact investors and governments can play a crucial role in diffusing best-practice governance arrangements and investing in the human capital needed

to embed new technologies within new and existing healthcare organisations (IFC, 2020). However, limited expenditure in areas of education and scientific research and low human capital in LMICs often lead to competent human resources leaving these countries (Clark and Chataway, 2009).

The current R&D ecosystem for health products is fragmented and supply-driven, with the private sector being the primary source of these products. Due to the fact that pivotal clinical trials can only be conducted during outbreaks, significant preparation must be done beforehand, such as strengthening clinical research capacity, developing pre-positioned trial protocols and clinical characterisation protocols, conducting discovery and pre-clinical research, manufacturing and early clinical testing of candidate products.

The supply of health technology is reliant on the private sector, resulting in products not being readily available throughout the R&D value chain. Even for well-known microbial threats, treatments, vaccines, and diagnostics are often not (sufficiently) available when needed. This low supply of health technology signals a market failure due to weak commercial attractiveness: infectious diseases often require short-term therapies rather than more lucrative chronic treatments.

There is a weak 'business case' for infectious diseases, given the unpredictable scale and timing of 'demand' in the case of epidemic outbreaks. Public health systems and the international community are often hesitant to invest in structural interventions and preventive measures, such as stockpiles that might remain unused, expire and need replacement. Even though Covid temporarily created a market opportunity, it still required public investments to mobilise private action.

Pandemic preparedness

Weak public health systems are a major concern in global health as they are unable to prevent, detect and respond to outbreaks effectively. The International Health Regulations (IHR) require that countries improve their public health systems; however, currently only one-third of countries meet this standard (World Health Organization, 2019). Lower-income countries could benefit from IHR provisions for international assistance by incorporating a financial mechanism to help build their capacity (Taylor et al., 2020). Despite a recurring theme across post-Ebola commissions emphasising the need to prioritise investments in core health system functions, primarily public health infrastructure and capabilities, many countries and donors have failed to do so (Moon et al., 2015). The decline in basic immunisation coverage is also a significant issue, as evidenced by reports of measles outbreaks in Europe, yellow fever and Zika

(BBC News, 2017; Tavernise and McNeil, 2016). The technologies required to get ahead of outbreaks, such as surveillance and immunisations, already exist; however, they cost a small fraction of what the global health community spends in this sector (Yazbeck and Soucat, 2019).

Low clinical research capacity for outbreak disease preparedness and response is a major challenge. Clinical interventions can only be tested during an outbreak, often as an integral part of the response. This means that clinical research capacity must be strengthened during 'peacetime' so that, during the epidemic, the healthcare system can focus on treatment. When clinical research capacity is low, trials may start past the peak of transmission, and compete for access to patients as sample sizes decline following the initial outbreak. This can delay the results or make them unreliable (Rojek, Horby and Dunning, 2017; Olliaro, 2018). For example, during the 2016–2018 West African EVD and the 2009–2010 influenza A (H1N1)pdm09 pandemic, the vaccine became available late in the pandemic, and clinical research results arrived after the pandemic ended. Clinical research also requires observational studies.

Antimicrobial resistance

The global market for antimicrobials is insufficient to meet the needs of LICs and MICs, while wealthier countries are oversupplied with them. This leads to a situation where individual benefits are not weighed against total costs. There is also a lack of investment in R&D for new antimicrobials, and private sector investment in the R&D pipeline for new antimicrobials is decreasing, particularly for antibiotics. Financial and other market incentives are urgently needed to attract sustainable, long-term private investments for R&D in antimicrobial resistance (AMR) given decreasing private investment (McDonnell et al., 2024).

Three-quarters of the companies surveyed for the AMR Industry Alliance 2020 report stated that they are likely to increase investments in AMR if the commercial environment improves and the challenges of the antimicrobial market are addressed through the implementation of an incentives package. This also supports the need to craft incentives. Even though human health R&D has the most funding, financial gaps still exist, especially regarding late-stage development for AMR. Financing gaps are even larger in LICs/MICs. There are large inconsistencies in the available data on financing of AMR R&D. No single source reports on total AMR resistance R&D funding across public and private sectors (Sustainability, 2020).

Low compliance is an issue as international regulations exist requiring WHO member states to monitor disease outbreaks, but these collaborative efforts have not fully materialised. There is also a lack of policies and a failure of global governance for AMR at the global level. Policies designed to improve access to antimicrobial

medicines, to maintain their effectiveness and to increase the supply of new products have not been implemented.

4.2.2 The main factors limiting demand from client countries

R&D for diagnostic, therapeutics, biopharmaceuticals and vaccines

Developing countries, particularly low-income countries, have limited surplus resources to invest in R&D due to the burden of diseases and other basic development challenges (Acharya and Pathak, 2019). Unlike high-income countries, where the business sector funds most research activities, low-income countries typically finance most of their research with public funds, making it more important to understand the effect of R&D budget allocation decisions (Gonzalez-Brambila et al., 2016). However, lack of immediate political value and preconceived notions of political personnel and bureaucrats often deter proper budget allocation in the R&D sector. Instead, small budget allocations focus on issues with immediate political value, such as hunger and unemployment (Kirigia and Barry, 2008).

Low scientific productivity and poor implementation matched with research that fails to address local needs/demands mean that R&D findings are often not linked with any visible outputs and profit potential (Acharya and Pathak, 2019). 'Free riding' leads to low investments in R&D in developing countries, with national industries lacking incentives to produce goods and services at home, thus increasing imports of equipment and supplies from overseas (Ciocca and Delgado, 2017). Low human capital and limited expenditure on education and scientific research lead to a lack of investment and competent human resources (Clark and Chataway, 2009).

Incentivising R&D investments via larger returns through intellectual property (IP) protections, such as patents and timelimited monopoly periods, works in high-income countries but fails in low- and middle-income countries (Røttingen et al., 2012). The system fails to provide adequate incentives in poorer countries because purchasing power is so low that they are unable to pay high prices incorporating R&D costs, making patents irrelevant in stimulating R&D and bringing products to market. Financing mechanisms to overcome this have been long analysed, yet success depends on whether the mechanism operates in a way that delinks the costs of R&D from the price of the product, allowing health products to be sold at an affordable cost. In developing countries, the market failure which IP rights try to correct is compounded by a lack of reliable demand for the products generated by R&D. Areas of R&D with typically low investment include antibiotics, AMR and vaccines (pre-Covid) due to short treatment periods compared to chronic diseases.

Pandemic preparedness and response

The opportunity costs of spending on preparedness versus other uses of health spending are potentially large, explaining why this kind of spending is not often prioritised by governments (Glassman and Smitham, 2021). It will cost just \$5 per person to support pandemic prep systems (McKinsey, 2021). However, some governments such as the DRC and Somalia, which have total government spending across all sectors of less than \$100 per person, face important opportunity costs to fill this finance gap.

The heavy debt burden of most LICs and MICs undermines the capacity of these countries to address pandemics, invest in their own public healthcare and in turn fund (or borrow to fund) pandemic preparedness and prevention (UN, 2019; Kose et al., 2021; Laskaridis, 2021). Fiscal consolidation tightens health budgets, sidelining PPR and GPH, with a heavy emphasis on expenditure cuts. This is expected to take place across 139 countries in the coming years to ensure debt-sustainability post-Covid-19 (Munevar, 2021; Ortiz and Cummins, 2021), and health budgets will not be exempt (Kentikelenis and Stubbs, 2022). If projected declines in expenditures take place, the broader global health agenda will be jeopardised (Birungi, Azcona and Munevar, 2022). The World Bank estimates that 41 governments will spend less on health between now and 2027 than they did in the pre-pandemic period. In 69 countries, spending will remain almost on par with pre-pandemic levels (Kurowski et al., 2021). International agreements for PPR depend on state compliance, but without strong national systems IHR has no use, and WHO lacks authority and funds to enforce it (Bollyky and Patrick, 2020).

Insufficient international financing, including for tracking, treatment and vaccination, is a major challenge. In 2018, fewer than half of WHO member states were in compliance with their IHR core capacity commitments, and many lacked even rudimentary surveillance and laboratory capacity to detect outbreaks (GPMB, 2019). Post-Ebola, WHO and the Global Health Security Agenda championed the joint external evaluation process to monitor IHR and PPR capacity. This initiative was voluntarily undertaken by over 100 countries, helping them to develop the National Action Plan for Health Security. However, there is no clear connection between JEE scores and PPR capacity, meaning that there is an IHR capacity monitoring void.

Misinterpretations of risks of emerging epidemiological, demographic and environmental transitions are a major challenge. Health risks are increasingly related to both modern food systems and environmental threats (Forouzanfar et al., 2015; Clark et al., 2019; Müller and Krawinkel, 2005). Foods associated with improved adult health often have low environmental impacts, indicating that the same dietary transitions would lower the incidence of noncommunicable diseases and help meet environmental

sustainability targets (Clark et al., 2019). Reduced air quality resulting from food production is responsible for around 20% of deaths from air pollution (Lelieveld et al., 2015). Health risks are shifting away from diseases that affect the young, as the population pyramid shifts. Causes of mortality are closely tied to NCDs (Jarzebski et al., 2021; Stuckler, 2008).

Antimicrobial resistance

There is increasing recognition that AMR represents a significant global threat to public health. However, there are currently many actors involved in AMR, all with different strategies, objectives and regulatory systems that are unaligned, leading to 'policy spaghetti' (Hoffman et al., 2015). Science is not sending a unified message, and the global antimicrobial regime lacks clear leadership and remains fragmented (European Medicines Agency, 2021). Debates between human and animal health researchers over drivers of AMR have hindered joint efforts (WHO, 2021b).

To address these challenges, MDBs such as the World Bank can play a crucial role in mediating incoherent global governance.

They can help galvanise national actors, which is crucial as the involvement of global actors in AMR limits the ability of ministries at the national level to discuss cross-cutting issues. Each actor works through their own lever to influence different ministries at the national level without incentivising ministries to communicate. For instance, the Food and Agriculture Organization (FAO) liaises with the minister of agriculture on AMR, and WHO engages with the minister of health on AMR, yet the two ministries rarely discuss AMR with each other.

MDBs, with their experience in similar fields and in partnership with other international NGOs and development agencies, can help train veterinarians, guide the development of regulatory frameworks for antibiotics, build laboratory and surveillance capacity, improve farming practices and link global health donors, international development bodies and aid and technical agencies to support developing countries to collect and analyse data on the prevalence of AMR (Review on Antimicrobial Resistance, 2016). MDBs can also provide a detailed economic analysis of the transition costs to lower antibiotic use in farming practices in different regions/countries.

MDBs can also help establish institutions that can invest in R&D and regional facilities. The Joint Programming Initiative on Antimicrobial Resistance's Strategic Research and Innovation Agenda on Antimicrobial Resistance outlines key areas where R&D investment is needed, including interventions, therapeutics, diagnostics, environment, surveillance and transmission. MDBs can craft incentives that maximise benefits, minimise costs, manage risks and balance trade-offs. For example, Hoffman et al. (2015) recommend a global pooled fund that allocates contributions from various donors to reward milestones achieved or provide incentives for R&D. The operational mechanism could involve the secretariat and World Bank as fund trustees.

Better coordination with civil society, industry and healthcare organisations is critical to strengthen functions that depend on them. MDBs can help integrate AMR in national PPR plans as well as development programmes. The Global Leaders Group on Antimicrobial Resistance (2021) is a key initiative that MDBs can help countries implement via both capacity and funding support.

MDBs could also help countries explore options to allocate catalytic funding to support cross-sectoral collaboration and incorporate AMR programmes into national budgets and development projects. Better estimates of the costs of implementing national action plans on AMR are needed to galvanise investment. MDBs should start assessing the risks and impacts related to AMR in their own investment, as called for by the Interagency Coordination Group on AMR in 2019, which recommends systematically applying an antimicrobial resistance and One Health 'lens' when making investments (Inter-agency Coordination Group on Antimicrobial Resistance, 2019).

4.3 Peace and security

Addressing the challenges of peace and security requires MDBs to understand the local context in order to design programmes that effectively respond to both development and peace objectives. The transition from fragility to resilience is political in that it changes arrangements of power and authority and the distribution of resources and economic rents that drives fragility and conflict. Even operational decisions, such as the choice of counterparts, the selection of regions of the country to invest in and how to approach institution-building and reduce risks of corruption will have political impacts.

4.3.1 The main challenges for the provision of projects and programmes focused on peace and security

Ability of MDBs to operate in political space. MDB mandates prohibiting activity of a political nature have been interpreted by management and Boards as limiting consideration of 'political' issues in their operations. Peace and security have clear political dimensions, and it has been argued (Yanguas, 2018) that any aid intervention can empower or disempower incumbent authority or its challengers. Historically, the WBG has adopted technocratic approaches to development, concentrated on economic issues, but has recently been incorporating an increasing awareness of sociological and anthropological issues (McKechnie et al., 2021).

MDB Boards can and do take 'political' decisions. While decisions may be political, they are presented in terms of supporting sound development policy. Examples include:

 The decision by the World Bank Board to cut back lending to India and Pakistan during nuclear weapons testing in 1998, although this might be interpreted as the application of a UNSC resolution (Mustafa, 2010).

- Supporting the Palestine Liberation Organization, the main component of the Palestinian Authority, in the early 1990s.
- Lending based on Cold War objectives, e.g. to countries such as Somalia which were scarcely creditworthy, and differing approaches to countries with non-constitutional changes to government.

There are options to bypass MDBs' limited political involvement. Political decisions are most often taken when MDBs have a consensus or majority in their authorising environment (Flores and Nooruddin, 2009) and when shareholders have political vested interests (Harrigan, Wang and El-Said, 2006). These tend to be at the country strategy level, e.g. sanctions or bans on lending imposed by the UN or the regional political body, such as the African Union. At lower levels, staff need to avoid decisions of a partisan nature. Some staff have attempted to push the boundaries on engagement on political issues that constrain development, such as promoting transparency, empowering people for local political engagement and greater political awareness in policy recommendations (World Bank, 2016). However, it is inescapable that even technocratic approaches have political impacts that empower or disempower incumbent authority and its challengers (Yanguas, 2018).

MDB procurement policies and financial and disbursement processes do not allow for quick response and dismiss political economy implications. Anti-corruption approaches focus on fiduciary compliance, and fail to consider the political economy of rents (see recommendations from Fjeldstad and Isaksen (2008)). Cumbersome procurement policies and financial and disbursement processes have been criticised for a sluggish response when peace opportunities arise, such as at the end of a conflict when at least some early results are needed to build public confidence in peace (World Bank, 2011). The World Bank has flexibility in its operational policies for a more agile response in conflict and fragile contexts, but this requires staff awareness and management tolerance for informed risk-taking, which may depend on the corporate priority of the country programme.

Effective partnerships require working outside economic and development space. Peace and security is inherently multidisciplinary and development assistance may be necessary but not nearly sufficient to achieve results. Investment in development can fail without successful diplomatic/political and peacekeeping/security action. Extremely high per capita levels of development assistance to Palestine have failed to substitute for efforts to resolve what is essentially a political problem. MDBs have tended to see partnerships as a means of acquiring resources outside their replenishments for issues lacking the commitment of shareholders and management. Effective partnerships require an investment of staff and resources for exchanging knowledge, producing strategies

that engage multiple policy communities and joint oversight of implementation and results.

Institutional (mis)alignment with peace and security goals. While most MDBs have strategies that give priority to peace and security, and this is common to other GPGs, follow-through is often inadequate to overcome institutional inertia, making shifting from business as usual difficult. This can be manifest in management down the chain; commitment of administrative budgets, assignment of staff with the right skills, especially to country offices; rigidity in the applications of policies, procedures (e.g. procurement, financial accountability) and financing instruments; and a general sluggishness in understanding and adapting to the country and thematic context.

Financing instruments focused on the project model are not appropriate for decades-long engagements in highly uncertain environments. More programmatic approaches are needed, but classic budget-supporting policy-based lending has run into shareholder resistance in countries that do not meet fiduciary expectations. options for better instruments include multi-year programmatic investment lending, adaptable finance for investment that can respond to changes in context and implementation experience, recurrent cost finance and instruments that permit engagement in institution-building for much longer than the period allowed for investment financing.

Insufficient availability of data and quality analytics related to the often dynamic and fast-changing context in which investments are considered, leading to limited understanding of the risk environment and potential impact (both negative and positive) of investments. Information-sharing across parties involved in a conflict remains challenging, especially in relation to sensitive information (Novosseloff, 2012).

Certain countries experiencing long-term fragility and conflict are prioritised for peace and security ODA funding, while others are neglected. Countries with higher fragility scores tend to receive larger volumes of peace and security ODA. Examples include Afghanistan, Syria, Somalia, the DRC, South Sudan and Lebanon. Countries such as Chad and the Central African Republic have higher fragility scores than Afghanistan (the largest recipient country of peace and security ODA), yet both received smaller volumes of funding. The reasons for this are unclear and likely to reflect individual donor preferences. To leave no-one behind and ensure that the needs of vulnerable and conflict-affected people are met, donors' ODA spending decisions should respond more to people's needs and the risks they face (Dalrymple, 2016).

Lack of fast-response facilities and financing instruments. Helping Lebanon and Jordan cope with the Syrian refugee crisis is a recent vivid example. The most easily available option of IBRD loans was quickly exhausted (and not particularly embraced by the governments concerned), while alternative sources and mechanisms (IBRD surplus, trust funds) were far from adequate to needs. An important lesson from this experience is that the World Bank Group needs to develop financial mechanisms or fast-response facilities to be used in similar situations, as well as use its global convening power more effectively (IEG, 2016).

4.3.2 The main factors limiting demand from client countries

Some countries are reluctant to use resources from MDBs to fund projects supporting peace and security. It is clear that investing in conflict prevention produces huge economic benefits as well as better human wellbeing (UN and World Bank, 2017). Furthermore, fragility and conflict is becoming more prevalent in MICs which borrow from MDBs on near market terms. Both set of countries are hesitant to take loans or other instruments with repayment obligations, as they might divert resources from what they see as more important national priorities. This reluctance may stem from their unwillingness to acknowledge fragility, their domestic policies treating fragility mainly as a security issue, their desire to allocate resources to their main supporters rather than dissidents, and their resentment at what they view as an infringement of their sovereignty.

Certain MDBs have special funds that provide additional grants on top of the regular country lending allocations for peace and security. These funds can take the form of non-/concessional credits and grants, and their sovereign status depends on the country's financing parameters. Most special funds are earmarked during concessional window negotiations and allow for donor contributions. Country-specific trust funds tend to be highly concessional, if not entirely grants.

It is important to consider whether the size of these funds matches the scale of the problem, and to what extent the activities financed through these funds are designed to achieve peace and security outcomes at scale. It may be necessary for MDBs to redistribute funding from flexible country programmable funding to GPGs such as peace and security. The demand for such funding will increase as conflict prevention moves up the international agenda and demands for humanitarian action and post-conflict reconstruction overwhelm available financial resources.

Geostrategic issues related to foreign assistance. OECD DAC partners may be reluctant to fund GPGs that are less popular with borrowers than other areas, for example infrastructure, which could increasingly be funded by rivals such as China, and which might generate more economic rents for borrower officials. Alternatively, 'business as usual' projects, e.g. highways, could be repackaged as promoting peace and security, although the record of such projects is mixed at best unless preceded by rigorous fragility and conflict

assessments, e.g. a road can facilitate settlers from a different ethnoreligious group, or the deployment of a repressive security apparatus.

Debt service arrears on loans made before the crisis have been a constraint to early re-engagement at the conclusion of conflicts by most MDBs. MDB policy and practice is not to make new funding available until the arrears due to MDBs and the IMF are cleared pari passu. Depending on their magnitude, arrears are typically cleared through donor grants, e.g. in the case of Afghanistan, or a new policy-based loan disbursed to the government budget for immediate repayment of past arrears, e.g. countries like Somalia that accumulated a large volume of multilateral debt during the Cold War (Viterbo, 2018: 130). Arrears clearance can take time to implement, and the World Bank Board has approved allocation of some WBG income for post-conflict countries to enable WBG financing during the critical period when a new government is established at the end of a conflict. In the case of the Palestinian Territories, this allocation enabled the first IDA loans to be made to the Palestinian Liberation Organisation, which did not have full jurisdiction of what remains a non-member state.

Currently, in countries where IDA is not available – either because they are not borrowing members (for example the West Bank and Gaza) or because the country is in arrears (for example Somalia or Sudan, prior to March 2021) – trust funds are the only sources of financing that MDBs can use to support operations and analysis (Independent Evaluation Group, 2022: 4).

Changes in operational policies have enabled MDBs to more rapidly respond to peace and security threats. While the World Bank's policy for emergency response (Operational Policy 8.50) allowed some rapid financing, it was flawed and its effectiveness was limited (Independent Evaluation Group, 2006). The definition of emergency focused on natural disasters, and the priority given to physical reconstruction of infrastructure did not enable the Bank to effectively address diverse borrower needs, particularly the immediate needs of disaster victims. Overall, the policy did not provide the Bank with sufficient means to assist countries in the critical early stages of recovery, or with enough flexibility to cooperate with other international partners in implementing comprehensive recovery programmes. Accordingly, A new operational policy was introduced in 2007 (Operational Policy 8.00 on Rapid Response to Crises and Emergencies), which is still in effect.

MDBs' fiduciary compliance policies restrict flexibility and prolonged engagement. Similar to other MDBs, when there are allegations of misuse of funds the World Bank has the authority to conduct investigations through its integrity unit and take action such as sanctioning firms and cross-debarring them from further contracts with other MDB, referring cases to the authorities and cancelling financing while imposing restrictions on borrowers. Although the

Bank believes its risk management processes are effective, there is some evidence that funds have been diverted to unintended purposes, particularly during the implementation phase of projects after contracts have been awarded (Brazys, Elkink and Kelly, 2017; Hobbs, 2005). Pritchett and de Weijer (2011) discuss how the pressure on fragile states to be accountable to external agents like MDBs hinders flexibility and causes confusion in accounting and accountability practices (ibid.: 40). Additionally, fiduciary compliance creates incentives for project designs to be fully predetermined in advance, which is difficult to reconcile with the need for prolonged MDB engagement in conflict situations (ibid.: 37). Misuse of funds is a problem for the recipient country as well as the MDB, and countries need support to strengthen their own accountability institutions. As this takes time, consideration might be given to new approaches that reconcile MDB fiduciary risks with country systems, including greater use of third party, civil society and citizen monitoring.

5. Conclusions

The impacts of cross-border challenges – climate change, global public health, fragility – are escalating and are becoming more frequent and protracted. Financing needs to address immediate consequences and invest in transforming societies and economies are soaring and becoming even more urgent. However, concessional public finance is not increasing enough to match the scale and urgency of action as bilateral donors try to balance their books following the Covid-19 crisis and countercyclical policies and deal with increasing domestic pressure. With the leverage effect of capital contributions, regional or global reach, upstream support – e.g. regulatory frameworks – project implementation and knowledge generation, MDBs have been seen as key players in helping address global challenges, providing or financing global public goods. Stretching their balance sheets and retooling their operations has attracted significant attention over the past couple of years, particularly in relation to the World Bank. However, as this report outlines, while MDBs can help address the constraints and challenges client countries face in accessing and implementing projects that have cross-border impacts, they are not the only development actors that can increase the uptake and delivery of global public goods.

This report offers an initial set of analyses of selected global public goods – climate change mitigation, global public health and peace

and security – that MDBs have been contributing to. Many other areas can have global implications and reach – global financial stability or global trade – but are not under the purview of MDBs. Other sectors – e.g. water and sanitation and food security – can be seen as global challenges but do not share the characteristics of a global public good, i.e. being non-rival and non-excludable. Climate change mitigation, global public health and peace and security are areas where MDBs operate – albeit at different scales across MDBs depending on their mandates and expertise – whose related projects are at risk of being underprovided. Hence why this report focuses on these three global challenges, among many.

GPGs are often undersupplied due to their non-rivalrous and non-excludable benefits, creating a free-rider problem. Some GPGs require all countries to meet minimum standards, while others need collective efforts. Differing preferences and priorities between countries can also hinder their provision. The provision of GPGs requires concerted national, regional and international action. However, some GPGs remain undersupplied due to the lack of a single multilateral institution to supply them. The provision and protection of GPGs may conflict with the principle of sovereignty and government priorities. Prioritisation and sequencing will shape the provision of different GPGs.

Mapping the relevance of MDBs' activities to GPGs is far from simple. The theory of GPGs is only partly helpful, as MDBs indirectly support climate change mitigation, global public health and peace and security via technical assistance and policy advice usually attached to programmes and projects. While a number of activities in the MDB portfolio are not 'pure' GPGs, i.e. they are either excludable or rival, they still matter in addressing global challenges. Take investments in renewable energy generation. Access to energy is still excludable and rival, but reductions in carbon emissions can be counted as a GPG. Projects and programmes of MDBs can also make direct (core) and indirect (complementary) contributions to tackling global challenges. Core activities that produce GPGs are multi-country or transnational in nature or focused on one country, but with benefits that extend to others. Several complementary activities of MDBs are not strictly defined as GPGs but prepare countries to produce and consume them, i.e. 'enabling environment'. And it is not only what MDB activities do but also what they should not undermine, e.g. efforts towards a low-carbon transition, by locking in projects in fossil-fuel technologies. Beyond finance, it is also crucial for their entire portfolios to be aligned with the 2015 Paris Agreement.

Against this backdrop, most MDBs do not explicitly mention crossborder challenges in their mandates and policy priorities. Some of these challenges are either cross-cutting – e.g. peace and security (or the 'global public bad', fragility) or are part of the social development mandate of an MDB – as is the case with global public health. Sustainability is explicitly mentioned in the mandates of the newest MDBs analysed in this report (EBRD and AIIB). However, most MDBs have operational medium-term strategies to address the three global challenges analysed in this report, albeit with varying levels of detail.

All the MDBs reviewed have set a target for climate finance spending to scale up ambitions and monitor progress. This reflects the pressure for contributing countries to count resources towards international climate finance commitments and greater coordination among MDBs. There are no financial targets related to the other two areas (global public health and peace and security), mainly due to challenges in measuring direct support (in the case of peace and security volumes are lower because of the greater role of policy and governance support, rather than large-scale infrastructure projects, there are fewer MDBs involved, demand is associated with specific shocks, and there is no international finance commitment to anchor it in the same way as international climate finance). When it comes to financial flows, climate change mitigation is by far the global challenge MDBs have spent the most on, as it usually involves largescale investments, e.g. in renewable energy and transport. Financing of climate change mitigation across MDBs has also significantly risen over time, more than doubling between 2013 and 2021, even without changing the MDB financing model.

Lower-income countries face several constraints in supporting programmes tackling the impacts of climate change. Countries have limited access to finance, especially concessional finance; terms and conditions are becoming more expensive, putting pressure on future debt sustainability or constraining investment choices and levels; and national and sub-national entities can find navigating the accreditation processes for accessing climate funds challenging, including high co-financing requirements.

Client countries tend to prioritise support from MDBs for sectors such as infrastructure, energy and transport, rather than climate mitigation and adaptation. Countries tend to be hesitant to borrow or use their country allocations to address global issues like climate mitigation, which will provide regional or global benefits, especially when they did not cause the problem. Inequity in the current global climate finance architecture constrains low- and middle-income countries' appetite to borrow for climate mitigation. Many countries lack the necessary policies, such as national power sector frameworks and electrification plans, to facilitate regulatory certainty and decision-making for investment planning, project implementation and timelines. Not all countries have the necessary resources or data to model decarbonisation pathways and develop Paris-aligned LTS.

MDBs do not have a specific mandate to address climate change, as Parties to the UNFCCC do, and are also not beholden to the commitment of providing 'adequate and predictable funding'. However, this report's analysis outlines how MDBs are well-placed to address some of these challenges and support client countries in their decarbonisation pathways, and to do so in ways beyond

finance. MDBs can leverage established processes for regular country engagement to align development and climate objectives, they are working to help client countries improve their mitigation ambitions in their NDCs and they are supporting client countries with reforming fossil fuel subsidies and actively working with client countries' regulators to promote environmentally sustainable practices within the banking and financial sectors.

While there has been some improvement since the start of this report's analysis, MDBs have been criticised for being risk-averse when it comes to deploying their capital and for not making the most of the risk mitigation tools available to them to mobilise resources, including for climate change mitigation. Only analyses at the project level can help in understanding how well client countries would respond to changes in pricing structures to reflect cross-border externalities and incentive uptake of projects whose consumption characteristics are non-rival and non-excludable.

Promoting global public health – as a global public good – goes well beyond pandemic preparedness. This requires interventions on multiple fronts both at the country – particularly public health systems – and at the global level – on governance and regulations. Interventions are needed for investment in laboratory systems; R&D for diagnostics and therapeutics, pharmaceuticals and vaccines; pandemic preparedness; and addressing antimicrobial resistance.

Countries, particularly lower-income countries, face a number of constraints to contributing to global public health. These include: low effectiveness of laboratory services – because of lack of standards, the supply chain for consumables, continuing professional development and quality assurance – and the high costs of running them; limited budgets as well as low returns on R&D investment and highly fragmented and supply-driven R&D systems; weak public health systems; low clinical research capacity for disease outbreak preparedness and response; a market for antimicrobials insufficient to meet the needs of LICs and MICs and that is highly fragmented; low compliance of international regulations; and opportunity costs of spending on pandemic preparedness against immediate priorities.

Not all of the challenges lower-income countries face in promoting global public health can be addressed by MDBs. As we have seen, the involvement of MDBs in global public health varies significantly depending on their mandates and expertise. At the same time, those MDBs active in this space can, for example, play a crucial role in sharing best-practice governance arrangements and investing in the human capital needed to embed new technologies within new and existing healthcare organisations, strengthening country-level health systems, mediating the incoherent global governance of AMR, helping establish institutions that can invest in R&D and regional facilities and exploring options to allocate catalytic funding to support cross-sectoral collaboration and incorporate AMR programmes into national budgets and development projects.

Some countries are reluctant to use resources from MDBs to fund projects supporting peace and security, as this might divert resources from what they see as more important national priorities. A number of constraints can be attributed to the allocation of development cooperation at the international level and operational limitations of MDBs. First, certain countries experiencing long-term fragility and conflict are prioritised for peace and security-related ODA funding. while others are neglected, and financing for other sectors – e.g. infrastructure – tends to be prioritised over efforts to prevent conflict and build peace and security. Second, MDB mandates that prohibit political activity have been interpreted by management and Boards as limiting consideration of 'political' issues in their operations. Third, MDBs' procurement policies and financial and disbursement processes do not allow a quick response and dismiss political economy implications. MDB fiduciary compliance policies restrict borrowers, may not be as effective as they appear and can hinder efforts to strengthen borrowing countries' own accountability systems, which could include CSO and citizen engagement. Finally, since countries emerging from crisis need an agreed plan for clearing arrears to allow MDB finance to flow, streamlining and predictably funding this process would enable a more effective international response to peace and security and other global challenges.

MDBs have implemented or could consider measures to address these operational constraints to support fragile and conflict-affected countries. First, MDBs have options to bypass their limited involvement in politically inflected issues. These tend to be at the country strategy level, e.g. sanctions or bans on lending imposed by the UN or a regional political body, e.g. the African Union. Second, MDBs have flexibility in their operational policies for a more agile response in conflict and fragile contexts, but this requires staff awareness and management tolerance for informed risk-taking, which may depend on the corporate priority of the country programme. Third, peace and security are inherently multidisciplinary and development assistance may be necessary but insufficient to achieve results. Effective partnerships require an investment of staff and resources for exchanging knowledge. producing strategies that engage multiple policy communities, and joint oversight of implementation and results. Finally, more programmatic approaches are needed, but classic budget-supporting policy-based lending has run into shareholder resistance in countries that do not meet fiduciary expectations. Options for better instruments include multi-year programmatic investment lending, adaptable finance for investment that can respond to changes in context and implementation experience, recurrent cost finance and instruments that permit engagement in institution-building for much longer than the period allowed for investment financing.

Any discussion of reforming MDBs' operational models to tackle global challenges requires a much better understanding of what activities matter, how MDBs contribute to them and what the major constraints are behind their under-provision or low uptake. While this

analysis of the role of MDBs in providing three global public goods and the review of the constraints faced by client countries in accessing and financing GPGs has provided an initial overview, any reform of instruments and modalities will require in-depth project-level case study analysis.

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Annex 1 Code List: Creditor reporting system Sub-sector by global public good

Global Public Health

CRS Purpose Code: CRS Purpose Name

12110: Health policy and administrative management

12182: Medical research

12191: Medical services

12250: Infectious disease control

12261: Health education

12262: Malaria control

12263: Tuberculosis control

12264: COVID-19 control

13040: STD control including HIV/AIDS

32168: Pharmaceutical production

Peace and Security

CRS Purpose Code: CRS Purpose Nam

15113: Anti-corruption organisations and institutions

15130: Legal and judicial development

15150: Democratic participation and civil society

15151: Elections

15152: Legislatures and political parties

15153: Media and free flow of information

15160: Human Rights

15170: Women's rights organisations and movements, and government institutions

15190: Facilitation of orderly: safe, regular and responsible migration and mobility

15210: Security system management and reform

15220: Civilian peace-building, conflict prevention and resolution

15230: Participation in international peacekeeping operations

15240: Reintegration and SALW control

15261: Child soldiers (prevention and demobilisation)

16063: Narcotics control

73010: Immediate post-emergency reconstruction and rehabilitation