



Karin Schermbrucker CARE

The Hidden Consequences of Climate Finance

Poor Countries Face Rising Debt from World Bank's Concessional and Non-Concessional Loans to Adapt to Climate Change

Adaptation finance is dominated by loans. For many developing countries, these loans make up a significant share of climate funding. However, loans are not the straightforward solution they appear to be. With recent hikes in global interest rates, many of these loans — especially non-concessional ones that don't offer softer terms — are placing a heavier financial burden on countries already struggling with debt.

As a result, developing nations are paying back far more than they receive in adaptation funding, diverting precious resources from critical needs like healthcare and education. Adaptation finance relying on loans rather than grants risks locking low-income countries into cycles of debt, hindering their ability to invest in resilience against climate impacts.

For example, our analysis of World Bank projects shows a clear trend: although the World Bank is a major contributor to adaptation finance, a significant portion of its loans are offered on non-concessional terms.

These loans come with standard market interest rates, which are now much higher than they were a few years ago, drastically increasing the debt of the recipient countries.

Many NGOs, including CARE, argue that adaptation finance should prioritize grants over loans. Grants are particularly important for projects that do not generate revenue, such as adaptation and loss and damage interventions, as well as initiatives for knowledge management and capacity building. These types of projects do not produce income to offset debt, making loans a poor fit. Furthermore, grants should be the primary means of financing for the most vulnerable and resource-limited countries, including Least Developed Countries (LDCs). Although LDCs have contributed only minimally to the climate crisis, they are among the most exposed to its impacts and lack the resources to bear additional debt burdens.

The following findings highlight key issues within adaptation finance and underline the need for more transparent and favorable funding solutions.

KEY POINTS

- Adaptation finance is dominated by loans, especially from the World Bank. Of the total \$28 billions in reported adaptation finance commitments in 2022, the World Bank (WB) provided the largest share, contributing 43% or \$12 billions.
- According to UNEP's Adaptation Gap Report 2024, 53% of adaptation finance from Multilateral Development Banks (MDBs) was concessional in 2022, while 44% was non-concessional. Notably, 41% of the World Bank's adaptation loans were non-concessional, which CARE considers problematic, given the World Bank's mission to create a world free of poverty on a livable planet.
- Non-concessional adaptation loans from development banks can be costly and add to national debt. Recent interest rate hikes by the US Federal Reserve, from near-zero rates in 2021 to about 5% in 2024, have substantially increased repayments on loans committed before these hikes, reducing grant elements significantly.
- CARE reviewed loan documents for 10 World Bank projects labeled as adaptation finance. The sample includes large projects across different sectors and recipient countries.
- Our analysis shows that non-concessionally financed projects now have minimal grant elements due to rate increases since 2021. While grant equivalents for loans from the International Development Association (IDA) window of the World Bank decreased by 8%, grant equivalents for primarily non-concessional loans from the International Bank for Reconstruction and Development (IBRD) dropped by 87%.
- These loans also worsen debt burdens that many developing countries already find unsustainable. Over time, debtors in the assessed projects face increased repayments — 6% more for IDA-backed projects and 35% more for IBRD-funded ones. These rising debt costs are diverting funds from critical needs, such as healthcare and education, in low-income countries.
- CARE believes poor countries should not be forced to take loans for climate adaptation necessitated by rich countries' emissions. Only the true value of loans for developing countries should be counted as climate finance, and MDBs should report grant equivalents, as is standard for bilateral assistance, with updates to reflect changing interest rates. CARE holds that adaptation finance should be provided as grants to poor and climate-vulnerable countries to avoid further debt burden. However, if loans remain a part of adaptation finance, they should be offered on highly concessional terms to reduce debt distress. The upcoming NCQG should restrict the use of debt-generating instruments for adaptation finance, particularly for poorer and vulnerable nations.

1. INTRODUCTION

This year's COP29 will center around renewed and increased climate finance contributions, focusing on the New Collective Quantified Goal (NCQG) under the Paris Agreement. Climate action in the Global South needs substantial and multifaceted funding. In 2022, the OECD reported \$91.6 billions in public climate finance.¹ However, only \$25 billions (28%) of this was in grants, while \$63 billions (69%) came as loans.

Adaptation Finance is dominated by loans, especially finance from the World Bank. Of the total \$28 billions reported adaptation finance commitments in 2022, the World Bank (WB) is by far the largest contributor, provided \$12 billions (43 % of total adaptation finance in 2022).² Of the \$12 billions, 74% were in the form of loans.³

According to UNEPs Adaptation Gap Report 2024, Multilateral Development Banks (MDBs) finance to adaption was 53% concessional finance and 44% non-concessional finance in 2022.² Of the World Bank adaptation loans, 41% were on non-concessional terms.³ With these significant non-concessional finance for adaptation, CARE wanted to calculate costs and repayments for a sample of such loans.

CARE analyzed 10 adaptation projects funded by the World Bank to understand their financial terms, values, and costs, which are significant for low-income recipient calculated the grant-equivalent values and projected total repayments of these projects to illustrate how rising interest rates impact debt burdens.

Within the World Bank Group, two major arms support climate finance:

- The International Bank for Reconstruction and Development (IBRD), which lends mainly to middle-income countries.
- The International Development Association (IDA), which provides highly concessional (favorable) financing to the poorest nations, tailoring loans and grants to align with these countries' repayment capacities.

This briefing explores how funding structures like loans and grant-equivalent calculations can create a more equitable and effective climate finance system.

It also discusses the NCQG's potential to meet the critical funding needs for climate action, aiming to inform decisions on financial instruments — grants, concessional loans, and non-concessional loans — to avoid deepening debt issues in vulnerable nations.

¹ OECD (2024), [Climate Finance Provided and Mobilised by Developed Countries in 2013-2022, Climate Finance and the USD 100 Billion Goal](#), OECD Publishing, Paris.

² United Nations Environment Programme (2024). [Adaptation Gap Report 2024: Come hell and high water - As fires and floods hit the poor hardest, it is time for the world to step up adaptation actions](#). Nairobi.
<https://doi.org/10.59117/20.500.11822/46497>.

³ Own calculations based on the OECD Creditor Reporting System data for 2022. Includes contributions to non-annex I countries.

2. GRANT EQUIVALENTS

Climate finance providers often report loans based on their full amount, which can overstate the actual financial contribution of the provider and the benefit to the recipient. To address this, the OECD DAC introduced a measure called “grant equivalence” in 2014, which calculates the real value of loans by accounting for their terms, such as interest rates and repayment schedules. This measure became standard for Official Development Aid (ODA) in 2019, though it remains voluntary for reporting to the UN-FCCC.⁴ **Using grant equivalents gives a clearer picture of the actual financing value** for recipient countries compared to face value alone.

Concessional (or favorable loan terms) is essential for low-income countries, as it lowers costs by offering reduced interest rates, longer repayment periods, or grace periods. Two central metrics, the “grant equivalent” and “grant element,” are used to measure how concessional a loan is from the donor’s perspective.^{5,6} A loan with a high grant element is more favorable, reducing the financial strain on recipient countries and allowing them to invest more in crucial climate projects.

The World Bank and other MDBs enjoy a strong credit rating (“AAA”), allowing them access to favorable interest rates on international capital markets and extend these lower rates to borrowers without the same credit rating. This

access enables them to offer flexible, non-concessional loans with interest rates that vary based on the market rate (like the Secured Overnight Financing Rate, or SOFR, and the Euro Interbank Offered Rate, or Euribor).⁷ **However, these flexible loans can become costly as interest rates fluctuate.** Indeed, with recent rate hikes they have become just that. Loans with fixed low interest rates, on the other hand, are not exposed to changing interest rates and can protect the borrower from sudden increases of debt.

Usually, grant equivalents are calculated when a loan is first agreed upon, **but changing interest rates can alter the value over time.** Recent increases in SOFR and Euribor, now over 5% and 4%, respectively (up from nearly zero or even below zero a decade ago), have sharply raised loan costs, particularly since April 2022. Unfortunately, **MDBs rarely report the grant equivalent of their climate loans, and when they do, it is not updated to reflect changing interest rates.**

The World Bank’s IDA (International Development Association) window lends on concessional terms, with fixed low-interest rates and repayments often spread over 30 years. Thanks to recent funding replenishments, more than half of IDA countries receive grants requiring no repayment. However, the International Bank for Reconstruction and Development (IBRD) window offers more flexible, market-dependent terms.

⁴ OECD DAC (n.d.), [The modernisation of official development assistance \(ODA\)](#).

⁵ For more information on the grant equivalent system, see OECD DAC (2024), [Converged Statistical Reporting Directives for the Creditor Reporting System \(CRS\) and the Annual DAC Questionnaire](#). The grant element method of measuring the concessional of loans and debt relief is further described in Scott, S. (2017), [The grant element method of measuring the concessional of loans and debt relief](#).

⁶ Where the grant equivalent refers to an absolute figure, the grant element refers to the share of the grant equivalent relative to the face value of the loan. For a loan with face value of \$500m and a grant equivalent of \$100m, the grant element is $\$100m/\$500m=20\%$.

⁷ These rates are benchmark interest rates for dollar- and euro-denominated derivatives and loans and closely follow changes in monetary policy from the US Federal Reserve and other Central Banks. As such, they reflect the loan opportunities and costs for the World Bank and other financial actors.

Explaining Grant Equivalents and Discounting

Grant equivalence uses a method called *discounting* to determine the real financial value of a loan for the recipient country. This approach helps show how favorable (or concessional) a loan is compared to a typical market loan. When a climate finance loan is discounted, its future repayments are adjusted to reflect their value in today's terms, factoring in how interest rates, repayment schedules, and other terms affect the recipient's overall financial burden.

Discounting works by applying a discount rate, which reduces the loan's value based on how far into the future each repayment occurs. A concessional loan, with low-interest rates and extended repayment schedules, has a lower present value of repayments, making it more beneficial (or "concessional") for the borrower.

For example, a loan with a long repayment period and a low interest rate will have a higher *grant equivalent*, meaning the country receives more benefit as if it were a partial grant rather than a full-cost loan. The "grant element" is the percentage of the loan's value that represents this benefit.

In practice:

- A discount rate between 6 and 9% is applied to future payments to calculate the present (or "discounted") value.⁸
- This adjustment considers that money owed in the future costs less in today's terms. A higher discount rate results in a lower grant equivalent since it reduces the present value of repayments.

Discounting becomes especially important with flexible-rate loans, where interest rate changes can raise or lower the present value of future payments. When rates increase, as they have recently, repayments cost more in real terms, lowering the grant equivalence and raising the effective cost to the borrower. This dynamic illustrates why concessional loans with fixed rates are often preferable for low-income countries - they provide stability against market fluctuations and maintain higher grant equivalence.

Analyzing Grant Equivalency in World Bank Projects

CARE analyzed 10 World Bank projects from 2021-2022 across low-, lower-middle-, and upper-middle-income countries and different sectors.⁹ The projects were selected among the largest WB adaptation projects to cover a large part of WB adaptation finance in the time period. Table 1 below shows financing amounts and grant-equivalent estimates at both the time of loan agreement and at current rates. These adjustments reveal the true cost to recipient countries given recent interest rate hikes.

⁸ The OECD DAC method of calculating grant equivalence uses discounting rates based upon the income groups of recipient countries. For projects in UMICs, a 6% discount rate is used; for LMICs, a 7% discount rate is used, and for LDCs and LICs, a 9% discount rate is used.

⁹ World Bank (n.d.), [Projects & Operations](#)

Project name - Country (Income group)	WB Window (Year)	WB Project Financing Amount (Face value)	Grant equivalence at loan agreement (Grant element %)	Grant equivalence at present rates (Grant element %)
Fourth Disaster Risk Management Development Policy Loan with a Catastrophe deferred Drawdown Option - Philippines (LMIC)	IBRD (2021)	\$500m	\$281m (56%)	\$14m (3%)
Inclusive Connectivity and Development Project - Sri Lanka (LMIC)	IBRD (2021)	\$500m	\$149m (30%)	\$6m (1%)
Türkiye Earthquake, Floods and Wildfires Emergency Reconstruction Project - Turkey (UMIC)	IBRD (2022)	\$449m	\$69m (15%)	\$32m (7%)
Connecting Madagascar for an inclusive growth project - Madagascar (LDC)	IDA (2022)	\$400m	\$217m (54%)	\$217m (54%)
Enhancing Connectivity in the Northern and Central Agricultural Production Areas of Senegal - Senegal (LDC)	IDA (2022)	\$200m	\$76m (38%)	\$36m (18%)
Climate Resilience and Water Security in Angola-RECLIMA - Angola (LDC)	IBRD (2022)	\$300m	\$49m (16%)	\$28m (9%)
Livestock Productivity and Resilience Support Project - Nigeria (LMIC)	IDA (2022)	\$500m	\$135m (27%)	\$135m (27%)
Enabling a Green and Resilient Development DPF - Peru (UMIC)	IBRD (2022)	\$500m	\$108m (22%)	-\$23m (-5%)
Blue Economy Program for Results - Morocco (LMIC)	IBRD (2022)	\$350m	\$125m (36%)	\$43m (12%)
Shire Valley Transformation Program - Phase 2 - Malawi (LDC)	IDA (2022)	\$134m	\$61m (46%)	\$61m (46%)
IDA Total	IDA	\$1,234m	\$489m (40%)	\$449m (36%)
IBRD Total	IBRD	\$2,599m	\$782m (30%)	\$99m (4%)
Total		\$3,833m	\$1,271m (33%)	\$548m (14%)

Table 1 Face values, grant equivalents at both loan agreement rates and present rates, and grant elements at both loan agreement rates and present rates for the 10 included WB projects. Own calculations.

The total financing for these projects is reported as \$3,833 million, but when adjusted to reflect the grant equivalence, this value drops substantially. The average interest rates at the time

of financing agreements were 1.3%, and based on these rates, the grant-equivalent value is \$1,274 million (a 33% grant element).¹⁰ At current average rates of 3.7%, this further declines to \$548 million (a 14% grant element).¹⁰ The increase in interest rates is

¹⁰ Average reference rates, 6m SOFR and 6m Euribor, weighted by WB project financing amounts. This analysis has relied on a recent SOFR of 5.39346% (the rate as of 16th of August 2024) and a recent Euribor rate of 3.6436% (the rate as of 31st of July 2024). Additionally, as IDA financed projects often feature fixed rates, the IDA financed projects' current interest rates are lower than IBRD financed interest rates, which decreases the current average interest rates. The loan agreements are all from between the 3rd of December 2020 and 30th of December 2022.

solely due to increases in the market rates and not in other terms in the loan agreements.

For IBRD loans, which have flexible interest rates, grant equivalents decrease drastically by 87%, from \$782 million to \$99 million. Meanwhile, IDA loans with fixed rates show only an 8% reduction, from \$489 million to \$449 million, underscoring the importance of concessional terms.

Key findings

- The total face value for the 10 selected World Bank projects is \$3,833 million, but adjusting for grant equivalency at current interest rates reduces this by 85.7%, resulting in a grant-equivalent value of just \$548 million (14%).
- IBRD loans show an 87% decrease from \$782 million to \$99 million in grant equivalence when adjusted for current rates, compared to an 8% decrease from \$489m to \$449m for the more stable IDA loans.

Recommendations

- **More Transparent Grant Equivalence Reporting:** The WB and other MDBs should report *grant-equivalent* values at project levels when each loan is approved and explain the methodology. Furthermore, annual updates should reflect current interest rates, helping recipient countries better understand the actual financial value of climate finance.
- **Increase Concessional Financing:** MDBs should offer more concessional terms for climate projects in low-income countries to counter rising interest rates, ensuring these projects remain financially sustainable.

Box 1: Understanding Concessionalism and Grant Equivalence

Concessionalism, measured by grant equivalence and the grant element, is crucial in assessing the real value of climate finance for recipient countries. Grant equivalence shows the actual benefit to the recipient, calculated using the loan’s net present value. This value considers factors like interest rate, discount rate, grace period, loan term, and face value.

To estimate a loan’s present value, we consider its duration, interest rate, grace period, and discount rate.

For example, the Inclusive Connectivity and Development Project in Sri Lanka involves a \$500 million IBRD Flexible Loan (IFL), agreed upon in November 2022. The loan has a 10-year grace period, with repayments starting in 2032 and spread over 17.5 years. The loan also includes a 0.25% front-end fee and a 0.25% commitment fee on disbursed amounts, along with a flexible interest rate.

Initially, the interest rate was set at 3.19%, the sum of a 1.95% reference rate (in this case the 6M SOFR) and a 1.25% variable spread that reflects the WBs costs of financing. Under these terms, total repayments were estimated at \$715 million. Using a 7% discount rate, the grant equivalent is \$149 million, giving a grant element of 30%.⁸ This means that the recipient country effectively receives 30% of the loan amount as a grant.

However, by the time of analysis (August 2024), SOFR had risen to 5.4%, pushing the interest rate to 6.6% due to central bank rate increases in the US and EU. This raised the total repayment to \$1,046 million — a 26% increase since November 2022. Consequently, the grant element fell sharply to 1%, reducing the grant equivalent to \$6 million, a 96% drop in value.

3. REPAYMENTS OF LOANS AND DEBT

We have discussed and looked at the grant equivalent, which should be more visible to reflect the actual financial value. Another non-transparency issue is the exact repayment cost of loans. The grant equivalent concept discussed earlier relies on discounting future payments to reflect the loan's present value. But as

debt burdens increase in some countries, the total (non-discounted) repayment amount also becomes crucial.

For the ten selected World Bank projects, the total financing at face value is \$3,833 million. However, due to interest rates, the actual repayments will be much higher. Based on the original loan terms with average interest rates of 1.3%, total repayments are estimated at \$4,788 million.¹⁰

Project name - Country (Income group)	Window (Year)	WB Project Financing Amount (Face value)	Total repayments at loan agreement	Total repayments at present rates
Fourth Disaster Risk Management Development Policy Loan with a Catastrophe deferred Drawdown Option - Philippines (LMIC)	IBRD (2021)	\$500m	\$620m	\$1,111m
Inclusive Connectivity and Development Project - Sri Lanka (LMIC)	IBRD (2021)	\$500m	\$758m	\$1,046m
Türkiye Earthquake, Floods and Wildfires Emergency Reconstruction Project - Turkey (UMIC)	IBRD (2022)	\$449m	\$692m	\$760m
Connecting Madagascar for an inclusive growth project - Madagascar (LDC)	IDA (2022)	\$400m	\$282m	\$282m
Enhancing Connectivity in the Northern and Central Agricultural Production Areas of Senegal - Senegal (LDC)	IDA (2022)	\$200m	\$222m	\$311m
Climate Resilience and Water Security in Angola-RECLIMA - Angola (LDC)	IBRD (2022)	\$300m	\$393m	\$426m
Livestock Productivity and Resilience Support Project - Nigeria (LMIC)	IDA (2022)	\$500m	\$682m	\$682m
Enabling a Green and Resilient Development DPF - Peru (UMIC)	IBRD (2022)	\$500m	\$606m	\$780m
Blue Economy Program for Results - Morocco (LMIC)	IBRD (2022)	\$350m	\$381m	\$528m
Shire Valley Transformation Program - Phase 2 - Malawi (LDC)	IDA (2022)	\$134m	\$152m	\$152m
IDA Total	IDA	\$1,234m	\$1,339m	\$1,428m
IBRD Total	IBRD	\$2,599m	\$3,449m	\$4,652m
Total		\$3,833m	\$4,788m	\$6,080m

Table 2 Face values and total repayments at loan agreement and present rates for the 10 included WB projects. Own calculations.

With current, higher average interest rates of 3.7%, however, this amount rises to \$6,080 million, showing the significant financial strain that rising global rates place on recipient countries.¹⁰

A closer look at World Bank repayments reveals significant differences between IBRD and IDA loans:

- **IBRD Repayments:** For the International Bank for Reconstruction and Development (IBRD), repayments were initially projected at \$3,449 million but have increased by 35% to \$4,652 million at current rates. This sharp rise is due to IBRD's flexible interest rates, which are sensitive to global financial shifts. Interest rates, which on average was 1.1% for the WB loans on average, have surged to 3.7% on average, significantly raising loan costs.
- **IDA Repayments:** The International Development Association (IDA), which offers more concessional financing, shows a smaller increase of 6.6% in total repayments, from \$1,338 million to \$1,427 million. Although IDA loans are more affordable, some still carry flexible rates, which can strain budgets in recipient countries as global rates rise.

Debt Challenges for Low-Income Countries

Rising debt burdens extend beyond World Bank projects, posing a severe challenge to achieving Sustainable Development Goals (SDGs).¹¹ According to the Overseas Development Institute (ODI), the poorest countries eligible for IDA financing saw their debt grow by 134% from 2012 to 2022 — almost triple the rate of their

economic growth. A recent World Bank report highlights that the 26 poorest countries are now more indebted than any time since 2006, leaving them increasingly vulnerable to natural disasters and economic shocks.¹²

Debt repayment obligations have surged, with a significant portion owed to private creditors and China, further limiting the fiscal resources of low- and lower-middle-income countries. Soaring global interest rates have only worsened this debt problem. Today, **nearly two-thirds of IDA-eligible countries (39 in total) are either in debt distress or at high risk of falling into it.**¹³ Although the G20's Debt Service Suspension Initiative (DSSI) provided temporary relief by postponing some repayments for a few countries, this pause has ended, renewing pressure on these countries' finances.¹¹

In 2024, IDA-eligible countries are expected to allocate 7.5% of their combined GDP to debt repayments - surpassing their spending on health, education, and infrastructure.¹¹ While IDA financing leverages capital market borrowing at low interest rates to mobilize \$3.5 per dollar contributed by partners, the leveraging still comes in the form of loans with debt repayments, diverting essential funds away from critical development needs in education, health and social sectors.¹⁴

The growing debt burden also severely limits these countries' ability to tackle climate change, as they are **repaying more than double what they receive in climate finance.** This hinders their capacity to pursue sustainable development and climate resilience.

¹¹ Watkins, K., Nwajiaku-Dahou, K. and Kovach, H. (2024), *Financing the fight against poverty and hunger – mobilising resources for a Sustainable Development Goal reset*. ODI Report. London: ODI

¹² Mawejje, J. (2024), *Fiscal Vulnerabilities in Low-Income Countries: Evolution, Drivers, and Policies*. Washington, DC: World Bank. License: Creative Commons Attribution CC BY 3.0 IGO

¹³ World Bank Group (2023), *International Debt Report 2023*. Washington DC: World Bank Group Report.

¹⁴ World Bank Group (2023) *Financing the future: IDA's Role in the Evolving Global Aid Architecture*.

With African leaders urging greater ambition, donors can commit to expanded funding for the IDA in December 2024, when the 21st replenishment (IDA21) will be announced for the coming three years.

Key Findings

- The total projected repayment for the 10 World Bank projects is \$4,788 million under original terms but rises by 27% to \$6,080 million at current rates, illustrating the growing financial strain of rising global interest rates.
- While IDA loans show a modest 6.6% increase in repayment costs due to concessional terms, from \$1,338 million to \$1,427 million, IBRD loans with flexible rates see a steep 35% rise, highlighting the pressure on low-income borrowers.

Recommendations

- **Increase IDA Funding:** Increased funding to IDA's concessional window can relieve debt stress for vulnerable countries, helping them fund crucial climate adaptation and resilience projects. The 21st IDA Replenishment Meeting hosted in South Korea in December 2024 offers an important opportunity to significantly increase funding to IDA's concessional window.
- **Promote Grant-Based Adaptation Funding for Vulnerable Nations:** Adaptation financing should ideally be provided as grants to poor and climate-vulnerable countries to avoid adding to their debt burden and rich countries responsible for historic emissions. However, if loans continue to be used for adaptation finance, highly concessional terms should be prioritized over non-concessional loans, as they offer a softer, more manageable financial burden for these countries, helping prevent further debt distress.

This briefing note was written by Rasmus Bo Sørensen and Hans Peter Dejgaard with contributions from David Oldcorn and Tallulah Cherry (INKA Consult), John Nordbo and Astrid Bang Therkildsen (CARE Denmark).

The views expressed in this publication are those of the authors and do not necessarily represent those of CARE International.

The study was commissioned by CARE Denmark.

Cover photo: Karin Schermbrucker/CARE, Zambia, 2020.