INNOVATIVE CLIMATE AND DISASTER RISK FINANCE SOLUTIONS

RESILIENCE BUILDING AND FISCAL STRENGTHENING

IDB

THE IDB

OUR MISSION

The Inter-American Development Bank (IDB) is devoted to improving lives. Established in 1959, the IDB is a leading source of long-term financing for economic, social and institutional development in Latin America and the Caribbean. The IDB also conducts cutting-edge research and provides policy advice, technical assistance and training to public and private sector clients throughout the region.

INTRODUCTION

- The Inter-American Development Bank **(IDB) offers a suite of innovative Climate and Disaster Risk Finance (CDRF) products and services** for borrowing member countries to strengthen resilience and fiscal sustainability.

- The Latin America and the Caribbean **(LAC) region is one of the most exposed and vulnerable to the effects of climate change and natural disasters**. These threats pose escalating risks to the ability of LAC countries to achieve the United Nations 2030 Sustainable Development Goals[1].

- To catalyze adaptation actions in the region, IDB has developed novel CDRF products and services that **empowers countries to proactively manage climate and disaster risks,** enhance financial preparedness, foster long-term economic and fiscal stability, and mobilize public and private sector resources for disaster risk management.

1: THE 17 GOALS - Sustainable Development - the United Nations.

WHY STRENGTHEN FINANCIAL MANAGEMENT OF CLIMATE AND DISASTER RISK?

- Since 1980, **natural disasters in LAC**, including those caused by climate extremes, **have affected around 7 million people**, on average, every year and caused average **annual economic losses of US$9.9 billion** in real terms.

- **The occurrence of natural disasters in the region has shown a clear upward trend** in recent decades, largely explained by increased climate-related hazards – tropical cyclones, severe floods, droughts, and wildfires (Figure 1a). Human and economic losses have also increased considerably in recent decades (Figure 1b).

- With global temperatures projected to rise further over the 21st century under all realistic emission scenarios, **the frequency, intensity, and duration of climate-related hazards are likely to increase further**. The occurrence of threats, in interaction with exposed and vulnerable human and natural systems, can result in catastrophic disasters that hinder the development of LAC countries.

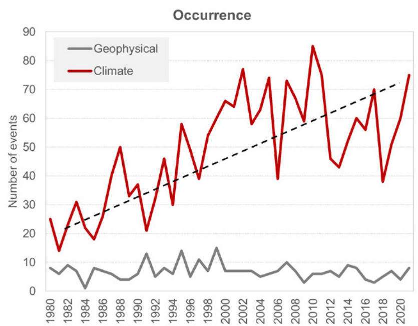


Figure 1 a

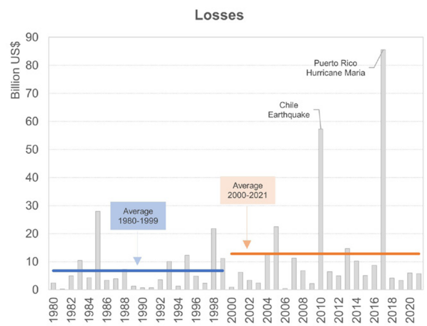


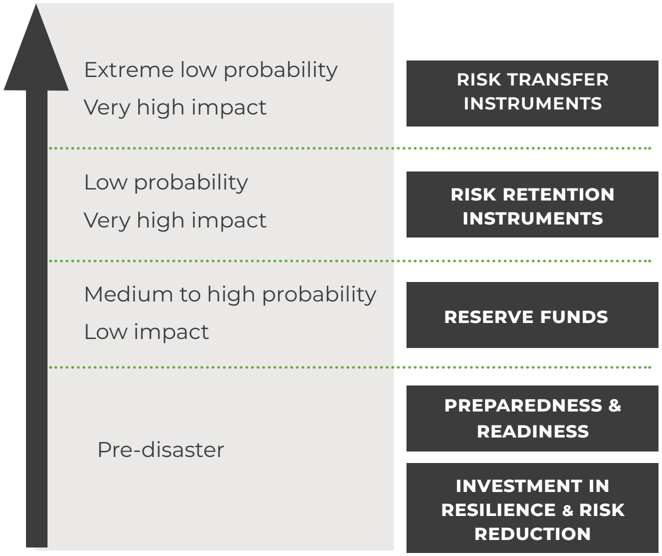
Figure 1 b

Source: Own calculations (losses in real terms adjusted by inflation) using data from The International Disaster Database (EM-DAT). Geophysical: earthquakes, volcanic activity; climate: tropical cyclones, floods, droughts, forest fires, extreme temperatures.

- The IDB follows a strategic approach that aims to **help LAC countries build financial resilience** to climate and disaster shocks, and to strike the right balance between reducing risks, transferring them, and managing the residual risks through financial instruments.

- The strategic approach is predicated on the basis that no single financial instrument can efficiently cover all layers of risks (probability of occurrence and expected losses). **An effective financial strategy should include a mix of financial instruments tailored to the country's climate and disaster risk profile and financing needs.** For instance, budgetary resources and reserve funds would be better suited to finance investments in prevention and mitigation, as well as to cover recurrent, lower loss events. For events with lower probability of occurrence but higher expected losses, contingent debt instruments, risk retention and risk-transfer instruments are usually more cost-effective options.

- Chart: Risk Layering Approach



IDB INNOVATIVE CLIMATE AND DISASTER RISK FINANCE PRODUCTS

RISK RETENTION

Contingent Credit Facility (CCF)

Climate Resilient Debt Clause

RISK TRANSFER

Through market transactions in the capital and/or insurance markets, tailored to client's needs.

RISK REDUCTION & INVESTMENT IN RESILIENCE

Investment Loans

Technical Assistance

IDB CONTINGENT CREDIT FACILITY (CCF) WHAT IS IT?

The Contingent Credit Facility for Natural Disaster and Public Health Emergencies (CCF) is **one of IDB's main ex-ante risk financing instruments to help borrowing member countries strengthen effective financial management of natural disaster and public health risks.**

The CCF's objective is to provide borrowing member countries significant amount of liquid resources following a natural disaster and public health event of severe to catastrophic proportions (eligible event) to help them provide humanitarian relief and restore basic services to the population. CCF loans can include two modalities of coverage:

- **Modality I** provides parametric coverages for natural disasters for up to US$300 million or 2% of GDP, whichever is less.
- **Modality II** provides non-parametric coverages for natural disasters and public health risks for up to US$100 million or 1% of GDP, whichever is less.

Proceeds from CCF Loans are exclusively used to cover extraordinary government expenditures incurred during 180-270 calendar days following the onset of an eligible event.

Innovation: The CCF offers state-of-the-art parametric coverages for natural disasters (e.g., earthquakes, hurricanes, floods, wildfires) tailored to LAC countries' needs and risk profile, complementing their existing risk retention and transfer instruments. These parametric coverages leverage remote sensing and geospatial data, as well as high-resolution satellite imageries provided by well-known scientific agencies such as USGS, NOAA, NASA and ESA.

CCF: VALUE PROPOSITION

01 **INNOVATIVE DESIGN**

Parametric triggers allow fast eligibility verification of events.

02 **FAST DISBURSEMENT**

Usually within 30 days after an eligibility verification request.

03 **COST EFFECTIVE COVERAGE**

No financial cost for the country if resources are not drawn

04 **LONG COVERAGE PERIOD**

5 years, renewable for another 5 years

05 **REPLENISHMENT OF RESOURCES**

Built-in mechanism to quickly replenish disbursed resources

06 **FLEXIBILITY**

No list of predetermined eligible expenses, rather based on needs for emergency response phase

CCF: FINANCIAL TERMS AND CONDITIONS

FINANCIAL TERMS AND CONDITIONS	IDB Flexible Financing Facility (FFF)
AMORTIZATION PERIOD	Max 25 years
GRACE PERIOD	Standard 5.5 years
WEIGHTED AVERAGE LIFE	Max 15.25 years
INTEREST RATE	SOFR + funding margin + lending spread
CREDIT FEE	None
UP-FRONT FEE	None
INSPECTION AND SUPERVISION FEE	Currently 0 bp
DRAWDOWN FEE	A one-time fee of 50 bps is charged only for the amount disbursed. No fee if Automatic Redirection List* is used

* The Automatic Redirection List (ARL) is a funding scheme that includes the Bank's current investment loans with the country, which could be automatically redirected should an eligible event occur.

CCF: PORTFOLIO

* **Group C:** Bahamas, Barbados, Costa Rica, Jamaica, Panama, Suriname, Trinidad and Tobago, and Uruguay
* **Group D1:** Belize, Dominican Republic, Ecuador, El Salvador, and Paraguay
* **Group D2:** Bolivia, Guyana, Honduras, Nicaragua, and Haiti

KEY MILESTONES

$3.7 billion

ex ante financial coverage through the CCF to improve resilience

15

borrowing member countries with coverage

$3.0 billion

of total coverage for small and vulnerable countries (Groups C and D)*

14 of 18

small and vulnerable borrowing member countries with coverage (Groups C and D)*

IDB'S CLIMATE RESILIENT DEBT CLAUSE WHAT IS IT?

IDB's climate-resilient debt clause, or debt pause clause, enables Borrowers to have a one-time option to defer principal repayments for two years following the occurrence of an eligible natural disaster and repay those amounts in future amortization installments. This clause is known in IDB loan contracts as the Principal Payment Option (PPO).

Principal payment deferrals are Weighted Average Life neutral and does not extend the loan's original maturity date. The deferment only applies to principal, the Borrower needs to keep making interest payments. It provides vital financial relief in a time of distress as the deferred payments allow the country to cover public expenses at its discretion.

The PPO is an option included in FFF IDB Loan Contracts since July 2021 including Investment and Policy-Based Loans. Countries with an active CCF that includes a parametric coverage are eligible to activate the PPO in FFF loans.

Innovation: IDB is the first Multilateral Bank to offer such clauses embedded in its loan contracts. IDB's climate-resilient debt clause uses the same state-of-the-art parametric coverage that was designed for CCF. In addition, the declaration of national emergency or equivalent is required to exercise the option.

Activation vs. Exercise: Countries may activate the PPO at loan signature or during the disbursement period up to 60 days prior to the original disbursement expiration date. The activation of the option gives the country the right to exercise the PPO (i.e., defer principal payments for two years) following the occurrence of an eligible natural disaster that meets the parametric conditions and for which the country has issue a declaration of emergency .

IDB'S CLIMATE RESILIENT DEBT CLAUSE: VALUE PROPOSITION

01

INNOVATIVE DESIGN

Pioneering debt management instrument that, while it enables principal payments to be deferred for 2 years, is not considered a debt restructuring tool and, therefore, does not adversely affect Countries' or IDB's creditworthiness.

02

DEBT SUSTAINABILITY

While vulnerable countries to climate change confront debt sustainability challenges, countries must make large investments in adaptation and resilience, as well as investments to recover from disasters. IDB's climate resilient debt clause is designed to support debt sustainability efforts.

03

EFFICIENT WAY TO FINANCE UNEXPECTED EXPENDITURES

Alternative mechanism to free up fiscal space by temporarily reallocating cash that would otherwise be used for repaying debt without the social burden of budget reallocations, or the need to issue new debt.

04

SCALABILITY

Countries may activate the option in several loans in their loan portfolio with the Bank to achieve their desired level of principal payment deferrals (coverage). Moreover, as long as loans are approaching maturity and new loans are provided by the Bank, countries could replenish the pool of loans for which the option is active by activating the option in new loans to keep the desire level of protection stable during the years.

05

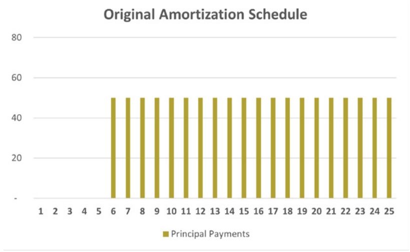
FLEXIBLE ACTIVATION

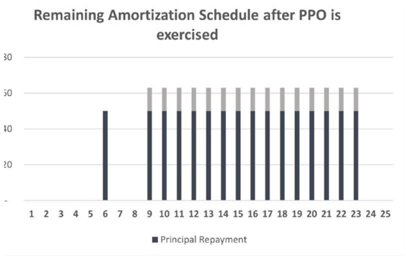
Since parametric triggers were already developed for the CCF, activation of the option in FFF loans can be done effortlessly at any point in time (from loan signature up to 60 days prior to the loan's original disbursement expiration date). This highlights the advantage of IDB's Integrated Climate and Disaster Risk Finance Approach.

EXAMPLES OF AMORTIZATION SCHEDULES PRIOR AND AFTER THE EXERCISE OF THE OPTION:

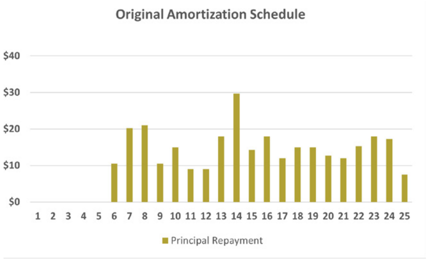
Assumption: Event occurs at the end of year 6, and therefore no principal payments are required in years 7 and 8.

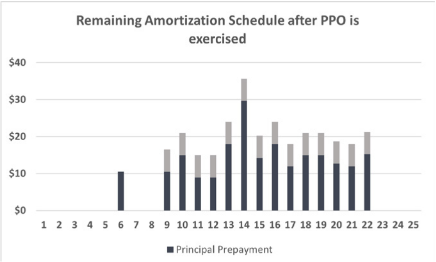
I) Straight-line amortization schedule





II) Irregular original amortization schedule





IDB'S CLIMATE RESILIENT DEBT CLAUSE: FINANCIAL TERMS AND CONDITIONS

FEES	5 bps annually calculated on the outstanding loan balance
FEE ACCRUAL PERIOD = EXERCISE PERIOD	The fee accrual period is the same as the exercise period (i.e.: the period during which the option to deferral principal can be exercised if an eligible natural disaster occurs). The fee starts to accrue 12 months prior to the first amortization date, or 60 days prior to the expiration of the Original Disbursement Period (whichever occurs later), and up to 5 years before the maturity date, or until an eligible natural disaster occurs - whichever occurs first. Since the accrual period coincides with the exercise period, no additional fees will be incurred by activating the PPO at loan signature vs. activating it later during the disbursement period.

IDB'S CLIMATE RESILIENT DEBT CLAUSE: PORTFOLIO AS OF FEB 29, 2024

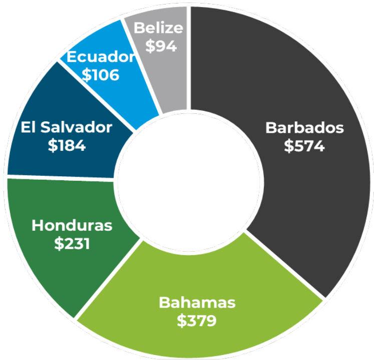
6

OF COUNTRIES THAT HAVE ACTIVATED THE PPO CLAUSES

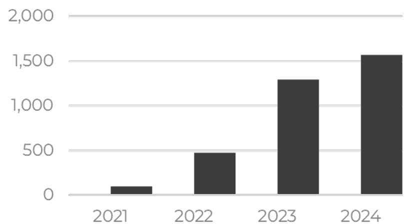
$1.6 BILLION

APPROVED AMOUNTS OF FFF LOANS THAT HAVE THE PPO ACTIVATED

ACTIVATIONS IN MILLION BY COUNTRY IN USD MILLION



AGGREGATE AMOUNT OF ACTIVATIONS IN USD MILLION[1]



1 Data presented reflects figures in USD millions and covers the period from 2021 to February 29, 2024

KEY MILESTONES

IDB RISK TRANSFER PRODUCTS

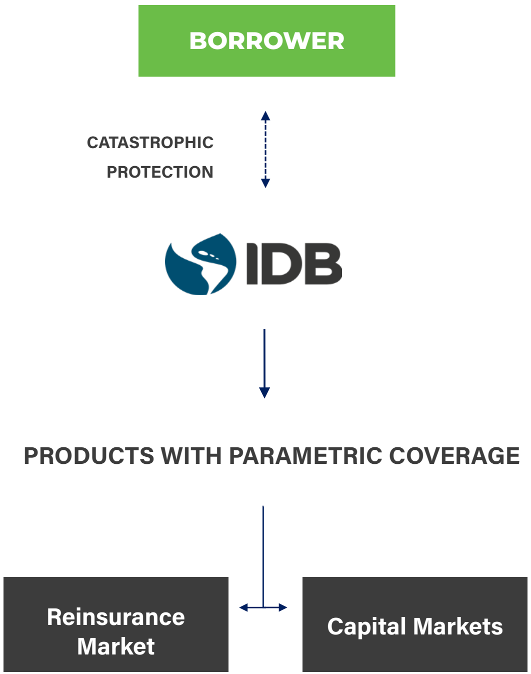
WHAT IS IT?

Through market transactions executed by the IDB, Borrowers can transfer away catastrophe risk to the capital and or insurance markets.

Designed to hedge against Catastrophic events with low probability of occurrence but high economic impact.

If an event triggers the parametric coverage, payment will be made to the country. In exchange, the country pays the cost of protection to the IDB.

Premium based on targeted layers of risks, and coverage period determined by country's preference, plus transaction costs to be determined depending on the market instrument to be used.



IDB RISK TRANSFER PRODUCTS: VALUE PROPOSITION

01

EFFICIENT STRUCTURING

Amount, duration, risks and parametric triggers of the coverage are tailored according to the needs of the country and its risk profile.

02

FAST PAYOUT

Parametric coverage ensures fast payout. Payment after a qualifying catastrophe is validated.

03

HOLISTIC COVERAGE APPROACH

Complements the menu of coverage with other products offered by IDB, which can be tailored made to the specifics needs of the client to manage low probability but high impact natural disasters.

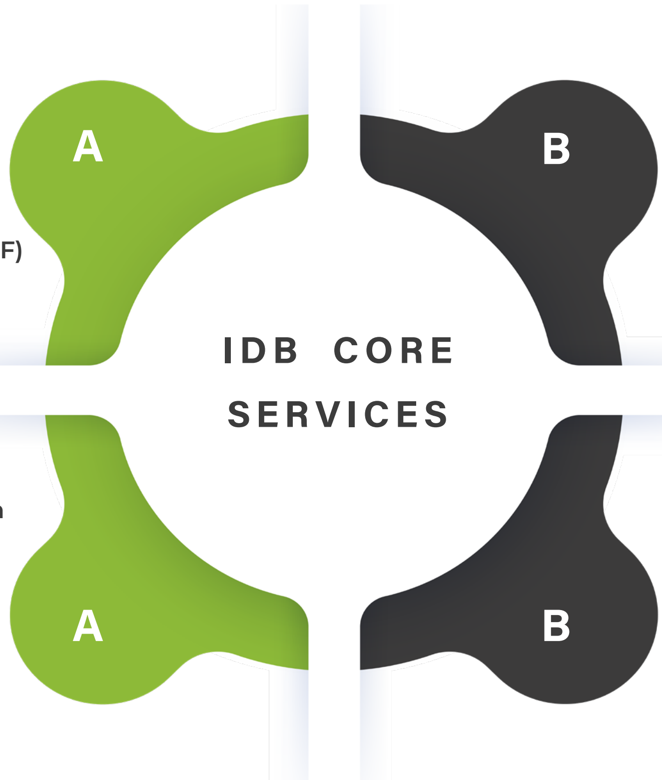
IDB RISK TRANSFER PRODUCTS: FINANCIAL TERMS AND CONDITIONS

COST	Cost = Premium (dependent on market conditions, the requested level and coverage period) + Third party costs (legal counsel, calculation agent, and the modeling, etc.) + IDB fee (10pbs approx.). Premium is paid pro rated at the beginning or during the life of the coverage as a fees or as part of the lending rate of the loan maintained with the IDB.

A. INSTITUTIONAL CAPACITY BUILDING

1. Assist governments in development and adoption of holistic climate and disaster risk financing (CDRF) strategies.

2. Provide technical support in implementation of country specific CDRF programs.



B. END-TO-END SUPPORT IN PRODUCT DESIGN AND TRANSACTION EXECUTION

1. Advisory

- Develop technical inputs necessary for customized CDRF solutions (e.g., understanding of country's risk profile).
- Evaluate different CDRF options and help governments make informed decisions.
- Prepare and support governments with key decisions regarding the technical, financial and legal aspects of a CDRF transaction.

2. Execution

- Provide competitive market-based solutions to governments.
- Streamline the process of executing a CDRF transaction.
- Act as a trusted partner to engage with insurance and ILS markets.

OVERVIEW OF INTEGRATED FINANCE SOLUTIONS

	CONTINGENT CREDIT FACILITY FOR NATURAL DISASTER AND PUBLIC HEALTH EMERGENCIES (CCF)	CLIMATE RESILIENT DEBT CLAUSE (PRINCIPAL PAYMENT OPTION - PPO)	CATASTROPHIC PROTECTION
INSTRUMENT TYPE	Risk retention	Risk retention	Risk transfer
COVERAGE OBJECTIVE	Immediate financial resources availability after a natural disaster happens to respond to an emergency.	Defer principal repayments on IDB loans for 2 years following an eligible natural disaster.	Non-reimbursable cash payments from the Bank to the borrower upon the occurrence of an eligible event.
COVERAGE LEVEL	High impact events	High impact events, greater than CCF.	High impact-catastrophic events, greater than CCF, and PPO options.
TRIGGERS	Parametric Coverage - The greater the impact of a natural disaster, the greater the resources available.	Parametric - binary type (yes / no compliance) Non-Parametric – Declared a national emergency (or equivalent) .	Parametric Coverage - Flexible, structured on a case-by-case basis depending on the client's needs and risk profile.
COSTS	Disbursed amounts have the same cost as FFF loans. Disbursement Fee: 50 bps on the disbursed amount. No cost if there are no disbursements.	5 bps per year on the outstanding loan balance, starting 12 months prior to the first amortization date, or 60 days prior to the expiration of the Original Disbursement Period (whichever occurs later), and up to 5 years before the maturity date, or until an eligible natural disaster occurs - whichever occurs first.	Cost = Premium (dependent on market conditions, the requested level and coverage period) + Third party costs (legal counsel, calculation agent, and the modeling, etc.) + IDB fee (10pbs approx.). Premium is paid pro rated at the beginning or during the life of the coverage as a fee or as part of the lending rate of the loan maintained with the IDB.

Authors: IDB

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