An aerial photograph of a city, likely Rio de Janeiro, showing a dense urban area with a mix of low-rise and high-rise buildings. A multi-lane highway with a bridge section runs through the middle of the city. In the background, there are lush green mountains under a blue sky with scattered white clouds. The title text is overlaid on the left side of the image.

PUBLIC DEBT AND RESILIENT FUTURES IN LATIN AMERICA AND THE CARIBBEAN

ULRICH VOLZ
MARIA FERNANDA ESPINOSA
AND ALEX DRYDEN



**DEBT RELIEF FOR A GREEN &
INCLUSIVE RECOVERY**

ABOUT

The mission of the Debt Relief for Green and Inclusive Recovery (DRGR) Project is to utilize rigorous, policy-oriented research to advance innovative solutions to address the challenges of 21st century sovereign debt crises.

Taking a holistic approach, the DRGR Project engages with policymakers, thought leaders and civil society to further ambitious, evidence-based policy dialogue for sustainable development around the world. The DRGR Project has been designed since its inception with input from stakeholders in the Global South, and to advance its policy recommendations through a development-centered lens.

The Boston University Global Development Policy Center, Heinrich-Böll-Stiftung, and the Centre for Sustainable Finance at SOAS, University of London founded the DRGR Project in 2020 during the height of the COVID-19 pandemic. Heinrich-Böll-Stiftung and the Centre for Sustainable Finance at SOAS, University of London remain active contributors. The DRGR Project focuses on the linkages between sovereign debt distress and climate change, advancing pioneering proposals to unlock finance for sustainable development and to achieve shared climate and development goals.

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KEY MESSAGES

- The region of Latin America and Caribbean (LAC) faces a triple challenge of high debt burdens, intensifying climate shocks, and stalled progress towards the Sustainable Development Goals (SDGs). Average gross public debt has reached 70 per cent of gross domestic product (GDP), with external obligations surpassing US\$1 trillion in 2023. In several countries, debt servicing now exceeds spending on health or education, crowding out critical social and climate investments.
- Rising borrowing costs, sharp currency depreciations, and repeated climate disasters are compounding fiscal stress. Average sovereign bond yields across the region now exceed 10 per cent. Caribbean small island developing states (SIDS) are especially vulnerable, with some disasters causing damages of more than 100 per cent of GDP.
- These dynamics risk locking countries into a vicious cycle in which debt distress limits climate and development investment, which in turn heightens vulnerability to future shocks. A regional heatmap of debt, climate, and SDG performance shows that 20 countries – representing 81 per cent of GDP in LAC – face high composite risk.
- Governments in LAC have pioneered innovative debt instruments to build fiscal resilience. Debt-for-nature swaps have re-emerged, with Belize, Barbados, Ecuador, and the Bahamas executing large-scale transactions since 2021. Caribbean states have also led in adopting “disaster pause” clauses, which temporarily suspend debt service after natural disasters. These innovations provide useful relief but face high transaction costs, complex structures, and political sensitivities, limiting their broader adoption.
- To break the cycle of vulnerability, a reformed debt and climate finance architecture is urgently needed. Current debt sustainability analyses fail to sufficiently incorporate climate risks or the investment needs for achieving the SDGs. A new framework should integrate these dimensions to distinguish between countries that need deep restructuring and relief and those that require liquidity support.

- A two-pillar approach is essential: (i) Distressed economies require substantial debt restructuring across all creditor classes, coupled with concessional finance to support climate action and social programmes; (ii) solvent but liquidity-constrained economies need lower borrowing costs through credit enhancements, concessional lending, Special Drawing Rights, and broader uptake of climate-linked instruments.
- Without proactively tackling sovereign debt challenges, the region risks a lost decade marked by repeated crises, fiscal instability, and development setbacks. With coordinated international action, however, LAC can secure fiscal resilience, scale up climate adaptation, and chart a sustainable and inclusive growth pathway.

1. INTRODUCTION

Mounting debt, worsening climate impacts, and faltering progress towards development goals are placing Latin America and the Caribbean (LAC) under increasing economic and fiscal pressure.¹ Debt levels across the region have risen sharply since the global financial crisis, with external obligations surpassing US\$1 trillion in 2023 and average gross debt reaching 70 per cent of gross domestic product (GDP) (IMF, 2024). Several countries, including Argentina, Ecuador, and Suriname, have undergone sovereign defaults or restructurings in the last five years, while others, such as Colombia and Brazil, are facing rising borrowing costs and growing investor concern.

At the same time, the region of LAC is increasingly exposed to the adverse effects of climate change. The Caribbean is highly vulnerable to hurricanes, sea-level rise, and coastal erosion; Central America faces recurring floods and droughts; and parts of South America, including the Amazon basin, are experiencing intensifying ecosystem stress due to shifting climate patterns (IPCC, 2023). LAC is the second most disaster-prone region in the world, with disasters causing more than US\$110 billion in damages between 2000 and 2022, disproportionately affecting low-income and small island developing states (SIDS) with limited fiscal buffers (UNDRR, 2022).

Meeting the region's climate and development goals will require substantial investment. The Inter-American Development Bank (IDB) estimates that, in order to align with the Paris Agreement, LAC must invest between 1.5 per cent and 5 per cent of GDP annually in climate adaptation and mitigation measures by 2030 (Watson and Schalteck, 2021; IDB, 2022). Yet, these needs arise at a time when debt servicing already consumes significant shares of government revenue, limiting the capacity of many countries in LAC to invest in resilience or essential public services. The debt burden is especially acute in Caribbean SIDS, where several governments spend more on debt service than on health or education (UNCTAD, 2025).

Far from being passive recipients, these countries have demonstrated agency by advancing locally driven solutions in climate resilience, sustainable development, and innovative finance (Espinosa Garcés, 2025). Leaders

1 This paper covers 33 countries in Latin America and the Caribbean, including: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, and Venezuela.

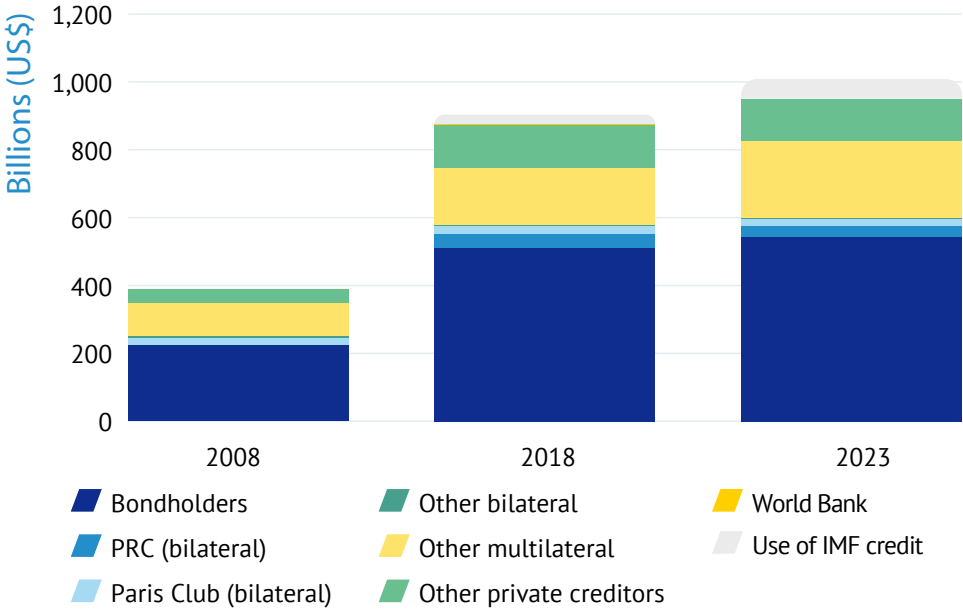
of LAC have sought to highlight the debt–climate trap and advance concrete proposals to address it. Prime Minister Mia Mottley of Barbados has been at the forefront, with the Bridgetown Initiative setting out an ambitious reform agenda for the international financial architecture, while Barbados has also pioneered the use of hurricane and disaster clauses in sovereign bonds (see [Section 4](#)). Colombia, in partnership with Kenya, France, and Germany, has initiated the Expert Review on Debt, Nature and Climate, which advances proposals for integrating environmental and climate risks into debt sustainability analyses. Meanwhile, the Alliance of Small Island States (AOSIS) has championed the creation of a SIDS Debt Sustainability Support Service, now slated for operationalisation and recognised in the outcome document of the Fourth International Conference on Financing for Development. Together, these initiatives illustrate how governments in LAC and regional coalitions have helped to drive a broader shift in thinking about sovereign debt management, highlighting the need for solutions that link fiscal resilience with climate and development goals.

This paper examines the interlinked challenges of debt, climate change, and development across the region. [Section 2](#) analyses the region's deteriorating debt dynamics and the growing climate and development risks. [Section 3](#) discusses the specific climate risks that are most acute to the region. [Section 4](#) highlights the use of debt instruments that have been primarily deployed by the nations of LAC and outlines some of the barriers to their broader adoption across the region. [Section 5](#) sets out the need for coordinated efforts to address sovereign debt challenges, including, where necessary, the provision of substantial debt relief as a foundation for sustainable growth and climate resilience. [Section 6](#) concludes.

2. DEBT AND DEVELOPMENT CHALLENGES IN LATIN AMERICA AND THE CARIBBEAN

This region is facing a troubling debt outlook that is leading to an inability to tackle the mounting costs of climate change and its development goals. As seen in [Figure 1](#), external debt levels throughout the region have risen by 158 per cent over the past 15 years. This increase is most notable among the Caribbean SIDS, which have experienced the most extreme increase, with their external debt stock nearly tripling, rising 171 per cent from US\$20 billion in 2008 to US\$54 billion in 2023. A similar trend can be seen across the region, with external public debt rising by 143 per cent in Central America and 169 per cent in South America between 2008 and 2023.

Figure 1: The public external debt composition (in US\$ billions) by creditor type for Latin America and the Caribbean, 2008–2023



Note: Includes data from 23 Latin American and Caribbean nations. The World Bank Group comprises the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA). PRC stands for “People’s Republic of China”.

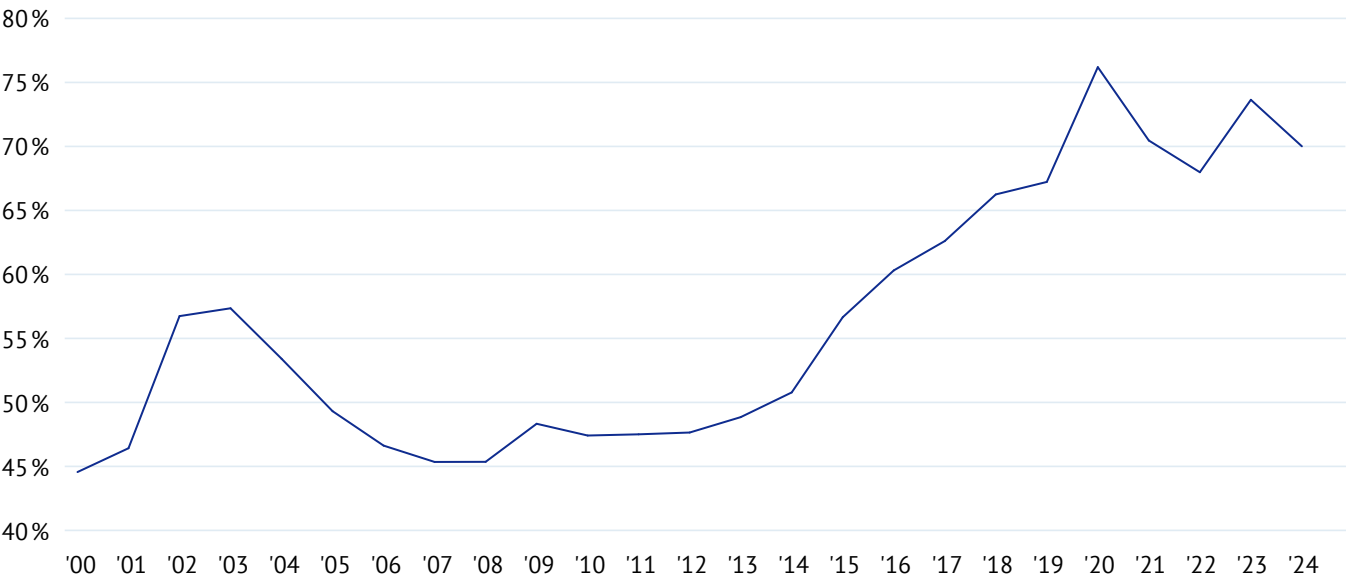
Source: Compiled by authors using World Bank (2024).

Debt owed to private bondholders rose sharply, from US\$222 billion in 2008 to US\$543 billion in 2023. The increase was especially pronounced in the Caribbean and Central America, where the stock of private bondholder debt grew more than seven times and nearly tripled, respectively, over this period. This increasing reliance on international capital markets can become

a challenge for fiscal policymakers, as rollover risk, currency fluctuations, and abrupt changes in international borrowing costs can cause significant challenges, particularly for climate-vulnerable nations (Dryden and Volz, 2025a, 2025b; Dryden et al., 2025).

Both external and domestic debt burdens have increased in the region, as reflected by the rise in gross debt-to-GDP ratios among the economies in LAC. [Figure 2](#) shows that the average gross debt-to-GDP ratio of nations in the region has risen from 45 per cent in 2008 to nearly 70 per cent in 2024, only slightly below its record high of 76 per cent in 2020. Although Venezuela – with a debt-to-GDP ratio of 164 per cent – might be a special case due to the political crisis there, it has also risen to alarming levels in several regional economies, including Barbados (103 per cent), Dominica (101 per cent), Bolivia (95 per cent), and St Vincent and the Grenadines (93 per cent).

Figure 2: Gross debt-to-GDP ratio for Latin America and the Caribbean



Source: Compiled by authors with data from the IMF (2025).

The rising stock of debt is placing growing pressure on government budgets in the Latin American and Caribbean region, but it is not just the volume that matters – the cost of servicing that debt has also surged. As major central banks raised interest rates to combat post-COVID inflation, borrowing costs for the region have soared. [Figure 3](#) shows that average yields on Latin American sovereign US dollar bonds have increased by 450 basis points since 2019 and now exceed 10 per cent across the region.

Figure 3: Average yield of Latin American US\$ Government Bond Index*



Note: *Index is the Markit iBoxx Latin America US\$ Unhedged Index.
Source: Compiled by the authors with data from iBoxx (n.d.) and Eikon.

In addition to rising borrowing costs, the region has experienced prolonged depreciation of domestic currencies against the US dollar. [Figure 4](#) illustrates the performance of an equal-weighted index of Latin American and Caribbean currencies and shows an average depreciation of 53 per cent since 2005. Not only crisis-stricken Haiti, but also Suriname, Brazil, Mexico, Colombia, Dominica, and Jamaica have seen currency losses of more than 75 per cent. These sustained depreciations have significantly increased the cost of servicing external debt, especially when large principal repayments are denominated in a foreign currency.

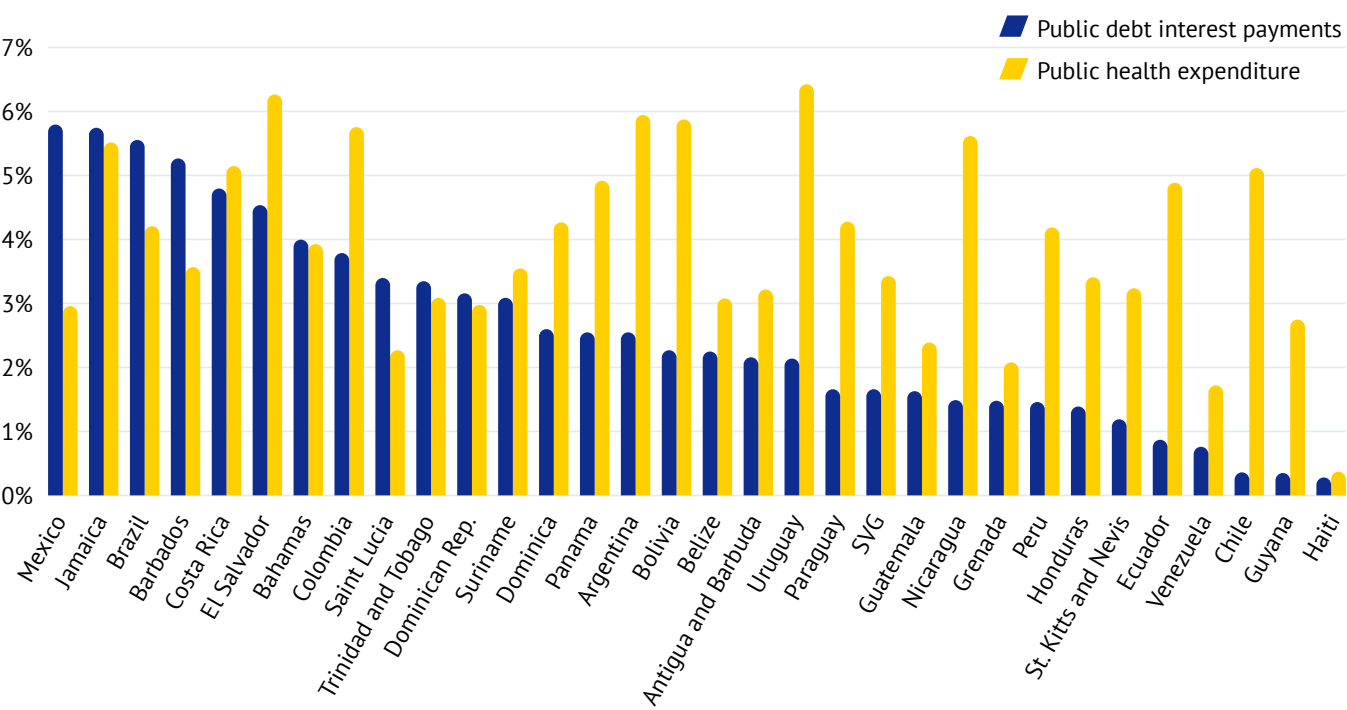
Figure 4: Equal-weighted currency index of Latin American and Caribbean currencies



Source: Authors' calculations based on weekly exchange rate fluctuations vs US dollar for the following countries in LAC: Brazilian real (BRL), Mexican peso (MXN), Chilean peso (CLP), Colombian peso (COP), Uruguayan peso (UYU), Peruvian sol (PEN), Costa Rica colon (CRC), Paraguay guarani (PYG), Dominican Republic peso (DOP), Jamaica dollar (JMD), Haiti gourde (HTG), Trinidad and Tobago dollar (TTD), Suriname dollar (SRD), Guatemala quetzal (GTQ).

High levels of indebtedness have placed a significant burden on fiscal finances, as debt servicing has crowded out spending on other vital services such as health care and education. [Figure 5](#) shows that eight nations in the region spend more on debt servicing than on public health expenditure, with Mexico, Jamaica, Saint Lucia, Barbados, and Brazil being notable examples of this trend.

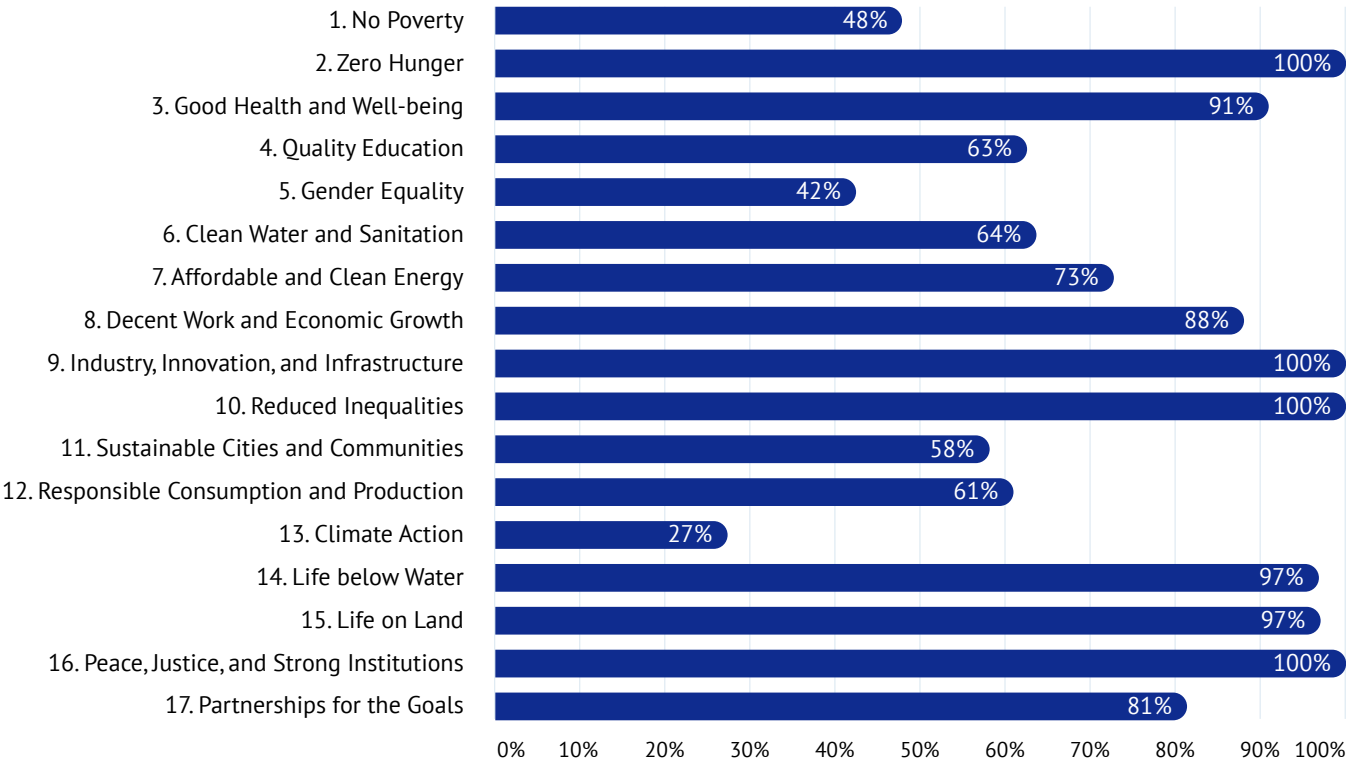
Figure 5: Health expenditure and interest repayments in LAC as a percentage of GDP (annual average for 2021–2023)



Source: Compiled by authors with data from UNCTAD (2024).

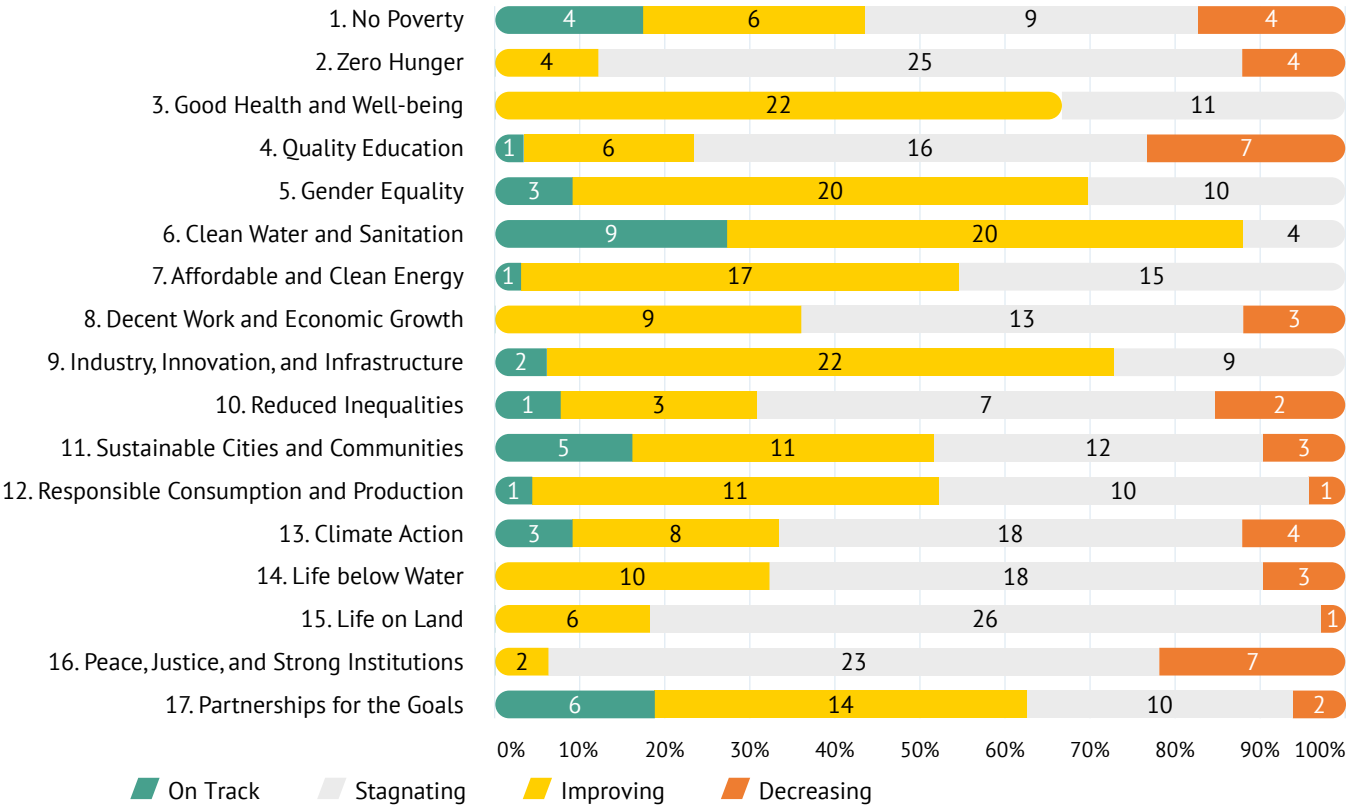
The high levels of debt and debt servicing obligations across the region have constrained the fiscal space available to invest in the Sustainable Development Goals (SDGs) or respond effectively to climate and development challenges. As shown in [Figure 6](#), more than half of the economies in LAC are facing major or significant challenges in achieving 14 of the 17 SDGs – with 100 per cent of these economies struggling with targets on zero hunger, reduced inequalities, and fostering strong institutions (Sachs et al., 2025). Progress remains limited: More than 55 per cent of country-goal observations are either stagnating or regressing, while only 7 per cent are currently on track, as [Figure 7](#) shows. These trends suggest that the region is not just off-course but falling further behind in many areas, especially in goals related to institutional capacity, environmental sustainability, and inclusive development.

Figure 6: Percentage of economies in LAC with major or significant challenges remaining in achieving the SDGs



Source: Compiled by the authors with data from Sachs et al. (2025) and SDG Index & Dashboards (2025).

Figure 7: Progress of the Latin American and Caribbean region towards achieving the SDGs (%)



Note: The white numbers denote the number of countries per category. The numbers may not total 35 countries due to non-applicable SDGs being excluded from the tally.

Source: Compiled by authors with data from Sachs et al. (2025) and SDG Index & Dashboards (2025).

3. CLIMATE VULNERABILITY AND THE RISK OF A VICIOUS CIRCLE

A high and growing debt burden places the Latin American and Caribbean region in a challenging position. The inability to easily raise fresh capital at sustainable interest rates makes it increasingly difficult to invest in climate resiliency or to help the region meet its sustainability goals. The region is the second most vulnerable area globally to the mounting risks from climate change, after sub-Saharan Africa (Monsalve, 2025). Seventy-four per cent of the economies in LAC are highly vulnerable to extreme weather events, making it the second most exposed region in the world behind only Asia (FAO, 2025; Volz et al., 2025). The social spending and infrastructure investment required to achieve climate adaptation and decarbonisation goals by 2030 will require US\$470 billion to US\$1.3 trillion annually, equivalent to 7-19 per cent of the region's GDP (Galindo et al., 2022).

Caribbean SIDS face particularly pronounced vulnerability. Despite contributing less than 1 per cent of global greenhouse gas emissions, their geographic isolation, narrow economic bases, and high dependence on climate-sensitive sectors such as tourism and fisheries means that they are disproportionately affected by both sudden-onset disasters and slow-onset events such as sea-level rise (Hurley et al., 2024).

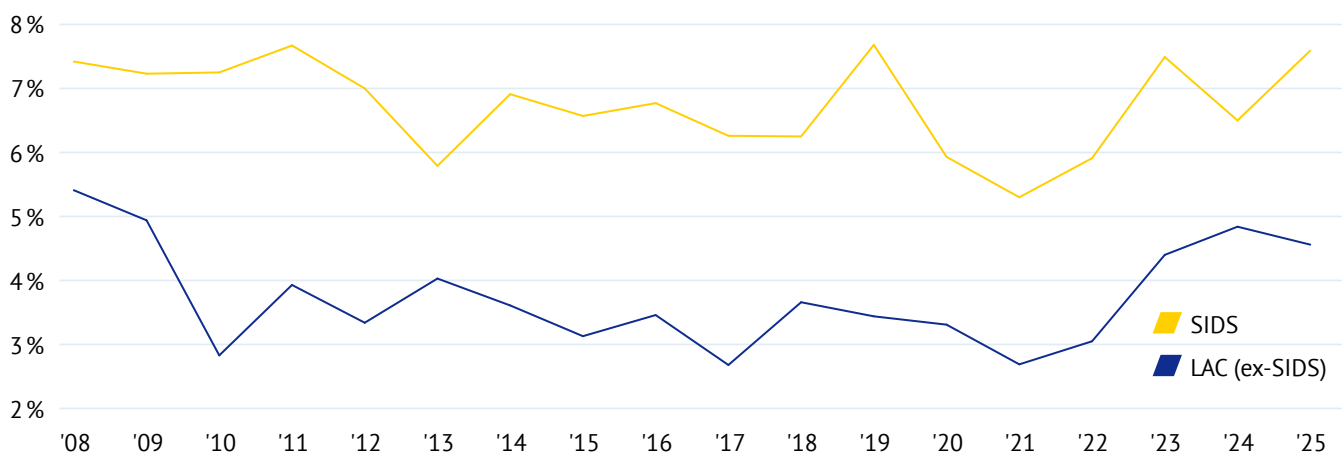
Evidence shows that climate-related shocks have intensified in both frequency and severity since 2010, with disaster-related damages in some SIDS exceeding 200 per cent of GDP, as in Dominica (Hurricane Maria, 2017) and Grenada (Hurricane Ivan, 2004) (Table 1). These events erode physical capital, disrupt livelihoods, and trigger costly recovery and reconstruction efforts, often financed through borrowing. Because these countries lack access to sufficient concessional finance, particularly middle- and high-income SIDS, the gap is frequently filled by expensive commercial debt, raising debt servicing costs well above the global average (Hurley et al., 2025). As Figure 8 demonstrates, the coupon on US dollar-denominated debt for the Latin American and Caribbean SIDS has consistently been above the broader regional average. In addition, the coupon for dollar-denominated debt has risen to its highest level since 2014, with the Bahamas and Barbados being charged coupons of 8 per cent or higher to raise debt in dollars.

Table 1: The 20 most damaging natural disasters in the Caribbean, 1990–2024

Country	Year	Type	Name	Damage (% of GDP)
Dominica	2017	Storm	Hurricane Maria	269.1
Grenada	2004	Storm	Hurricane Ivan	164.6
Saint Kitts and Nevis	1998	Storm	Hurricane Georges	114.0
Dominica	2015	Storm	Tropical Storm Erika	96.9
Haiti	2010	Earthquake	-	120.0
Saint Kitts and Nevis	1995	Storm	Hurricane Luis	72.4
Dominica	1995	Storm	Hurricane Marilyn	71.1
Antigua and Barbuda	1995	Storm	Hurricane Luis	61.8
Saint Vincent and the Grenadines	2021	Volcanic activity	-	37.6
Grenada	2024	Storm	Hurricane Beryl	34.9
Bahamas	2019	Storm	Tropical Storm Dorian	26.9
Antigua and Barbuda	2017	Storm	Hurricane Irma	17.4
Saint Vincent and the Grenadines	2013	Flood	-	14.9
Antigua and Barbuda	1998	Storm	Hurricane Georges	14.7
Haiti	2016	Storm	Hurricane Matthew	13.2
Saint Kitts and Nevis	1999	Storm	Hurricane Lenny	11.3
Bahamas	2004	Storm	Hurricane Frances	11.3
Haiti	2021	Earthquake	-	11.0
Dominican Republic	1998	Storm	Hurricane Georges	10.9
Dominica	1995	Storm	Hurricane Luis	8.1

Source: Compiled by authors with data from EM-DAT (n.d.).

Figure 8: Average coupon for US dollar-denominated debt in the Caribbean SIDS versus the broader Latin American and Caribbean region



Note: Data reflect simple average of dollar-issued debt per annum across each regional grouping.

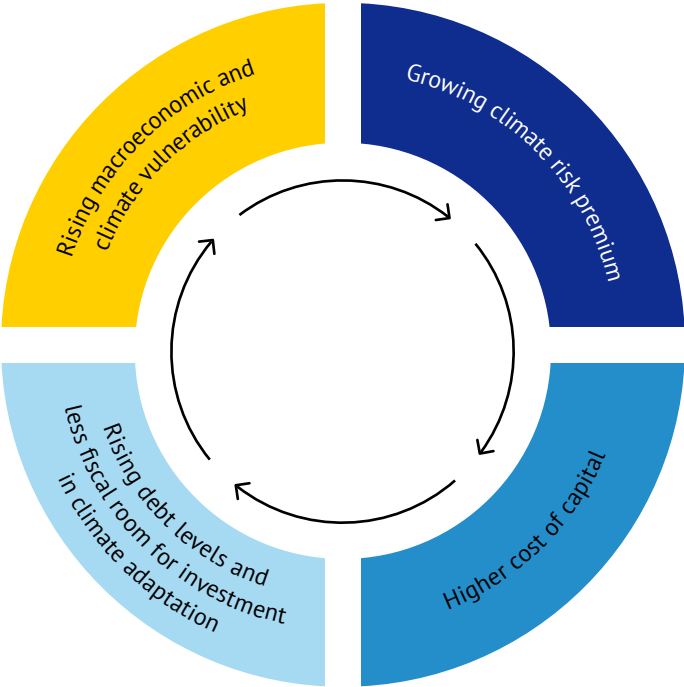
Source: Authors' calculation using Eikon data.

This dynamic creates a vicious cycle: Climate disasters increase public debt; high debt burdens and the higher cost of capital constrain fiscal space; and underinvestment in resilience leaves countries more exposed to future shocks (Figure 9) (Kling et al., 2025; Volz, 2018). In many cases, debt trajectories appear to improve temporarily before abruptly reversing with new climate events, locking SIDS into a pattern of “recovery then reversal” (Hurley et al., 2025).

However, the twin challenges of climate change and heavy debt burdens that regional SIDS have been confronting are also applicable to the broader Latin American and Caribbean region. To provide a macro perspective on the debt–climate situation across the region and in the countries that are facing the greatest strain, we construct a composite assessment along four dimensions: debt-to-GDP ratio, interest payments as a share of government revenue, climate vulnerability, and progress towards the SDGs. Each country is scored based on thresholds of fiscal and environmental stress, with a heatmap summarising the extent of exposure, as illustrated in Table 2. The results show that 20 countries in the region – representing 81 per cent of regional GDP – have a “high” composite risk score when assessed via the four dimensions of debt-to-GDP ratio, interest payments, climate vulnerability, and progress towards the SDGs. Caribbean SIDS look particularly vulnerable, with 10 island nations having concerning high debt burdens coupled with moderate or high climate vulnerability risks. Guyana stands out as the only country in the region with a relatively low and affordable debt burden, while also making steady progress towards its SDG commitments. Haiti and Venezuela are notable anomalies, as seen in Table 2. Both countries face severe challenges – for Haiti these are extreme climate vulnerability and weak institutional capacity, whereas Venezuela is contending with prolonged default and political isolation – yet their composite scores register only as “moderate”, which largely reflects the gaps and inconsistencies in the available data.

This framing offers a useful lens for identifying those countries that are most in need of targeted debt relief and concessional climate finance. Still, it cannot replace a strengthened debt sustainability analysis that explicitly integrates climate risks and SDG-related expenditure needs (Zucker-Marques et al., 2024a, 2024b).

Figure 9: The vicious cycle of climate vulnerability, debt, and underdevelopment



Source: Adapted from Volz (2018, 2025).

Table 2: Debt and climate heatmap for LAC

Country	Debt/GDP (%)	Interest/Govt Expenditure (%)	SDG Progress (Percentage of SDGs that are Stagnant or Declining)	Climate Vulnerability	Composite Risk
Antigua and Barbuda	67	12.0	46	0.47	High
Argentina	85	7.3	59	0.38	High
Bahamas	78	18.4	53	0.46	High
Barbados	103	20.9	46	0.37	High
Belize	61	20.4	50	0.47	High
Bolivia	95	-	38	0.45	High
Brazil	87	24.1	47	0.37	High
Chile	42	4.3	53	0.33	Moderate
Colombia	61	13.2	56	0.41	High
Costa Rica	60	16.7	53	0.38	High
Cuba	-	-	50	0.44	High
Dominica	101	7.9	64	0.44	High
Dominican Republic	59	17.5	65	0.43	High
Ecuador	55	-	47	0.46	Moderate
El Salvador	88	14.1	65	0.43	High
Grenada	73	13.1	83	0.38	High
Guatemala	26	12	81	0.43	Moderate
Guyana	24	3.3	21	0.43	Low
Haiti	15	-	73	0.51	Moderate
Honduras	43	-	69	0.45	High
Jamaica	69	14.1	81	0.42	High
Mexico	58	15.8	59	0.39	High
Nicaragua	39	9.2	67	0.45	Moderate
Panama	57	6.3	47	0.41	Moderate
Paraguay	45	8.8	56	0.37	Moderate
Peru	33	12.4	29	0.41	Moderate
St Kitts and Nevis	52	3.4	54	-	Moderate
St Lucia	74	17.2	57	0.38	High
SVG	93	11.8	46	0.43	High
Suriname	87	12.7	64	0.40	High
Trinidad and Tobago	64	-	62	0.37	Moderate
Uruguay	69	6.4	35	0.37	Moderate
Venezuela	164	-	44	0.37	Moderate

Note: The composite risk assessment is based on four indicators: (1) gross public debt-to-GDP ratio; (2) interest payments as a percentage of government revenue; (3) the proportion of SDGs showing stagnation or regression; and (4) climate vulnerability as measured by the ND-GAIN index. Each indicator is scored as follows: 1 point for high risk, 0.5 for moderate risk, and 0 for low risk. The thresholds used are: debt-to-GDP ratio: high risk > 70 per cent, moderate 40–69 per cent, low < 40 per cent; interest/government revenue: high risk > 10 per cent, moderate 5–9.9 per cent, low < 5 per cent; SDG stagnation: high risk > 50 per cent, moderate 30–50 per cent, low < 30 per cent; climate vulnerability: high for ND-GAIN > 0.45, moderate for 0.33–0.45, low for < 0.33; a country's composite risk classification is: high (total score 4–5), moderate (2–3), or low (< 2). *SDG indicator is the proportion of SDGs that are either “stagnating” or “declining”.

Source: Authors' calculations using data from IMF (2025); SDG data from Sachs et al. (2025), and SDG Index & Dashboards (2025); ND-GAIN = Notre Dame Global Adaptation Initiative.

4. ASSESSING THE FISCAL RESILIENCY OF LATIN AMERICA AND THE CARIBBEAN: THE ADOPTION OF A MORE SHOCK-RESPONSIVE DEBT ARCHITECTURE

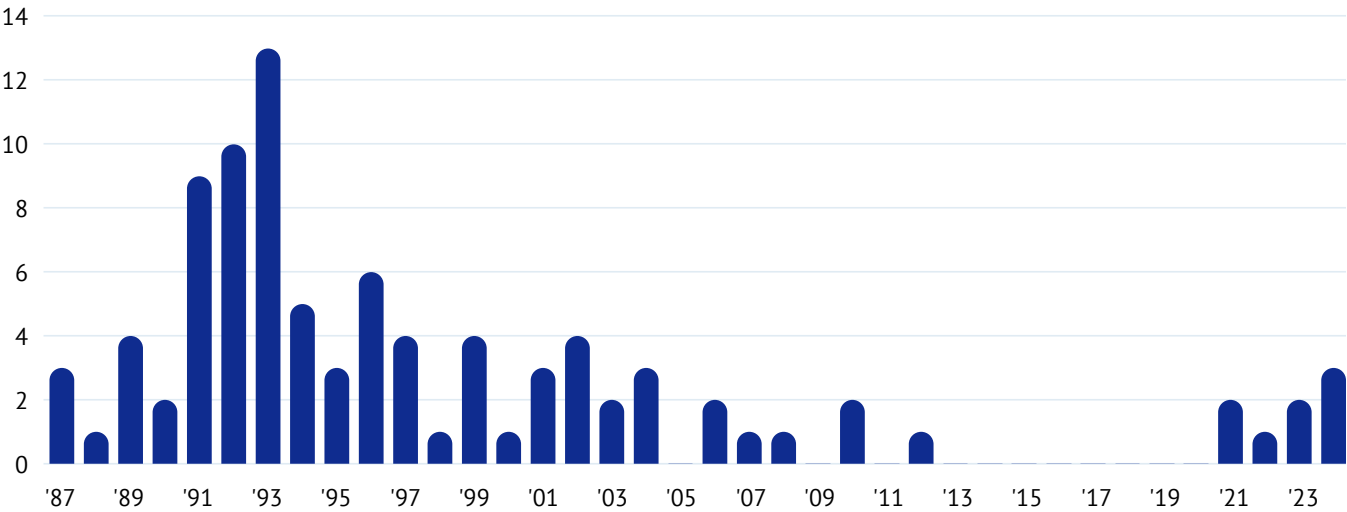
The approaches of policymakers to the region's fiscal and climate change challenges have been among the most ambitious globally. In an attempt to enhance the resiliency of their public debt issuances, they have been applying innovative debt instruments such as debt-for-nature swaps (D4NS) and embedding debt pauses into bond contracts to help governments navigate these challenges. Complementing these market-based tools, the new Debt Sustainability Support Service (DSSS) aims to provide SIDS with technical and financial support to better manage shocks and protect their fiscal space.

Debt-for-Nature Swaps in LAC: What Did They Deliver?

D4NS are arrangements in which a portion of a country's external debt is forgiven or restructured in exchange for commitments to invest in environmental conservation or climate-related initiatives (Fresnillo, 2023). Countries in the Latin American and Caribbean region were early adopters, with Bolivia carrying out the first such transaction in 1987. As shown in [Figure 10](#), between 1987 and 2012, economies in LAC completed 85 separate swap agreements, converting more than US\$2 billion in debt (Dryden, 2025a).

By the mid-2000s, however, D4NS had become less common. Large-scale debt relief initiatives (e.g. Heavily Indebted Poor Countries and the Multilateral Debt Relief Initiative) had reduced the stock of eligible commercial debt, donor preferences were shifting towards direct environmental aid, and questions over the cost-effectiveness of the swaps made them less attractive and diminished their political salience.

Figure 10: Number of D4NS transactions in the Latin American and Caribbean region by year



Source: Calculations are taken from a subset of data series included in Dryden (2025a).

The tool re-emerged in LAC in 2021 when Belize launched a “blue bond” debt-for-nature swap in partnership with the Nature Conservancy. The US\$364 million transaction refinanced the country’s US\$553 million “Superbond” at 55 cents on the dollar, cutting public debt by roughly 12 per cent of GDP and generating estimated savings of US\$200 million over 20 years (Jiang and Cao, 2024). Backed by a credit guarantee from the US International Development Finance Corporation, the blue bonds achieved an Aa2 Moody’s rating and attracted global institutional investors. The deal included a novel feature: parametric catastrophe insurance to protect debt servicing. Under this arrangement, a third-party insurer provides payouts if hurricanes or other disasters hit Belize, covering bond payments during a crisis and removing the need for a debt moratorium. In exchange, Belize committed to spend US\$4.2 million annually on marine conservation through 2041, alongside a US\$23.5 million endowment, and pledged to expand marine protected areas from 15.9 per cent to 30 per cent of its waters by 2026 (Jiang and Cao, 2024). This was, at the time, the largest ocean-focused debt swap globally and has been promoted as a replicable model for integrating fiscal relief with climate-resilient environmental protection.

This new D4NS framework – whereby cheap capital is mobilised with the backing of international organisations such as the US International Development Finance Corporation – has encouraged other regional economies to follow suit. Since 2022, Barbados (2022 and 2024), Ecuador (2023), El Salvador (2023), and the Bahamas (2024) have all executed D4NS transactions. The deals with Ecuador and El Salvador were particularly notable

for their scale, each restructuring more than US\$1 billion in nominal debt – orders of magnitude larger than the historic regional average of just US\$32 million per transaction since 1987 (Dryden, 2025a).

Despite the recent renaissance in D4NS, there are significant issues associated with these transactions. Firstly, governments remain reluctant to utilise these swaps due to the stigma associated with them. In early 2025, Colombia declined several proposed D4NS, citing concerns that such transactions could be perceived negatively by credit rating agencies and potentially harm its sovereign credit profile (Bloomberg, 2025).

Secondly, there are lingering concerns about the fiscal effectiveness and overall costs associated with the recent wave of D4NS. Industry standards indicate that the consulting and advisory fees on post-2020 transactions have been around 15–20 per cent of nominal debt relief (Das, 2025). For example, in Belize's 2021 transaction, the administration costs amounted to US\$85 million, absorbing about 25 per cent of the nominal debt relief (Das, 2025).

Finally, D4NS often raise sovereignty issues that are more subtle but no less important. Many deals require the establishment of conservation trust funds or independent oversight bodies with mandates that operate outside the direct control of national governments (Fresnillo, 2023). Although these structures are designed to ensure transparency and ring-fence environmental spending, they can be perceived domestically as ceding decision-making authority over national resources to external actors. This tension between environmental conditionality and autonomy over national policy remains an endemic feature of D4NS and a key reason why some governments remain wary of embracing them (Dryden, 2025b). In their current form, D4NS provide a useful but limited tool that is capable of delivering fiscal relief and conservation gains under the right conditions, yet D4NS are often burdened by high costs, complex structures, and political sensitivities that constrain their broader effectiveness.

Adopting Disaster Pause Clauses

The Caribbean has been at the forefront of experimenting with debt instruments that embed climate-responsive features, notably “disaster pause” clauses. These contractual provisions allow debtor governments to temporarily suspend debt servicing in the wake of a defined natural disaster, providing immediate fiscal space for relief and reconstruction (Volz, 2022).

Grenada was an early adopter of disaster clauses. In 2015, following a restructuring, it incorporated a “hurricane clause” into its debt contracts (Volz, 2022). This allowed repayments to be paused if a hurricane struck the islands – a necessary safeguard following the devastation of Hurricane Ivan in 2004, which led to a debt default (Mallucci, 2022). The clause’s activation mechanism is tied to the Caribbean Catastrophe Risk Insurance Facility, a regional disaster insurance pool; if Grenada receives an insurance payout above a certain threshold (around US\$15 million in losses) due to a tropical cyclone, the country can invoke a payment deferral (Civillini, 2024). For nearly a decade the clause went unused until Hurricane Beryl hit Grenada in 2024, causing damage estimated at roughly 33 per cent of GDP (Jones, 2024). The government invoked the clause, postponing US\$12 million in interest payments on its 2030 bonds, which were due the following year. In doing so, Grenada became the first sovereign to activate a disaster debt clause (Jones, 2024).

In June 2025, Barbados took the concept a step further with the issuance of a US\$500 million international bond maturing in 2029 that contained a “disaster pause” clause. This provision allows all principal and interest payments to be automatically deferred for two years following a qualifying disaster, including earthquakes, cyclones, and pandemic events. It thus gives the government fiscal breathing room for emergency expenditure. Analysts estimate that the clause could defer up to US\$370 million in repayments on this issuance alone. If applied to the country’s full debt stock, it could free resources equivalent to around 15 per cent of GDP. Fitch Ratings observed that such clauses effectively reprofile debt servicing during adverse times, thereby improving fiscal resilience to environmental shocks (Fitch, 2025).

Notably, the reception by investors was positive. Demand reached five times the issuance size, and the bond was priced at a yield of 8 per cent – 25 basis points lower than a comparable Bahamas bond that was issued earlier in 2025 (Spink and Bruni, 2025). This suggests that markets imposed no penalty for the inclusion of the disaster clause.

That acceptance may reflect the creditor protections which are built into the contract for Barbados. Deferred payments accrue interest, thereby ensuring that investors do not suffer any loss in the net present value. The clause can only be invoked twice during the bond’s life and not within the final 12 months, limiting its coverage window. Bondholders also retain veto power: If 50 per cent or more object within 15 days, the moratorium can be blocked on grounds of opportunistic invocation. Credit rating agencies have cautioned that if the clause is contested and deemed invalid, the episode could

be treated as a default event for Barbados (Fitch, 2022). Although these provisions align incentives by restricting use to bona fide large-scale disasters, they also introduce legal and regulatory risks, particularly if the scale of damage is contested or falls near the contractual threshold.

Despite these innovations, disaster clauses remain rare in the debt markets of LAC. Broader adoption faces both technical and institutional challenges. One hurdle is defining objective, verifiable “parametric triggers” that work for different disaster types (Mustapha and Benson, 2024). Hurricanes have relatively well-established measurement standards, often using wind speed, central pressure, and landfall data. However, many regional economies face other climate threats such as droughts and floods, for which damage is harder to quantify consistently. For example, the economic impact of floods can vary dramatically depending on location, population density, and infrastructure exposure. Designing robust, contractually acceptable triggers for such hazards is complex, particularly given the preference of creditors to retain override rights, which can undermine the speed and certainty of clause activation (Mustapha and Benson, 2024).

Moreover, the uptake of these clauses depends on awareness and capacity among debt management offices and policymakers, as well as familiarity among investors. Many issuers remain cautious, concerned about potential reputational risks, investor pushback, and credit rating implications. However, the successful activation of Grenada's debt clause as well as Barbados' 2025 issuance demonstrates that, under the right conditions, disaster clauses can be incorporated without raising borrowing costs while enhancing fiscal flexibility in the face of environmental shocks. Their success offers a template for other small island and disaster-prone states.

However, for the instrument to fulfil its potential, further work is needed to improve disaster coverage beyond hurricanes to other climate hazards, standardise and improve parametric triggers, and ensure creditor trust through swift and transparent activation processes. In a region where climate change is intensifying and natural disasters are increasing in frequency and severity, the ability to temporarily suspend debt service without losing market access could be an important tool for maintaining fiscal stability. The Caribbean's early experiments, led by Grenada and Barbados, suggest a viable pathway – one that, with refinement, could be replicated more widely across LAC.

Activating the Debt Sustainability Support Service

The DSSS is a recently launched initiative designed to address the debt vulnerabilities of SIDS. Announced at the Fourth International Conference on SIDS in Antigua and Barbuda, it is closely tied to the Antigua and Barbuda Agenda for SIDS which sets out a 10-year plan for building resilient and sustainable economies (Li, 2025; UNECA, 2024). The DSSS responds to the persistent challenge that SIDS – despite often being classified as middle-income – face structurally high debt burdens and limited access to concessional finance, while simultaneously being among the most exposed to external shocks such as natural disasters, commodity swings, and global interest rate volatility (ODI, 2023).

The DSSS is structured around four interlinked components. First, it promotes a layered approach to debt sustainability that calibrates borrowing strategies according to different levels of risk, distinguishing between concessional, market-based, and contingent instruments (PreventionWeb, 2024). Second, it embeds mechanisms to provide forward-looking protection, such as insurance, disaster clauses, and contingent debt instruments, to reduce the need for costly aftershocks that result from borrowing. Third, it links debt management more directly to resilience investment, emphasising that borrowing should enable climate adaptation and sustainable infrastructure rather than perpetuate cycles of vulnerability. Finally, it provides technical, legal, and advisory support to governments, enabling SIDS to negotiate more effectively with creditors, structure complex contracts, and strengthen domestic debt management capacity (ODI, 2023).

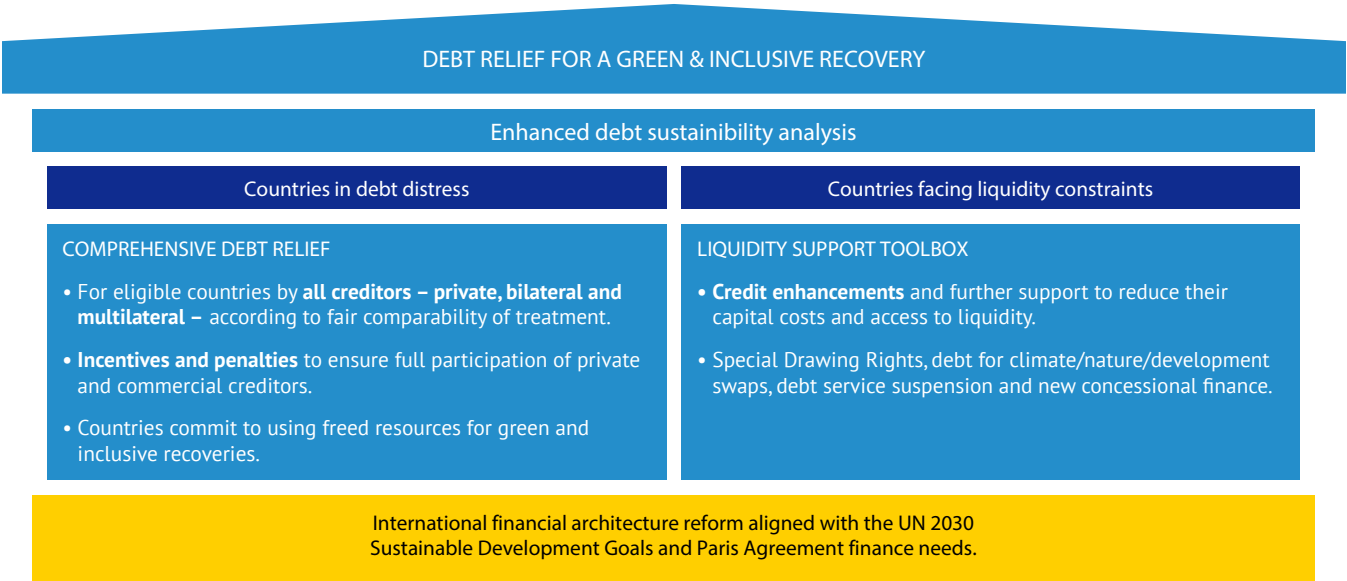
Although the DSSS represents a step towards breaking the cycle of debt and vulnerability, it faces important implementation challenges. Questions remain over its financing, institutional anchoring, and the extent of creditor engagement (IIED, 2024). Moreover, SIDS are highly heterogeneous, and it will be critical to ensure that the service remains flexible enough to address diverse debt profiles (AOSIS, 2024). Nonetheless, the DSSS has the potential to preserve fiscal space for development and climate resilience while amplifying the collective voice of SIDS within the global financial architecture. If operationalised effectively, it could provide a model for supporting other climate-vulnerable economies (IIED, 2024).

5. RETHINKING DEBT AND CLIMATE FINANCE MECHANISMS

The Latin American and Caribbean region is facing the dual challenge of high debt burdens and escalating climate risks, which together undermine the region's capacity to invest in sustainable development and resilience-building. Addressing these challenges requires a more ambitious and better-aligned international framework – one that links debt relief and liquidity support directly to climate action, social inclusion, and long-term growth.

As shown in [Figure 11](#), a reformed Debt Sustainability Analysis (DSA) process is central to such an architecture. Current DSAs often overlook the fiscal space required for climate adaptation, just transitions, and SDG progress. By systematically integrating climate vulnerability and essential investment needs into DSAs, the international community can better distinguish between countries requiring deep debt restructuring and those needing liquidity relief. For LAC, where climate shocks – from hurricanes in the Caribbean to prolonged droughts in South America – carry significant macroeconomic consequences, this enhancement is particularly urgent.

Figure 11: Two pillars for Debt Relief for a Green and Inclusive Recovery



Source: Debt Relief for a Green and Inclusive Recovery Project (Zucker-Marques et al., 2024a).

Building upon the foundation of an enhanced DSA arrangement, there are two complementary pillars. Firstly, for distressed economies, substantial debt restructuring should be undertaken with the active participation of all creditor groups and backed by comparability of treatment principles as well as enforcement mechanisms to ensure private-sector involvement. Relief must be paired with new concessional resources to finance green infrastructure, climate adaptation, and social programmes. Beneficiary countries would commit to debt transparency, the publication of climate and SDG investment plans, and aligning expenditures with their Nationally Determined Contributions.

Secondly, for liquidity-constrained but solvent economies, measures should focus on lowering borrowing costs and enhancing market access. These can include credit enhancements, expanded concessional lending from multilateral development banks, the targeted use and reallocation of Special Drawing Rights, and the broader adoption of complementary tools such as D4NS, climate-linked bonds, and the incorporation of debt pause clauses.

These measures should form part of a permanent debt and climate finance mechanism for LAC that is integrated into a reformed global financial architecture. Systemic reform should combine the provisions of predictable liquidity, affordable development finance, and a credible sovereign debt workout process. Without these measures, the region risks remaining trapped in a cycle in which debt vulnerabilities and development risks feed into one another, stalling both growth and resilience.

6. CONCLUSION: FROM CRISIS TO RESILIENCE – LINKING DEBT REFORMS, CLIMATE ACTION, AND DEVELOPMENT

The Latin American and Caribbean region stands at a precarious crossroads. The evidence presented in this paper shows that the region's public debt burdens, which have risen over the past two decades, are now converging with intensifying climate shocks and stalling progress towards their development goals. This triple challenge of debt, climate, and development is not only straining fiscal capacity, but also reinforcing a cycle of vulnerability that risks trapping many economies in a trajectory of recurrent crises. With their narrow economic bases and high exposure to natural disasters, SIDS look particularly vulnerable, but the risks extend across the wider region as a whole.

As this paper has demonstrated, these debt challenges are not transient issues. Structural dependence on external borrowing and depreciating currencies have amplified debt servicing costs, leaving governments with shrinking fiscal space for health, education, and climate investment.

Many economies of LAC, particularly in the Caribbean, are willing to experiment with various novel policy instruments to help manage these growing debt burdens. Indeed, the use of D4NS and disaster clauses are important innovations that should be adopted more broadly across the region. However, they should be viewed as complementary measures – helpful in alleviating immediate pressures but insufficient as substitutes for addressing structural challenges. To achieve sustainable growth, a new debt and climate finance architecture is essential – one that directly links debt relief and liquidity measures to climate action, resilience, and inclusive growth.

Two complementary pillars should underpin such a framework. For distressed economies, deep restructuring is needed – with full creditor participation and comparability of treatment – and should be combined with concessional finance to support green investment and social programmes. For solvent but liquidity-constrained economies, measures should focus on lowering borrowing costs and enhancing fiscal space through credit enhancements, concessional lending, reallocated Special Drawing Rights, and broader adoption of innovative instruments such as D4NS and disaster pause clauses. Crucially, both approaches must be embedded within a permanent global mechanism that provides predictable liquidity, affordable climate finance, and a credible process for sovereign debt workouts.

Without coordinated reform, the region risks a lost decade marked by repeated crises, constrained fiscal capacity, and a further erosion of development gains. With decisive action, however, the region can build fiscal resilience, strengthen climate adaptation, and realign debt management with sustainable development.

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