Debt-for-climate swaps for small islands

Small island developing states are currently faced with two significant challenges that are more onerous due to limited financial resources: adapting to increasing climate change risk and recovering from the pandemic. Debt-for-climate swaps provide an avenue for SIDS to address these challenges.

Adelle Thomas and Emily Theokritoff

High climate change risks experienced by many small island developing states (SIDS) are caused in part by high exposure to an array of climate hazards but are also affected by socio-economic characteristics that drive vulnerability, in particular, high levels of debt that are pronounced in island nations (Fig. 1)[1]. For instance, Caribbean SIDS are already suffering high levels of debt. Combined with their largely tourism-dependent economies, the impacts of the COVID-19 pandemic and climate change threats are particularly challenging to address (Fig. 2). Structural characteristics — including limited economies of scale, trade policies that are insensitive to small export capacities and an over-reliance on imported goods and tourism — have contributed to these nations being among the most indebted countries globally (two of the ten most indebted countries in the world (in percentage of GDP) are in the Caribbean)[2]. Servicing debt requires ongoing payments, which reduces the national budgets available for sustainable development, climate change adaptation and disaster risk reduction, which thereby increases vulnerability to climate change[3]. In 2015, the Caribbean region's total debt service payments represented on average over 20% of total government revenue[4].

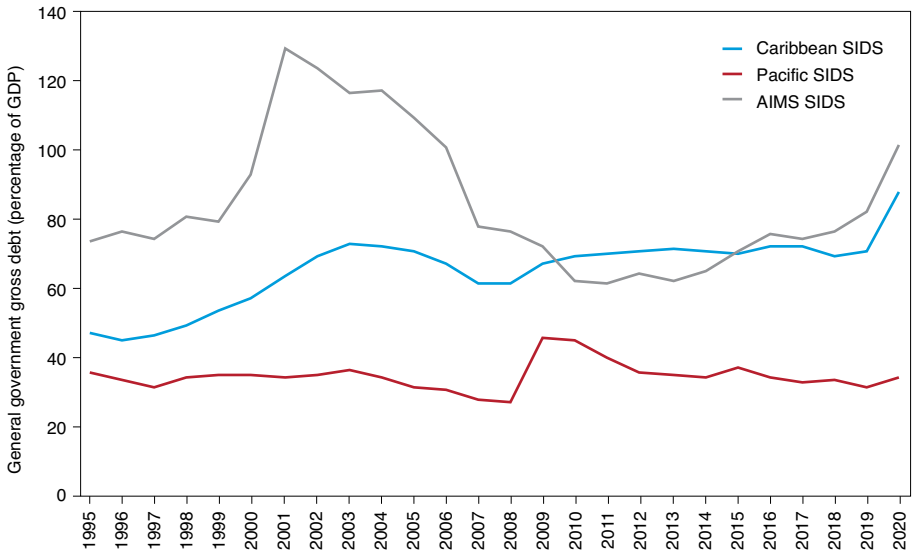

Fig. 1 | Evolution of general government gross debt for SIDS regions. Average general government gross debt as a percentage of GDP for the three geographic SIDS regions: the Caribbean; the Pacific; and Africa, Indian Ocean, Mediterranean and South China Sea (AIMS). Data retrieved from the World Economic Outlook Database (IMF)[2].

Climate risk, pandemic and debt

The impacts of climate change from extreme events have already contributed to rising levels of debt in Caribbean SIDS. With projections of an increased intensity of extreme events, this trend of rising debt may continue. Economic loss and damage associated with tropical storms has increased in the region and has required many countries to borrow externally to address escalating threats[5]. For example, in 2017, Hurricane Maria caused damages of US$1.3 billion in Dominica, 226% of the country's GDP, resulting in a sharp deterioration in fiscal performance, decreased tax revenue, increased expenditure of public funds on rehabilitation and reconstruction, and increased external debt[6]. The storm landed in Dominica while the country was still in the recovery phase from the 2015 Tropical Storm Erika, which caused damages equivalent to 96% of GDP and also increased external debt. Projections show that the relative change in expected annual damage from tropical cyclones in Dominica will increase by 6% at 1.5 °C global warming, 14% at 2 °C and 29% at 3 °C as compared to 2020 (ref. [7]). The case of Dominica exemplifies the constant repair and recovery cycles and debt accumulation from extreme weather events that challenge Caribbean SIDS[3]. Regionally, extreme weather events resulted in losses on average of 109% per unit GDP across Caribbean SIDS in 2019, and with rising global warming, the intensity of tropical cyclones and the resulting damage are expected to increase further[8].

The COVID-19 pandemic has also contributed to the debt crisis in the region. While the pandemic resulted in a global decline in tourism arrivals of 73% in 2020 (ref. [9]), the implications of this are particularly severe for developing countries that are highly dependent on this sector. Five of the world's ten most tourism-dependent economies are Caribbean SIDS[10], in which the contributions of travel and tourism to GDP are well above the global average (Fig. 2). The decline in tourism-related income for Caribbean SIDS due to the pandemic has had severe economic consequences — including declines in tax revenue, foreign exchange earnings and employment — and has further strained the limited government resources available to repay debt and to support climate action. Although travel is slowly resuming, the recovery of the tourism sector remains highly uncertain and the consequences will be long lasting: international tourist arrivals decreased by 83% globally in both January and February in 2021 (ref. [9]).

Adaptation financial constraints

For SIDS, adaptation is critical to reduce risk and minimize additional loss and damage. Although adaptation is increasingly being

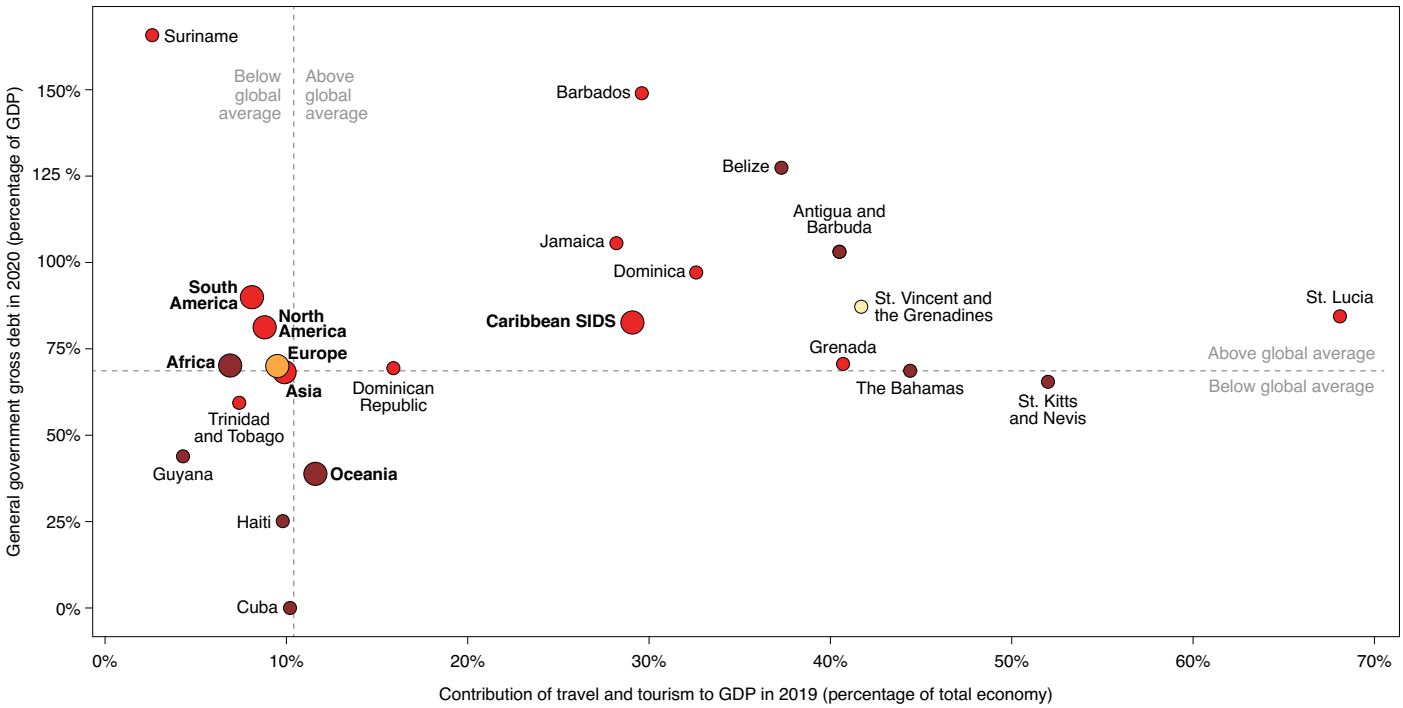

Fig. 2 | Scatter plot of general government gross debt (percentage of GDP), contribution of travel and tourism to GDP (percentage of total economy) and vulnerability. Data for all Caribbean SIDS are presented along with regional averages. Debt data were retrieved from the World Economic Outlook Database (IMF)[2], and the regional averages were compiled with the pycountry_convert Python package. No debt data were available for Cuba. Travel and tourism data were retrieved from the World Travel and Tourism Council website (https://wttc.org/Research/Economic-Impact). No travel and tourism data were available for Guinea-Bissau. The colours of the dots represent the vulnerability of countries/regions determined on the basis of the ND-GAIN data (https://gain.nd.edu/our-work/country-index/). Vulnerability scores were rounded off to the first decimal; the darker the colour, the higher the vulnerability. There were no data available for St. Vincent and the Grenadines (light yellow).

implemented, a large adaptation gap prevails and is currently being widened further by the effects of the COVID-19 pandemic[11].

Lack of finance has repeatedly been reported as the main factor hindering adaptation in SIDS[12]. As these nations are collectively responsible for less than 1% of global emissions, the 'polluter pays' principle means that there is a need for developed countries to provide long-overdue support for climate action. The first step in this direction was made at the Copenhagen climate negotiations in 2009, where developed countries committed to jointly mobilise US$100 billion per year by 2020 to assist developing countries with adaptation and mitigation. However, unclear accounting rules under the United Nations Framework Convention on Climate Change (UNFCCC) make it impossible to assess whether the goal has been met or not, and there is much evidence that the actual funds are far less than what was committed[13]. In addition, only 20% of current climate finance actually targets adaptation, with the bulk of finance focused on mitigation[13]. Despite high vulnerability to climate change and high levels of external debt, middle-to-high-income Caribbean SIDS have limited access to climate finance as they are not eligible for certain funds.

The COVID-19 crisis has further constrained the financial resources of Caribbean SIDS and is expected to have significant implications for adaptation. Funds previously earmarked for adaptation projects have been diverted to COVID-19 responses, and rapidly changing priorities disrupt adaptation planning and implementation processes[11]. The postponement of the Conference of Parties (COP) 26 also resulted in a lack of progress on key international targets such as country commitments for more ambitious greenhouse gas reductions through revised Nationally Determined Contributions (NDCs) and increasing support and access to financing, which will affect the vulnerability of countries to climate change and adaptation for decades to come[11]. In the long term, a decrease in the availability of funding for adaptation and changes in donor priorities may be expected as the global economy recovers[11]. The consequences of COVID-19 may therefore further increase the vulnerability of Caribbean SIDS and constrain adaptation.

An urgent need for debt-for-climate swaps

Debt-for-climate swaps have long been proposed as an alternative source of climate finance for developing countries[14]. These mechanisms consist of bilateral or multilateral debt being forgiven by creditors in exchange for a commitment by the debtor to use outstanding debt service payments for national climate action programs. Debt cancellation, suspension or rescheduling may also be components of an overall restructuring of debt. In the Caribbean, debt-for-climate swaps have been proposed by a range of regional bodies, and there have been a few small-scale bilateral swaps, mostly focusing on broader environmental issues such as conservation[15]. For example, Jamaica engaged in a debt-for-nature swap in 2004 with the United States government and The Nature Conservancy, providing $16 million over a period of 20 years for forest conservation activities[15]. However, large-scale debt-for-climate swaps are still rare.

Debt-for-climate swaps have the potential to transform daunting debt into opportunities to reduce climate vulnerability and implement much-needed adaptation. They offer a stream of predictable financing for longer-term adaptation projects or capacity-building for which it may be difficult to secure other types of climate finance. For example, these funds can be used for the long-term maintenance of adaptation measures that have been implemented with short-term project-specific budgets, or they can be used to bolster human resources for strained national climate change departments. Debt-for-climate swaps may also attract additional funds by leveraging support from a range of other sources, for instance, by including incentives to promote private sector support[15]. These swaps would thus contribute to the Paris Agreement, which stipulates that developed countries should mobilize climate finance from a wide variety of sources through a variety of actions and consider the needs and priorities of developing countries[16].

Debt-for-climate swaps in the region will need to go beyond past debt-relief approaches. Some Caribbean SIDS have been disqualified from debt-relief initiatives due to relatively high GDPs[15]. The focus on GDP as an indicator for climate finance assistance has been repeatedly challenged by SIDS, who argue that income profiles do not consider disproportionate vulnerability to climate change, the rising costs of responding to and recovering from climate-related disasters and the costs of critical climate action. The Alliance of Small Island States (AOSIS) has proposed to use a multi-dimensional vulnerability index, which would acknowledge the special circumstances and vulnerabilities of SIDS and not disqualify access to innovative financial instruments on the basis of GDP[17]. Debt-for-climate swaps must ensure that funds are targeted towards climate action so that they can support improved adaptation and complement other debt-relief approaches.

Swaps also need to be tailored to the circumstances of individual countries to account for differences in creditors and other national contexts. Key elements of success include high-level political support and linking the swap to the adaptation priorities outlined in national UNFCCC documents, such as National Adaptation Plans or NDCs. This would ensure that swaps meet nationally identified adaptation needs, alleviate concerns that swaps may be donor driven and limit where and how funds can be used.

Escalating debt, limited climate finance for adaptation, challenges in accessing climate finance and the rising vulnerability of Caribbean SIDS are all exacerbated by the effects of climate change and the COVID-19 pandemic. There is an urgent need for debt-for-climate swaps to move beyond proposals and pilots and to be used more widely in the region to increase funding for much-needed adaptation to rising climate risks. ❐

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Competing interests

The authors declare no competing interests.

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Peat management by local communities can reduce emissions

Local communities can play a role in helping to restore tropical peatlands by using more sustainable agricultural practices. Enhancing this role would help to address interconnected crises such as climate change, food security and environmental degradation.

Massimo Lupascu

Decision makers across the public and private sectors and communities are slowly acknowledging how nature-based solutions[1] can help to address many societal challenges. Nature-based solutions offer a cost-effective method that provides multiple benefits if done properly. One example of a nature-based solution is the restoration of peatlands, carbon-rich wetlands formed from the reduced decomposition of vegetation biomass due to water-logged anaerobic conditions,