Don't owe, shouldn't pay

The impact of climate change on debt in vulnerable countries





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1. Executive summary

Small states: On the frontline of climate chaos

As climate change worsens, destruction caused by weather events like tropical storms, droughts and floods is increasing around the world. The impacts of climate change are extremely costly and have major knock-on economic and social impacts.

While the impacts of climate change are global, some groups of countries with certain characteristics are more vulnerable to the increasingly destructive weather events that are being unleashed. Small states are more vulnerable to climate disasters because proportionately more of their land area, economy, or people can be affected by a single event. Impoverished countries are particularly vulnerable because of, for example, poorer quality infrastructure to cope with disasters, or greater dependence on rain-fed agriculture.

This briefing looks at the impact of climate change on debt in small states, especially those that are more impoverished. In international processes, the closest official 'category' for small states is the grouping of Small Island Developing States. Around 80% of the most damaging disasters since 2000 have been tropical storms, and over 90% of them have been in Small Island Developing States, with over 60% taking place in the Caribbean. See Box 1 for more information on the Small Island Developing States grouping.

Because Small Island Developing States are the closest official grouping to the small states that are the focus of this briefing, we frequently refer to data about them to illustrate the problems faced by small states more generally. However, there are some small states which aren't included in the official Small Island Developing States category, and our analysis and proposals apply to them as well. The briefing looks at the particular impacts and vulnerabilities of small impoverished states in relation to both climate change and debt. However, our recommendations apply to all small states, as we believe that in the face of worsening climate change, any state which suffers a disaster affecting a large part of its people or economy will need effective responses that do not leave it more indebted.

The moral and financial debt of climate change

Small states have generally contributed very little to the problem of climate change, especially those that are impoverished. Climate change is caused by greenhouse gas emissions, which primarily come from richer people and countries. Twenty-nine Small Island Developing States, with 0.7% of the global population, are together responsible for just 0.2% of global carbon dioxide emissions.

However, despite having made little contribution to climate change, small states suffer disproportionately from climate-related disasters. It is widely accepted that rich countries therefore owe a moral and financial debt to those suffering the results of climate change, and this obligation is inscribed in international law. The principle of common but differentiated responsibilities, agreed to by all 195 members of the United Nations Framework Convention on Climate Change,¹ asserts that those states which have historically contributed the most to climate change are most responsible for dealing with its impacts.

But this debt is not being paid. Instead, many small states are already heavily indebted, especially those that are impoverished. Many suffered under colonialism, with their economies exploited and orientated to

Box 1: Small states and Small Island Developing States

The grouping of small states recognized by the United Nations is the Small Island Developing States. Not all of them are islands, and not all are impoverished. The grouping includes some richer countries, such as Singapore, which are still vulnerable to disasters but have greater resources available to protect themselves and recover. Some small states are not included in the Small Island Developing States category. There is no arbitrary line in terms of size or income past which a smaller state becomes dramatically less vulnerable to climate disasters. serve the needs of colonisers. This continued after independence. For example, after the slave uprising in 1791 which led to Haiti's independence from France in 1804, France made Haiti pay 'compensation' for slave owners' loss of slaves and land.

In recent decades many small impoverished states have been hit by disasters and economic shocks such as loss of trade preferences or falls in tourism after the global financial crisis, and some have been excluded from international debt relief schemes. The IMF conducts debt sustainability analyses for 21 impoverished Small Island Developing States. Of these, two are in debt default, 11 are at high risk of default, eight are at medium risk, and *none* are at low risk.

Borrowing to rebuild

Furthermore, many of the proposed 'solutions' to the costs of addressing climate change are debt-related, whether this involves borrowing more in advance to increase climate resilience or borrowing to rebuild after the negative impacts of climate change have hit. This unjustly burdens countries that are not responsible for causing climate change.

Loans are taken on to cope with ongoing and one-off climate events, from reduced rainfall to more devastating storms. For example, in 2015 the South Pacific archipelago of Vanuatu was decimated by cyclone Pam. Government debt almost doubled from 21% of GDP before to 39% after, with the IMF saying this was primarily due to loans for reconstruction.

This briefing shows that, for the most economically damaging disasters so far in the 21st Century, the government debt of affected states was higher after two years in over 80% of cases. In only one country did debt fall without debt relief being given.

Climate 'risk' insurance

One idea receiving much promotion, including by the insurance industry, is that countries vulnerable to climate change should take out insurance. This briefing argues that the scale of climate damages means insurance will never come anywhere near to meeting the costs. Moreover, this leaves the cost of paying for climate damage on the victims, vulnerable people and countries, through premiums, rather than on rich greenhouse gas emitters. It therefore breaks the principle of common but differentiated responsibilities in the United Nations Framework Convention on Climate Change.

One insurance scheme, the CCRIF SPC (formerly the Caribbean Catastrophe Risk Insurance Facility) has received \$293 million in premium payments and grants from donors since it began in 2007 but has paid out just \$131 million in claims. In contrast, \$105 million from the scheme has gone to private insurance companies as profit.

Ending the climate debt spiral

Instead of these false solutions, we urgently need policies at the international level to stop climate disasters leading to debt burdens which undermine the meeting of human rights, basic needs and the Sustainable Development Goals, and which can further increase the vulnerability of countries to climate impacts.

In this briefing we propose that there should be:

- 1) A new, comprehensive debt relief scheme for small states, covering all external creditors, to:
 - reduce debt to a sustainable level.
 - ensure remaining debt payments are linked to ability to pay.
- 2) A permanent, effective, automatic debt relief process in response to disasters.

The true climate debt is owed by those who have contributed most to climate change, and it is owed to those who are most severely impacted. It is a moral outrage that those who are most affected by climate change are being made to take on debts because of the disasters that climate change is exacerbating.

2. Climate change impacts

Impoverished countries and small states are the most vulnerable to climate change. One climate vulnerability index shows that three quarters of low-income countries and a third of small island states are extremely or highly vulnerable to climate change, compared to a quarter of the rest of the world.²

Impoverished countries are particularly vulnerable to climate change because, for example, of having poorer quality infrastructure to cope with disasters. Furthermore, droughts can have devastating impacts because impoverished countries are more dependent on rain-fed agriculture for food production. For example, the World Bank notes that *"warming above* $1.5^{\circ}C$ to $2^{\circ}C^{3}$ increases the risk of reduced crop yields and production losses in Sub-Saharan Africa, South East Asia and South Asia. These impacts would have strong repercussions on food security and are likely to negatively influence economic growth and poverty reduction in the impacted regions."⁴

Small states are particularly vulnerable to climaterelated disasters. Their small size means that one disaster is likely to affect a large proportion of the country. The IMF estimates that 9% of disasters in small states cause damage worth more than 30% of GDP, compared to less than 1% for larger states.⁵ Also, many small states are in regions that are particularly vulnerable to climate change impacts, through, for example, the increasing strength of tropical storms as temperatures rise. A working paper for the IMF finds that the average annual economic damage from hurricanes in the Caribbean will increase between 22% and 77% by 2100 in a high carbon dioxide emissions / high global temperature scenario.⁶ Much more of the land area of small islands is also vulnerable to sea level rise.

Furthermore, small states are likely to be dependent on a small number of exports, which makes them more vulnerable if that sector is affected. For example, Grenada's nutmeg industry was devastated following hurricane Ivan in 2004. In the five years before the hurricane, Grenada exported on average 2.5 million kilograms (kg) of nutmeg a year, making an average of \$14 million a year. After the hurricane, nutmeg exports collapsed to just 350,000 kg in 2008, a fall of 86%. Because of the length of time it takes nutmeg trees to mature, Grenada was still only exporting 850,000 kg by 2016, a fall of 66% on pre-hurricane levels, generating just \$8 million.⁷

Many small states are also particularly vulnerable to losing tourism revenue due to *"Erosion of beaches, reduced freshwater supplies, and extreme climate events"*.⁸

3. Debt and disasters

3.1 The impact of disasters on debt

Disasters have been shown to both negatively impact GDP and to increase debt.⁹ Disasters also worsen the trade balance,¹⁰ making countries more dependent on external debt. In the absence of adequate grant support from the international community for both disaster preparedness and recovery after a disaster, loans are taken on for rebuilding, and to make up for lost income such as from tourism or agricultural exports.

Since 2000 there have been 14 climate-related disasters which are estimated to have cost more than 10% of GDP in their respective countries (see Table 1 on page 5). 13 of these 14 happened in Small Island Developing States, the one exception being Tajikistan. In nine cases, government debt was higher two years after the disaster than beforehand. Guyana qualified for debt relief at the same

time as the 2005 floods, which led to its debt halving independently of the disaster. Only following hurricane Erika in Dominica in 2015 did debt fall. Three are too recent to yet have figures.

Excluding the latter three cases, government debt was higher two years after the disaster in over 80% of cases. Around 80% of the most damaging disasters since 2000 have been tropical storms. Over 90% of these disasters affected Small Island Developing States, and more than 60% took place in the Caribbean.

Belize was struck by two devastating storms in succession in 2000 and 2001. In 1999, Belize's government debt was 47% of GDP. By 2003 it had doubled to 96%. Grenada was already heavily indebted when it was hit by the devastating hurricane Ivan in 2004. Following the hurricane, debt rose from 80% of GDP to 93%. In 2015

Country	Year	Disaster	Economic damage as percent of GDP	Total damage	Government debt year before the disaster	Government debt two years after ¹³
Dominica	2017	Storm	330%	\$2,000,000,000	73%	N/A
Grenada	2004	Storm	150%	\$889,000,000	80%	93%
Dominica	2015	Storm	90%	\$482,810,000	81%	69%
Vanuatu	2015	Storm	60%	\$449,400,000	21%	39%
Guyana	2005	Flood	35%	\$465,100,000	119%	60% Got HIPC and MDRI debt relief
Belize	2000	Storm	35%	\$277,460,000	47%	83% ¹⁴
Tonga	2001	Storm	30%	\$51,300,000	32%	41% ¹⁵
Belize	2001	Storm	30%	\$250,000,000	67%	96% ¹⁶
Haiti	2016	Storm	25%	\$2,000,000,000	30%	N/A
Bahamas	2004	Storm	20%	\$1,550,000,000	27%	30%
Samoa	2012	Storm	15%	\$133,000,000	42%	54%
Tajikistan	2008	Extreme temperature	15%	\$840,000,000	34%	37%
St Vincent and the Grenadines	2013	Flood	15%	\$108,000,000	72%	79%
Fiji	2016	Storm	15%	\$600,000,000	48%	N/A

Table 1: Largest relative economic damage from climate-related disasters¹²

Vanuatu was decimated by cyclone Pam. Government debt almost doubled from 21% of GDP before to 39% after. In relation to Vanuatu, the IMF said in April 2018: *"The public and publicly-guaranteed debt increased sharply since* 2014 mainly due to disbursements for reconstruction".¹¹

For people in larger impoverished countries, climate change is causing and will continue to cause a huge range of problems. However, whilst these countries are vulnerable to disasters, their debt is likely to increase more gradually in response to drought, flooding, and disasters which only affect part of the country. In contrast, small states, including Small Island Developing States, are more vulnerable to nation-wide disasters that have a sudden, dramatic impact on their debts.

Furthermore, the expectation of future climate risks is already increasing debt costs for the most vulnerable countries. Research by Imperial College Business School and SOAS University of London has found that, controlling for other factors, countries that are vulnerable to climate change are paying significantly more to borrow from the financial markets.¹⁷ Extra interest charges are predicted to cost the most vulnerable impoverished countries \$168 billion over the next decade.

3.2 Small states are already heavily indebted

Some smaller, more impoverished, states are already among the most heavily-indebted countries in the world. This is partly due to the legacy of previous disasters, as well as economic shocks such as loss of trade preferences and the global financial crisis of 2008. Furthermore, many of these states suffered under colonialism, with their economies orientated to serve the needs of colonisers, and some, such as Haiti, were made to pay 'compensation' to European slave owners after gaining independence.

Getting a true picture of an individual country's debt situation requires looking at a range of information. However, one key figure for assessing the immediate debt burden is the amount spent on external debt payments as a proportion of government revenue. This takes account of what the debt actually costs, including interest payments, and relates it to a government's actual income.

The (median) average government external debt payments as a proportion of revenue for low- and middleincome countries is 7.9%. There are eleven Small Island Developing States which spent more than this in 2017 (see Table 2 on page 6).

Box 2: IMF rankings of debt default risk in Small Island Developing States (as of August 2018)

In debt distress (2)

Grenada, Sao Tome and Principe

High risk (11)

Cabo Verde, Dominica, Haiti, Kiribati, Maldives, Marshall Islands, Micronesia, Samoa, St Vincent and the Grenadines, Tonga, Tuvalu

Medium risk (8)

Comoros, Guinea-Bissau, Guyana, Papua New Guinea, Solomon Islands, St Lucia, Timor Leste, Vanuatu

Low risk (0): None

The IMF and World Bank conduct Debt Sustainability Analyses for 67 of the most impoverished countries in the world. Of these, 21 are Small Island Developing States. Of the IMF's debt assessments of these 21 countries, two are in debt default, 11 are at high risk of debt default, eight at medium risk and *none* are at low risk.¹⁸

Most Small Island Developing States were considered to be too rich to benefit from the debt relief schemes introduced in the last twenty years by the IMF and World Bank, known as the Heavily Indebted Poor Countries (HIPC) initiative and the Multilateral Debt Relief Initiative (MDRI). These schemes, which were the result of global campaigns for debt cancellation, were only available to low-income countries – those with annual GDP per person of less than \$995. To qualify, eligible countries had to implement a range of IMF and World Bank conditions. On qualifying, they got most of their historic debt to the IMF, World Bank and African Development Bank cancelled, as well as most of the debt owed to other governments. Today, 36 countries have qualified for \$130 billion of debt cancellation.

Of the countries in Table 2 (below), only Guyana and Sao Tome and Principe were allowed to enter the schemes, both of which got significant amounts of debt cancelled in 2004/05 and 2007 respectively. However, average debt

Table 2: Small Island Developing States with the highest debt payments

Country	External government debt payments as a proportion of revenue
Jamaica	26%
Grenada	25%
Belize	21.4%
St Vincent and the Grenadines	15.6%
Marshall Islands	15.2%
Dominican Republic	14.7%
Dominica	13.7%
Cabo Verde	11.8%
Samoa	9.6%
Sao Tome and Principe	9.1%
Guyana	8.1%

Graph 1: Median average external debt payments as proportion of government revenue for Small Island Developing States and all low- and middle-income countries (1998–2017)¹⁹





Graph 2: The distribution of external government debt by creditor for 22 states²⁰

payments for Small Island Developing States follow a similar pattern to all low- and middle-income countries (see Graph 1 on page 6). For both groups, debt payments were high in the late 1990s and 2000s before debt relief for some and increasing commodity prices reduced payments in the 2000s. However, in recent years debt payments have begun to increase again.

3.3 Who are the creditors?

The range of creditors for Small Island Developing States is broad. Looking across the 22 Small Island Developing States for which the World Bank has figures, almost half of external debt is owed to the external private sector. 40% is owed to private creditors in the form of bonds, and a further 6% directly to commercial banks. 35% of external debt is owed to multilateral creditors. 8% is owed to the World Bank, and 3% to the IMF, leaving 24% owed to other multilateral institutions such as the Caribbean Development Bank. Finally, 20% is owed to other governments – known as bilateral debt (see Graph 2 above).

Unfortunately, the World Bank database does not break down the multilateral and bilateral creditor categories,²¹ so it is not known across small states which are the most important multilateral and bilateral creditors. Also, the average figures are dominated by the debts of larger island states, such as Dominican Republic and Jamaica. The individual creditors for any one country could be quite different.

Below we look in detail at the creditor breakdowns of the four countries with the highest external debt payment

burdens. As with the average figures, these show a range of creditors. For example, private external debt makes up 30% to 40% of total government debt in Jamaica, Grenada and Belize, but virtually none in St Vincent and the Grenadines. St Vincent has much higher multilateral debt, which accounts for 50% of total government debt. But multilateral debt still makes up 20% to 35% of debt in Jamaica, Grenada and Belize.

The largest multilateral creditor tends to be the Caribbean Development Bank, except in Jamaica where it is the Inter-American Development Bank. Together, the IMF and World Bank are owed around 10–15% of debt, except in Belize where they are owed very little.

Bilateral debt rises from 4% of debt in Jamaica to 9% in Grenada and 14% in Belize and St Vincent, but we have not been able to establish who the main bilateral creditors are.

Jamaica

Of the Jamaican government's total debt, 38% is owed externally as bonds, and 34% to domestic private creditors. With 1% owed externally to commercial banks, this makes 73% of the debt owed to the external or domestic private sector.

Of public creditors, the largest is the Inter-American Development Bank, with 9% of the debt. The World Bank and IMF are both owed 5% each, and the Caribbean Development Bank 1%. We have not been able to find any breakdown of the bilateral creditors, which total 4% of the debt, nor for multilateral institutions, which total 2%.



Graph 3: The Jamaican government's creditors, as of October 2017²⁴

Grenada

Of the government of Grenada's total debt, 29% is owed externally as bonds, and 28% to the domestic private sector. The World Bank is owed 11%, the Caribbean Development Bank 14% and the IMF 3%. The World Bank database reports that a further 6% of debt is owed to other multilateral creditors. 9% of debt is owed to other governments.



Graph 4: The government of Grenada's creditors, as of end 2016²⁵

Belize

Of the government of Belize's debt, 30% is owed to the external private sector as bonds, and 29% to the domestic private sector. Of the remaining 41%, 20% is owed to multilateral institutions, with the largest being the Caribbean Development Bank (9%) followed by the Inter-American Development Bank (6%). 7% of bilateral debt is owed to Taiwan but there is also another 14% owed to other governments, but the Belize central bank does not specify which.

Graph 5: Government of Belize debt by creditor, as of February 2018²⁶



St Vincent and the Grenadines

For St Vincent and the Grenadines, hardly any external debt is owed to the private sector. Half of total debt, and over three quarters of external debt, is owed to multilateral institutions, the largest being the Caribbean Development Bank. A further 14% of total debt is owed to other governments.

Graph 6: St Vincent and the Grenadines government's creditors, as of end 2016²⁷



Box 3: Key multilateral creditors

World Bank (IBRD and IDA)

The World Bank lends money for projects and direct funding of government budgets. There are two parts of the institution which lend money to governments – the International Bank for Reconstruction and Development (IBRD), which lends at interest rates slightly above the rate the World Bank itself can borrow at, and the International Development Association (IDA), which lends at lower interest rates, subsidised by grant contributions from donor countries.

All low-income Small Island Developing States, and some middle-income ones, qualify for IDA loans. The rest receive loans from the IBRD. The IBRD and IDA have separate governing boards. Below are the votes of selected countries and regions. The European Union collectively holds 26.5% of the votes in the IBRD, and 32.8% in the IDA. The UK, with 1% of the global population, is overrepresented in both, but particularly the IDA where it has 6.5% of the votes. All Small Island Developing States collectively have 2.4% of the votes in IBRD, and 4.7% in IDA.

Country or region	Votes in the IBRD	Votes in the IDA
European Union of which UK	26.5% 3.8%	32.8% 6.5%
United States	16%	10%
Japan	6.9%	8.3%
China	4.4%	2.2%
Small Island Developing States	2.4%	4.7%

Caribbean Development Bank

The Caribbean Development Bank lends to the governments of 19 borrowing countries in the Caribbean region. As well as the 19 borrowing members, it has nine donor members from outside the region which contribute funds – the UK, Canada, Germany, China, Italy, Venezuela, Mexico, Colombia and Brazil. Together these nine donors have 55% of the votes, the 19 borrowers 45%. The UK and Canada are the largest non-borrower members, with 9.3% of the votes each.

The main source of funds is the same as the World Bank's IBRD – members put in capital which is then used as the guarantee for the Caribbean Development Bank to borrow on financial markets at relatively low interest rates, which it can then lend on. It also has a Caribbean Development Fund to lend at lower interest rates to the poorest members, but this requires grant subsidies from the donor members.

Inter-American Development Bank

The Inter-American Development Bank lends to 26 governments across Latin America and the Caribbean. It has 22 non-borrowing members – 16 European countries including the UK, as well as the US, Canada, Japan, Israel, South Korea and China. The borrowing governments have 50% of the votes, and the nonborrowers 50%. Of the non-borrowers, the US has 30% of total votes, and the UK 1%.

The Small Island Developing States which are members are the Bahamas, Barbados, Belize, Dominican Republic, Guyana, Haiti, Jamaica, Suriname and Trinidad and Tobago. Collectively these nine countries have 2.7% of the votes.

International Monetary Fund

The International Monetary Fund lends to countries which are supposedly suffering from a short-term crisis, but can comfortably keep paying debts in the medium term. However, it has evolved and now often lends to countries in much deeper debt crisis, which enables debts to other creditors to be paid, while the unsustainable debt burden remains.

The money the IMF lends comes from capital contributions from member countries. Its loans to most middle-income countries, and all high-income ones, charge an interest rate which both covers the IMF costs and builds up reserves. The IMF currently has \$29 billion in reserve,²² which has increased from \$8 billion in 2008,²³ largely from profit it has earned from lending following the global financial crisis.

For all low-income and some middle-income Small Island Developing States, the IMF gives lower interest loans, which are subsidised by grants from donor countries.

The European Union has 29% of the votes in the IMF, of which the UK accounts for 4%. The United States has 16.5% and China 6.1%. Small Island Developing States collectively have 2.4% of votes.

4. Contribution to climate change

Given their small size, small states make a negligible contribution to carbon dioxide emissions and thus to climate change. Twenty-nine Small Island Developing States, with 0.7% of the global population, are together responsible for 0.2% of global carbon dioxide emissions.²⁸ countries. They have also emitted far less per person historically. Below are the historic and current carbon dioxide emissions for the 21 Small Island Developing States with debt sustainability assessments from the IMF, alongside those of selected richer countries.

Most Small Island Developing States emit significantly less carbon dioxide *per person* than many larger, richer

Small Island Developing States	Historic emissions (Tonnes of CO ₂ emitted per person from 1850 to 2012) ³⁰	Current tonnes of CO ₂ emitted per person, per year	Richer states	Historic emissions (Tonnes of CO ₂ emitted per person from 1850 to 2012) ³¹	Current tonnes CO ₂ emitted per person, per year
Guyana	100	2.6	United States	1,167	16.5
Grenada	59	2.3	United Kingdom	1,106	6.5
St Lucia	55	2.3	Germany	1,055	8.9
St Vincent and the Grenadines	47	1.9	Belgium	1,034	8.3
Dominica	45	1.9	Canada	815	15.1
Maldives	43	3.3	Russia	717	11.9
Tonga	32	1.1	Australia	655	15.4
Samoa	29	1.0	Poland	631	7.5
Papua New Guinea	16	0.8	Netherlands	628	9.9
Kiribati	16	0.6	Kuwait	614	25.2
Cabo Verde	15	0.9	France	525	4.6
Vanuatu	15	0.6	Norway	415	9.3
Sao Tome and Principe	13	0.6	Ireland	411	7.4
Solomon Islands	12	0.4	Japan	400	9.5
Haiti	5	0.3	Italy	360	5.3
Comoros	5	0.2	New Zealand	346	7.7
Guinea-Bissau	5	0.2	United Arab Emirates	318	23.3
Marshall Islands	N/A	1.9	Saudi Arabia	307	19.5
Micronesia	N/A	1.4	Spain	266	5.0
Tuvalu	N/A	1.0	South Korea	265	11.6
Timor-Leste	N/A	0.4	China	111	7.5

Table 3: CO2 emissions per person for selected countries²⁹

5. Disaster insurance

5.1 CCCRIF SPC

One idea receiving widespread attention is that countries should insure themselves against disaster events. The Caribbean is one of the most advanced regions in this regard. CCRIF SPC (formerly the Caribbean Catastrophe Risk Insurance Facility) was formed in 2007, a joint venture of Caribbean governments, the World Bank and donor governments.³² Members pay in premiums and receive payments if a disaster hits.

Payments are made according to the strength of the disaster (for example, hurricane wind speed or earthquake intensity) rather than an estimate of damage, so can be disbursed more quickly than traditional insurance contracts, which have to wait for damage assessments. However, payments are therefore not related directly to the amount of damage but indirectly to the strength of the event. The value of a payout is also influenced by the annual premium a country has committed to pay.

Since 2007, the Facility has made 36 payments to 13 countries, totaling \$131 million.³³ The Facility gives less publicity to how much it has received in premiums and donor grants over the same time. The CCRIF has told Jubilee Debt Campaign that it has received \$75 million in donor grants so far, primarily from the World Bank and the government of Mexico.³⁴

In addition, CCRIF has so far been paid \$218 million in premiums and the initial joining fee by members.³⁵ So in total CCRIF has received \$293 million in payments, but only paid out \$131 million in insurance over its first decade.

The nature of insurance is that money is retained to pay for unlikely but dramatic impacts. However, the CCRIF has so far been a significant drain on resources across the countries it insures (rather than on individual countries). Furthermore, the unknown risk for the CCRIF is lower than for more traditional insurers, as payouts are only indirectly related to damage.

CCRIF itself operates as a not-for-profit company. However, one of the main ways it ensures it has the resources to make payments is by purchasing reinsurance from global insurance companies. It is therefore effectively operating as a middle-man between its member nations and profitmaking insurance companies, which will ultimately be the beneficiaries *if* the CCRIF continues to receive more than it pays out. The total amount spent by CCRIF on reinsurance, minus payments it has received from that reinsurance, is \$105 million so far. This \$105 million is effectively all profit for global insurance companies. Over time, this figure could fall if there are more and stronger disasters over coming years,³⁶ and conversely it could also rise. One response to rising claims would be for the reinsurance companies to increase the premiums they demand. A summary of CCRIF's finances so far is in Table 4 below.

Table 4: CCRIF finances 2008–2017³⁷

Income		
Donor grants	\$75 million	
Premium income and membership fees	\$218 million	
Investment income	\$31 million	
Total:	\$324 million	
Expenditure		
Claims	\$131 million	
Administration	\$12 million	
Technical assistance	\$5 million	
Net reinsurance cost	\$105 million	
Total:	\$253 million	
Net assets:	\$100 million ³⁸	

5.2 Disaster insurance and climate change

Insurance in response to climate change has three main difficulties. One is simply scale. The total damage to Dominica from Hurricane Maria in 2017 was \$2 billion. Yet Dominica only received \$19 million from the CCRIF,³⁹ 1% of the total damages. Insurers simply will not be willing to take on the scale of risk attached to climate events.

The second is that insurance does not create resources for free. Even if insurers were willing to insure fully against the potential damage from climate events, the premium payments required from countries at risk would be so high they would be unaffordable. Insurance ultimately has to be paid for, and promoting it as the response to climate damage puts the cost solely on those who suffer such damage. It therefore breaks the principle of common but differentiated responsibilities, agreed to by all 195 members of the United Nations Framework Convention on Climate Change,⁴⁰ which agreed that those states which have historically contributed most to climate change have the most responsibility for dealing with its impacts. The only way insurance could justly be used in response to climate change is if rich emitters paid the premiums.

Finally, because the climate is changing, estimates of damage in the future cannot be based on what has happened in the past. Damage is increasing, but at an unknown rate, and so the risk for insurers is unknown. As Avinash Persaud, special economic adviser on economic recovery post-hurricane Maria to Dominica, told a meeting to launch the Climate Damages Tax campaign in London: "Climate change cannot be addressed by private insurance. Insurance works best when risk is uncorrelated, diversified and random and you can spread the risks over time and across disasters. But what does climate change tell us? That disasters are of increasing intensity [and] of rising correlation. By definition, you cannot privately insure against that."⁴¹

6. Dealing with the debt burdens of small impoverished states

Requiring countries to take on debt, and other forms of self-financing such as insurance, is the wrong way to address the loss and damage from impacts of extreme events caused by others. Similarly, requiring countries to make external debt payments in the wake of a climaterelated disaster is a moral outrage. Just when a country needs all its resources and more to aid survival and rebuilding, those resources are taken out of the country, usually to pay richer creditors elsewhere in the world. This outrage grows worse as damage due to climate change increases, as small states have made little contribution to climate change, but are likely to bear the greatest costs.

In contrast, debt relief and cancellation can be part of the solution – to prepare countries to be more able to cope with disaster, and to free up their own resources in its immediate aftermath.

6.1 Which debts should be cancelled?

Any successful restructuring or reduction of small states' debt has to be applied across a comprehensive range of creditors. Because debt is spread out, particularly between private and multilateral creditors, it will be insufficient to simply restructure private sector debt claims or reduce multilateral debt payments. A comprehensive approach is needed across creditors.

The one exception may be domestic debt. Restructuring domestic debt can cause problems for the local financial system, as happened in Greece in 2013, as large proportions of the debt tend to be owned by domestic banks. Conversely, domestic debt can be owed to rich people within a country, increasing inequality by sending money from taxpayers to the rich. Whether domestic debt should be included in a debt restructuring will therefore depend on the circumstances of each particular country.

6.2 A comprehensive debt relief scheme

Many Small Island Developing States are already in severe financial difficulty, even before being hit by future disasters. A comprehensive debt relief scheme is needed now to free up resources to make countries less economically vulnerable to external shocks, whether these are climate-related disasters or other disruptions such as global financial crises.

A comprehensive debt relief scheme could be created for all small states. Assessments of debt could be made by an independent body (such as a UN agency) to determine how much external debt a country could pay. Such assessments must ensure that the country has the resources to fund essential public services, poverty alleviation and climate adaptation programmes (unless and until full external grant funding is made available for climate adaptation). Then a conference of all creditors could be held to reduce debt payments to this level. On starting such a process, all debt payments would need to be suspended, so that those creditors with payments coming due sooner do not receive unequal treatment.⁴²

Because multilateral, bilateral and private debts are all significant across small states, a range of bodies would need to pay for the required debt restructurings. The private sector should bear the cost of any debts they have to reduce, as an incentive towards more responsible lending in the future. However, to help get the private sector on board with a debt restructuring plan, multilateral and bilateral creditors should also restructure debts. This would mean that the future payments which remain following a comprehensive restructuring are more likely to be made, and so would benefit the private sector.

Therefore, bilateral and multilateral creditors should offer to reduce debts as part of a comprehensive process. If this in turn helps to reduce debts owed to the private sector, it would be a genuine example of public funds being able to leverage additional money from the private sector.

Sometimes following debt restructurings, some creditors, known as holdouts, refuse to comply with the restructuring that most other creditors have agreed to. If the government concerned continues to default on its debt, the holdout creditors can then sue it for full payment. These court cases are usually heard in New York or London, as it is New York and English law which tends to be used for government debt contracts.

Therefore, the outcomes of a comprehensive debt restructuring process should be enforced in the law in which the debts are owed (most likely New York and English law). This will help ensure that all creditors will abide by its agreed outcomes. This has happened once before under English law. In 2010, the Debt Relief (Developing Countries) Act enforced HIPC and MDRI debt relief in English law, preventing creditors for suing for more than they would have got if they had taken part in the restructuring.

6.3 State-contingent loans

Debt relief can ensure vital resources are kept in a country and can be made available for disaster relief and reconstruction. If it happens quickly or even automatically in response to a shock or disaster, it can be one of the fastest ways to respond to a disaster.

The most automatic way to deliver debt relief is if the terms of a contract specify that debt payments will be suspended in response to a shock or disaster – what is known as a state-contingent loan. These are contracts which specify how much debt will be paid depending on circumstances. They balance risk between borrower and lender, rather than placing it all on borrowers up until a default, when the risk transfers *en masse* to lenders. Discussion elsewhere on state-contingent debt tends to focus on its role in private sector loans. However, there is no reason bilateral and multilateral lenders should not make their loans state-contingent too.

The contract can tie future debt payments to specific economic events or data. For instance, it could say that if a hurricane over a certain strength hits the country, debt payments are suspended for three years. Or if a disaster causes economic damage of a specified amount of GDP, debt payments fall in proportion to the scale of the economic damage. Where required, an independent institution could be specified to assess whether damage thresholds have been crossed.

If a large proportion of a government's debt is statecontingent, it reduces default risk for lenders. Whilst lenders will not know how much they will be repaid under a state-contingent contract, such contracts lower the chance that a debt will be fully defaulted on, and so reduce the risk of an all-out loss.

State-contingent debt contracts could be a useful way to ensure future debt payments are in line with what a country can afford to pay. However, this will only be the case if the contracts are set up comprehensively, covering the full variety of circumstances which arise. Characteristics of state-contingent debt should ensure that:

- The contracts cover the widest range possible of economic shocks and disasters. This could best be done by identifying a few key data triggers, such as economic growth and economic damage, rather than events in themselves, such as a hurricane.
- The contracts enable a sliding scale of payments, rather than a one-off suspension or payment. For example, if economic growth is used as a sliding scale to determine debt payments, then debt payments would be lower during periods of low growth, and higher during periods of high growth. However, a second trigger of economic damage may also be needed to ensure debt payments are reduced by enough in response to a disaster. Because there is a delay between a disaster and the extent of the damage being known, the contract could specify a total suspension of payments in response to the disaster event, but that the amount of debt payments ultimately to be made would be decided after an assessment of damage had been completed.
- Most of a government's debt (or at least external debt) would need to be state-contingent, to ensure that default risk is reduced. This is the only way that overall risk for the private sector is reduced, and so the general future terms of lending are improved. Given that in more impoverished countries bilateral and multilateral lenders are significant creditors, debts to them, as well as to the private sector, have to be made statecontingent if a large majority of a government's debt is to be state-contingent.

The last criteria is one of the main stumbling blocks to introducing state-contingent debt. If only new loans are given in this way, only a small proportion of a government's debt will be state-contingent, and so the default risk will not be reduced. However, if there was a comprehensive debt reduction scheme for a country, then all the restructured debt, across all types of creditors, could be made state-contingent. This would immediately reduce future default risk across creditors, enable creditors to gain if a country's economy performs better than expected, and create a state-contingent debt framework which any future borrowing could then use.

The best, and most feasible, way for state-contingent debt contracts to be introduced is therefore *after* a comprehensive debt restructuring process, rather than piecemeal as new loans which do little to change the overall risk profile of a country's debt.

Box 4: Grenada's state-contingent debt

In 2015 Grenada restructured its debt with private creditors. The restructured debt includes a clause specifying that if Grenada is hit by a hurricane, debt payments will automatically be suspended for between six months and a year, depending on the strength of the hurricane. However, these payments are then moved into the future, rather than being cancelled, so the overall debt payment burden on Grenada over time does not fall.⁴³

The 'hurricane clause' in Grenada's debt to its private creditors shows such clauses are possible, but it does not meet the requirements above. It only covers hurricanes, not other economic shocks and disasters. It just pushes costs into the future, rather than recognising that a disaster permanently reduces Grenada's ability to make debt payments. And the clause is only in contracts to private creditors, and does not apply to other Grenada government debt owed to multilateral institutions and some other governments.⁴⁴

6.4 Debt relief in response to disasters

If the following two measures above are not taken – comprehensive debt relief now, and future debts becoming contingent on repayment capacity – then there needs to be an effective, automatic debt relief process in response to disasters. Given the expectation of increased damage from climate-related disasters, without debt relief states hit by disasters will build-up debts which prevent them from meeting human rights, basic needs, and the Sustainable Development Goals.

Multilateral institutions and governments should sign-up to a scheme which automatically suspends debt payments in the aftermath of a disaster for small impoverished countries. For example, a scheme could specify that if economic damage from a disaster could exceed 10% of a particular country's GDP, then all debt payments to the members of the scheme would automatically be suspended. To get private-sector creditors and others who have not signed-up to the scheme to comply with the suspension, the signatory creditors should also suggest the government concerned suspends all its external debt payments, regardless of whether the creditor has agreed. The Paris Club group of western creditors say that a "comparability of treatment" should be followed across external creditors. Therefore, it is logical for them to require debt restructuring by the private sector to follow any debt relief given by governments.

Following the suspension, a comprehensive assessment of economic damage should be conducted. This should then feed into a donor conference to mobilise grants for rebuilding. Once this has been completed, as under 1.1 above, an independent assessment of debt payment capacity should be concluded, taking into account grants committed and what loans will need to be taken on to make up for any shortfall. This independent assessment of debt payment capacity should then, as in 6.2, inform a comprehensive debt conference to agree debt reduction and future debt payments.

Small Island Developing States, and developing countries more broadly, have called for agreements so that those who have contributed most to climate change pay for loss and damage which climate change creates. Shamefully, richer countries have refused to accept making loss and damage payments, and the inadequate grants which are given in response to disasters are misleadingly labelled as aid. In the absence of adequate compensation for the damage caused by climate change, there need to be effective, automatic mechanisms to deal with the debt burdens which will inevitably result under the current system.

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