

Using the new UN MVI to identify and fill in vulnerability financing gaps in SIDS

This paper attempts to advance reflections on using the new United Nations' Multidimensional Vulnerability Index (MVI) to guide smarter resource allocations in small island developing states (SIDS).

This paper has been produced to inform discussions concerning the new Multidimensional Vulnerability Index introduced by the United Nations.

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Abstract

This paper attempts to advance reflections on using the new United Nations' Multidimensional Vulnerability Index (MVI) to guide smarter resource allocations in small island developing states (SIDS). First, it shows how the MVI could help unveil the higher vulnerability of SIDS that is often overlooked or underestimated due to an average higher level of income. Second, it shows that, in the absence of correlation between MVI scores and official development finance (ODF) allocation, SIDS suffer from structural vulnerability financing gaps, in particular in the areas of climate-related disaster risk reduction (DRR)/adaptation and economic diversification. Third, it suggests a methodology that weighs in MVI scores and specific resources mobilisation capacities to prioritize allocation of ODF and other resources to fill in structural vulnerability financing gaps, using the example of climate-related disaster risk reduction and adaptation financing.

Foreword

This report is one of several studies conducted since 2016 by the OECD on the responses of the international community to the sustainable development and financing challenges faced by small island developing states (SIDS).

After two general reports, *Climate and Disaster Resilience in SIDS* and *Making Development Co-operation Work for Small Islands Developing States*, two country studies looked at SIDS experiences of graduating from the least developing country (LDC) category: an ex-post analysis of *Cabo Verde's* graduation, and an ex-ante analysis of the *Solomon Islands' graduation*. Four additional papers explored the consequences of the COVID-19 pandemic: *Mapping the Economic Consequences of COVID-19 in SIDS*, *COVID-19: Understanding Health Risks in SIDS*, *The impact of the COVID-19 crisis on External Debt in SIDS*, and *COVID-19 Pandemic: Towards a Blue Recovery in SIDS*. Two additional papers explored the difficulty of SIDS in accessing financing from climate funds *Capacity development for climate change in Small Island Developing States* and *Small Island Developing States' access to green funds*. Taking a regional perspective *Financing Sustainable Development in the Organisation of the Eastern Caribbean States: A Transition Finance Diagnostic* contributes to the Development Assistance Committee's reflections on the most appropriate responses to SIDS' financing challenges when close to graduation from ODA eligibility. Further research is also planned and being carried out during 2024 by the OECD/DAC: *Preparing for SIDS graduation from ODA-eligibility*, *Reviewing multidimensional vulnerability indexes and their impact on ODA graduation*, and *Improving domestic resource mobilisation in SIDS*.

All those reports provided substantial evidence that, while most SIDS are upper-middle income countries, they remain most vulnerable to the impacts of climate change, due to their small size, remoteness, and vulnerability.

Finally, the present paper *Using the new UN Multidimensional Vulnerability Index to identify and fill in vulnerability financing gaps in SIDS* aims to further contribute to the Development Assistance Committee's reflections concerning the use of the new UN MVI to guide smarter resource allocations in SIDS.

This document has been authored by Cecilia Piemonte.

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Table of contents

Abstract	3
Foreword	4
Acknowledgments	5
Executive Summary	8
1. Using the MVI to better assess vulnerability and financing needs in SIDS	10
Introducing the United Nations MVI	11
The rationale	11
The development and adoption of the index	12
Using the UN MVI to better assess vulnerability	14
SIDS are more vulnerable than their peers	15
Using the MVI to better assess financing needs	16
MVI and GNI per capita are not substitutable but rather complementary	16
2. Using the MVI to better guide allocation of ODF and other sources of financing in SIDS	20
Using the MVI to re-balance income and vulnerability criteria guiding ODF allocation to SIDS	21
The allocation of ODF to SIDS is largely driven by the income criterion	21
There is no correlation between vulnerability, as assessed by the MVI, and ODF allocation in SIDS	24
Using the MVI to identify and fill in structural vulnerability financing gaps in SIDS	25
SIDS' structural vulnerability is mainly related to disaster risk and lack of diversification	26
Financing to climate-related disaster risk reduction and adaptation and to promote economic diversification should be significantly increased	27
Using the MVI to mobilise and prioritise allocation of other sources of financing in SIDS	30
Remittances	30
Citizenship by Investment Schemes' (CBI) revenues	35
Debt swaps for climate-related DRR/adaptation investment	38
Other financing resources	43
3. Conclusions and recommendations	44
References	46
Annex 1. Most in need groupings	51

Tables

Table 1.1. The average SIDS' MVI score is higher than that of other 'most in need' country groupings	15
Table 2.1. What weighs the most in SIDS' SV scoring?	26
Table 2.2. The annual adaptation gap for SIDS amounts to USD 7.3 on average per year until 2030	28
Table 2.3. Remittances as a share of GDP in 2022	31
Table 2.4. Cabo Verde and Comoros, St Vincent and the Grenadines and Jamaica, Fiji and Solomon Islands, are SIDS from three regions that could particularly benefit from DAC members' efforts to help mobilise remittances into DRR/adaptation investment	32
Table 2.5. Most SIDS present a high risk of debt distress	38
Table 2.6. By region, some order of priority for the urgency of debt swaps	42

Figures

Figure 1.1. The new UN MVI structure	13
Figure 1.2. ODA-eligible SIDS are concentrated in the higher MVI quintiles	16
Figure 1.3. The presence of distinct income groups within different quadrants suggests a weak correlation between the MVI and the GNI per capita	17
Figure 1.4. SIDS concentrate in the upper-right quadrant: high MVI scores and high GNI per capita	18
Figure 2.1. ODF to SIDS steadily increases	22
Figure 2.2. As SIDS become wealthier, ODA flows decrease and OOF increase	23
Figure 2.3. The same phenomenon occurs in the case of SIDS' peers, even if the substitution rate of the financing means differs	23
Figure 2.4. ODF levels are not correlated to SIDS' MVI vulnerability scores	24
Figure 2.5. Only Lack of Structural Resilience presents a positive correlation with ODF allocations to SIDS	25
Figure 2.6. The quadratic mean	26
Figure 2.7. Remittances show a steady increase in SIDS	30
Figure 2.8. In 2021 official debt represents 47% of the total PPG external debt in SIDS	40
Figure A 0.1. Countries most in need, 2024	51

Boxes

Box 1.1 What is an MVI?	11
Box 2.1. Note on the methodology	21
Box 2.2. Factors that weigh in the SV-UN MVI component: the aggregation method	26
Box 2.3. UNEP calculations of SIDS adaptation financing needs	28
Box 2.4. Remittances for sustainable and resilient infrastructure in the Pacific	32
Box 2.5. Matching-grant programs: the Moldovan experience	34
Box 2.6. More than fifty years of diaspora bonds	35
Box 2.7. Saving extraordinary resources: the case of the Chilean sovereign funds	38
Box 2.8. What are debt swaps?	41

Executive Summary

This paper explores possible uses of the new United Nations Multidimensional Vulnerability Index (MVI) to guide allocation of Official Development Finance (ODF) and help mobilise other resources for a better alignment with SIDS' country priorities and financing needs. It gives a sense of which actions to prioritise and in which contexts, tackling the causes of structural vulnerability (SV) in SIDS. It suggests ways to fill in the financing gap for climate-related Disaster Risk Reduction (DRR) and climate change adaptation needs.

Main Findings:

- **No meaningful correlation can be discerned between the UN MVI scores and GNI per capita data, suggesting that the two indicators are not substitutes but rather complements.** Used together, they may allow for more clarity and better understanding of the risks underlying developing countries' situations.
- **Wealthier does not mean less at risk: MVI scores suggest that, among countries labelled as “most in need”¹, SIDS are the most vulnerable.** While several SIDS will lose eligibility to Official Development Assistance (ODA) in the coming years due their high GNI per capita levels (OECD, Forthcoming_[11]), concrete efforts should be needed to urgently address their structural and resilience-related vulnerabilities² to ensure a smooth and successful graduation.
- **Currently, there is no correlation between ODF allocation and overall MVI scores. Looking into the MVI scores in more detail, it appears that the disconnect between risk and allocation is greatest in financing of structural vulnerability (compared to resilience).** Within structural vulnerability, climate-related DRR and adaptation, along with economic diversification, represent the bulk of the challenges requiring more and/or a reallocation of resources.
- **To explore the question of the additional costs linked to filling in the structural vulnerability financing gaps, the paper focuses on climate-related DRR and adaptation which weigh significantly in the MVI's high structural vulnerability scoring level.** To fill the climate-related DRR/adaptation finance gap in SIDS,³ an average of USD 7.3 billion per year for ODA-eligible SIDS until 2030 is estimated (UNEP forecasts). While ODF cannot do it all, the paper suggests

¹ See DAC definition here: <https://www.oecd.org/development/financing-sustainable-development/countries-most-in-need.htm>

² The term 'vulnerability' may be used and understood differently by the different practitioners/fora and contexts. See for example vulnerability to climate change in (IPCC, 2023_[66]). Vulnerability is here used in the context of the definitions developed under the new UN MVI framework.

³ For reasons of brevity this paper only focuses on climate-related DRR/adaptation issues.

using it to leverage capacity to tap into other resources, including a more effective use of remittances, domestic resources, and debt.⁴

⁴ The cases of remittances, domestic resources, and debt are here used as examples but are in no way exhaustive of the use of other instruments/issues to be tackled.

1. Using the MVI to better assess vulnerability and financing needs in SIDS

The allocation of Official Development Finance (ODF) is driven by a number of factors that vary across providers.⁵ Still, a number of common references exist that set the boundaries of certain categories of ODF recipients, such as the Least Developed Countries (LDCs) category (based on GNI per capita/human assets index/economic vulnerability index), the World Bank income groups (based on GNI per capita), or the OECD DAC List of ODA-eligible countries (based on GNI per capita as well). Overall, **GNI per capita remains a determinant criterion** of ODF allocation, as illustrated by the strong correlation between GNI per capita and the accessibility/distribution of different sources of financing along the low to high-income transition spectrum.⁶

However, in recent decades, the distribution of world poverty has shifted along the transition spectrum with the rapid growth of large middle-income countries and the emergence of new forms of vulnerabilities linked, for example, to climate change.⁷ A number of countries, including Small Island Developing States (SIDS), have therefore called for a better integration of vulnerability among the factors of ODF allocation, and facilitated the development of multidimensional vulnerability indices (MVIs) to shed light on financing needs linked to specific vulnerabilities.⁸

This section introduces the most recent MVI developed by the United Nations and shows how it could be used to better diagnose the specific vulnerabilities and financing needs of SIDS. Preliminary analysis confirms that, independent of their income level, SIDS remain highly vulnerable, and therefore the use of the MVI could helpfully complement the GNI per capita and other indicators to assess a country's financing needs. It also calls for a better preparation of SIDS for ODA graduation, increased efforts to mobilise other sources of financing to ensure sustainability of financing beyond graduation, and tailored mechanisms to address vulnerabilities at all levels of income.

⁵ The literature on factors driving aid allocation is quite extensive and authoritative. Identified factors include income, population, governance, economic potential, providers' interest. See e.g., (Collier and Dollar, 1999^[64]) (Guillaumont and Chauvet, 2001^[63]).

⁶ See OECD work on Transition Finance (OECD, 2024^[65])

⁷ See (Melonio, Naudet and Rioux, 2022^[62]).

⁸ Note that here vulnerability factors are understood as those factors that can increase the risk of shocks, affecting countries' development, while resilience factors can reduce their impact.

Introducing the United Nations MVI

After decades of work, in response to calls from SIDS and other countries, a multidimensional vulnerability index (MVI) (Box 1.) has recently been proposed and is being followed up by the United Nations members states for its possible adoption within the framework of an intergovernmental process co-facilitated by Portugal and Antigua and Barbuda.

Box 1.1 What is an MVI?

A multidimensional vulnerability index measures the exposure of a population⁹ to multiple hazards. Typically, such an index is a composite of multiple quantitative/qualitative indicators that, via some formula, deliver a single numerical result, making comparisons possible.

Many MVIs for SIDS and other groupings of countries already exist. They may include different dimensions (mainly economic, environmental, and social) but are defined in different ways.

Some examples of MVIs are: the Economic and Environmental Vulnerability Index (EVI)¹⁰ developed by the Committee for Development Policy (CDP) and used to classify the LDCs; the Fragility framework¹¹ used by the OECD to qualify fragile contexts; the Commonwealth Universal vulnerability index¹²; the Human Development Index (HDI)¹³ developed by UNDP; metrics designed to capture climate risk (global climate risk index)¹⁴, the Multidimensional Structural Vulnerability Index (MSVI) from the Sustainable Development Solutions Network,¹⁵ etc. Note that all these metrics have, to varying degrees, been subject to debate for their choice of indicators and data availability. OECD forthcoming work will further analyse and compare them in order to inform their use and usefulness in an ODA allocation context.

The rationale

Small Island Developing States (SIDS) have argued for three decades that traditional measures of development (i.e., GNI per capita), primarily used for the allocation of concessional resources, insufficiently capture their vulnerabilities. This call has become louder as the number of compound crises to which SIDS are exposed have increased in frequency and intensity, with many SIDS finding themselves on the frontlines of impact (e.g., climate change, biodiversity loss).

A call for the development of a globally accepted vulnerability assessment was first made in 1992 at the United Nations Conference on Environment and Development. This was repeated by SIDS in 1994, in the Programme of Action for the Sustainable Development of SIDS and was endorsed by the

⁹ Population as understood in statistical terms, i.e., the pool of individuals (creatures, things, cases, other) from which a statistical sample is drawn for a study.

¹⁰ [EVI Indicators | Department of Economic and Social Affairs \(un.org\)](#)

¹¹ [Compare your country by OECD](#)

¹² [D17470 EYSD Universal Vulnerability Index Report 2021B Travis Mitchell \(production-new-commonwealth-files.s3.eu-west-2.amazonaws.com\)](#)

¹³ [Human Development Index | Human Development Reports \(undp.org\)](#)

¹⁴ [Global Climate Risk Index 2021 | Germanwatch e.V.](#)

¹⁵ [Sustainable Development Report for SIDS 2023.](#)

General Assembly in resolution 49/122¹⁶. Between 1995 and 2003, there were further calls for the development of a multidimensional vulnerability index. In 2005, the Mauritius Strategy for the Further Implementation of the SIDS Programme of Action¹⁷ reiterated the concern of the international community about the vulnerability of SIDS. This was restated in September 2014, where UN member States in the Third International Conference on SIDS reaffirmed their commitment “to take urgent and concrete action to address the vulnerability of SIDS”. Additionally, the SAMOA Pathway (UN, 2014_[2]) calls upon the United Nations to develop appropriate indices for assessing the progress made in the sustainable development of SIDS and to develop vulnerability-resilience country profiles.

In June and August 2020, with the onset of the global COVID-19 pandemic, Belize, the then-Chair of the Alliance of Small Island States (AOSIS), wrote to the UN Secretary-General reiterating the need to advance work on a multi-dimensional vulnerability index (MVI). The UN Secretary General responded with the work on an MVI.

The development and adoption of the index

In December 2020 the United Nations (UN) General Assembly called upon the United Nations Secretary General to undertake “Immediate and substantial actions to facilitate the responses of small island developing states to recover from the unfolding crisis caused by the COVID-19 pandemic [...]” and “to provide recommendations [...] on the potential development and co-ordination of work within the UN system on a multidimensional vulnerability index for small Island developing states, including on its potential finalisation and use”.

In response to this call, the UN Secretariat conducted a series of consultations throughout 2021, which examined through technical webinars and virtual briefings the work of both UN and non-UN entities¹⁸, who had conducted similar work.

Based on these consultations the UN Secretary General presented a set of recommendations in his report¹⁹ and confirmed *inter alia* that:

- It is possible to develop an MVI. And this, for any specific purpose (i.e., either specifically focusing on SIDS vulnerabilities or one that is universal in nature, that is, an index that includes all countries’ vulnerabilities), or for a particular targeted group. This MVI, to the extent necessary, may differentiate and reflect exogenous factors (factors that are external to or independent of current

¹⁶ [ODS HOME PAGE \(un.org\)](#)

¹⁷ [A/61/277 - Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States: Sustainable Development Knowledge Platform \(un.org\)](#)

¹⁸ Individuals and entities consulted included the Department of Economic and Social Affairs, UNDP, Lino Briguglio (University of Malta), the Asian Development Bank, the Organisation for Economic Co-operation and Development, the Commonwealth, UNEP, the United Nations Office for Disaster Risk Reduction, the Caribbean Development Bank, IMF, UNCTAD, the Food and Agriculture Organization of the United Nations, the World Meteorological Organization, Sabina Alkire (University of Oxford), the United Nations Educational, Scientific and Cultural Organization, the secretariat of the Committee for Development Policy, Simona Marinescu (United Nations Resident Coordinator), Jeffrey Sachs (Sustainable Development Solutions Network), the African Development Bank and the United Nations Population Fund. Source: (United Nations, 2024_[3])

¹⁹ [A/76/211 - Follow-up to and implementation of the SIDS Accelerated Modalities of Action \(SAMOA\) Pathway and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States | Department of Economic and Social Affairs \(un.org\)](#)

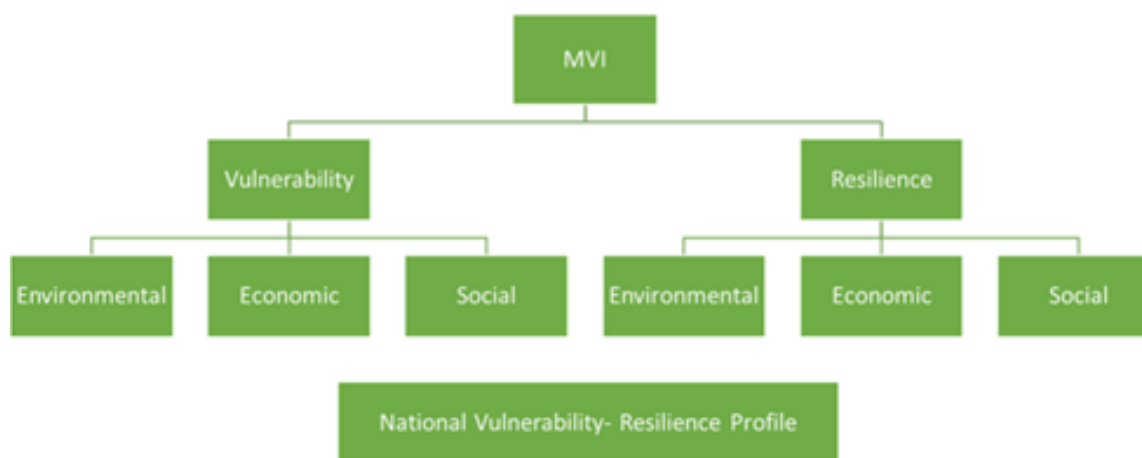
policies) and endogenous factors (linked to current policies, which may affect a country's capacity to adapt and respond to shocks, that is, resilience).

- It is possible to develop an index that can complement the existing performance-based allocation models used by the international financial institutions and multilateral development banks, which rely mainly on per capita income and the quality of economic policies; and
- The development of an index can be concluded within a year. Indeed, it was recommended in the report that the work on the index could be finalised in 2022.

The work on the index was carried out by a high-level expert panel²⁰ headed by two eminent persons, both appointed by the President of the General Assembly -- one of whom hails from a small island developing State. Appointed Co-chairs are H.E Mr. Gaston Browne Prime Minister of Antigua and Barbuda and H.E. Ms Erna Solberg former Prime Minister of Norway. Other members include senior policymakers, academia, civil society, and the public and private sector actors.

In August 2022 a preliminary draft version of the Interim report was circulated among UN member states for comments. This preliminary Interim report suggests the configuration of an MVI Framework constituted by an MVI index reflecting the structural challenges faced by countries, irrespective of their current policies and the political will of their governments containing two components: (i) a structural vulnerability indicator, and (ii) a structural resilience indicator, each with its own Economic, Environmental and Social dimensions. Systematic and in-depth vulnerability country profiles that supplement the MVI assessment were also planned to be delivered. See Figure 1

Figure 1.1. The new UN MVI structure



Source: (United Nations, 2024^[3])

The UN Secretary General²¹ also recommended the possible uses of the MVI, as follows: “a) To facilitate action to address vulnerability and build in-country resilience through the development of evidence-based policies and partnerships; b) To facilitate evidence-based, targeted and effective support and smarter resource allocations; c) To complement performance-based allocation models, allowing the use of a vulnerability component; d) To support and guide the design of innovative financing mechanisms and act

²⁰ TORs of the HLP available at [MVI_Panel_TOR_2021.pdf \(un.org\)](https://www.un.org/ohrls/mvi/hlp). Members of the panel: <https://www.un.org/ohrls/mvi/hlp>

²¹ Para 84-85 of A/76/211

as a vehicle for providing exemptions or wider eligibility with regard to the rules governing access to development and concessional financing; e) To serve as an advocacy tool to promote the principle to leave no one behind; f) To serve as a tool for monitoring, evaluation and measuring vulnerability and targeted policies in that regard; g) To support and guide the formulation of country vulnerability resilience profiles; h) To be used for evidence-based decision-making and the development of smarter, risk informed national, bilateral and multilateral cooperation policies; i) To inform United Nations in-country engagement and to support the preparation of country graduation strategies; j) To serve as a tool to inform approaches to debt restructuring, to act as a vehicle to extend eligibility for comprehensive debt treatment and to allow exceptional eligibility for vulnerable States.”

The new UN MVI, guided by the principles of multidimensionality, universality, exogeneity, availability, and readability, was finally launched in September 2023. Some governance arrangements were also suggested in its more recent and final report. (United Nations, 2024^[3]).²²

In October 2023, H.E. Mr. Gaston Browne declared that the “MVI now [...] presents a new quantitative benchmark designed to measure structural vulnerability and lack of resilience across multiple dimensions of sustainable development at the national level. Importantly, the MVI is not intended to replace GNI per capita; rather, it complements it, offering a deeper understanding of a country development requirements, including its need for concessional financing”.²³

Furthermore, at the High-Level Meeting (HLM) of the DAC, in November 2023, members reaffirmed they would “work actively as individual members to contribute to successful outcomes of upcoming major international meetings, such as (...) the 2024 4th International UN Conference on Small Island Developing States (SIDS)”. They also committed to “continue to deepen (their) partnership with SIDS, supporting the work of the Alliance of Small Island States-DAC Taskforce (... and to) consider how different evidence-based approaches to vulnerability in all its forms may be reflected in Members’ policies, informed by many sources of information and evidence, including the final report of the UN High Level Panel on the development of a multi-dimensional vulnerability index (MVI)”.

In 2023 a guidance document was elaborated by the novel AOSIS/DAC partnership, called ‘Improving Development Impact in SIDS: Implementing Effectiveness Principles’ which identified the new UN MVI as one of the areas to be studied and further explored by the two constituencies. (AOSIS/OECD, 2022^[4]).

Finally, it should be noted that this new indicator is a living tool that could further be improved.²⁴ With this spirit in mind, the next section highlights its possible use in order to inform DAC members’ ODA allocations.

Using the UN MVI to better assess vulnerability

Preliminary analysis using the UN MVI reveals the high vulnerability of SIDS, even compared to other countries most in need, despite their relatively higher income level.

²² It was suggested to constitute (i) an MVI Secretariat, with similar arrangements to those employed by the CDP Secretariat (UNDESA) or the UNDP Human Development Report Office (HDRO); and (ii) an Independent MVI Advisory Review Panel, mirroring the arrangements adopted by the UNCTAD’s PCI High Level Advisory Body, the UNDP’s Statistical Advisory Board (SAB) and or by the ECOSOC’s CDP.

²³ <https://pointville.ag/pm-browne-to-address-mvi-issues-before-leading-financial-institutions/>

²⁴ Some UN members, such as the United Kingdom, have reported on practical issues on which the new UN MVI could be improved to better illustrate vulnerability, e.g., removing the trade openness variable, suggesting the MVI be combined with the GNI per capita criterion. (Official UK comment in the May 2023 consultations).

SIDS are more vulnerable than their peers

Analysis using the UN MVI unveils the SIDS' high vulnerability:

- **SIDS are more vulnerable than non-SIDS.** For the subset of ODA-eligible SIDS, the average MVI score is 56.7 compared to 52.4 for ODA-eligible non-SIDS (and their median respectively 57 and 52). Table 1.1.
- **Even compared to other “countries most in need” (see Annex A), SIDS remain the most vulnerable,** with the highest (average and median) MVI scores, followed by least developed countries (LDCs), Fragile contexts (FCs) and Land-locked developing countries (LLDCs). Table 1.1.

Table 1.1. The average SIDS' MVI score is higher than that of other ‘most in need’ country groupings

ODA-eligible developing countries

	Average	Median
SIDS	56.7	57.0
LDCs	55.5	54.9
Fragile contexts (FCs)	54.7	54.9
LLDCs	53.0	52.0
<i>Total non-SIDS</i>	<i>52.4</i>	<i>52.0</i>

Note: Fragile contexts as defined by the OECD/DAC <https://www.oecd.org/dac/states-of-fragility-fa5a6770-en.htm>
 Source: Author's calculations (2023) based on <https://www.un.org/ohrlls/content/mvi-preliminary-country-scores>

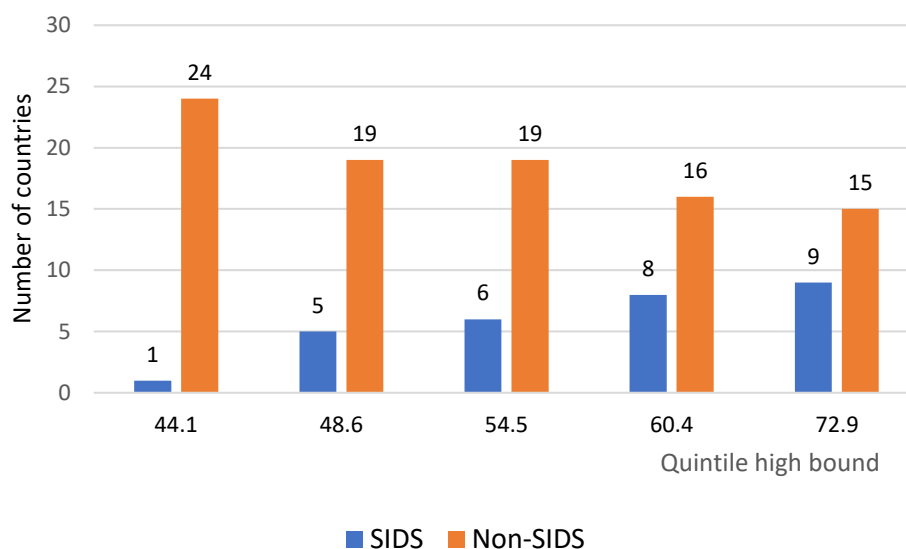
- **Unlike other developing countries, SIDS are concentrated in the higher MVI quintiles²⁵:** almost 60% of SIDS are concentrated in the fourth and fifth quintiles of the MVI score values, compared to only one-third for non-SIDS countries.²⁶ Figure 1.2.

²⁵ A quintile is a statistical value of a data set that represents 20% of a given population.

²⁶ Refers to ODA-eligible developing countries. It should be noted that the MVI calculates scores for a number of non-SIDS countries ineligible for ODA, which are excluded from consideration in the present study.

Figure 1.2. ODA-eligible SIDS are concentrated in the higher MVI quintiles

Number of countries by quintile



Note: The chart should be read as follows: in the [0;44.1] quintile only one SIDS is included and 24 non-SIDS; in the [44.1;48.6] figure five SIDS and 19 non-SIDS, etc. so most of SIDS are concentrated around high MVI values (it is the opposite for non-SIDS); Non-SIDS refer to ODA-eligible non-SIDS.

Source: Author's design based on UN (2024) data <https://www.un.org/ohrls/content/mvi-preliminary-country-scores>

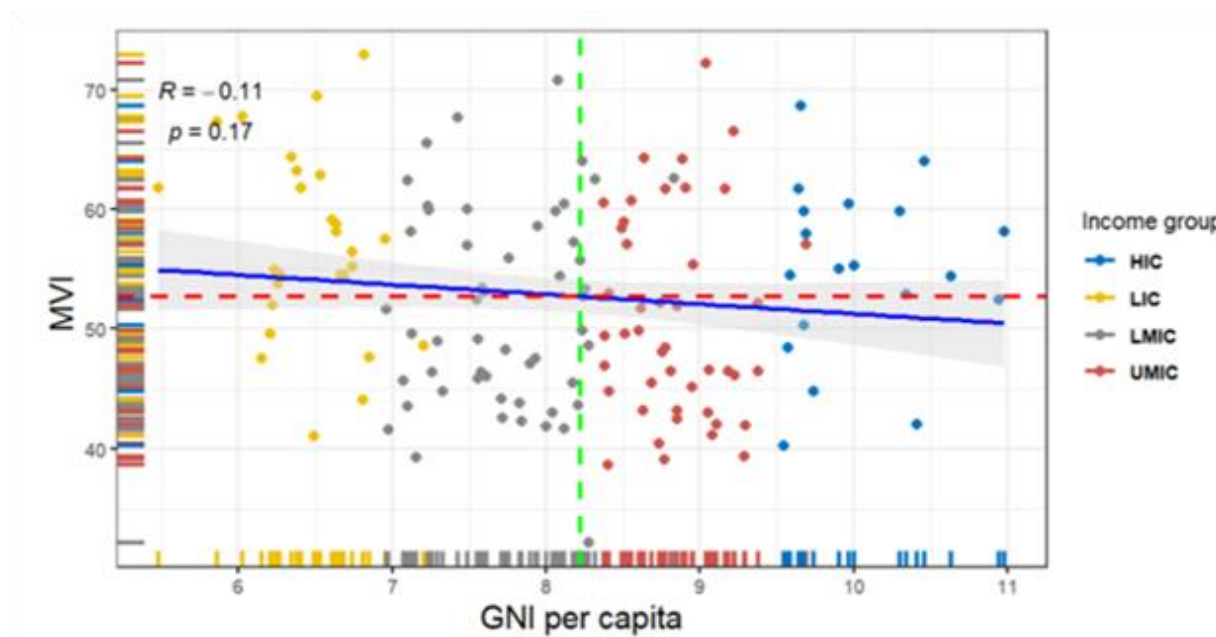
Using the MVI to better assess financing needs

Since the MVI unveils SIDS' vulnerabilities, how could it be used to guide the allocation of ODF? How could it articulate with other factors of allocation of ODF, including GNI per capita? The following analysis suggests that it would not be a good substitute but rather a good complement to GNI per capita.

MVI and GNI per capita are not substitutable but rather complementary

There is no correlation between the level of income and the level of vulnerability as measured, respectively, by the GNI per capita and the MVI score. Figure 1.3 shows an even distribution of countries across levels of income and vulnerability. Therefore, the MVI could not, taken alone, be a satisfactory substitute for the GNI per capita criterion; similarly, the GNI per capita taken alone does not sufficiently reflect specific vulnerabilities informed by the MVI. The two measures are complementary. (United Nations, 2024^[3])

Figure 1.3. The presence of distinct income groups within different quadrants suggests a weak correlation between the MVI and the GNI per capita



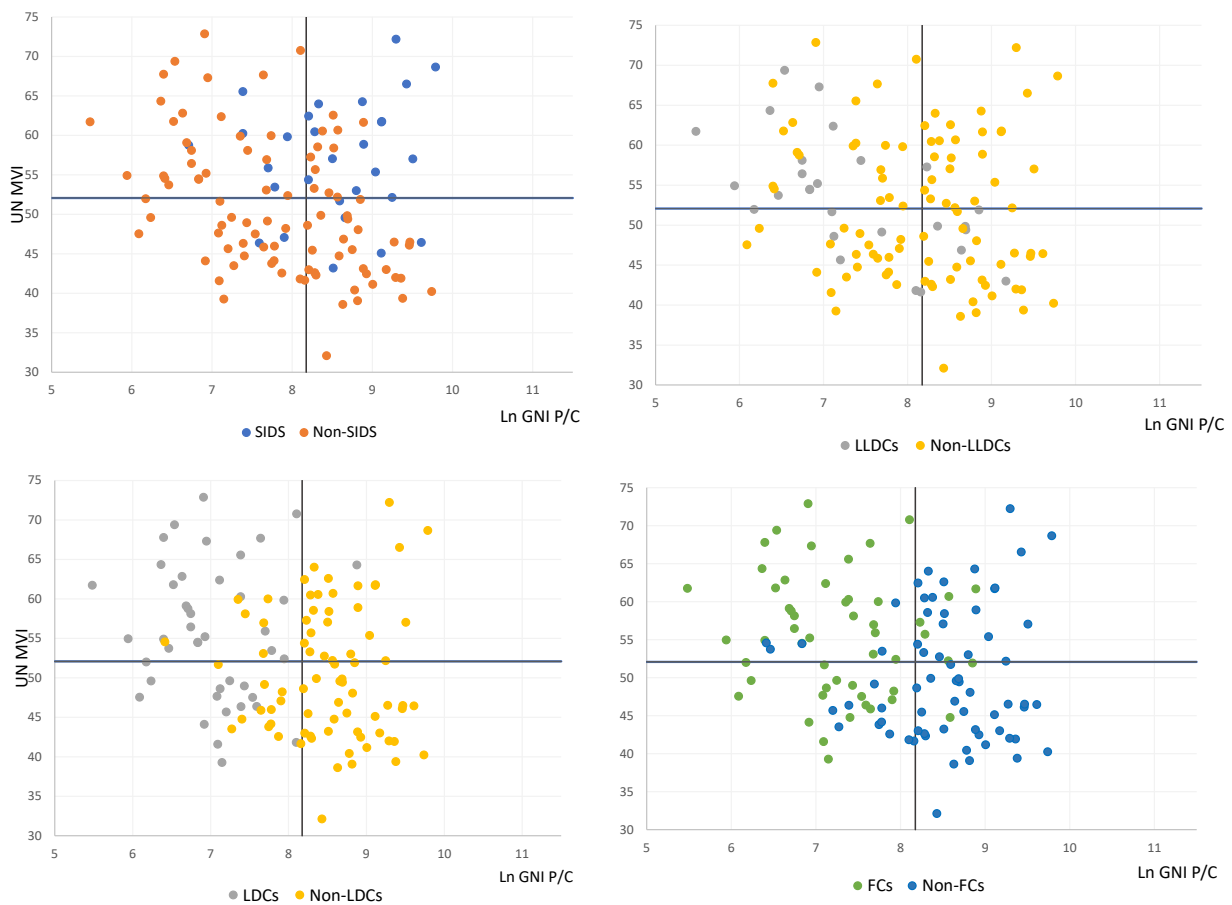
Note: Dashed lines indicate medians for each axis.

Source: (United Nations, 2024^[3])

This distribution also prevails among countries most in need that have diversified income/vulnerability mixes, except for SIDS that concentrate in the higher right quadrant with high income and high vulnerability. The plotting of MVI scores and GNI per capita data for the countries most in need groupings shows a noticeable concentration of SIDS in the upper-right quadrant (high MVI scores and high GNI per capita), while other in need groupings are differently distributed. Figure 1.4 illustrates by grouping that, while conserving a near-absence of correlation between the MVI/GNI per capita factors:

- SIDS markedly concentrate around high MVI and high GNI per capita scores,
- LDCs and FCs are mostly concentrated around low levels of GNI per capita but with a balanced distribution around the developing countries' MVI median, and
- LLDCs tend to show high MVI scores combined with low GNI per capita figures.

Figure 1.4. SIDS concentrate in the upper-right quadrant: high MVI scores and high GNI per capita



Note: Includes ODA-eligible developing countries. Dashed lines indicate medians for each axis. Note that the four groupings cannot be represented altogether since many countries appear in more than one grouping. See Annex A, Figure A.1.

Source: Author's design based on UN MVI (2024) <https://www.un.org/ohrls/content/mvi-preliminary-country-scores> and WDI (2024) <https://data.worldbank.org/indicator/NY.GNP.PCAP.CD>

This situation creates specific challenges for SIDS, in particular when they reach high-income status and lose ODA-eligibility. This suggests that DAC members could helpfully use the MVI to better assess SIDS vulnerabilities and address them as early as possible in anticipation of graduation and ensure that other funding sources have been mobilised to continue addressing them after graduation. The following section shows how the MVI could be used to address this conundrum and guide the allocation of ODF to respond to the most imminent challenges SIDS face. A closer look at the MVI components to understand the overall high score of SIDS could help further identify the precise challenges they face and

help them more effectively tackle their causes.²⁷ Development is not linear, and ignoring some vulnerabilities could have dramatic effects with possible setbacks.²⁸

²⁷ As useful background, digging into the MVI components also helps understand why countries such as Saudi Arabia and Qatar have high MVI scores: they are explained by factors such as dry lands and water scarcity (weighing heavily in their MVI computation). This illustrates the usefulness of looking beyond the simple, aggregate MVI score.

²⁸ SIDS are also extremely dependant on ODA flows. This issue is further explored in (OECD, Forthcoming^[1]). The Transition Finance (TF) research carried out by the OECD shows that as countries grow, the role of ODA becomes negligible (approaching 2%) relative to other means of financing (such as non-concessional flows, private investment, and domestic revenues). In the case of SIDS, however, it seems that close to graduation, countries continue to be significantly dependent on ODA flows (e.g., on average 38% of external financial flows to SIDS consists of ODA financing). Such figures refer to evidence-based data from years 2017 to 2022.

2. Using the MVI to better guide allocation of ODF and other sources of financing in SIDS

MVI scores reveal that SIDS are more vulnerable than other developing countries, despite their relatively high level of income, even compared to other countries most in need. In the absence of correlation between MVI scores and GNI per capita, the MVI could be a good complement to GNI per capita to identify the financing needs of SIDS.

The following section further explores how the use of the MVI could improve the allocation of ODF and other resources to address SIDS' vulnerability. It shows that ODF allocation remains largely guided by income levels of partner countries, and that there is no correlation between vulnerability scores and ODF allocation. Therefore, SIDS suffer from large structural vulnerability financing gaps.

Filling in the structural vulnerability financing gap revealed by the use of the MVI would require the mobilisation of additional ODF or/and their reallocation, and other resources in particular in support of climate-related disaster risk reduction (DRR) and adaptation, as well as economic diversification, which explain three quarters of the high vulnerability score together. The following section tests new methodologies for filling in the climate-related DRR/adaptation financing gap based on the combined use of MVI scores and mobilisation potential of innovative financial instruments.

Box 2.1. Note on the methodology

In 2023 the Development Assistance Committee (DAC) recognises 32 ODA-eligible SIDS. These countries are: Belize, Cabo Verde, Comoros, Cuba, Dominica, Dominican Republic, Fiji, Grenada, Guinea-Bissau, Guyana, Haiti, Jamaica, Kiribati, Maldives, Marshall Islands, Mauritius, Micronesia, Montserrat,²⁹ Nauru,³⁰ Niue, Palau, Papua New Guinea, St. Lucia, St. Vincent and the Grenadines, Samoa, Sao Tomé and Príncipe, Solomon Islands, Suriname, Timor-Leste, Tonga, Tuvalu, and Vanuatu. The regional grouping ‘Caribbean, regional’ and ‘Oceania, regional’ is also included as ODA recipients.

Commitments versus disbursements: *Commitments* measure donors’ intentions and allow the OECD to monitor the targeting of resources to specific purposes and recipient countries. They fluctuate as aid policies change and reflect how donors’ political commitments translate into action. They give an indication about future flows. *Disbursements* show actual payments made each year. Commitments are often multi-year and subsequent disbursements spread over several years. This paper prioritises the use of commitments as a better proxy to measure DAC members’ global action.

Official Development Finance (ODF) refers to official development assistance (ODA) plus non-concessional flows (or other official finance – OOF).

Adaptation finance: Since 2010, the DAC monitors and reports development finance ODA flows in relation to adaptation finance through the so called ‘Rio markers’ methodology. Rio markers may be reported on allocable ODA, a subset of ODA that excludes some activities that are not eligible for climate reporting according to DAC rules. Reporting on the Rio markers is mandatory for ODA from DAC members. The OECD also collects climate adaptation data on multilateral outflows. Multilaterals organisations, however, use a different methodology to capture this issue, the so called MDBs joint methodology. See details in (OECD, 2024^[5])

Using the MVI to re-balance income and vulnerability criteria guiding ODF allocation to SIDS

Allocation of ODA to SIDS is largely driven by income criteria, and there is no correlation between allocation of ODA to SIDS and their vulnerability, as assessed by the MVI. Preliminary analysis suggests that “structural vulnerability” is not a driver of ODF allocation.

The allocation of ODF to SIDS is largely driven by the income criterion

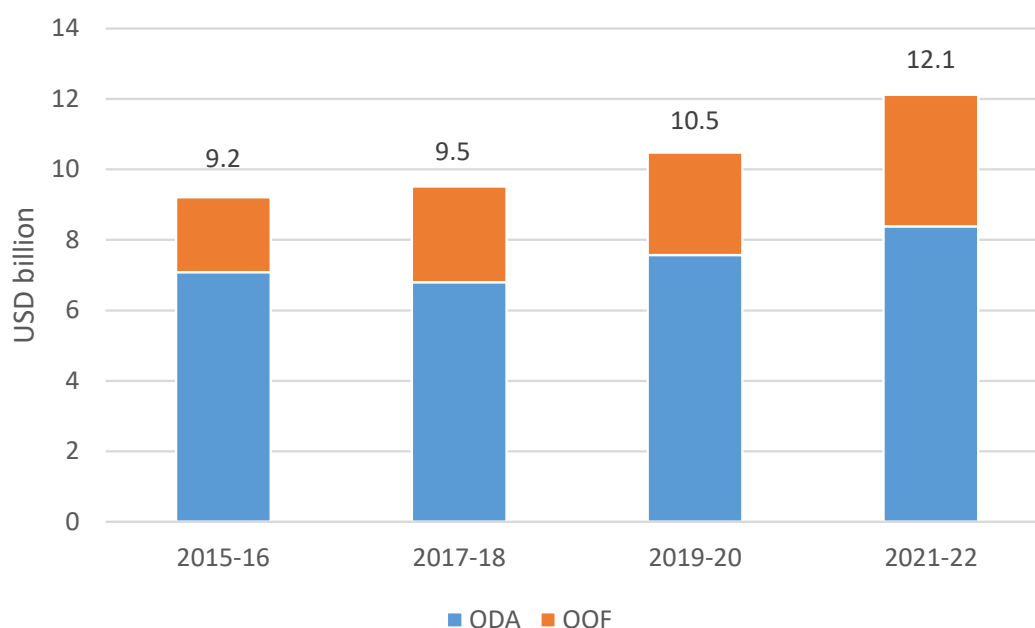
ODF commitments to SIDS amounted to USD 12.1 billion on average per year in 2021-22, showing a significant increase in recent years (2019-20 compared to 2021-22). Such an increase is mainly OOF-based, while ODA flows show a slower but steady increase over the observation period (2015-22). Figure 2.1.

²⁹ The DAC agreed to defer the decision to graduate Montserrat until October 2025, based on reliable GNI per capita data to be submitted by the latest on 1 July 2025. If the data show that Montserrat remained a high-income country, it will be proposed for graduation for 2026.

³⁰ The DAC already approved the graduation of Nauru from the DAC List of ODA Recipients but agreed to defer the date of effect of its graduation until 1 January 2026. In January 2026, the DAC will update the DAC List of ODA Recipients to reflect Nauru’s graduation.

Figure 2.1. ODF to SIDS steadily increases

Bi-annual averages, USD billion commitments, 2021 prices



Note: Includes 32 SIDS and regional figures.

Source: Author's design based on OECD/CRS database (2024) <https://stats.oecd.org/Index.aspx?DataSetCode=crs1>

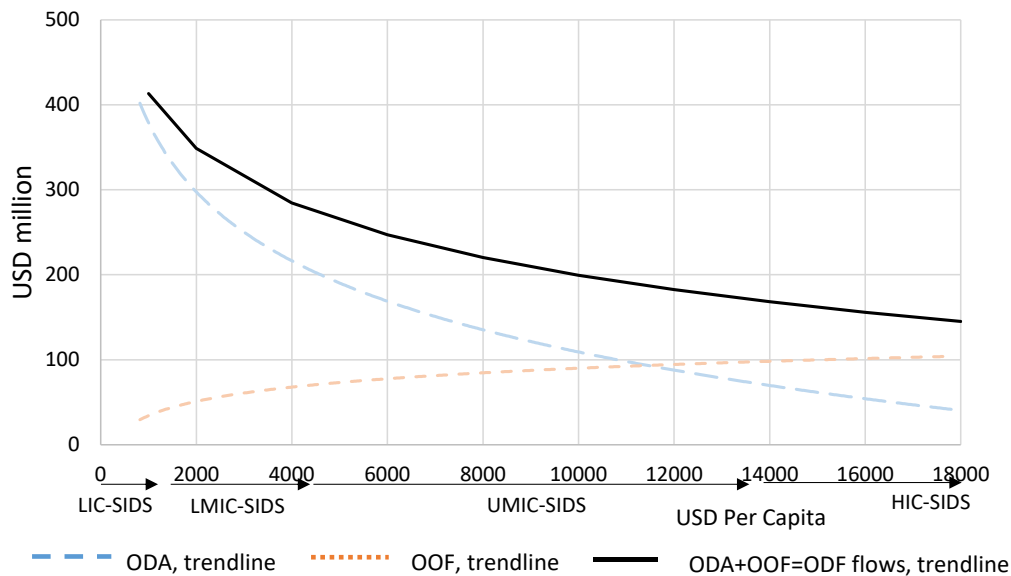
The progressive substitution of ODA by OOF is in line with the “logic” of ODA allocation that has been highlighted by OECD/DAC work on Transition Finance (TF) carried out by the OECD/DAC. As countries become richer, ODA inflows decrease, OOF inflows increase, and other non-official flows and domestic resources (private investment and tax revenues) become more prominent in the developing countries’ financing mix (see the Transition Finance approach, (Piemonte et al., 2019^[6])).

This transition is desirable because it shows the capacity of countries to reduce dependence on foreign assistance and to mobilise domestic public and private sector resources. ODA is progressively phased out to leave way to less concessional forms of financing, and as economies grow, they develop their own self-financing capacities.

Figure 2.2 and Figure 2.3 illustrate this evolution of ODA and OOF allocations for SIDS vis à vis non-SIDS, with a progressive phasing out of ODA and substitution by less concessional OOF.

Figure 2.2. As SIDS become wealthier, ODA flows decrease and OOF increase

ODF figures, 2017-22 average, USD disbursements, 2022 prices, DAC members' and multilateral outflows to SIDS

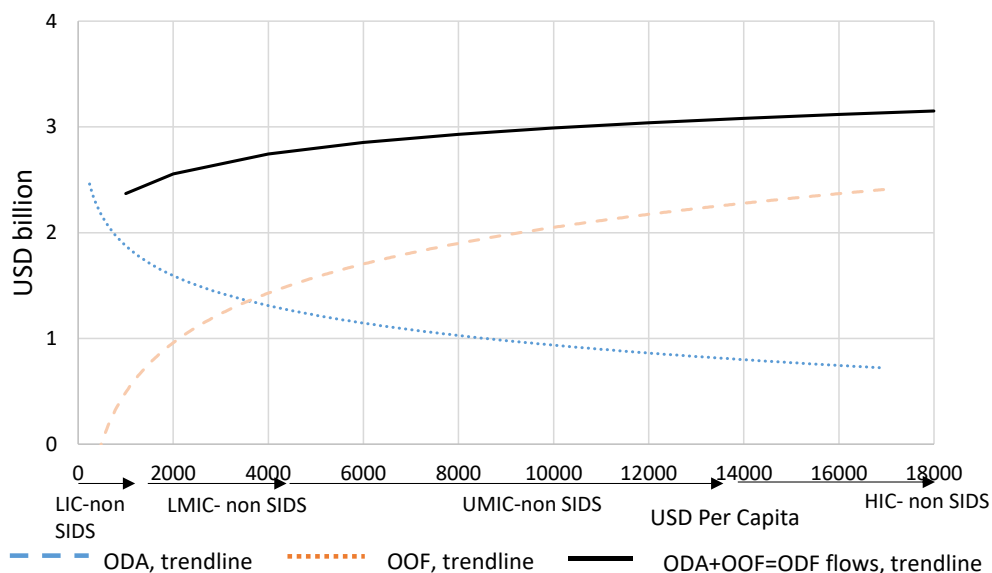


Note: Includes 32 SIDS.

Source: Author's design based on OECD/CRS database (2024) <https://stats.oecd.org/Index.aspx?DataSetCode=crs1>

Figure 2.3. The same phenomenon occurs in the case of SIDS' peers, even if the substitution rate of the financing means differs

ODF figures, 2017-22 average, USD disbursements, 2022 prices, DAC members' and multilateral outflows to non-SIDS



Note: Includes 88 non-SIDS developing countries.

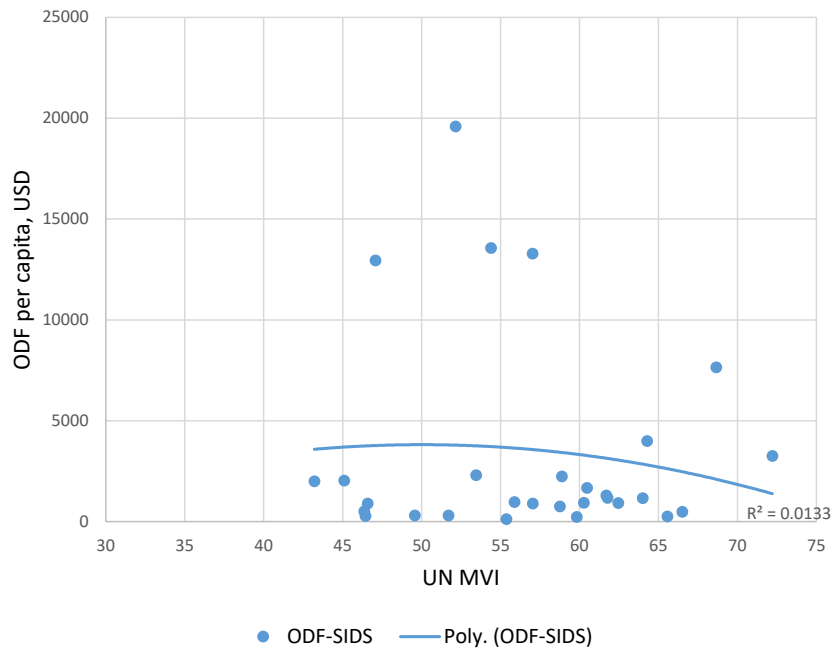
Source: Author's design based on OECD/CRS database (2024) <https://stats.oecd.org/Index.aspx?DataSetCode=crs1>

There is no correlation between vulnerability, as assessed by the MVI, and ODF allocation in SIDS

ODF to SIDS does not present any significant correlation with the vulnerability score of the new UN MVI. In other terms, the allocation of ODF does not respond to the aggregate of vulnerability criteria in the MVI: a higher vulnerability does not trigger more ODF.³¹ Figure 2.4.

Figure 2.4. ODF levels are not correlated to SIDS’ MVI vulnerability scores

2018-22 average, USD commitments, 2021 prices



Note: Trend lines are shown as log or polynomial representations depending on their higher correlation results. 2018-22 is taken as the reference period to calculate ODF per capita.

Source: Author’s design based on OECD/CRS database (2024) and <https://www.un.org/ohrls/content/mvi-preliminary-country-scores>

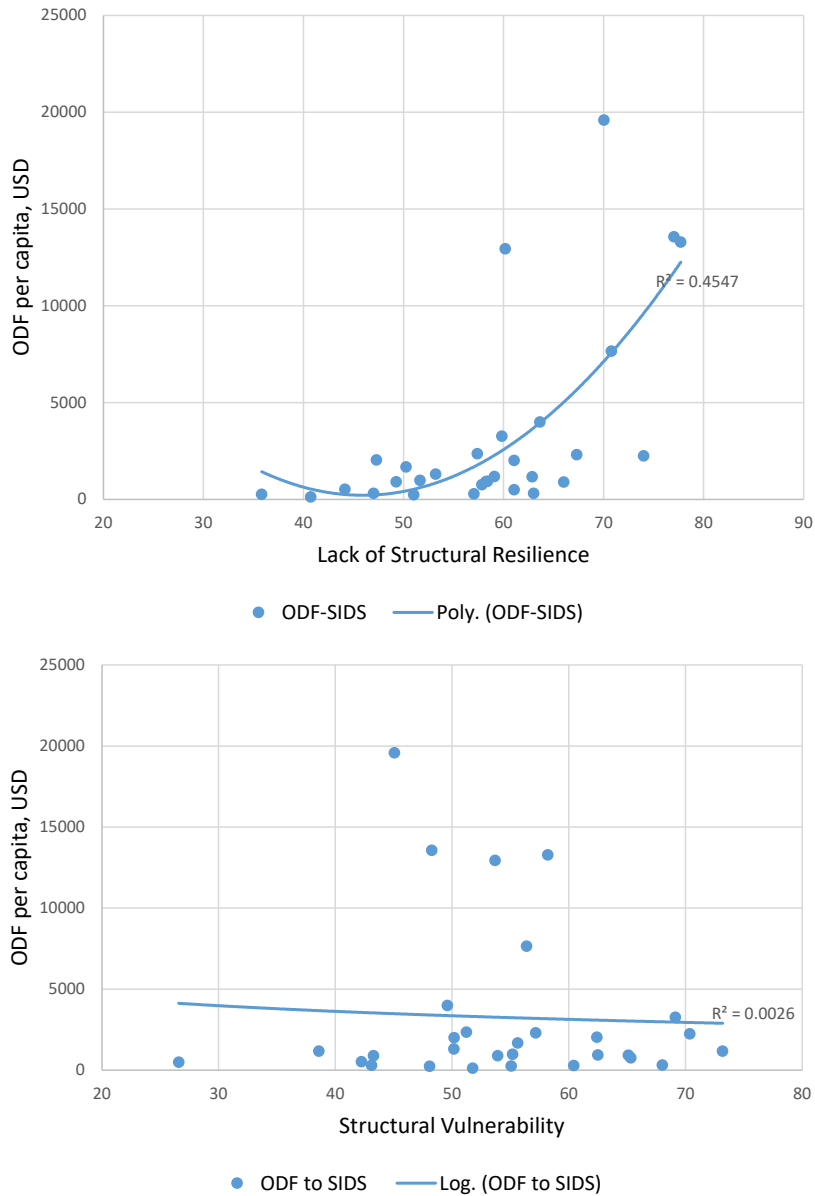
At a more disaggregated level, looking at the two sub-indicators of the UN MVI, it appears that this poor correlation with the overall index is primarily caused by the absence of responsiveness of ODF allocation to the SIDS’ structural vulnerability (Figure 2.5, lower graphic). This structural vulnerability sub-index includes indicators pertaining to: Exposure to fluctuations in export earnings, Exposure to fluctuations in strategic import prices, Exposure to natural hazards, Exposure to extreme weather events, Exposure to ecosystem pressure, Exposure to global health shocks, Spillover effects of regional violence, Exposure to entrance of international forced displacement of people.

On the contrary, ODF allocation appears to be more responsive to structural resilience criteria (See Figure 2.5, upper graphic). This structural resilience subindex includes Indicators pertaining to: Capacity to integrate with international markets, Economies of scale, Domestic economic capacity, Adequacy of water supply, Resilience of agricultural system, Resilience to heat shocks, Low demographic pressure, Effective social service provision, Gender equity.

³¹ A similar phenomenon is observed in the case of non-SIDS.

Figure 2.5. Only Lack of Structural Resilience presents a positive correlation with ODF allocations to SIDS

2018-22 average, USD commitments, 2021 prices



Note: Trend lines are shown as log or polynomial representations depending on their higher correlation results.

Source: Author's design based on OECD/CRS database (2024) and <https://www.un.org/ohrlls/content/mvi-preliminary-country-scores>

Using the MVI to identify and fill in structural vulnerability financing gaps in SIDS

The absence of correlation between ODF allocation and structural vulnerability suggests that this dimension of SIDS' vulnerability might be overlooked or underestimated, and therefore point to a potentially significant financing gap.

SIDS' structural vulnerability is mainly related to disaster risk and lack of diversification

In order to better guide external assistance to SIDS, taking into account exogenous causes of vulnerability (or structural vulnerability), it is worth deepening the analysis of SIDS' structural vulnerability (SV) scores. Box 2.2.

Box 2.2. Factors that weigh in the SV-UN MVI component: the aggregation method

The SV component of the UN MVI is compiled by thirteen different indicators, each indicator weighing differently depending on the country. This is precisely what differs the most in the construction of this new MVI from other existing indices.

Most indices use linear aggregation methods based on the simple arithmetic mean of equally weighted components. This type of aggregation is easily understandable as it is computed by summing a set of observations and dividing the result by the number of observations. Importantly, this method assumes perfect substitutability between all components: a poor score in one component can be compensated by sufficiently high scores in other components. The UN High Level Panel producing the new MVI concluded that this assumption does not hold in the case of vulnerability, as, for example, low social vulnerability does not correct for high vulnerability to natural hazards. The Panel therefore rejected the use of this method.

The aggregation method, chosen by the MVI Panel, employs the quadratic mean or the “root mean square” (RMS), as it was felt that this method allows for a good balance between simplicity and the need to highlight heterogeneous vulnerability profiles. The quadratic mean (Figure 2.6 describes the formula), used for each layer of aggregation, is computed in three steps: (i) each indicator is squared (to amplify the extremes); (ii) the arithmetic mean of the squared values is calculated; (iii) the square root of the result obtained in step 2 is calculated.

Figure 2.6. The quadratic mean

$$MVI_q = \sqrt{\frac{1}{n} \sum_{i=1}^n V_i^2}$$

Source: Author's design based on (United Nations, 2024^[3])

In the case of SIDS, SV's sub-component calculations show that the climate-related disaster risk reduction (climate-related DRR)/adaptation issues and lack of diversification both present the biggest incidence (38% each) in the SV scoring composition. They are followed by food and fuel dependency (13%) and social vulnerability (12%). Table 2.1.

Table 2.1. What weighs the most in SIDS' SV scoring?

	Share in the SV component of the UN MVI in SIDS, %
Climate-related DRR / Adaptation-related issues	38
Lack of economic diversification	38
Food and fuel dependency	13
Social vulnerability	12
Total	100

Note: Climate-related DRR and adaptation issues related to 'temperature shocks', 'damage due to natural hazards', 'rainfall shocks', 'victims of natural hazards', 'low elevation coastal zone (LECZ)', and 'drylands'; lack of economic diversification relates to 'export concentration' and 'instability of exports'. Note that 'damage due to natural hazards' and 'victims due to natural hazards' may also refer to non-climate-related events (tsunamis, earthquakes, ash falls and some epidemics), however, in the last twenty years SIDS have mostly seen tropical cyclones, droughts, floods and storms as being the cause of their damages and victims of natural hazards.

Source: Author's calculations (2023) based on <https://www.un.org/ohrrls/content/mvi-preliminary-country-scores>

This information is extremely valuable to identify financing gaps and guide ODF allocation to SIDS for greater effectiveness and impact. Concretely, it means that more ODF should be allocated to climate-related disaster risk reduction and adaptation as well as to promote economic diversification. A re-balancing of ODF allocation using results of the MVI analysis could thereby contribute to building more resilient SIDS' economies and address risks of development setbacks linked to high structural vulnerabilities.

Financing to climate-related disaster risk reduction and adaptation and to promote economic diversification should be significantly increased

Further including vulnerability considerations into ODF allocation decisions highlights that additional efforts are needed in particular in the areas of climate-related disaster risk reduction (DRR) and adaptation, and economic diversification that, together, explain more than three-quarters of the poor structural vulnerability score of SIDS. It does not mean that ODF should be shifted away from other areas, but may question current allocations, and for sure points to a structural financing gap that should be filled. Nor it means that ODF alone should fill in this gap, but that a greater attention should be paid to these structural vulnerability factors in country development programmes and ODF allocation decisions. This could also promote greater alignment with partner country's national development priorities and boost country ownership. Again, this might be counter-intuitive for providers that mainly look at income levels to make ODF allocation decisions: it requires a shift of mindset.

Then, the question becomes: what additional resources would be needed to better address the structural vulnerability financing gap revealed by the SIDS MVI scores? The following provides some preliminary analysis of this financing gap in the specific area of climate-related DRR/adaptation that is, together with economic diversification, the main factor of SIDS' structural vulnerability. Such analysis could be further deepened and expanded to other vulnerability indicators to have an estimate of the total cost of filling in the SIDS vulnerability financing gap.

According to UNEP recent research, it is estimated that the financing of SIDS' domestic adaptation plans would amount, annually, to an average USD 153 per inhabitant until 2030, ranging from USD 65 to USD 258 across SIDS. (United Nations Environment Programme, 2023^[7]). Box 2.3.. In other terms, this would represent, for the thirty-two ODA-eligible SIDS under analysis, an average financing need of USD 8.5 billion per year to fight climate change adaptation (with a minimum of USD 3.6 billion and a maximum of USD 14.3 billion per year).

Box 2.3. UNEP calculations of SIDS adaptation financing needs

Adaptation needs are compiled by UNEP following the National Determined Contributions (NDCs) and National Adaptation Plans (NAPs) submitted by developing countries themselves. Their needs are mostly based on sector- and project-based estimates.

'It is important to recognise that not all NDCs and NAPs, as well as the identified adaptation needs in these plans, have been fully costed. Many countries have highlighted methodological challenges and capacity gaps in quantifying adaptation finance needs. Therefore, even for those countries that have submitted costed estimates, actual adaptation needs may potentially be larger and grow as climate change risks increase over time. At the same time, the lack of rigorous assessments and countries' interest in attracting international finance means there is a possibility that adaptation finance needs are overestimated.'

Source: Author's based on (United Nations Environment Programme, 2023^[7])

Currently, the international community provides an average of USD 1.4 billion³² per year to finance climate-related DRR/adaptation. If climate-related DRR/adaptation needs in SIDS were to be entirely financed by external partners, SIDS' climate-related DRR/adaptation average annual gap would then amount to USD 7.3 billion per year (with a minimum of USD 2.5 billion and a maximum of USD 13 billion)³³ until 2030. Caribbean SIDS show the largest gap (USD 5.4 billion on average per year), followed by Pacific SIDS (USD 1.3 billion) and Atlantic, Indian Ocean and South China Sea (AIS) SIDS (USD 588 million). Table 2.2 uses UNEP estimates to calculate, country by country, the average minimum and maximum climate-related DRR/adaptation gaps.

Table 2.2. The annual adaptation gap for SIDS amounts to USD 7.3 on average per year until 2030

USD million

	Average adaptation financing needs	Average CCA / climate-related DRR financing received (average per year 2017-21)	Average Adaptation Gap per year	Minimum Adaptation Gap per year	Maximum Adaptation Gap per year	For information : Income grouping
AIS SIDS	784.4	196.2	588.2	141.2	1126.5	
Guinea-Bissau	284.8	24.8	260.0	96.2	455.4	LIC
Mauritius	193.5	81.1	112.4	1.1	245.2	UMIC
Comoros	124.5	34.5	90.0	18.4	175.5	LMIC
Cabo Verde	83.6	16.7	66.9	18.8	124.3	LMIC
Maldives	66.8	21.7	45.1	6.7	90.9	UMIC
Sao Tomé and Príncipe	31.3	17.4	13.8	<i>On track</i>	35.3	LMIC
Caribbean SIDS	5861.2	515.1	5376.2	2029.9	9379.5	

³² Average climate change adaptation commitments received by SIDS over 2017-21 as shown in CRS (2023) database.

³³ Author's calculations based on the average financing needs as shown in (United Nations Environment Programme, 2023^[7]) and annual average climate change adaptation commitments received by SIDS over 2017-21 as shown in the CRS (2023) database, both from a bilateral and multilateral origin.

	Average adaptation financing needs	Average CCA / climate-related DRR financing received (average per year 2017-21)	Average Adaptation Gap per year	Minimum Adaptation Gap per year	Maximum Adaptation Gap per year	For information : Income grouping
Cuba	1757.1	72.4	1684.8	674.1	2890.7	UMIC
Haiti	1680.1	255.4	1424.7	458.3	2577.7	LMIC
Dominican Republic	1647.4	39.0	1608.4	660.9	2738.9	UMIC
Jamaica	442.2	18.3	423.9	169.6	727.4	UMIC
Guyana	119.0	25.4	93.6	25.1	175.3	HIC
Suriname	86.2	3.7	82.5	32.9	141.6	UMIC
Belize	57.3	15.9	41.4	8.5	80.8	UMIC
St. Lucia	27.2	11.1	16.1	0.5	34.8	UMIC
St. Vincent and the Grenadines	16.1	15.6	0.5	<i>On track</i>	11.5	UMIC
Montserrat	0.7	0.3	0.4	<i>On track</i>	0.8	UMIC
Grenada	16.5	32.8	<i>On track</i>	<i>On track</i>	<i>On track</i>	UMIC
Dominica	11.3	25.1	<i>On track</i>	<i>On track</i>	<i>On track</i>	UMIC
Pacific SIDS	1831.1	710.1	1291.4	358.5	2454.1	
Papua New Guinea	1262.4	204.0	1058.4	332.3	1924.8	LMIC
Timor-Leste	198.3	58.1	140.3	26.2	276.4	LMIC
Fiji	138.5	67.6	71.0	<i>On track</i>	166.1	UMIC
Solomon Islands	93.5	71.9	21.7	<i>On track</i>	85.8	LMIC
Vanuatu	42.3	85.4	<i>On track</i>	<i>On track</i>	<i>On track</i>	LMIC
Samoa	30.1	35.6	<i>On track</i>	<i>On track</i>	<i>On track</i>	LMIC
Kiribati	17.8	46.0	<i>On track</i>	<i>On track</i>	<i>On track</i>	LMIC
Tonga	16.5	38.4	<i>On track</i>	<i>On track</i>	<i>On track</i>	UMIC
Micronesia	16.1	27.1	<i>On track</i>	<i>On track</i>	0.1	LMIC
Marshall Islands	8.1	35.7	<i>On track</i>	<i>On track</i>	<i>On track</i>	UMIC
Palau	3.3	4.8	<i>On track</i>	<i>On track</i>	0.8	HIC
Nauru	2.1	14.1	<i>On track</i>	<i>On track</i>	<i>On track</i>	HIC
Tuvalu	1.7	19.5	<i>On track</i>	<i>On track</i>	<i>On track</i>	UMIC
Niue	0.2	2.0	<i>On track</i>	<i>On track</i>	<i>On track</i>	UMIC
Total	8476.7	1421.4	7255.8	2529.6	12960.1	

Note: 'On track' does not mean no adaptation financing is needed, it means climate adaptation financing should keep being committed at its current pace. Countries are ordered by region and from greatest to lowest needs ('Average adaptation financing needs' from higher to lower levels). CCA refers to climate change adaptation.

Source: Author's calculations based on the average financing needs as shown in (United Nations Environment Programme, 2023^[7]) and annual average climate change adaptation commitments received by SIDS over 2017-21 as shown in CRS (2023) database <https://stats.oecd.org/Index.aspx?DataSetCode=crs1> for bilateral donors, and excel files from <https://www.oecd.org/dac/financing-sustainable-development/development-finance-topics/climate-change.htm> (2023) for multilateral agencies.

In term of income groupings:

- **Low-income SIDS** (LIC-SIDS, that include only one country, Guinea-Bissau) would need on average an additional USD 260 million per year (with a minimum of USD 96.2 million and a maximum of USD 455.5 million) to finance climate-related DRRAdaptation;
- **Lower-middle income SIDS** (LMIC-SIDS, that is eleven SIDS) would need on average an additional USD 2.8 billion per year (with a minimum of USD 854 million and a maximum of USD 5.2 billion); and

- **Upper-middle-income and high-income SIDS**, UMIC/HIC-SIDS (twenty countries), would need on average USD 4.2 billion additional per year (with a minimum of USD 1.6 billion and maximum of USD 7.3 billion).

Again, this gap is not to be filled by ODF alone, and in the case of ODA-graduated SIDS, should be financed by other means. But this preliminary analysis gives an order of magnitude of the additional resources needed to better address some of the most pressing SIDS' vulnerabilities and draws attention to the vulnerability financing gap. It is also incomplete, because it includes only the adaptation financing gap that explains 38% of the SIDS' structural vulnerability score in the MVI.

Using the MVI to mobilise and prioritise allocation of other sources of financing in SIDS

Addressing the structural vulnerabilities that affect the development prospects of SIDS should be a priority, and the use of the MVI could help guide allocation of ODF to those countries and areas with financing gaps. As SIDS become wealthier and near ODA-graduation, particular efforts should be made to help them address those vulnerabilities, or the risks of setbacks and debt distress will grow. ODF could be used directly to remedy vulnerability issues, and indirectly, as a catalyst or lever of other resources.

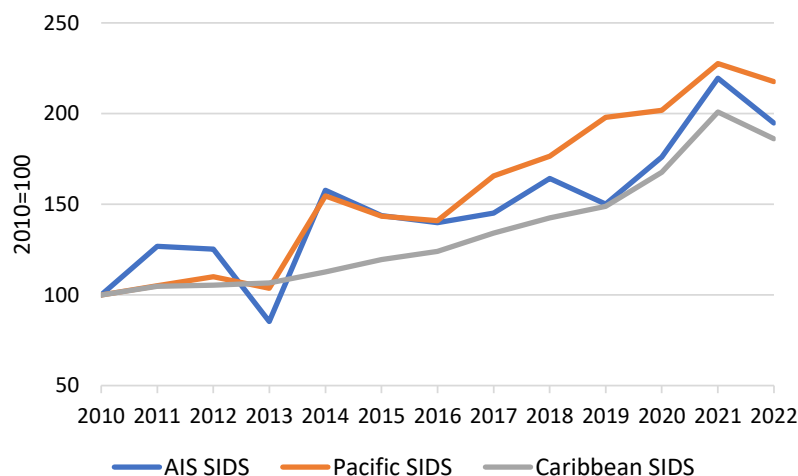
The objective should remain full independence from ODA, and where other external and domestic resources could be better leveraged to address vulnerability challenges such as climate-related DRR/adaptation. This section explores how the MVI could be used to help mobilise and prioritise the use of certain innovative non-ODF instruments in support of SIDS climate-related DRR/adaptation, and thereby remedy to structural vulnerability in SIDS.

Remittances

In all three SIDS regions (AIS, Caribbean, and Pacific) remittances have steadily increased in recent years, with a doubling of amounts in most countries between 2010 and 2022 and reaching the highest ever peaks during the COVID-19 pandemic (2021), before returning to pre-pandemic trends in 2022. Figure 2.7.

Figure 2.7. Remittances show a steady increase in SIDS

USD inflows, 2021 prices



Note: No data were available for Cuba, Montserrat and Niue. For Nauru, the latest available data date from 2017 and were estimated to be maintained as such levels until 2022.

Source: Author's design based on World Bank Indicators (2023) <https://data.worldbank.org/indicator/BX.TRF.PWKR.CD.DT> and CRS/OECD deflators.

Remittances represent up to 46% of GDP in Tonga, 25% in Jamaica and 22% in Comoros. Table 2.3. While private in nature, provided that they represent a large source of income, recent research questioned whether remittances could not be used to address climate-related DRR/adaptation challenges, e.g. through private investment in climate-related projects (Musah-Surugu et al., 2018^[8]), (Mills, 2022^[9]), (Ferro, 2021^[10]).³⁴ Indeed, climate-related applications of remittances include renewable energy, energy efficiency, and a range of climate change resilience and adaptation activities. An example is the programme to distribute solar lanterns to households in Haiti, funded through remittances. (OECD, 2023^[11])

Table 2.3. Remittances as a share of GDP in 2022

USD million, 2021 prices

SIDS	Remittances as a % of GDP		Remittances as a % of GDP
Tonga	46.2	Micronesia	5.5
Samoa	29.4	Belize	5.4
Jamaica	25.3	Suriname	4.9
Comoros	22.2	Timor-Leste	4.8
Vanuatu	21.4	Tuvalu	4.2
Haiti	20.1	Salomon Islands	3.2
Cabo Verde	15.0	St. Lucia	2.7
Marshall Islands	13.3	Mauritius	2.4
Guinea-Bissau	12.6	Sao Tome and Principe	2.0
Dominica	11.7	Palau	1.2
Dominican Republic	11.3	Maldives	0.1
Fiji	9.2	Papua New Guinea	0.04
Saint Vincent and the Grenadines	7.3	Cuba	-
Guyana	6.8	Montserrat	-
Grenada	6.6	Nauru	-
Kiribati	5.9	Niue	-

Note: Estimations were not feasible for Cuba, Montserrat, Niue, and Nauru because of unavailability of data.

Source: Author's design based on World Bank Indicators (2023) <https://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS>

Between 70 and 80 per cent (ECLAC, 2020^[12]) of remittances are spent on household expenses associated with food, health, housing, and education, among others, and the remaining 20 to 30 per cent are dedicated to business development or savings. In the case of SIDS, this could mean that USD 4.1-6.2 billion may potentially be invested in projects with a positive impact on climate-related DRR

³⁴ Some climate change-related experiences referring to mitigation projects (energy) are Sogexpress in Haiti (co-financed and partnering among the Inter-American Development Bank, the Clinton Bush Haiti Fund, FOMIN, Basel Agency for Sustainable Energy); Sogexpress (money-transfer agent), Food Express (Miami remittance centre), and Micama Soley; EasySolar in Sierra Leone; Diaspora Initiative in Nigeria; Diaspora Energy in Cote d'Ivoire; Clean Energy in Ecuador.

/adaptation. Attractive adaptation-related projects in which to invest could include the construction of stronger houses; the financing of technologies to improve harvests (adequate seeds, weather predictors); the construction of small-scale digs, wells, canals for irrigation farmers to adapt to climate change; the payment and participation in microinsurance, etc. Box 2.4 describes a new initiative in the Pacific that follows this line.

Box 2.4. Remittances for sustainable and resilient infrastructure in the Pacific

Currently in its feasibility phase, a remittance-based financing mechanism is being prepared to facilitate the acquisition of micro-infrastructure products such as roof strappings and solar panels to enhance households' resilience by local inhabitants in the Pacific.

Based on prior mechanisms implemented in Latin America (Haiti 2012 and Bolivia 2015), it is expected that migrant workers from the Pacific SIDS will direct part of their periodic remittance flows for resilient micro-infrastructure housing improvements for their families back home. It is expected that to purchase the resilient housing products, loans will be taken by the migrant workers (or their families) from local financial institutions in the Pacific Islands. To facilitate these loans, these institutions may take on debt from international impact investors. The products for improving household resiliency will be marketed and channelled through money transfer organisations or other money transfer service providers in the region.

The mechanism is expected to be self-sustaining, envisaged to mobilise USD 35 million, and impact 9 000 households. The countries involved are Samoa, Tonga, Fiji, Vanuatu, and Kiribati.

Source: (Convergence, 2023^[13])

Considering the level of remittances, the climate-related DRR/adaptation gap, and the SV score, Table 2.4 attempts to provide a sort of ranking,³⁵ region by region, of the countries with the highest potential to finance DRR/adaptation-related projects through remittances.

Such a ranking could be useful to DAC members as guidance in helping countries mobilise remittances where the urgencies are the highest and where the probability of success is the most significant.³⁶

Table 2.4. Cabo Verde and Comoros, St Vincent and the Grenadines and Jamaica, Fiji and Solomon Islands, are SIDS from three regions that could particularly benefit from DAC members' efforts to help mobilise remittances into DRR/adaptation investment

Ranking (50% weigh)	SIDS	Average climate-related DRR/Adaptation gap per year	SV score	<i>For information: Volume of Remittances, 2022, USD million</i>
	AIS SIDS			
1	Cabo Verde	66.9	58.39	293

³⁵ To define the ranking the SV scoring is weighted 50%, and the level of the (climate-related DRR/adaptation gap over the total of remittances) per year also weighted 50%.

³⁶ The higher the SV score, the higher the need to finance climate-related DRR/adaptation projects. The lower the share of the climate-related DRR/adaptation gap over remittances, the higher the probability that at least some share of remittances is dedicated to climate-related DRR/adaptation investments.

2	Comoros	90.0	66.00	243
3	Mauritius	112.4	62.86	256
4	Guinea-Bissau	260.0	57.03	167
5	Sao Tome and Principe	13.8	51.64	7
6	Maldives	45.1	73.99	5
Caribbean SIDS				
1	Saint Vincent and the Grenadines	0.5	65.12	65
2	Jamaica	423.9	51.00	3449
3	Dominican Republic	1608.4	47.00	9614
4	Guyana	93.6	35.82	505
5	St. Lucia	16.1	73.18	52
6	Haiti	1424.7	62.99	4239
7	Belize	41.4	50.26	133
8	Suriname	82.5	44.14	139
9	Grenada	On track	65.33	65
10	Dominica	On track	62.41	49
-	Cuba	-	40.72	-
-	Montserrat	-	-	-
Pacific SIDS				
1	Fiji	71.0	53.21	429
2	Salomon Islands	21.7	50.19	76
3	Timor-Leste	140.3	49.27	174
4	Papua New Guinea	1058.4	61.04	3
5	Samoa	On track	57.17	262
6	Tonga	On track	49.59	203
7	Vanuatu	On track	57.36	140
8	Marshall Islands	On track	45.06	28
9	Micronesia	On track	56.40	22
10	Kiribati	On track	48.76	14
11	Tuvalu	On track	48.26	2
12	Palau	On track	53.70	2
-	Nauru	-	58.20	-
-	Niue	-	-	-

Note: 'On track' does not mean no adaptation financing is needed. Rather, it means climate adaptation financing should keep being committed at its current pace through ODF. Countries are listed following a 'priority' order based on the countries' average climate-related DRR/Adaptation finance gap as a share of GNI (weighted 50%), and the SV scoring (also weighted 50%). Countries are listed by region. Such weights are indicative and may change as donors' preference change. No data indicates unavailability or only partial information that prevents a 'ranking'.

Source: Author's design based on (United Nations Environment Programme, 2023^[7]); WDI (2023) <https://data.worldbank.org/indicator/NY.GNP.MKTP.CD> and SV scoring (2023) <https://www.un.org/ohrls/content/mvi-preliminary-country-scores>

To facilitate the mobilisation of remittances to finance climate-related DRR/adaptation projects the DAC community could:

- **Raise awareness both among developing country households and senders of remittances of the usefulness and interest of investing in climate-related DRR/adaptation-related projects.** To do so it would be critical to involve community leaders in partner countries, closely followed by local population particularly in the Pacific and Caribbean islands, as well as associations of migrants in the countries where migrants live.
- **Help local governments incentivise the use of remittances for adaptation-related investment, for example through matching-grant programmes.** Some successful examples of

matching-grant programmes (typically with a ratio of 1:1) have already been carried out (see the case of Moldova, Box 2.5). Similarly, adaptation-related programmes could benefit from such initiatives, for example, in the agricultural sector (to improve adapted seeds' choice, and small-scale irrigation systems),³⁷ or in environment-related initiatives (e.g., scientific exchange on the maintenance of the mangrove, coral reefs, biodiversity), among others.

Box 2.5. Matching-grant programs: the Moldovan experience

Moldova has implemented a successful and diverse policy approach towards diaspora engagement, with initiatives such as the Program on Attracting Remittances into the Economy (PARE 1+1), the Diaspora Succeeds at Home Programme (DAR 1+3), Diaspora Engagement Hub and Diaspora Excellence Groups. These bodies have enjoyed substantial support from donors and have been successful at engaging the diaspora in local development and strengthening links between diaspora members and their former hometowns.

The PARE 1+1 programme, first implemented by the Organization for the Development of the Small and Medium Enterprises Sector (ODIMM) in 2011, has helped connect migrants' expertise to local small businesses and entrepreneurial training initiatives and foster the option for members of the diaspora to jointly establish a business with another family member or a friend living in Moldova with help from the government (on a co-funding basis). The programme channels remittances towards small and medium-sized enterprise development in Moldova's agriculture, industrial and services sectors. Between 2011 and 2017 over 1100 projects were implemented with initial investments coming from the emigrants' remittances which attracted additional funding from other investors and led to significant job growth throughout Moldova. The programme has benefited from both Moldovan Government and EU financial support and continues to foster the development of entrepreneurial skills among geographically widespread emigrants as well as local remittance recipients.

The DAR 1+3, Diaspora Engagement Hub and Diaspora Excellence Groups project were designed to ensure funding for initiatives focused on implementing concrete measures specifically designed to tap into skills development and recognition for labour migrants, targeting co-operation with the scientific segments of the diaspora, remaining aligned to Moldova's national economic development objectives.

Source: (UNECE, 2021^[14])

- **Help SIDS develop the appetite of their migrant population for diaspora bonds and prepare an enabling framework.** A pipeline of climate adaptation-related projects could be financed through diaspora bonds, and donors could deploy technical assistance to help partners build a system that adds transparency standards and the intervention/insurance of financial institutions (such as the Securities and Exchange Commission, SEC) to secure investors and their interests. (Schneidman, Tadesse and Lissanu, 2022^[15]). Box 2.6.
- **Encourage more remittances by helping lowering fees.** (AOSIS/OECD, 2022^[4]) highlights the high cost of sending remittances and exposes this as an obstacle to fully capitalise on the potential of this source of external financing to promote sustainable development. Indeed, despite the commitment to

³⁷ (Fonta, and , 2018^[50]) observed that 3.4% of remittances are used for investment into small businesses; (ECLAC, 2020^[12]) indicates that 'The average share of remittances invested in El Salvador's tomato and green pepper value chain was around 15%, compared with 3.7% for the tourism chain in Sacatepéquez, Guatemala, and 6.3% for the dairy chain in the Dominican Republic'.

reduce the transaction costs for migrant remittances to less than 3 percent by 2030, the global average was 6.5 percent in 2020. In many SIDS, transaction costs were over 10 percent.

Box 2.6. More than fifty years of diaspora bonds

“Diaspora bonds are simple. A country issues foreign-currency debt targeted at nationals living outside its borders, hoping to benefit from a patriotic dividend that offers lower pricing. If successful, the issuer receives crisis-resilient foreign-currency funding; in return, the diaspora is given a chance to contribute their quota to national development.” (Famoroti, 2018^[16])

Diaspora bonds have been in the market for more than fifty years, with contrasted results. Israel pioneered diaspora investments. Since 1951, Israel bonds, largely issued in the United States and registered with the U.S. SEC, had raised more than U.S. \$46 billion (as of mid-2021) and represented in 2019 sixteen per cent of the government’s external debt. They have targeted a mixed group of sectors such as agriculture, transportation, technology, energy, and immigration.

A less positive experience concerns the case of Ethiopia, who launched two initiatives of diaspora bonds, one in 2008 (to finance projects in the Ethiopian Electric Power state owned enterprise), another in 2011 (to finance the Grand Ethiopian Renaissance Dam, GERD). Both initiatives failed to achieve the expected results, the first after collapsing over environmental concerns and mistrust of the government, the second because of a lack of legal framework of water allocation related to the Nile in the region, which has complicated its functions.

Source: (Mbaku, 2020^[17]); (Gevorkyan, 2021^[18]); (Schneidman, Tadesse and Lissanu, 2022^[15])

Citizenship by Investment Schemes’ (CBI) revenues

Citizenship by Investment Schemes (CBIs) is a method of obtaining citizenship of a country through investment in specific sectors approved by the government, including real estate and economic contribution through donation. The main advantage of the CBI schemes is to mobilise additional revenues and build resilience against exogenous shocks.

CBIs are a highly criticised source of income. They are highly volatile³⁸ and may be subject to macroeconomic instability (or improper fiscal management: in good economic times government consumption rises, while in bad times social and political pressures make it downward inflexible). These schemes often also lack transparency on the collection and use of the revenues,^{39 40} and/or be a source of discomfort among the population.⁴¹ They can lead to a race to the bottom among countries, thereby

³⁸ In the case of St. Lucia, for example, they doubled in 2022 vis à vis 2021.

³⁹ “In some countries contributions to certain funds are not reported as part of the budget and managed at the discretion of cabinet. The CBI revenues from the real estate option, as in Dominica, are regarded as “non-fiscal”, held in commercial bank accounts, and transferred to the budget when convenient.” (Caribbean Investigative Journalism Network, 2022^[60])

⁴⁰ Analysis suggests that Dominica may have sold thousands more ‘golden passports’ (Jolly, 2023^[52])

⁴¹ See for example <https://www.theguardian.com/world/2019/jun/20/antigua-yida-project-chinese-colony-controversy>

undermining their usefulness.⁴² These issues are compounded by the fact that the schemes can be misused to hide assets offshore by escaping reporting under the OECD/G20 Common Reporting Standard or to misrepresent an individual's jurisdiction(s) of tax residence. Indeed, potentially high-risk CBI schemes are those that give access to a low personal income tax rate on offshore financial assets and do not require an individual to spend a significant amount of time in the location offering the scheme (OECD, 2022^[19]).

Still, four ODA-eligible SIDS in the Caribbean and one SIDS in the Pacific possess CBI schemes that represent a significant source of income. These are Antigua and Barbuda, Dominica, Grenada, St. Lucia, and Vanuatu. In some cases CBI revenues may represent a significant portion of the country's revenue: for example, CBI schemes represented almost 30% of Dominica's GDP in 2021 or USD 166 million, 14% of GDP in Vanuatu (USD 134 million, 2022), 11% of GDP in Grenada (USD 133 million in 2022), 8% of GDP in St. Lucia (USD 160 million the same year), and 3% of GDP in Antigua and Barbuda (46 USD million in 2021).⁴³ (LAZARUS, 2023^[20]); (Henrik, 2023^[21]); (OECD, Forthcoming^[22]); (Henrik, 2023^[23]), (Henrik, 2023^[24]), (Global Pass, 2023^[25]).

Acknowledging the difficulties these countries would have to replace CBI revenues in the short term,⁴⁴ there are alternatives to help secure their virtuous use until removal.⁴⁵ Following IMF recommendations (IMF, 2020^[26]), in order to avoid SIDS' fiscal instability linked to CBI schemes, countries could create stability funds to save CBI revenues⁴⁶ (see the example of Chilean sovereign funds highlighted in Box 2.7). Moreover, as suggested by the IMF, DAC members could help SIDS governments improve governance and regional co-ordination of CBI programmes, stopping the race to the bottom among countries, and establishing a sole stabilisation fund entailing important economic benefits to its members. IMF simulations indicate that a regional stabilisation fund (RSF) is about half of the size of the

⁴² The United States have threatened to end visa-waiver arrangements for countries offering CBI in order to prevent individuals, especially from Russia and Belarus, from bypassing sanctions of entrance to the country. In addition, EU members have given OECS until 2025 to abolish their CBI schemes or risk losing visa-free access to the EU (Searchlight, 2022^[51]).

⁴³ St. Kitts and Nevis, an ODA-graduated SIDS, drew on CBI revenues for 23% of its GDP in 2021.

⁴⁴ As explained in (OECD, Forthcoming^[61]) more should be done to help countries with CBI schemes to leverage domestic revenues from other sources. See recommendations to the DAC, "[DAC should] Focus their efforts on supporting domestic resources mobilisation (DRM) to ensure a smooth transition of OECS countries without creating financing gaps or traps. This includes the (i) phasing out of ineffective tax cuts to attract foreign investors in the tourism sector that can turn into a race to the bottom and deprive governments of significant tax returns; ii) the promotion of private sector development, including through backward and forward linkages in the tourism industry or regional shoring and shortening of value chains in North America, to expand the tax base; iii) if appropriate, progressively phase-out Citizenship by Investment schemes (CBI) that contribute to higher volatility and windfall effects when additional sources of tax income are put in place."

⁴⁵ Note that some partners have been incorporating more transparency in the deployment of CBI schemes. Vanuatu is currently working to include modifications to its Economic Citizenship Programme (ECP) to ensure compliance with security and due diligence procedures and allow comprehensive checks to be conducted by all suitable stakeholders on all applicants, after the EU and Switzerland announced in 2023 a full suspension (for all Vanuatu passport holders) until August 2024 of their visa waivers. For more details on the consequences of this issue in Vanuatu's economy, see (IMF, 2023^[54]).

⁴⁶ Furthermore, (IMF, 2022^[53]) says that "Recent EU and U.S. proposals to phase out CBI programs could intensify the scrutiny of compliance risks in the ECCU financial system, thereby increasing correspondent banking relationships (CBR) risks for the local banks that are becoming systemic with the exit of international banks. [...] The loss of CBRs remains a concern for the region as it poses a risk to financial stability."

sum of individual countries' stabilisation funds (SF), for the same level of saving contribution and withdrawal.⁴⁷

DAC members could help SIDS establish such savings fund(s). Noting that such Fund(s) should increase by USD 639 million on average every year, a share of the fund's resources could be invested in climate-related DRR/adaptation projects.⁴⁸ Knowing that the annual needs for adaptation-related investments in the countries involved are estimated at USD 113 million per year and that the current gap amounts to USD 20 million per year, expenses for climate-related DRR/adaptation projects would represent on average only 3% of such a fund (Box 2.7).

⁴⁷ The result is based on a Monte Carlo experiment replicating historical patterns of variation in output, revenue, and expenditure in response to shocks. For example, for a probability of RSF depletion at 1 percent, the estimated RSF would be about 5 percent of the regional GDP, while the sum of individual countries' SF is near 10 percent. (IMF, 2020^[26]).

⁴⁸ The IMF also suggests to properly programme CBI spending, for example, in bad times prioritise and spend on public investment. Indeed, simulations have proven that countries could thereby increase long-term output, consumption, and labour income (as obtained in IMF Monte Carlo simulations for OECS countries). (IMF, 2020^[59])

Box 2.7. Saving extraordinary resources: the case of the Chilean sovereign funds

Chile is currently the world's leading producer of copper, concentrating 26.3% of global production (Guía Minera de Chile, 2022^[27]). While the mining industry generates significant fiscal revenues for the country, they are rather volatile, fluctuating as the international copper price oscillates. Indeed, from representing 0.5% of the country's GNI in 2000, fiscal revenues from the mining sector increased to 3.2% of the national GNI in 2005, decreased to 2.8% in 2010, then to 0.9% in 2015 and reached 0.7% of the GNI in 2020.

In 2006⁴⁹, and to prevent unsustainable spending, a fiscal responsibility law was passed ('Ley de Responsabilidad Fiscal') which promotes an equilibrium fiscal rule estimating the net fiscal income that would be obtained from the impact of the economic cycle, and in particular from the cycles of prices of raw materials and spending only the amount compatible with that level of income in the long term. In practice, this enables the country to save during periods of economic boom and spend when fiscal revenues diminish.

The 'surpluses' of tax revenues, when collected, are invested in two sovereign funds:

- i) A Pensions Reserve Fund, to finance future solidarity pensions.
- ii) An Economic and Social Stabilisation Fund (FEES), to guarantee the stability of public spending in periods of lower growth. Currently, this Fund allows the government to finance budget deficits and make reimbursements of public debt.

Both funds are governed by a set of deposit and withdrawal rules and are administered by the Central Bank of Chile.


As an example, in 2020, USD 4 billion were retired from the FEES to help confront the economic consequences of the COVID-19 crisis in the country. This extra spending mostly helped finance direct subsidies to citizens ('COVID bond', 'family emergency income', 'middle class bond', 'Christmas COVID bond', 'Carrier's bond', etc.) and indirect subsidies to the economy ('health fund', 'municipality bond', etc.). (Diario Financiero, 2021^[28])

Source: Author's analysis based on (Muinelo-Gallo, 2022^[29])

Debt swaps for climate-related DRR/adaptation investment

Available IMF debt classifications identify that three ODA-eligible SIDS are in debt distress and fifteen at high risk of debt distress. Another nine SIDS show moderate risk or enjoy a sustainable debt outlook. These results reflect a deterioration of SIDS' debt situation compared to the pre-COVID-19 period.⁵⁰ Table 2.5.

Table 2.5. Most SIDS present a high risk of debt distress

	Current IMF classification of the external debt risk	Change since 2019
Belize	Unsustainable	

⁴⁹ Note that previously, between 1987 and 2005, the "Copper Income Compensation and Stabilisation Fund" operated in Chile. (Dirección de Presupuestos, República de Chile, 2015^[58])

⁵⁰ Compared to pre-COVID trends in 2023 for six SIDS the debt risk increased, for one it decreased and the other maintained its classification. See (Piemonte, 2021^[55]).

	Current IMF classification of the external debt risk	Change since 2019
Cabo Verde	Moderate	
Comoros	High	
Dominica	High	No change
Dominican Republic	Sustainable	No change
Fiji	Moderate	No change
Grenada	In debt distress	No change
Guinea-Bissau	High	
Guyana	Moderate	No change
Haiti	High	No change
Jamaica	Sustainable	No change
Kiribati	High	No change
Maldives	High	No change
Mauritius	Elevated risk	
Marshall Islands	High	No change
Micronesia	High	No change
Nauru	Sustainable	-
Palau	Elevated risk	
Papua New Guinea	High	No change
Samoa	High	No change
Sao Tomé and Príncipe	In debt distress	No change
Solomon Islands	Moderate	No change
St. Lucia	Moderate	No change
St. Vincent and the Grenadines	High	No change
Timor-Leste	Moderate	
Tonga	High	-
Tuvalu	High	No change
Vanuatu	Moderate	No change

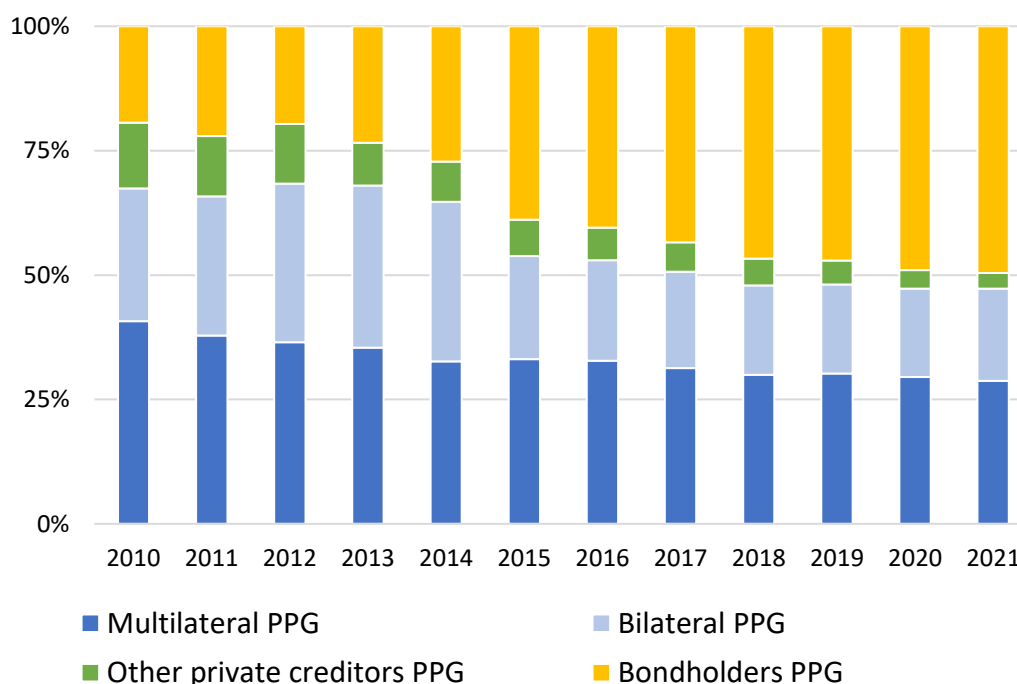
Source: (IMF, 2023_[30]); (IMF, 2022_[31]); (IMF, 2023_[32]); (IMF, 2023_[33]); (IMF, 2022_[34]); (IMF, 2022_[35]); (IMF, 2023_[36]); (IMF, 2021_[37]); (IMF, 2020_[38]); (IMF, 2018_[39]); (IMF, 2019_[40]); (World Bank, 2018_[41]); (IMF, 2023_[42])

The composition of the Public and Publicly Guaranteed (PPG)⁵¹ external debt is also changing. In 2010, sixty-seven per cent of the PPG debt in SIDS was contracted with official investors (bilateral and multilateral creditors), while this share decreased to forty-seven per cent in 2021, giving a more prominent role to private investors (in particular bondholders). Figure 2.8. In terms of volume, however, even if representing less than half of total SIDS PPG debt, official PPG debt continued to increase (+ 71% between 2010 and 2021) and reached USD 31 billion in 2021.

⁵¹ A particular accent is put in the PPG debt because such debt affects the countries' sovereign balance sheet (unlike public non-guaranteed debt).

Figure 2.8. In 2021 official debt represents 47% of the total PPG external debt in SIDS

USD, current prices



Note: Not only Paris club members are included under bilateral PPG, but all official bilateral actors. The chart includes 22 SIDS for which data are available. Blue shades represent official PPG debt (bilateral and multilateral).

Source: Author's design based in World Bank Debt Statistics (2023) <https://www.worldbank.org/en/programs/debt-statistics>

Despite increasing as a share of the total PPG debt, PPG linked to bonds does not constitute a major threat for SIDS.^{52 53} Nine out of the twenty-two SIDS for which data are available have issued PPG bonds, with Jamaica and the Dominican Republic (some of the 'biggest' SIDS) accounting for most of these issuances (82% of the total in 2021). Both countries have sustainable debt outlooks, meaning that they have been solvently managing their debt portfolio.

Grenada is a country currently in debt distress, for which however bond-based PPG debt may be an issue. Notwithstanding this, relatively successful negotiations have prevented free-riding practices for the country when restructuring private debt.⁵⁴ Grenada has been successful in lowering its current PPG bond-based debt composition (18% in 2021 versus 41% in 2010).

The other countries that have issued PPG bonds are Fiji⁵⁵, Maldives, Papua New Guinea, St. Lucia, Guinea-Bissau, and Dominica. Among them, Guinea-Bissau, Maldives, and St. Lucia (the first two

⁵² A high level of private PPG debt may be an issue when countries are in debt stress because of the difficulties of negotiating debt restructuring with them. Private lenders are less organised and may prefer to wait for the country to negotiate with official PPG lenders on the share of their respective debt, which ensures they increase their chances to be paid (at zero cost). It is a well-known free-riding practice.

⁵³ Note that this study does not include the 'off-the-radar' Chinese debt that may be also seen as PPG debt. See (Piemonte, 2021^[55])

⁵⁴ See (Pride, 2020^[56]); (Wise, 2015^[57])

⁵⁵ In 2021 Fiji no longer maintains any active bond position.

presenting a high and the third a moderate risk of debt distress) have the highest exposure to private PPG debt (26%, 34%, and 34% of the total PPG debt, respectively) and related free-riding risk in case of official debt re-negotiation.

Overall, and noticing the need to invest in climate-related DRR/adaptation in SIDS, official lenders could consider renegotiating the PPG debt they maintain with SIDS through debt swaps.⁵⁶This could free up fiscal space and allow countries to invest in DRR/adaptation projects. See Box 2.8 for a definition of debt swaps.

Box 2.8. What are debt swaps?

“Debt swaps provide opportunities for raising capital to address environmental and other policy challenges. There are also a range of risks and management issues that need to be addressed if debt swaps are to achieve their objectives.

The rationale of debt swaps is that debt can be acquired at a discount. When creditors do not expect to recover the full nominal value of debts, they may be willing to accept less. In exchange for (partial) cancellation of the debt, the debtor government is prepared to mobilise the equivalent of the reduced amount in local currency for agreed purposes on agreed terms.

Debt swaps are normally negotiated in the context of debt restructuring of PPG long-term debt to official bilateral creditors, such as the members of the Paris Club.” (OECD, 2023^[43])

Note that in a debt-for-adaptation swap, countries who borrowed could have that debt forgiven, if the money that was to be spent on repayment is instead diverted to climate adaptation and resilience projects. Most recent examples of debt-for-climate or debt-for-nature swaps have taken place in Cabo Verde (2023), Barbados (2022), Belize (2021) and Seychelles (2018). Furthermore, to the extent that debt reduction exceeds the new spending commitments, borrowers get fiscal relief through budget savings. In the case of Belize, the country even benefited from an upgrade of its sovereign credit rating, making government borrowing cheaper.

Source: (OECD, 2023^[43]); (Brookings, 2023^[44]); (Georgieva, Chamón and Thakoor, 2022^[45]); (Jain, Palacios and Verhoeven, 2023^[46]); (Associação Lusófona de Energias Renováveis, 2023^[47])

One option to prioritise action for debt negotiation among SIDS could be to analyse the combination of the climate-related DRR/adaptation finance gap, the most pressing debt issues (in terms of PPG debt as a share of GNI), and the SV scoring. Weighted similarly, the three factors could result in a priority list as shown in Table 2.6.⁵⁷ Note that such a list is an attempt to give a sense of urgency to the debt restructuring action, but does not in any case represent a strict guide to follow. It merely illustrates a methodological approach that could be adapted by DAC members.

The resources to be leveraged through debt swaps in the top three most exposed countries amount to USD 126 million on average per year in the AIS region⁵⁸ (with a minimum of USD 26 million and a

⁵⁶ Note that simple debt relief is also an option to be explored but not tackled in this paper.

⁵⁷ Further considering, case by case, the possibility of free-riding practices from private lenders.

⁵⁸ This refers to Cabo Verde, Maldives and Sao Tomé and Príncipe. Note that Maldives presents a high level of private PPG debt (34% of the total PPG debt), so to avoid free riding practices, official negotiations for debt swaps should consider involving private lenders too.

maximum of USD 250 million per year); **USD 17 million on average per year in the Caribbean region**⁵⁹ (with a maximum of USD 46 million); **and USD 1 billion on average per year in the case of the Pacific region**⁶⁰ (with a minimum of USD 332 million and a maximum of USD 1.9 billion, per year). It should be noted, however, that the scoring of a large number of countries is impossible due to data unavailability.⁶¹

Table 2.6. By region, some order of priority for the urgency of debt swaps

1/3 Weight*	SIDS	Climate-related DRR/adaptation gap as a share of GNI, %	Total PPG debt as a share of GNI, %	SV scores
	AIS SIDS			
1	<i>Cabo Verde</i>	2.9	96.1	58.3
2	<i>Maldives</i>	0.8	62.9	74.0
3	<i>São Tomé and Príncipe</i>	2.5	44.0	51.6
4	Comoros	7.2	20.9	66.0
5	Mauritius	0.9	19.9	62.8
6	Guinea-Bissau	15.7	3.8	57.0
	Caribbean SIDS			
1	<i>St. Vincent and the Grenadines</i>	0.1	55.0	65.12
2	Dominica	On track	56.2	62.42
3	<i>St. Lucia</i>	0.8	42.9	73.18
4	Jamaica	2.6	63.1	51.01
5	Grenada	On track	50.6	65.33
6	Belize	1.5	52.9	50.26
7	Dominican Republic	1.5	36.3	47.01
8	Haiti	10.0	9.0	63.00
9	Guyana	0.7	17.5	35.82
-	Cuba	-	-	40.72
-	Montserrat	-	-	-
	Pacific SIDS			
1	Samoa	On track	45.9	51.17
2	Vanuatu	On track	37.2	57.37
3	<i>Papua New Guinea</i>	3.6	24.0	61.05
4	Fiji	1.5	30.0	53.22
5	Timor-Leste	4.5	12.3	49.27
6	Solomon Islands	1.3	8.8	50.19
-	Kiribati	On track	-	48.77
-	Marshall Islands	On track	-	45.07
-	Micronesia	On track	-	56.40
-	Niue	-	-	-
-	Nauru	On track	-	58.20
-	Palau	-	-	53.70
-	Suriname	2.5	-	44.15

⁵⁹ This refers to St. Vincent and the Grenadines and St. Lucia, Dominica's needs for climate-related DRR/adaptation investment being estimated 'on track'. St. Lucia presents a high level of private PPG debt (34%).

⁶⁰ This refers to Papua New Guinea only, as for Samoa and Vanuatu needs for climate-related DRR/adaptation investment are estimated 'on track'.

⁶¹ Based on Table 3.1.

<i>1/3 Weight*</i>	SIDS	Climate-related DRR/adaptation gap as a share of GNI, %	Total PPG debt as a share of GNI, %	SV scores
-	Tonga	-	37.6	49.60
-	Tuvalu	On track	-	48.26

Note: *Countries are listed following a 'priority' order based on the countries' climate-related DRR/Adaptation finance gap as a share of GNI (weighted 33%), their Total PPG debt as a share of GNI (weighted 33%) and the SV scoring (also weighted 33%). Countries are listed by region. Such weights are indicative and may change as donors' preference change. No data indicates unavailability or only partial information that impedes to give a 'ranking'. The top three 'most debt swap needed' SIDS by region are shown in *italic* (if 'on track' not urgent debt swap for climate-related DRR/adaptation is estimated to be needed).

Source: Author's calculations based on (United Nations Environment Programme, 2023^[77]); WDI (2023) <https://data.worldbank.org/indicator/NY.GNP.MKTP.CD> and SV scoring (2023) <https://www.un.org/ohrls/content/mvi-preliminary-country-scores>

Debt swap initiatives may pose, however, a number of technical, financial, and governance-related challenges. To improve and facilitate the terms of transactions, the DAC community could try (i) to involve not only governments, but also foundations and civil-society organisations, encouraging them to buy debt on secondary markets and use it for climate or nature swaps; (ii) Repurchase debt at the lowest possible price, through carefully designed secondary-market transactions that minimise the increase in price as debt is bought back, or through incentives for creditors, such as allowing them to trade in carbon credits arising from the transaction; and (iii) Minimising the cost of financing the debt buy-back: donors could offer partial guarantees that lower the risk for investors and reduce the expense. (Georgieva, Chamón and Thakoor, 2022^[45]).

Other financing resources

Finally, several other means of financing exist or are being developed that could help fill in the SIDS vulnerability funding gap. These include: the possibility to expand the use of Special Drawing Rights (SDR) for adaptation financing (OECD, 2023^[48]), the use of climate-resilient debt clauses (World Bank, 2022^[49]), the use of carbon markets for adaptation investment, the new Loss and Damage Fund, etc. All these initiatives or means of financing could use, as shown above, the UN MVI scoring to provide evidence on priority needs in countries and sectors and allow for a better targeted allocation of their respective resources. Similarly, such means of financing, cross-checked with the SV indicator, could result in some guidance or urgency of prioritisation.

3. Conclusions and recommendations

This paper provides a preliminary analysis of possible uses of the new UN MVI to guide the DAC and development co-operation providers community on actions to prioritise in specific contexts, tackling the causes of vulnerability in SIDS. It is not intended to be in any respect prescriptive but rather offer practical proposals to help better allocate scarce resources.

SIDS are more vulnerable than peers. Among countries labelled as “most in need,” SIDS appear to be the most vulnerable, with the highest (average) MVI score, followed by least developed countries (LDCs), Fragile contexts (FCs) and Land-locked developing countries (LLDCs). Almost 60% of SIDS are concentrated in the fourth and fifth quintiles of the MVI score values compared to only one-third of non-SIDS countries.

Currently, the DAC community largely follows income criteria to allocate its support to SIDS and other developing countries; in fact, vulnerabilities as defined by the new UN MVI do not seem to be considered when allocating ODF. This results in structural vulnerability financing gaps in SIDS. The use of the MVI could help restore a sense of importance to address certain vulnerability issues to better prepare SIDS for graduation and avoid major development setbacks or the risk of debt distress.

By unpacking the MVI score by sub-components, the paper finds that the main reason for the disconnect between vulnerability and ODF allocation is “structural vulnerability” and in particular the high scores of the disaster risk reduction, adaptation and economic diversification indicators. This should allow to better guide ODF towards those areas that are of critical importance to SIDS and relatively underfunded. On the other hand, there is a correlation between ODF allocation and “structural resilience”, suggesting that DAC members respond well to SIDS structural resilience financing needs and should keep doing so.

If we follow the information that the indicator as currently defined provides, to help SIDS confront the challenges related to their structural vulnerability, the DAC community should target climate-related DRR/adaptation investments and lack of economic diversification as a priority. Thanks to the new perspectives the UN MVI brings, it is now possible to identify and quantify the incidence that the different components of each of the two sub-indicators (thirteen components each) have. In the case of SIDS, it results that those components that weigh the most on their structural vulnerability are climate-related DRR/adaptation issues and lack of economic diversification (weighing similarly at 38%). Tackling them would pave the way to build more solid and resilient economies.⁶²

With a view to illustrate possible implications of these findings for guiding ODF and other resources allocations, the paper takes the example of the climate-related DRR/adaptation financing gap in SIDS. This gap would represent investments around an average of USD 7.3 billion per year until 2030 (UNEP estimates). Three resources are explored in particular: (i) remittances, (ii) CBI revenues, and (iii) debt swaps.

⁶² Other factors that weigh into SIDS structural vulnerability are regional homicide and victims of epidemics (9% each), food and fuel dependency (8%) and regional conflict (2%).

The methodology combines information provided by the MVI scores and the mobilisation potential of certain resources to help prioritise countries and mobilisation efforts:

- **In the case of remittances, the DAC community could dedicate special efforts to help countries such as Cabo Verde and Comoros in the AIS region, St Vincent and the Grenadines and Antigua and Barbuda in the Caribbean, and Fiji and Solomon Islands in the Pacific, to mobilise remittances for climate-related DRR/adaptation investment.** Those countries score at the top 2 positions in each region when combining the highest urgencies (measured by the SV score) with the highest levels of remittances related to the climate-related DRR/adaptation finance gap. To do so, DAC members could **raise awareness** among the diaspora of the usefulness of allocating a share of the remittances for climate-related DRR/adaptation investment; **help establish matching-grant programmes** with partner countries; and assist SIDS to **develop the appetite of the diaspora to invest in diaspora bonds**.
- **DAC members could help partner countries create stability funds to save CBI revenues** (for those having such schemes) **and help them dedicate a small share of them to secure climate-related DRR/adaptation investment.** For the countries involved, and following UNEP estimations, only 3% of the annual revenues from CBI schemes would be needed to fill the DRR/adaptation gap.
- **DAC members could help alleviate the debt pressure and at the same time help SIDS fill the climate-related DRR/adaptation investment gap by using debt swaps.** Some indicative order of priority for DAC members on which countries to focus first could guide the debt restructuring action. This would be possible, for example, considering factors such as the countries' indebtedness levels, the climate-related DRR/adaptation financing gap and the urgency of action (given by the SV score). For the top three 'most in-need of debt swap SIDS', such actions would represent deals for USD 126 million on average per year in the AIS region; USD 17 million on average per year in the Caribbean region; and USD 1 billion on average per year in the case of the Pacific region.

While this paper only targets climate-related DRR/adaptation issues, it invites further research to explore the diversification issue of SIDS' economies, a factor as important as climate-related DRR/adaptation to explain SIDS high SV scores. It also encourage to follow the indicator's modifications and improvements, if any, to adjust conclusions and recommendations.

References

- 1, V. (ed.) (2018), *Migrants' remittances. A complementary source of financing adaptation to climate change at the local in Ghana*, Emerald Publishing Limited, <https://www.emerald.com/insight/publication/issn/1756-8692>. [8]
- AOSIS/OECD (2022), *Improving Development Impact in Small Island Developing States: Implementing Effectiveness Principles*, https://www.un.org/ohrls/sites/www.un.org.ohrls/files/principles_for_improved_development_impact_in_sids_accessible.pdf. [4]
- Associação Lusófona de Energias Renováveis (2023), *Cape Verde and Portugal sign agreement to transform debt into investment in the Climate and Environment Fund*, <https://www.aler-renovaveis.org/en/communication/news/cape-verde-and-portugal-sign-agreement-to-transform-debt-into-investment-in-the-climate-and-environment-fund/>. [47]
- Brookings (2023), <https://www.brookings.edu/articles/debt-for-adaptation-swaps-a-financial-tool-to-help-climate-vulnerable-nations/#:~:text=In%20a%20debt%2Dfor%2Dadaptation,climate%20adaptation%20and%20resilience%20projects>. [44]
- Caribbean Investigative Journalism Network (2022), *Caribbean Citizenship-by-Investment Programmes: Performance and Challenges*, <https://www.cijn.org/caribbean-citizenship-by-investment-programmes-performance-and-challenges/>. [60]
- Collier, P. and D. Dollar (1999), "Aid Allocation and Poverty Reduction", *Development Research Group, World Bank*, https://web.stanford.edu/class/ips216/Readings/collierdollar_99.pdf. [64]
- Convergence (2023), *Blending Global Finance*, <https://www.convergence.finance/design-funding/grant-portfolio/7wwGmagbKDeNpMyIGmG2tC/view>. [13]
- Diario Financiero (2021), *El Fisco ha usado más de USD 7 mil millones del FEES desde 2018 y el valor del fondo está en un mínimo histórico*, <https://www.df.cl/economia-y-politica/macro/el-fisco-ha-usado-mas-de-us-7-000-millones-del-fees-desde-2018-y-valor>. [28]
- Dirección de Presupuestos, República de Chile (2015), *Evolución, administración e impacto fiscal de los ingresos del cobre en Chile.*, https://www.dipres.gob.cl/598/articulos-133158_doc_pdf.pdf. [58]
- ECLAC (2020), *Designing strategies to promote investment of family remittances in value chains. A toolkit*, United Nations publication. [12]

- Famoroti, M. (2018), *Foresight Africa viewpoint – Debt by diaspora: Ties that bond*, [16]
<https://www.brookings.edu/articles/foresight-africa-viewpoint-debt-by-diaspora-ties-that-bond/>.
- Ferro, A. (2021), “Making Room for Green Remittances: the Role of the Diaspora Engagement in Fighting Climate Change Effects in the Origin Country: the Case Study of the Community from Burkina Faso in Italy”, [10]
https://www.cespi.it/sites/default/files/documenti/final_edited_executive_summary_eng_green_remittances_a_ferro.pdf.
- Fonta, W., S. and A. (2018), “Estimating farmers’ willingness to pay for weather index-based crop insurance uptake in West Africa: Insight from a pilot initiative in Southwestern Burkina Faso”, *Agricultural and Food Economics*, 6. 11., [50]
https://eprints.whiterose.ac.uk/137107/1/Fonta%20et%20al%202018_Agriculture%20and%20Food%20Economics.pdf.
- Georgieva, K., M. Chamón and V. Thakoor (2022), *Swapping Debt for Climate or Nature Pledges Can Help Fund Resilience*, [45]
<https://www.imf.org/en/Blogs/Articles/2022/12/14/swapping-debt-for-climate-or-nature-pledges-can-help-fund-resilience>.
- Gevorkyan, A. (2021), *Can Diaspora Bonds Supercharge Development Investment?*, [18]
<https://www.migrationpolicy.org/article/diaspora-bonds-supercharge-development-investment>.
- Global Pass (2023), *Vanuatu Breaks CBI Revenue Records for 5th Year Running*, [25]
<https://globalpassme.com/blog/Vanuatu-Breaks-CBI-Revenue-Records-for-5th-Year-Running>.
- Guía Minera de Chile (2022), *Chile sigue siendo líder en producción mundial de cobre de mina, pero baja su participación*, <https://www.guiaminera.cl/chile-sigue-siendo-lider-en-produccion-mundial-de-cobre-de-mina-pero-baja-su-participacion/>. [27]
- Guillaumont, P. and E. Chauvet (2001), “Aid and Performance: A Reassessment”, *The Journal of Development Studies*. [63]
- Henrik, C. (2023), *Antigua and Barbuda CBI Applications up 31% in 2021 - Government Revenue reaches USD 46 million*, <https://www.imidaily.com/intelligence/antigua-barbuda-cbi-applications-up-36-in-2021-govt-revenue-reaches-us46m/>. [24]
- Henrik, C. (2023), *Grenada CIP: Revenue up 213% from last year, USD 133 million invested in Estate since January*, <https://www.imidaily.com/intelligence/grenada-cip-revenue-up-213-from-last-year-us133m-invested-in-real-estate-since-january/>. [21]
- Henrik, C. (2023), *St. Lucia CIP Investment Doubles, Caribbean Visa-Free UK Travel in Peril, Malta CBI Revenue Reaches €1.7bn, ++*, <https://www.linkedin.com/pulse/st-lucia-cip-investment-doubles-caribbean-visa-free-uk-nesheim#:~:text=Saint%20Lucia's%20Citizenship%20by%20Investment,figure%20of%20the%20preceding%20year>. [23]
- IMF (2023), *IMF Executive Board Concludes 2023 Article IV Consultation with Palau*, [42]
<https://www.imf.org/en/News/Articles/2023/12/20/pr23467-palau-imf-executive-board-concludes-2023-article-iv-consultation>.
- IMF (2023), *IMF Executive Board Concludes 2023 Article IV with Fiji*, [32]
<https://www.imf.org/en/News/Articles/2023/06/28/pr23248-fiji-imf-executive-board-concludes-2023-article-iv-consultation>.

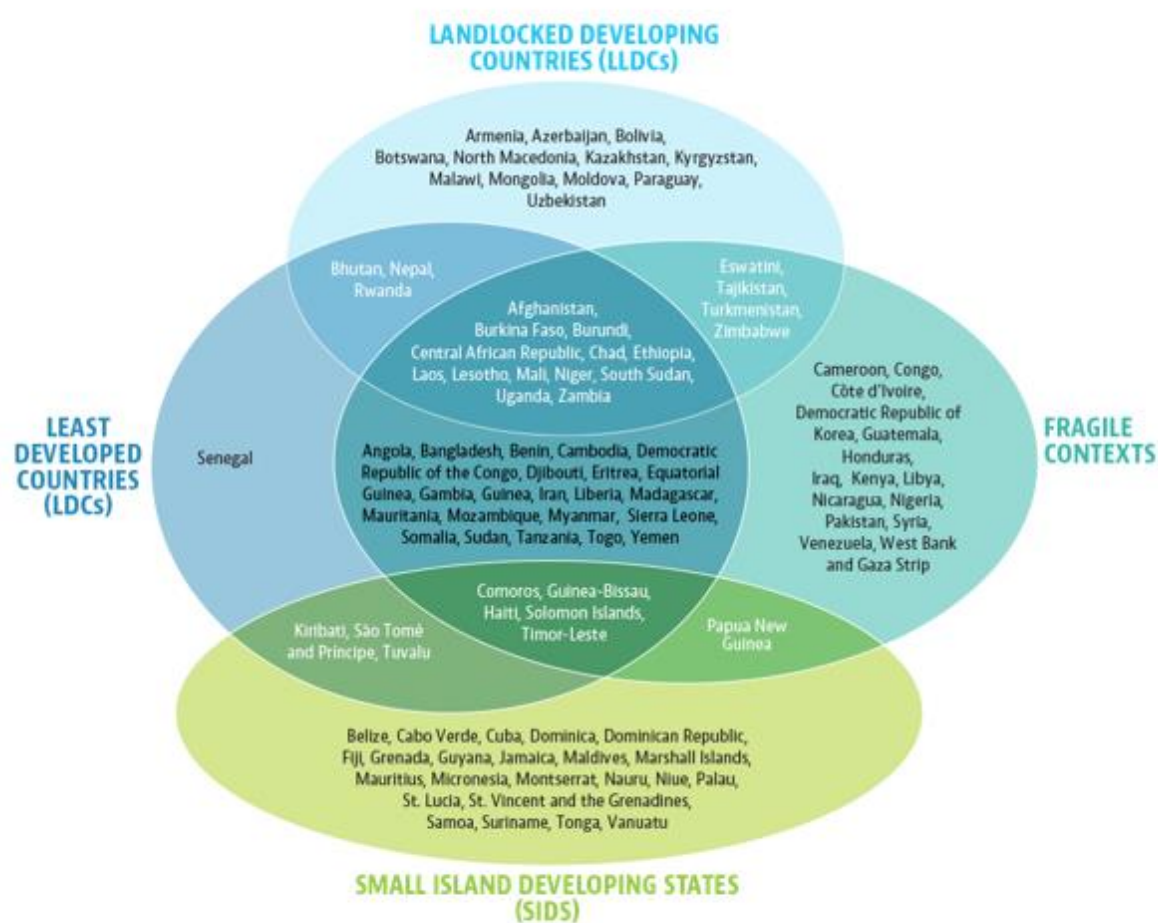
- IMF (2023), *Jamaica: 2022 Article IV Consultation*, [33]
<https://www.imf.org/en/Publications/CR/Issues/2023/02/10/Jamaica-2022-Article-IV-Consultation-Press-Release-Staff-Report-and-Staff-Statement-529664#:~:text=The%20Article%20IV%20consultation%20places,frequent%20due%20to%20global%20warming.>
- IMF (2023), *Kiribati 2023 Article IV Consultation*, [36]
<https://www.imf.org/en/Publications/CR/Issues/2023/09/15/Kiribati-2023-Article-IV-Consultation-Press-Release-and-Staff-Report-539167.>
- IMF (2023), *List of LIC DSAs for PRGT-Eligible Countries as of August 31, 2023*, [30]
<https://www.imf.org/external/pubs/ft/dsa/dsalist.pdf>.
- IMF (2023), *Vanuatu, 2023 ARTICLE IV CONSULTATION*, [54]
<https://www.imf.org/en/Publications/CR/Issues/2023/03/20/Vanuatu-2023-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-531181#:~:text=Staff%20Country%20Reports-,Vanuatu%3A%202023%20Article%20IV%20Consultation%2DPress%20Release%3B%20.>
- IMF (2022), *Belize: 2022 Article IV Consultation*, [34]
<https://www.imf.org/en/Publications/CR/Issues/2022/05/10/Belize-2022-Article-IV-Consultation-Press-Release-and-Staff-Report-517761.>
- IMF (2022), *Dominican Republic: 2022 Article IV Consultation*, [35]
<https://www.imf.org/en/Publications/CR/Issues/2022/07/08/Dominican-Republic-2022-Article-IV-Consultation-Press-Release-and-Staff-Report-520543#:~:text=This%202022%20Article%20IV%20Consultation,levels%20as%20of%20end%2D2021.>
- IMF (2022), *EASTERN CARIBBEAN CURRENCY. 2022 ARTICLE IV CONSULTATION WITH MEMBER COUNTRIES ON COMMON POLICIES OF THE EASTERN CARIBBEAN CURRENCY UNION*. [53]
- IMF (2022), *Mauritius STAFF REPORT FOR THE 2022 ARTICLE IV*, [31]
<https://www.npccmauritius.org/images/download/291.pdf>.
- IMF (2021), *Republic of Nauru: 2021 Article IV Consultation*, [37]
<https://ideas.repec.org/p/imf/imfscr/2022-028.html>.
- IMF (2020), *Eastern Caribbean Currency Union*. [26]
- IMF (2020), *Eastern Caribbean Currency Union*. [59]
- IMF (2020), *Kiribati—Assessment Letter for the Asian Development Bank and World Bank*, [38]
<https://www.adb.org/sites/default/files/linked-documents/50028-003-imf-kir.pdf>.
- IMF (2019), *Federated States of Micronesia 2019 Article IV Consultation*, [40]
<https://www.imf.org/en/Publications/CR/Issues/2019/09/06/Federated-States-of-Micronesia-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-48654.>
- IMF (2018), *Republic of the Marshall Islands: STAFF REPORT FOR THE 2018 ARTICLE IV*. [39]

- IPCC (2023), *Climate Change 2022 - Impact, Adaptation and Vulnerability*, [66]
<https://www.cambridge.org/core/books/climate-change-2022-impacts-adaptation-and-vulnerability/161F238F406D530891AAAE1FC76651BD#>.
- Jain, G., L. Palacios and H. Verhoeven (2023), "Can Debt-for-Climate Swaps Help Heavily Indebted Developing Countries Address Climate Priorities?", *Center on Global Energy Policy at Columbia*, <https://www.energypolicy.columbia.edu/publications/can-debt-for-climate-swaps-help-heavily-indebted-developing-countries-address-climate-priorities/>. [46]
- Jolly, J. (2023), *Dominica may have sold thousands more 'golden passports' than it disclosed, analysis suggests*, <https://www.theguardian.com/business/2023/oct/12/dominica-golden-passports-citizenship-by-investment-cbi-scheme>. [52]
- LAZARUS, L. (2023), "Red Flags Among Golden Passports: An Analysis of Chinese Influence In Five Caribbean Citizenship By Investment Programs", *Diálogo Americas*, <https://dialogo-americas.com/articles/red-flags-among-golden-passports-an-analysis-of-chinese-influence-in-five-caribbean-citizenship-by-investment-programs/>. [20]
- Mbaku, J. (2020), *The controversy over the Grand Ethiopian Renaissance Dam*, <https://www.brookings.edu/articles/the-controversy-over-the-grand-ethiopian-renaissance-dam/>. [17]
- Melonio, T., J. Naudet and R. Rioux (2022), "Official Development Assistance at the Age of Consequences", *Policy Papers AFD*, [https://www.afd.fr/en/ressources/official-development-assistance-age-consequences#:~:text=Official%20Development%20Assistance%20\(ODA\)%20was,%E2%80%9D%20and%20the%20%E2%80%9CSouth%E2%80%9D](https://www.afd.fr/en/ressources/official-development-assistance-age-consequences#:~:text=Official%20Development%20Assistance%20(ODA)%20was,%E2%80%9D%20and%20the%20%E2%80%9CSouth%E2%80%9D). [62]
- Mills, E. (2022), "Green Remittances: a novel form of sustainability finance", [9]
<https://www.sciencedirect.com/science/article/pii/S0301421523000861?via%3Dihub>.
- Muinelo-Gallo, L. (2022), *Asignación, distribución y uso de los ingresos fiscales derivados de la explotación minera en Chile. un análisis de sus efectos económicos y sociales.*, [29]
https://repositorio.cepal.org/bitstream/handle/11362/47887/S2200215_es.pdf.
- OECD (2024), *Development Finance for Climate and Environment*, [5]
<https://www.oecd.org/dac/financing-sustainable-development/development-finance-topics/climate-change.htm>.
- OECD (2024), *Transition Finance Toolkit*. [65]
- OECD (2023), , <https://www.oecd.org/env/outreach/debt-for-environment-swaps.htm>. [43]
- OECD (2023), *CAPACITY DEVELOPMENT FOR CLIMATE CHANGE in SIDS*, [11]
<https://www.oecd.org/dac/capacity-development-climate-change-SIDS.pdf>.
- OECD (2023), *Scaling up Adaptation Finance in Developing Countries*, <https://www.oecd-ilibrary.org/docserver/b0878862-en.pdf?expires=1702571241&id=id&accname=ocid84004878&checksum=2FD6F0340CB8908F48DA8CB5AEA93196>. [48]
- OECD (2022), *Residence/Citizenship by investment schemes*, [19]
<https://www.oecd.org/tax/automatic-exchange/crs-implementation-and-assistance/residence-citizenship-by-investment/>.

- OECD (Forthcoming), *Financing Sustainable Development in the Organisation of the Eastern Caribbean States: A Transition Finance Diagnostic*. [61]
- OECD (Forthcoming), *Preparing for SIDS' graduation from ODA-eligibility: towards a checklist to guide DAC members on what needs to be prioritised*. [1]
- OECD (Forthcoming), *Transition Finance in the Eastern Caribbean*. [22]
- Piemonte, C. (2021), *The Impact of the COVID-19 Crisis on External Debt in SIDS*, [https://www.oecd.org/dac/financing-sustainable-development/External-debt-in-small-island-developing-states\(SIDS\).pdf](https://www.oecd.org/dac/financing-sustainable-development/External-debt-in-small-island-developing-states(SIDS).pdf). [55]
- Piemonte, C. et al. (2019), *Transition Finance: Introducing a new concept*, OECD Publishing, <https://doi.org/10.1787/2dad64fb-en>. [6]
- Pride (2020), "Grenada Government Says It Will Honour Debt To Bond Holders, Despite Seeking Moratorium", <http://pridenews.ca/2020/05/12/grenada-government-says-will-honour-debt-bond-holders-despite-seeking-moratorium/>. [56]
- Schneidman, W., A. Tadesse and A. Lissanu (2022), *Diaspora bonds: An innovative source of financing?*, <https://www.brookings.edu/articles/diaspora-bonds-an-innovative-source-of-financing/>. [15]
- Searchlight (2022), *Threat to CBI programs an opportunity for OECS Governments*, <https://www.searchlight.vc/editorial/2022/03/18/threat-to-cbi-programs-an-opportunity-for-oecs-governments/>. [51]
- UN (2014), *SIDS ACCELERATED MODALITIES OF ACTION [S.A.M.O.A.] Pathway*, <https://sustainabledevelopment.un.org/samoapathway.html>. [2]
- UNECE (2021), *Innovation for Sustainable Development: review of Moldova*, <https://unece.org/info/Economic-Cooperation-and-Integration/pub/364780>. [14]
- United Nations (2024), *High Level Panel on the development of a Multidimensional Vulnerability Index*, https://sdgs.un.org/sites/default/files/2024-02/Final_MVI_report.pdf. [3]
- United Nations Environment Programme (2023), *Adaptation Gap Report 2023: Underfinanced. Underprepared. Inadequate investment and planning on climate adaptation leaves world exposed.*, <https://www.unep.org/adaptation-gap-report-2023>. [7]
- Wise (2015), "Grenada's creditors agree to restructure US\$262 Million of Bonds", <https://wiseequities.com/home/news.php?id=4561>. [57]
- World Bank (2022), *World Bank Group Announces Comprehensive Toolkit to Support Countries After Natural Disasters*, <https://www.icmagroup.org/News/news-in-brief/icma-publishes-new-climate-resilient-debt-clauses-to-facilitate-sovereign-debt-relief-and-financial-stability/>. [49]
- World Bank (2018), *Tuvalu*, <https://elibrary.worldbank.org/doi/abs/10.1596/30908>. [41]

Annex 1. Most in need groupings

Figure A 0.1. Countries most in need, 2024



Note: LDCs, LLDCs and SIDS ODA eligible countries as defined by the United Nations; Fragile Contexts (FCs) as defined by the DAC/OECD.
Source: <https://www.oecd.org/development/financing-sustainable-development/countries-most-in-need.htm>