REPORT

DEBT-FOR-CLIMATE SWAPS AS A TOOL TO TACKLE CLIMATE AND DEBT CRISES: OPPORTUNITIES AND CHALLENGES

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Executive Summary

Current public international climate finance flows are inadequate to meet the Paris Agreement goals, with a significant gap between the needs of developing countries and available funds. At the same time, many developing countries, especially Small Island Developing States (SIDS), are trapped in a vicious cycle of increasing debt and vulnerability to climate change. Debt-for-climate (DFC) swaps theoretically offer a promising mechanism to address both debt and climate crises at the same time by converting debt into local investments in climate action. However, the actual potential of this instrument has remained largely unexploited. We assess the potential of DFC swaps as an innovative tool in the international climate finance landscape, analysing past experiences and identifying key opportunities and challenges. Our study is based on extensive desk research of peer-reviewed and grey literature, supplemented by expert interviews.

DFC swaps reduce a country's external debt in exchange for investments in local climate projects through bilateral or tripartite agreements involving entities including non-governmental organisations (NGOs) and multilateral development banks (MDBs). They can facilitate funding for projects addressing climate change which are unattractive under traditional financing models and allow debtor countries to make payments in local currency. DFC swaps undertaken to date have been relatively small and due to the complexity of negotiations generated high transaction costs. The latter are increased by the need for robust project monitoring and verification systems. Further problems include concern regarding the additionality of funds and enforcement of DFC swap conditions.

To enhance the relevance of DFC swaps, we suggest increasing their scale, adopting a programmatic approach, streamlining negotiation and implementation processes, and ensuring that swaps are adapted to local contexts and sustainable development goals proven by regular impact assessments. Politically, it is crucial to align DFC swaps with national climate change mitigation and adaptation targets and strategies.

While DFC swaps present out-of-the box opportunities to address climate change and sovereign debt challenges, so far, their effectiveness has been limited. Overcoming current limitations requires strategic improvements, such as moving from project-based to programmatic approaches. Overall, DFC swaps should not be seen as neither a standalone solution nor as panacea for each of the debt and climate crises, but rather as part of a broader climate finance landscape as well a broader toolbox of debt relief approaches.

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Abbreviations

AfDB	African Development Bank
ANRC	African Natural Resources Management and Investment Centre
BESF	Barbados Environmental Sustainability Fund
CI	Conservation International
COP	Conference of the Parties
COVID-19	Coronavirus Disease 2019
CPI	Climate Policy Initiative
DFC	Debt for Climate
DFN	Debt for Nature
ESDF	Egyptian Swiss Fund for Development
Eurodad	European Network on Debt and Development
GDP	Gross Domestic Production
GHG	Greenhouse Gas
HIPC	Heavily Indebted Poor Country
IDB	Inter-American Development Bank
IIED	Institute for Environment and Development
IMF	International Monetary Fund
LEDS	Low-Emission Development Strategies
L&D	Loss and Damage
MDB	Multilateral Development Bank
MRV	Monitoring, Reporting and Verification
NAP	National Adaptation Plan
NDC	Nationally Determined Contributions
NGO	Non-Governmental Organization
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
SDR	Special Drawing Right
SeyCCAT	Seychelles Conservation and Climate Adaptation Trust
SIDS	Small Island Developing State
TFCA	Tropical Forest Conservation Act
TNC	The Nature Conservancy
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
US	United States of America
US DFC	United States Development Finance Corporation
WWF	World Wildlife Fund

1. Introduction

The year 2023 will be the hottest in the history of temperature measurement, close to 1.5°C above pre-industrial temperatures (Copernicus 2023). Current global efforts to mitigate climate change point to a temperature rise of 2.8°C by the end of the century; far away from reaching the Paris Agreement goal of limiting global warming to well below 2°C, let alone 'best case' 1.5°C (UNEP 2022). The consequences of non-action and failure to adapt to the changing climate are already felt heavily in many parts of the world, as extreme precipitation events, heat waves and wildfires are becoming more and more common (WMO 2023). Developing countries are affected the most, as they are confronted with multiple crises at the same time in addition to climate change, including unstainable levels of debt, geopolitical tensions, massively increasing interest rates, biodiversity loss, and the lasting consequences of the COVID-19 pandemic (Steele and Patel 2020; UN 2023).
Financing climate action, particularly in the most vulnerable developing countries, poses significant challenges, especially in the face of existing sovereign debt burdens. Closing the gap between available climate finance and the needs of developing countries requires looking beyond traditional sources of finance – i.e., grants and debt-increasing (concessional) loans – to innovative financial instruments and mechanisms that can unlock additional investment (IISD n.d.).

Debt for Climate swaps, a specialised version of the long-standing Debt for Nature (DFN) swaps, have emerged as an instrument in the international public climate finance landscape, aiming to relieve part of a country's external debt in return for local investment in climate change mitigation and/or adaptation. While the prospect of simultaneously addressing sovereign debt and climate financing appears enticing, it is essential to understand and eventually limit the complexities of such an arrangement to ensure its efficacy and sustainability.

The objective of this study is therefore to analyse the potential of DFC swaps as a public international climate finance instrument, identifying opportunities for debtor and creditor countries as well as various challenges that arise during structuring and implementing this tool. Particular attention is paid to the contribution DFC swaps can make to meeting the climate finance needs of developing countries, climate change mitigation and adaptation benefits generated by DFC swaps and the integration of the instrument into climate policies and strategies. The study is based on desk research of peer-reviewed and 'grey' literature as well as a series of expert interviews (see Annex III: Interview questions) to gain a holistic understanding of DFC swaps.

The remainder of the study proceeds as follows. First, we explain the context of international climate finance, in which DFC swaps emerged. Subsequently, the architecture of and actors involved in DFC swaps are explained. Third, we assess lessons learned from existing DFC swaps and examine the potential of DFC swaps as an international climate finance instrument. The concluding section

summarizes the insights gained in this study and provides tailored recommendations for creditor and debtor parties involved in DFC swaps.

2. Climate finance and debt nexus

2.1. Inadequacy of climate finance flows

A major point of contention between developed and developing countries involves financing climate action. The volume of climate finance (i.e., financial resources, investments, and funding mechanisms dedicated to addressing climate change mitigation and adaptation) is still vastly insufficient: annual climate finance flows (domestic and international combined) in 2019 and 2020 reached on average USD 653 billion, far from what is needed to be on track to meet the 1.5°C target, i.e., estimated USD 4.3 trillion annually by 2030 (Naran et al. 2022)[1]. Considering their historic responsibility for climate change, developed countries committed at the 15th Conference of the Parties (COP15) to the UNFCCC in 2009 to providing USD 100 billion per year by 2020 (later extended to 2025) to support developing countries in their climate mitigation and adaptation efforts. However, the actual amount of finance provided has reached only USD 83.3 billion in 2020 according to OECD (2022)[2]. Not only the volume but also distribution, allocation and type of finance are inadequate to tackle the imminent climate crisis (Songwe et al. 2022). Many developing countries, and especially SIDS face barriers (e.g., institutional capability gaps) when it comes to accessing said finance streams. In fact, only 2.1 % of annual international climate finance streams reached SIDS between 2016-2019 (Francis and Andresen 2022). Despite their minimal contribution to global greenhouse gas emissions, SIDS are disproportionately and increasingly affected by the impacts of climate change and often lack the financial means to invest in resilience strengthening measures. Consequently, they rely on international financial support to adapt to changing climate conditions. However, financial flows for adaptation continue to lag significantly behind those for mitigation (8% total climate finance or around USD 52 billion), as estimated by the Buchner et al. (2021). Moreover, most climate finance – 61% (USD 384 billion) – comes in the form of loans, of which only 12% were low-cost or concessional loans in 2019/2020. The second largest instrument is equity investments, which accounted for 33% of total climate finance while grant-based finance comprised only USD 36 billion or 6% of total flows (Buchner et al. 2021). In summary, international climate finance to date prioritizes mitigation over adaptation and adds to the debt burden of vulnerable countries.

[1] Excluding finance needed to address Loss and Damages (see Chapter 4.3).
[2] It should be noted that the lack of a commonly accepted definition of international climate finance makes it difficult to track climate finance flows transparently (Shishlov and Censkowsky 2022, Oxfam 2022), for example, estimates the true value of climate finance at only a third of the 100 billion promised.

2.2. Increasing debt burdens in developing countries

In July 2023, UN Secretary-General António Guterres alerted that global public debt had reached an all-time high of USD 92 trillion in 2022. This is only exacerbated by the persistent inflation since 2020, which has led to a massive spike in interest rates (Smialek and Zhang 2023). Globally, 3.3 billion people live in countries that spend more on interest payments than on health or education (UN Global Crisis Response Group 2023). The International Monetary Fund (IMF) already warned that the proportion of countries at risk of or already in high debt distress (where a country is unable to fulfil its financial obligations and debt restructuring is required) doubled compared to 2015 levels, reaching 60% globally (IMF 2022a; IMF 2020). Public debt is rising faster in developing countries due to the growing need for development finance, the COVID-19 pandemic, climate change and an international financial system that makes access to finance difficult and costly for developing countries (UN Global Crisis Response Group 2023). Latest figures (UNDP 2022) show that 28 of the countries most vulnerable to climate change are at risk of defaulting on their debt. Among them were Ghana and Sri Lanka that announced default on most of their external debt in late 2022 due to the ongoing economic crisis and inflation rates of up to 50% (Akorloe and Inveen 2022; Perera 2022).

Consequently, countries with substantial debt that are also susceptible to climate change find themselves trapped in a vicious cycle.[3] Their ability to invest in addressing climate change is constrained by the need to service their debt, with debt payments eating up to 70% of annual government revenues in some cases (UN 2020; Rawnsley 2022). At the same time, the negative impacts of climate change, e.g., reduced production capacities and extreme weather events, necessitate further borrowing, often at a higher cost, as increasing climate hazards make lending to these countries riskier for donors (IMF 2022b). Pakistan serves as a recent example: in summer 2022, severe floods wreaked havoc across the nation, resulting in the displacement of 33 million people, the deaths of over 1400 people, and approximately USD 40 billion in property losses. While the IMF approved a relief loan of around USD 1.1 billion, Pakistan's administration announced that it would need to borrow billions more to rebuild the country (Rawnsley 2022). Mozambique faced a similar situation in 2019. The country, amid a severe economic crisis, was hit by a devastating cyclone that claimed hundreds of lives and wiped-out entire villages. Mozambique did receive financial assistance in form of a USD 118.2 million loan from the IMF. However, this sum represented only a fraction of the financial resources needed to jumpstart the country's recovery and reconstruction

[3] At the same time, many of the countries facing debt distress have significant oil and gas reserves and have been found to be likely to increase borrowing regardless of energy prices rising or falling. Indebtedness and fossil fuel production create another vicious cycle: higher debt spurs increased fossil fuel production, enabling even more borrowing (Colenbrander 2023; Steadman et al. 2023).

(Toyana 2019). Even at present day, Mozambique has a CCC+ (Fitch 2023) sovereign credit risk rating[4] (latest rating in 2022), indicating a substantial level of risk of the country defaulting on its debt obligations.

If a country is no longer able to meet its financial obligations, sovereign debt relief becomes necessary (IMF 2020). Debt relief can take two forms. The first is debt forgiveness, which means a complete cancellation of part or all the debt (IMF n.d.). In this case, the debtor is no longer obliged to repay the forgiven amount ('last resort option'). Debt forgiveness was mostly used, for instance, as part of the IMF-World Bank´s (WB) Heavily Indebted Poor Countries Initiative (HIPC) and the Multilateral Debt Relief Initiative (MDRI), which were created to ensure that low-income countries are not faced with an unmanageable debt burden that hinders investment in healthcare, education and other social services in their country (IMF 2023).[5] The second sub-form of debt relief is debt restructuring, which aims to avoid bankruptcy of a country by modifying the terms of the debt to make it more manageable. This can be achieved by extending the maturity dates, changing the payment schedule, lowering interest rates or reducing the face value of the debt (IMF n.d., Das et al. 2012).

According to the World Bank (2018), HIPC and MDRI have relieved 37 participating low-income countries - 31 of them in Africa - of more than USD 100 billion in debt. Nevertheless, the sustainability of debt relief for countries remains a challenge, as demonstrated by the number of countries that have already received debt relief under the HIPC initiative and whose debt has already reached or threatens to reach an unsustainable level (Useree 2021). In response to the COVID-19 pandemic, the G20 introduced in 2020 the Debt Service Suspension Initiative (DSSI), allowing all 73 eligible low-income countries to temporarily suspend official bilateral debt service payments.[6] In the same year, the G20 launched the 'G20 Common Framework for Debt Treatments beyond the DSSI' which brings together traditional and new official bilateral creditors (such as China and India) and aims to deliver jointly on deeper debt restructuring for the same group of low-income countries, on a case-by-case basis (Essers et al. 2021; World Bank 2022). So far, only few debtor countries – Chad, Ethiopia and Zambia- have made requests for debt relief under the Common Framework. Reasons stated for the low participation of debtor countries in the new debt relief initiatives include the slow decision-

[4] Sovereign credit ratings refer to the risk assessment of sovereign debt by credit rating agencies (CRAs). They represent the potential loss to a lender if a borrower defaults on its debt obligations (Mellios and Paget-Blanc 2006). The three major rating agencies - Moody's, Standard & Poor's (S&P) and Fitch Ratings - are privately owned and rate countries in comparable risk categories. Regarding the overall credit rating scale concerning issuers and issues, Fitch specifically expresses ratings through categories 'AAA' to 'BBB' (investment grade) and 'BB' to 'D' (speculative grade). For an additional +/- level, AA through CCC expresses the relative differences between probability of default and recovery for issues (Fitch Ratings n.d). A low bond rating (BBB, BB and lower) indicates a higher default risk, while a stronger rating (BBB, A, AA, or AAA) signifies lower default risk.

[5] To participate in these initiatives, countries need to meet certain eligibility criteria, commit to policy changes to reduce poverty, and demonstrate a record of doing so (IMF 2023).

[6] DSSI temporality paused official debt payment for only two thirds of the 73 eligible low-income countries (DSSI ended in 2022).

making process of the Common Framework (coordination of the Paris Club and other creditors as well as numerous state institutions and agencies within the creditor countries) and the associated reputational risks and consequences for the debtor countries, including negative implications on a country´s credit rating (IMF 2021; Presbitero et al. 2023).

2.3. Addressing debt and climate crises at the same time?

As in many countries debt and environment and/or climate related problems tend to go hand in hand (Chamon et al. 2022), solutions to address both issues together started to be sought as early as the 1980s. Debt relief in exchange for spending or government commitment to fund domestic environmental protection, known as DFN swaps, were first introduced as a response to the Latin America debt crisis of the 1980s (Thapa 1998). If the debt relief is linked to climate measures, they are called DFC swaps (Chamon et al. 2022).

The landscape of debt swaps shows a pluralism of terms used referring to the conditional part of the swap: it ranges from equity (first form of conditional debt swap which implies that debt is exchanged for local currency at a discount, provided that the proceeds are used to buy shares in local companies) (Blackwell and Nocera 1989), nature (Dollery et al. 1995), environment (OECD 2007) and conservation, to development (Karaki and Bilal 2023), climate (Zawya 2023), adaptation (Adaptation Fund 2012, Khan 2020, Economic Commission for Latin America and the Caribbean (ECLAC) n.d.) and blue economy (Commonwealth Blue Charter 2020).

The diversity of debt swaps could have arisen due to their evolving general focus over time, with a stronger focus on environmental issues in the 1980s and 1990s (more DFN swaps) shifting more specifically to climate along with worsening climate change and impacts in recent years. Another reason can be the interests of the actors involved in debt swaps, not only the creditor and debtor country but also the NGOs which can have an influence on the focus of the deal. For example, recent DFN swaps involving the US-based philanthropy The Nature Conservancy (TNC) have focused on conservation targets, as this is the organisation's key area of work. It is also important to note that many terms are interpreted differently by different actors (e.g., adaptation) or that certain activities can be assigned to several terms (e.g., some conservation measures can also be related to mitigation/adaptation). Finally, some debt swaps may be ‘advertised’ as climate-related simply because the fight against climate change takes centre stage globally and makes the deal thereby more attractive for involved actors.

Using a DFC swap, a debtor country can repay its external debts at a discount to its face value, usually in the local currency instead of foreign ‘hard’ one (i.e., it is cheaper than if the country would repay its debt without the swap) freeing up fiscal space to invest in climate-relevant measures domestically (Cassimon et al. 2011). Contrary to the predominantly loan-based climate finance, DFC swaps can finance climate action without increasing the debt burden of a country (grants can as well but are scarce as described in Section 2.1). Since the first debt swap in 1987, more than 150 debt

swap transactions have taken place around the world (own estimation, see Annex I: Overview of implemented and planned debt swaps (1987-2023)). Of those, only few swaps were clearly linked to climate measures (e.g., Seychelles 2015; Cabo Verde 2022; Kenya 2022) (Karaki et al. 2023). The combined face value of debt swapped is estimated to be around USD 6.4 billion[7] with an average transaction size of around USD 42 million (min: USD 0.05 million in Poland in 1990; max: USD 1.6 billion in Ecuador in 2023). The total volume of financial resources made available from the transactions for environmental or climate purposes is lower than the volume of debt dealt with (Chamon et al. 2022), with USD 2.1 billion in total.

2.4. Debt and climate in multilateral political agenda

Over the last few years, various multilateral initiatives have evolved that aim to reconcile climate and debt issues, such as the Accra-Marrakech Agenda of the Vulnerable Group of Twenty (V20 2023) or the Sustainable Debt Coalition Initiative (United Nations Economic Commission for Africa 2022). Proposed reforms to the global financial architecture include, among others, natural disaster clauses in debt contracts, more concessional funding, and expanding the lending capacity of multilateral development banks (MDBs) (e.g., Rawnsley 2022). Most comprehensively, such reform proposals were put forward by climate-vulnerable countries under the leadership of Barbados under the '2022 Bridgetown Agenda for the Reform of the Global Financial Architecture' (Ministry of Foreign Affairs and Foreign Trade of Barbados 2022).

Originally, at COP26, Barbados' Prime Minister Mia Mottley called for broader reform of the global financial system, including an additional USD 500 billion worth of Special Drawing Rights (SDRs) – a reserve assets held by the IMF – to be issued every year for 20 years to unlock the investments needed to limit global temperature increase to 1.5°C (Farand 2021). Over the last few months, however, the agenda has become a much less ambitious, 'living' document with different proposals. 'Bridgetown 2.0' highlights six key areas (Barbados Government Information Service 2023). Among others, they include the re-channelling of at least USD 100 billion of unused SDRs to climate-vulnerable countries, restructuring debt with long-term low interest rates, a Sustainable Development Goal (SDG) stimulus of USD 500 billion, and the creation of a truly sustainable international trade system. So far, only the first point has been delivered upon. This was one of the key outcomes of the Summit on a New Global Financing Pact in June 2023, hosted by France' President Macron in support of the Bridgetown Agenda, and attended by more than 40 world leaders, mostly from developing countries (e.g., Rathi and White 2023). These SDRs however, are only re-allocated of (so far) unused ones from the IMF's last general SDR allocation in 2021 (Elyssee 2023a), making them non-additional climate finance. Though the detailed Paris Summit Roadmap

[7] Own estimation based on figures in Annex I, excluding all swaps under discussion. For comparison, ANRC (2022) mentions USD 3.7 billion between 1987-2021 and Baldwin et al. (2022) USD 4.2 billion for the time period from 1987 to 2023.

(until the end of 2024) raised expectations for the other five key areas as well (E3G 2023), the risk looms large that the Bridgetown Agenda may lose some of its momentum, and that a potential Bridgetown 3.0 version demands even less. In any case, because of the Bridgetown Agenda new debt treatment instruments such as DFC swaps have already attracted more attention, and the 'new wave of debt swaps' (Nedopil et al. 2023) could become an important part of advancing the Bridgetown Agenda.

The question of the appropriateness of DFC (and DFN) to address debt and climate crises has been disputed for many years. On the one hand, supporters of DFC swaps, among them IMF's Managing director Kristalina Georgieva and Barbados Prime Minister Mia Mottley, advocate for them as an innovative and additional climate finance tool that can overcome challenges in accessing and allocating climate finance, particularly benefiting climate-vulnerable middle-income countries that do not usually receive grant-based climate finance and are not eligible for debt relief initiatives such as HIPC and MDRI and those with high yet manageable debt levels (Fuller et al. 2018; IMF 2022a; IMF 2022b; Maki 2022). In addition, while DFC swaps have not yet been discussed explicitly in the context of Loss and Damage (L&D) finance (see Section 4.3), they may be an important part of the 'mosaic' of solutions contributing to fill the L&D finance gap (see e.g., Thomas and Theokritoff 2021; Schmidt et al. 2023).

On the other hand, experiences with DFN/DFC swaps reveal critical issues such as their limited scale making them costly and inefficient, with past swaps not significantly reducing debt levels due to low transaction volumes[8] and often merely replacing old debt with new (Chamon et al. 2022). The multifaceted arguments for and against DFC swaps make them an interesting and relevant subject of study. Considering the substantial climate finance gap, innovative financing approaches to meet the objectives of the Paris Agreement are needed. However, limited resources such as government officials' time should not be spent on approaches that often take years to implement if they ultimately do not produce the desired results. While the debt and climate crisis cannot be solved by DFC swaps alone, it is therefore crucial to understand their potential and role as a financial instrument in this context and what they can and cannot realistically deliver.

[8] This volume within 26 years of implementation is quite limited if one compares it e.g., to the 'Brady Plan' for debt restructuring in the 1980s which provided an aggregate debt reduction of USD 65 billion (Bowe and Dean 1997). Another example from the early 2000s: USD 133.9 billion (EUR 122 billion) of debt was cancelled by the G7 finance ministers for 36 countries (Gallagher 2022).

3. Functioning of debt-for-climate swaps

3.1. Actors involved and architecture of debt swaps

To understand the different types of actors and architecture of DFC swaps, it is necessary to elaborate on some basics on sovereign debt. Debt owed by a country can be divided into external debt and domestic debt. External debt is owed by public and private entities in a country to non-residents of the country. Conversely, domestic debt is owed by national entities to other national entities within the same country (IMF n.d.). External debt may be owed by public entities such as the government and its government agencies (referred to as 'public debt') or by private entities (referred to as 'private' or 'commercial debt') of a debtor country. There are three different types of creditors: multilateral creditors, official bilateral creditors, and private creditors:

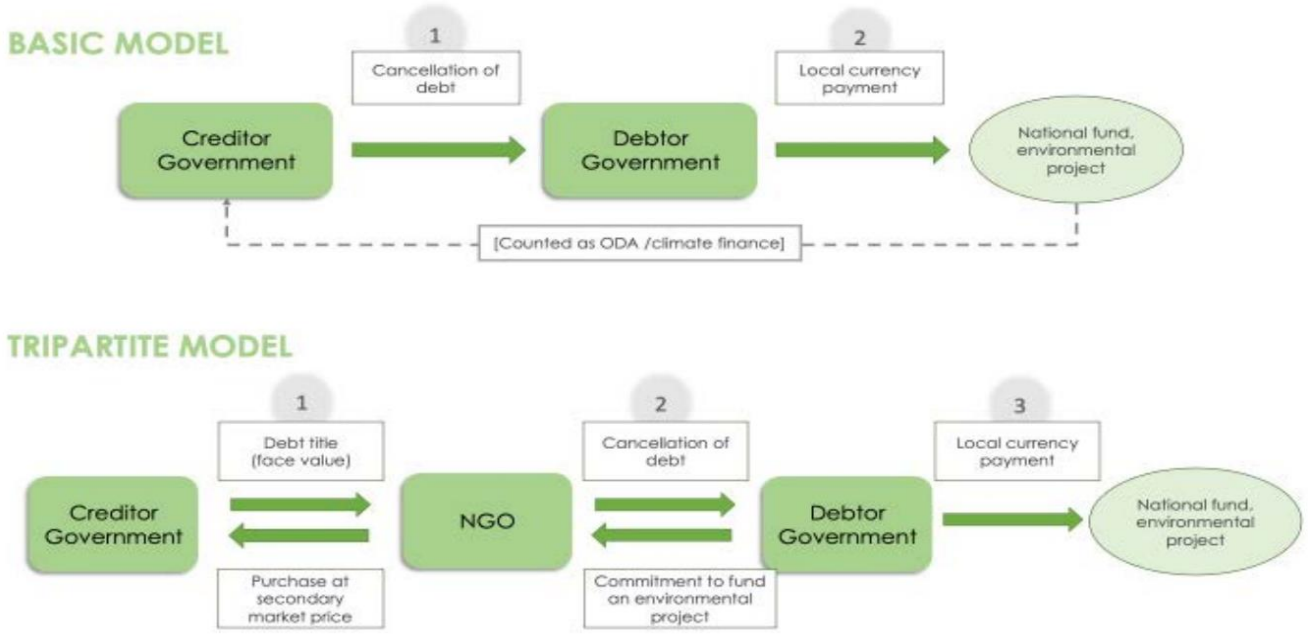
1) **Multilateral creditors** are international financial institutions such as the IMF, the World Bank and regional development banks such as, for example, the African Development Bank (AfDB).
2) **Bilateral creditors**, which are other states and their associated agencies (e.g., expert credit agencies). The finance provided by bilateral creditors can be in the form of credit guarantees, loans or Official development assistance (ODA) loans (Paris Club n.d.). There are also informal groups of bilateral creditors, such as the Paris Club, which gathers major creditor countries[9] and offers solutions to debtor countries' payment difficulties through conditional debt restructuring schemes (ibid.). Such solutions can be an adjustment of the payment schedule (debt relief through deferral) or rescheduling of debt on preferential terms, reducing the amount of debt service obligations with the condition that the debtor country has initiated and continues to pursue the requisite transformations to improve their financial and economic situation (Paris Club n.d.a).
3) **Private entities**, including commercial banks and private bondholders, extend commercial debt.

A debt swap can take place between two parties (the debtor and creditor country) in which bilateral debt is reduced ('bilateral swaps') or as a multi-party arrangement ('tripartite swaps'). In bilateral swaps, the creditor country either forgives some of the existing debt or offers new debt with better terms. In return, the debtor country agrees to allocate funds in its own currency for climate action. This commitment usually takes the form of a locally financed and managed conservation fund but can also involve high-level political commitments. In the case of tripartite swaps, third parties,

[9] The Paris Club has 22 permanent members: Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Korea, Netherlands, Norway, Russian Federation, Spain, Sweden, Switzerland, United Kingdom, United States of America (Paris Club n.d.). There is also the London Club which, like the Paris Club, is an informal group, but it primarily deals with the restructuring of commercial debt, primarily involving private creditors and banks.

usually one or more international non-governmental or philanthropic organisations, purchase (commercial) developing country debt on the secondary market at a discount from the face value of the debt title. In the next step, the third party(ies) lend the debtor country the funds at a below-market interest rate and in return receive a commitment that the funds will be invested in local currency[10] in agreed-upon national climate protection measures (see Figure 1 below for bilateral (basic) and tripartite model). In many cases for the tripartite model, mechanisms are set up to make sure that the agreed investment is taking place, e.g., through setting up trust funds that are typically governed by a committee with representatives from the involved parties (i.e., creditors and debtor country) and disburse money for climate protection projects (Warland and Michaelowa 2015).

Figure 1: The architecture of debt swaps.

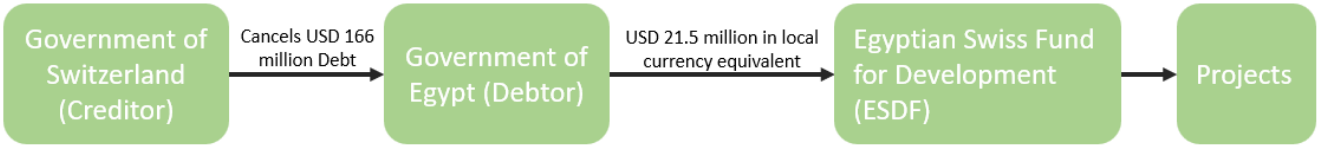


Source: Novikova et al. (2021, p.2).

Figure 2 depicts an example of a bilateral debt swap between Switzerland and Egypt in 1995. In the swap agreement, both countries formally agreed to cancel USD 166 million of Egypt's debt to Switzerland in return for the establishment and financing of the Egyptian Swiss Fund for Development (ESDF) in the amount of USD 21.5 million in local currency. The fund aimed to finance development and environmental projects that could create jobs and increase of income and improve the environmental and social situation in the country.

[10] Replacing hard currency obligations by local currency one's benefits developing countries which often struggle with severe hard currency shortage (Cassimon et al. 2011).

Figure 2: Overview of the Switzerland-Egypt 1995 swap structure



Source: Authors, based on Sarangi and Griswold (2020)

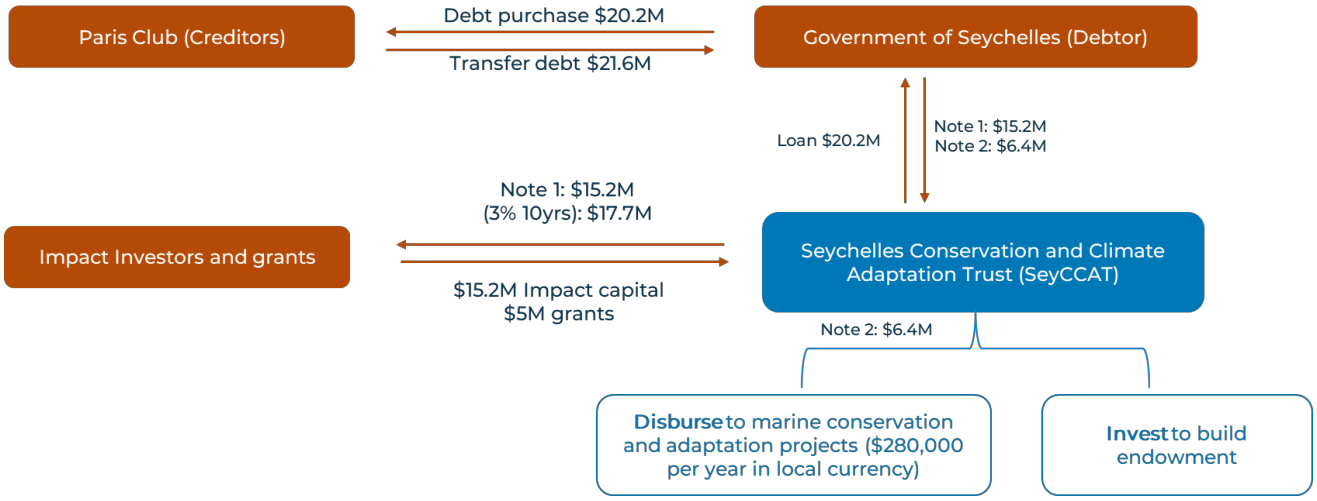
3.2. Tripartite debt swap example: Seychelles

Figure 3 depicts the workings of the 2015 Seychelles – Paris Club DFC swap. The functioning of such a tripartite DFC swap including the real debt relief component will be illustrated using this example. The Seychelles owed USD 21.6 million in external bilateral debt to members of the Paris Club of creditors. Here, the NGO TNC and other impact investors funded – with USD 15.2 million impact capital and USD 5 million grant – a newly set up national climate trust fund - the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT). The money of the trust fund was used for funding conservation and adaptation measures and to provide a loan to the debtor government (USD 20.2 million). The debtor government (the Seychelles) were able to buy back their debt from the creditor (Paris Club) at a discounted price of USD 20.2 million (i.e., at a discount of 6.5%). The debt cancellation thus amounted to USD 1.4 million (USD 21.6 million – 20.2 million). The debt service payment of the swap flows back to the trust fund (note 1: USD 15.2 million) to repay the loan channelled through the trust fund to the NGO and USD 6.4 million (note 2) to capitalize the SeyCCAT endowment fund (in total USD 21.6 million as original debt sum) (Commonwealth Blue Charter 2020).

In this swap, the Seychelles experienced modest cash flow gains because the new notes had an extended maturity period and a lower interest rate compared to the original debt. However, there was no reduction in the principal amount owed, and the payments to SeyCCAT were primarily in hard currency (USD), offering no advantage in terms of reduced currency risk. Looking at the climate finance generated by the swap, the deal provides SeyCCAT with resources to allocate USD 280,000 annually in the local currency for two decades towards marine conservation and climate adaptation projects (such as coastal management and conservation of mangroves). Additionally, it allowed for the creation of an endowment, projected to be worth around USD 6.6 million over the same period, to fund future investments (Essers et al. 2021).

The 2015 DFC swap enabled the Seychelles three years later to launch the first sovereign blue bond[11], raising USD 15 million from international private investors. This bond, partially guaranteed by a USD 5 million World Bank guarantee and aided by a USD 5 million concessional loan from the Global Environment Facility (GEF), will fund marine conservation and will be managed by SeyCCAT (World Bank 2018a).

Figure 3: Debt for climate swap Seychelles 2015



Source: amended from Commonwealth Blue Charter (2020) and UNDP (2023b)

3.3. Linking bonds to debt swaps example: Belize

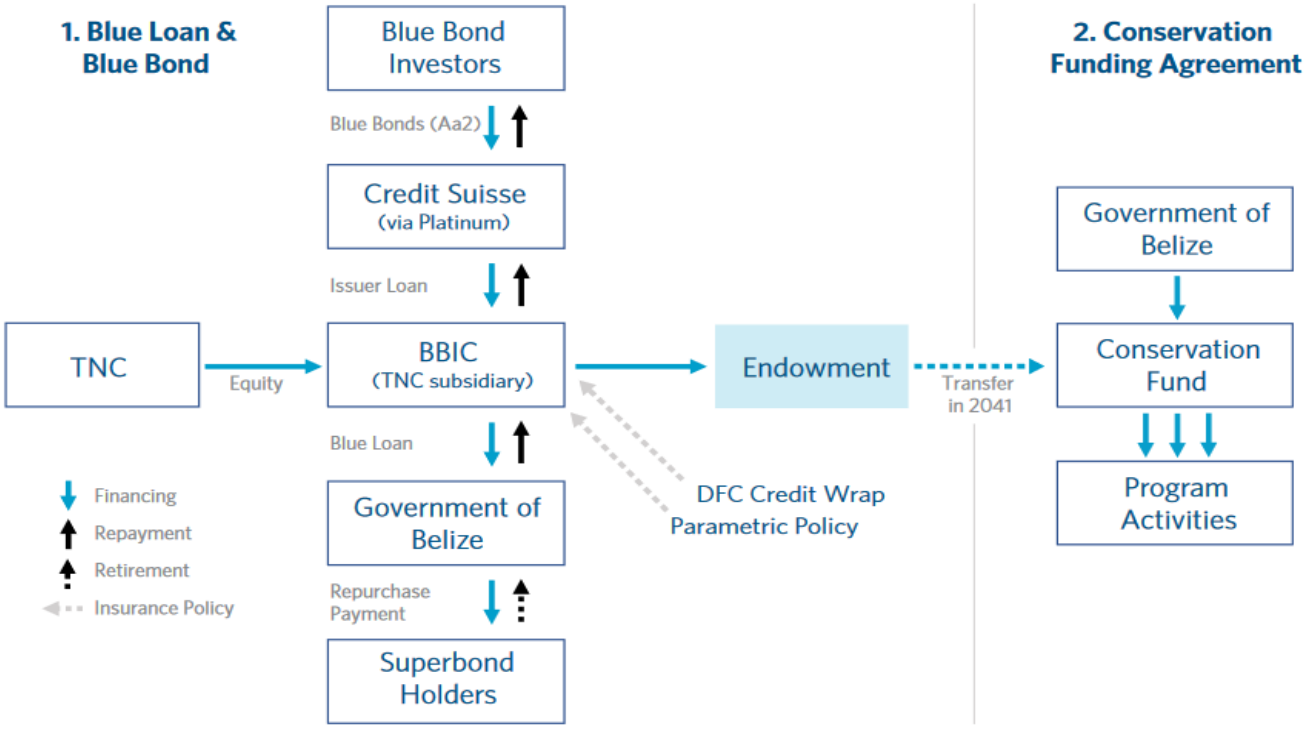
Since 2015, a new wave of debt swaps has begun, centred on bond debt (commercial debt) and aimed at jointly tackling the triple crisis of debt burden, climate change and biodiversity loss (Kelly et al. 2023). Recent examples include DFN swaps in Belize (2021), Barbados (2022), Ecuador (2022) and Gabon (2023). This new type of debt swaps uses credit enhancement tools such as providing guarantees on interest payments (at least partially) to reduce risk for potential investors, and to allow governments to issue 'blue' or 'green' bonds with better credit rating (Karaki et al. 2023). They also more and more involve private banks in financing the transactions (e.g., funding blue bonds or providing guarantees).

For instance, in the case of Belize, commercial creditors had a sovereign bond worth USD 553 million (also called 'Superbond'), making up 30% of the nation's Gross Domestic Product (GDP). The bond was traded at a deep discount at the secondary market due to high perceived risks of bondholders

[11] According to the World Bank (2018 b.), *"a blue bond is a debt instrument issued by governments, development banks or others to raise capital from impact investors to finance marine and ocean-based projects that have positive environmental, economic and climate benefits."* Blue bonds can be seen a variation of green bonds which were first launched by the European Investment Bank (EIB) and the World Bank in 2007-2008 and are financing projects that have a positive environmental impact (World Bank 2018c). In 2022. Global green bond issuance amounted to USD 487.1 billion (Michetti et al. 2023).

that Belize would not be able to repay the debt. Through an agreement between the Belizean government, TNC, the United States Development Finance Corporation (US DFC), and the commercial creditors, a bond repurchase was made possible by using a so-called 'blue loan' (Chamon et al. 2022). This loan is financed by the proceeds of a new blue bond issued to the market (bond-for-cash exchange at a rate of 55 cents per USD of face value) with the help of Credit Suisse as bond arranger and funder (see Figure 4).

Figure 4: Debt for nature swap in Belize in 2021



Note: BBIC stands for Belize Blue Investment Company, which was created to allow Belize to repurchase their bond debt.
Source: TNC (2021).

As part of the transaction, Belize agreed to a Conservation Funding Agreement with TNC that provides for the funding of marine conservation over a 20-year period through an endowment fund for marine conservation totaling USD 23.4 million and USD 4.2 million annually for marine conservation initiatives. The agreement includes pre-defined and time-bound ocean conservation milestones (developed with the help of TNC). Should Belize fail to meet a conservation milestone by the set date and subsequent grace period, the annual conservation payment is set to rise by USD 1.25 million for the initial missed milestone, with an additional increase of USD 250,000 for each subsequent missed milestone (ibid).

The debt swap would have not been possible without the political risk insurance (a form of credit enhancement) provided by US DFC for Belize´s payment of the blue loan which enabled an Aa2 rating by Moody's (in comparison to Belize´s sovereign rating of Caa3 at that time) (TNC 2021). Post-

transaction, Standard & Poor's raised Belize's sovereign credit rating to B- (Chamon et al. 2022), which can help Belize to reduce cost of debt in the future.

Compared to the debt conversion of the Seychelles, the Belize swap is a DFN swap with a clear focus on the conservation of marine biodiversity. While Belize is extremely vulnerable to natural disasters and the impacts of climate change such as hurricanes, flooding, coastal erosion, coral bleaching and sea level rise, the conservation agreement does not appear to take these factors into account, nor does it include specific climate change adaptation measures. Although some of the goals of the conservation agreement could contribute to adaptation to climate change, this requires clearly defining the adaptation rationale and monitoring how key indicators develop over time (and should be aligned with national climate strategies e.g., National Determined Contribution (NDC), National Adaptation Plan (NAP) etc.).

4. Past experiences with debt-for-climate swaps

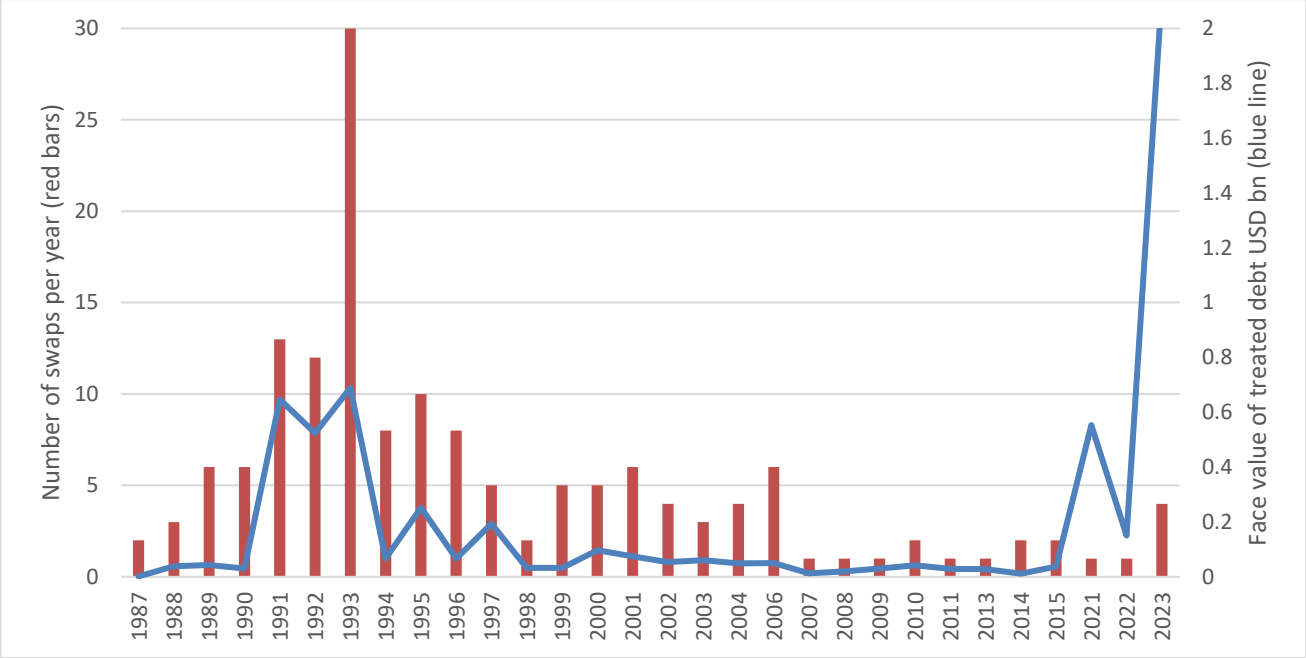
4.1. Overview and analysis of implemented DFN and DFC swaps

To date, there is no single institution that maintains and updates a public database on debt swaps. For this reason, for the purpose of providing an overview of DFN/DFC swaps carried out and in planning to date, overviews provided in other publications (African Natural Resources Management and Investment Centre, ANRC, 2022 and Sheikh 2018) have been compiled (see Annex I: Overview of implemented and planned debt swaps (1987-2023)). The database provides basic information on the debtor country as well as creditor(s) and involved institutions, the region, year of agreement, type of debt swap (bilateral/tripartite) and the face value of the treated debt for debt swaps between 1987 and 2023. Further, Annex II presents a more detailed analysis including some key information on the transactions, special features, outcomes as well as lessons learned for ten selected DFC/DFN swaps. The selection seeks to ensure a balance between the size of the swaps (volume of debt treated), the type of swap, the geographical distribution, the variety of actors involved and the time period in which they were agreed.

Between the years 1987 and 2023, a total of 152 swaps were executed and nine are under discussion, amassing a cumulative volume of around USD 6.41 billion[12] of treated debt and USD 2.1 billion of funds allocated for environmental/climate purposes. Debt swaps peaked before the turn of the millennium, with 75% of all transactions executed (33% in the 2000s and only 7% between 2011 and 2023). After the first peak time of DFC/DFN swaps ended in the 1990s, they continued to be implemented on a smaller scale throughout the 2000s and early 2010s. This decline can potentially be attributed to a reorientation of creditors towards more comprehensive debt relief under HIPC and MDRI initiatives (Chamon et al. 2022) and the price increase for debt on the secondary market (Steele and Patel 2020). Often, various swaps with different creditors occurred around the same time, which explains the often-used term ‘waves’ when referring to the execution of DFC/DFN swaps (ANRC 2022). Figure 5 illustrates the implementation and face value of treated debt of DFC/DFN swaps over time.

[12] It must be stressed that the figures should be regarded with caution. During an examination of a sample of the entries in the databases, different figures were found for most of the transactions from different sources. Also, both publications do not list sources for their figures.

Figure 5: Number and volume of debt swaps (face value of treated debt in USD million) per year

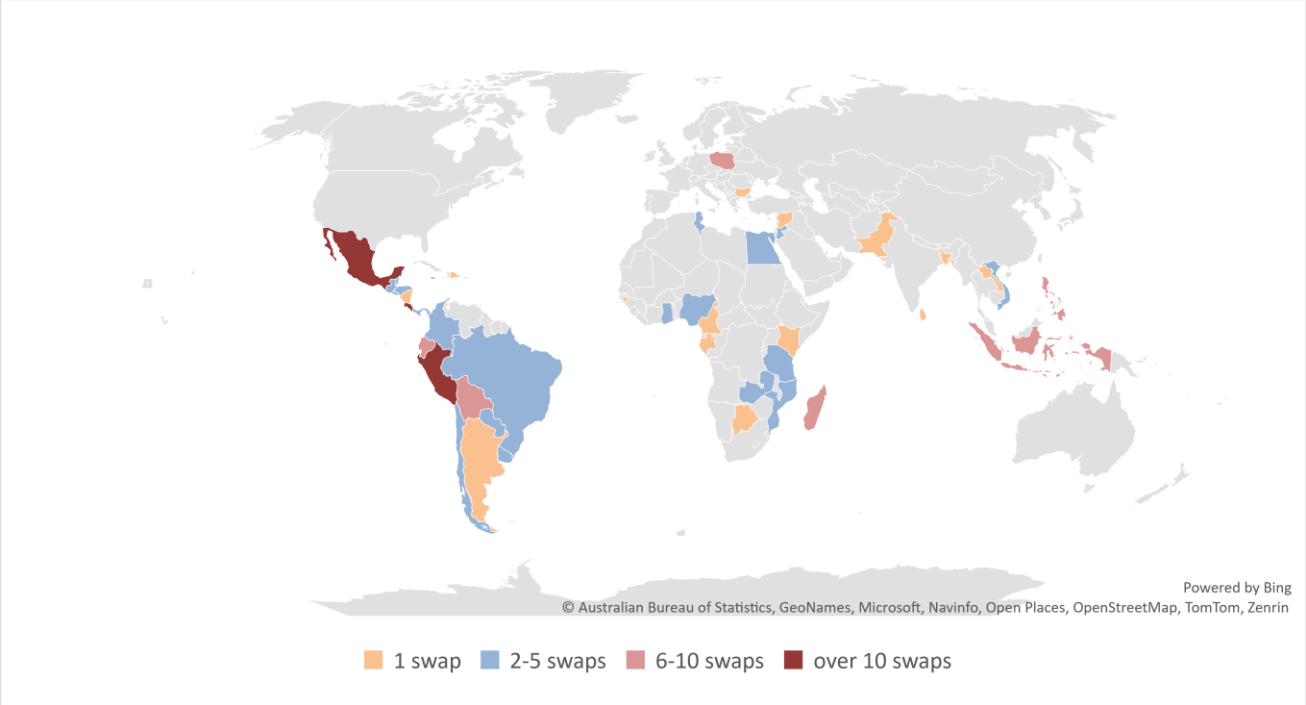


Source: authors based on data from Sheikh (2018) and ANRC (2022)

Geography of DFC/DFN swaps

Regional distribution (Figure 6) demonstrated a strong emphasis on Latin America and the Caribbean accounting for 84 out of the 152 swaps (most of them in late 1980s and 1990s). In contrast, Africa (27) and Asia (18) have a relatively low share of debt swaps, while the Middle East and North Africa (MENA) and Europe lag with 12 and nine transactions, respectively. For European swaps, eight of these were with Poland as the debtor and the other one in 1995 with Bulgaria. Among the debtor countries, Mexico, Peru, Costa Rica and Madagascar stand out as the most prominent recipients of DFC/DFN swaps with at least ten or more swaps implemented. It is remarkable that some big, developing and climate vulnerable countries have been remarkably absent (e.g., Afghanistan, Bangladesh, Ethiopia, Morocco) or under-represented (e.g., Brazil, Pakistan). Also, landlocked (African) nations have hardly had any involvement in past DFC/DFN swaps.

Figure 6: Debtor countries most involved in DFC/DFN swaps to date



Source: authors based on data from Sheikh 2018 and ANRC 2022

Volume of DFC/DFN swaps

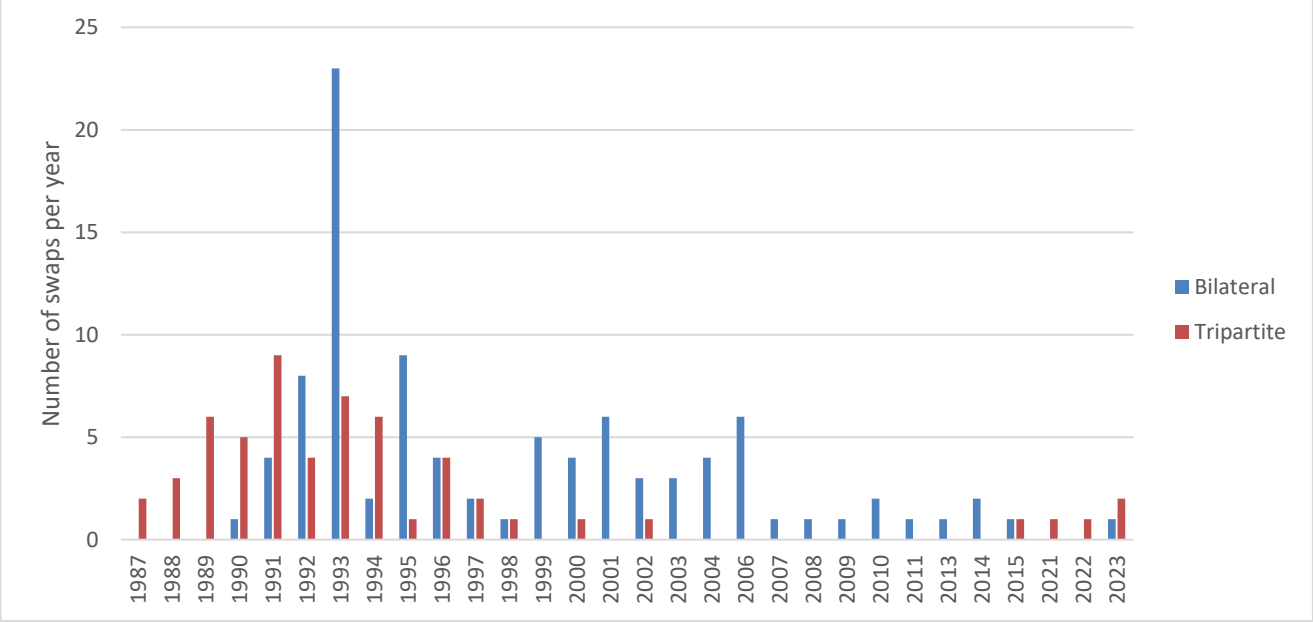
Overall, debt swaps are traditionally mostly small (typically less than USD 10 million, average USD 25.1 million[13]) and involve bilateral debt (64% of all transactions are bilateral swaps). Creditor countries that have engaged the most in debt swaps are the US (45 debt swaps of which 32 are bilateral swaps), Germany (24 debt swaps, all bilateral and most between 1994-2006) and Switzerland (ten debt swaps all bilateral and between 1993-1995). The dominance of these three countries within debt swaps especially in the mid-1990s and early 2000s may be explained by the countries' development focus and significant role in international debt relief efforts during that time. For instance, the US government began to engage more actively in debt swaps following the passage of the 1998 Tropical Forest Conservation Act (TFCA), aiming to offer debt relief to developing countries in return for their commitment to enhanced local conservation of tropical forests (Steele and Patel 2020). Tripartite swaps hold on average smaller volume of debt treated (avg. USD 14.5 million for tripartite against USD 31.1 million for bilateral swaps), many limited to only a few hundred thousand US dollars. NGOs most engaged as part of tripartite transactions are the US-based Conservation International (CI), TNC and the World Wildlife Fund (WWF).

[13] For comparison, Baldwin et al. (2022) find an average DFC swap size of USD 26.6 million.

Type of debt swapped

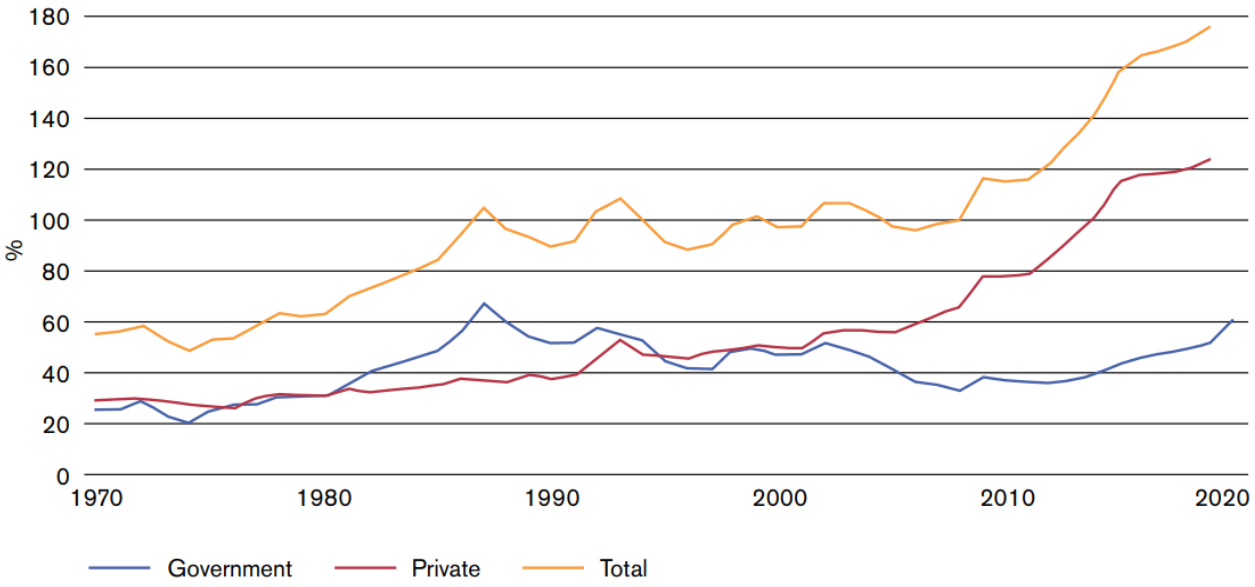
Until the first bilateral swap between Poland and Finland in 1990, all previous 16 swaps dealt with commercial, secondary market-traded debt (tripartite model, Figure 7), including the involvement of the WWF in as many as ten cases, and only three with a creditor country directly engaged (1x Netherlands, 2x Sweden). After the Paris Club of creditors in 1990/1991 had included a clause on debt swaps in its standard terms and conditions for the treatment of highly indebted low- and middle-income countries (so-called Houston and London terms and conditions) (Club de Paris 2023a; Club de Paris 2023b), all bilateral debt classified as ODA and a certain amount or percentage of non-ODA (non-concessional) debt could now be swapped on a voluntary basis, which led to many creditor countries making use of it (Cassimon and Essers 2014). The new wave of debt swaps since approximately 2015, is again centred on bond debt (commercial debt). This last debt swap type change can be explained by the fact that sovereign debt of emerging and developing countries is held increasingly by private entities as can be seen in Figure 8 (since approx. 1998 private debt has predominated).

Figure 7: Number of bilateral and tripartite swaps over time (1987-2023)



Source: authors

Figure 8: Emerging market and developing economies debt as percentage of GDP (1970-2020)



Source: Useree 2021

Recent DFC/DFN swaps

There are several recently announced DFC/DFN swaps such as the swap between the US and Peru with a volume of USD 20 million of treated debt (U.S. Department of the Treasury 2023), Germany's announced DFC swap with Kenya with debt worth USD 65 million (EUR 60 million) (Miriri 2023), and Belgium's debt swap with Mozambique amounting to USD 2.5 million (EUR 2.4 million) of treated debt (Walker 2023). Other swaps under discussion include Pakistan, Lao PDR (UNDP n.d.) and Sri Lanka (Gallagher 2022), Kenya, Mozambique and a new Barbados swap. In October 2023, Barbados announced its aim to secure a DFC swap in early 2024, to secure savings of USD 300 million over 15 years to fund clean water supplies, using a structure similar to its DFN swap (Savage and Jones 2023).

4.2. Outcomes and lessons learned of selected DFC/DFN swaps

Looking at the ten selected DFC/DFN swaps summarized in Annex II: Analysis of selected debt swaps, it becomes apparent that only very few past debt swaps are linked to climate change action while most of them are conservation orientated. Initially the latter focused on conservation of forests – thanks to the push of the USA in the context of the TFCA – now more focused on marine conservation – due to the involvement and mission of the TNC. Only the Seychelles and Cabo Verde swaps explicitly focused on climate change adaptation and mitigation respectively. Considering the acceleration of climate change, it is surprising to see such limited focus on climate change-related action.

Only for four of the ten analysed transactions, some limited information could be found on the outcomes (e.g., 91 developmental projects supported in the 1995 Egypt-Switzerland swap). In addition, most sources of information on debt swaps mention the setup of a trust fund to finance projects based on project proposals submitted by, e.g., local NGOs but, usually do not mention what kind of projects are to be funded. Thus, little can be said about the effectiveness and impact of the activities. Regarding debt sustainability, UNDP (2023b) noted that while DFC/DFN swaps can have positive short-term impacts, such as improved sovereign credit ratings, their long-term effects cannot be demonstrated due to their limited application and relatively short history. Also, the limited publicly available information on DFC/DFN swaps leads to 'black-box-transactions'.

The ten selected DFC/DFN swaps have provided valuable lessons. The case studies show that it is important for NGOs and government agencies in debtor countries to have the necessary capacity to implement projects, to address issues of land and property rights and traditional land use, and to have appropriate governance structures in place to ensure that the proceeds of DFN swaps are used as intended. Therefore, strong civil society representation, local stakeholder dialogues and country ownership should be considered of utmost importance, as they have – so far – too often been neglected (Woolfenden 2021). The cases also highlight that monitoring and enforcement of the agreements are difficult, especially when private NGOs are entrusted with enforcement.

Moreover, the swaps proved to be more expensive than expected due to additional costs such as legal fees, negotiation time and enforcement expenses. This lack of cost-effectiveness is noteworthy, especially as the cases also show that the volume of the swaps was mostly minimal compared to the countries' substantial indebtedness. Consequently, the development of simple-to-monitor metrics is crucial (Chamon et al. 2022), as well as the cancellation of a significant proportion of a country's debt in the swap, to increase the ratio of savings to transaction costs (Woolfenden 2021). In addition, the case studies suggest that the design of DFC swaps needs to be flexible to take account of each country's unique circumstances, at the same time, the nature conservation and protection conditions attached to debt swaps should align with existing domestic country priorities and national development plans (Cassimon et al. 2011). The Egyptian case raises the question of how to avoid debt swaps substituting for, rather than increasing, social spending in the debtor country. Any DFC swap should, as far as possible, be additional to existing development and climate finance (e.g., Fresnillo 2020).

4.3. Opportunities of DFC swaps as a debt relief and climate finance instrument

Based on desk research and the analysis of past debt swaps, five main advantages and opportunities of DFC swaps for debtor countries are singled out: (1) **debt reduction**, (2) **mobilization of finance for mitigation, adaptation and L&D**, (3) **leveraging additional (private sector) financing**, (4) **saving scarce hard currency**, and (5) **credit risk management**.

Debt reduction

DFC swaps are one tool in the toolkit of a government to address a high debt burden and low fiscal space to finance domestic climate action. They are meant to cancel a portion of external debt in exchange for domestic investment in mitigation or adaptation. As they do not increase the debt burden of a country, the instrument is advantageous compared to the dominant debt-increasing international climate finance instruments (loans and equity), but it needs to be noted that it is not the only instrument that can achieve this goal. As Chamon et al. (2022) highlight, grants or combinations of grants with concessional lending as well as comprehensive debt restructuring conditional on climate action are comparable alternatives. In terms of the debt relief achieved through DFC swaps, the volume of treated debt has so far been fairly modest across all debt swaps (nature and climate), so a positive impact on the debt sustainability of debtor countries cannot be systematically observed, but DFC swaps can in principle, if implemented on a larger scale, reduce the debt burden of developing and middle-income countries (Chamon et al. 2022).

In addition, middle-income countries, many of which are highly vulnerable to climate change (e.g., Kenya and Cape Verde) and struggling with rising debt levels, are not eligible for HIPC and MDRI, which contributes to their limited ability to invest in low-carbon, climate-resilient development (UN 2021). As a country's external debt decreases thanks to DFC swaps, it can lead to better credit ratings, which can, in turn, lead to favourable borrowing conditions in international markets, facilitating the country's access to future funds and attract new foreign investments (Novikova et al. 2021).

Mobilization of finance for mitigation, adaptation, and L&D

By reducing debt obligations, DFC swaps create fiscal space for governments to invest in climate projects. Well-designed DFC swaps ensure that the released funds are channelled into meaningful climate change mitigation and/or adaptation measures supporting national adaptation and mitigation targets outlined in its Nationally Determined Contributions and/or NAPs. Overall, this also means that the money stays within the country, supporting local climate initiatives rather than flowing out as debt repayments.

DFC swaps may also be used as an instrument for L&D finance. L&D finance has not yet been clearly defined by the UNFCCC but can generally be understood as climate finance for activities to address losses and damages that have already occurred due to climate change impacts or are also unavoidable by climate change mitigation or adaptation measures. (Bakhtaoui and Shawoo 2022). In the absence of dedicated L&D finance, non-addressed impacts of (increasingly) frequent climate-related disasters accompanied by short and unsupported recovery processes will amass, increasing vulnerability and amplifying risks (Pardo 2021). Estimates for this gap between L&D financial flows and needs range from at least USD 290 to USD 580 billion annually by 2030, rising to USD 1 trillion or more per year by 2050, as highlighted in a synthesis report on L&D finance presented by the Transitional Committee (UNFCCC 2023).

While DFC swaps have not yet been discussed explicitly in the context of L&D finance, they might be an important part of the 'mosaic' of solutions contributing to fill the L&D finance gap (see e.g., Thomas and Theokritoff 2021). In fact, Schmidt et al. (2023) have found DFC swaps to be among the ten most promising instruments to raise L&D finance due to their relative political simplicity of implementation (high feasibility), compared to other L&D finance instruments such as global taxes. However, the authors highlight that DFC swaps are only partially fair and predictable regarding L&D finance, i.e., additional funding does not necessarily come from current and historical Greenhouse Gas (GHG) emitters or from entities/individuals with above-average resources, and their piecemeal nature does not allow for predictable planning for various countries at the same time, in contrast to, e.g., a global tax.

Leveraging additional (private sector) financing

DFC swaps can mobilise private finance to leverage swap proceeds at the end-user level. Moreover, as DFC swaps often involve setting up a trust fund for disbursing the debt service savings, this can allow for more public climate finance to be absorbed by the debtor country through this vehicle. Debt swaps can also help to attract private sector finance for climate-related investments due to an improved sovereign risk rating and the conditional activities of the swaps can have relevant co-benefits such as poverty reduction (Warland and Michaelowa 2015). Overall, DFC swaps may thus provide additional resources to undertake climate action beyond traditional climate finance.

Saving scarce hard currency

DFC swaps reduce the amount of hard currency that the country needs to allocate for debt repayments, allowing it to retain more of its foreign reserves. At the same time, local currency does not have to be used to purchase hard currency for the purpose of multilateral debt service (Fuller et al. 2018) and can instead be invested locally. Scarce hard currency can in turn be used to establish (or not deplete) foreign exchange reserves, whose level is a vital factor in global trade and economic stability.

Credit risk management

For creditors (bilateral and commercial), DFC swaps can be a way to manage credit risk. They can turn non-performing loans or high-risk debts into investments in climate projects. By recovering all or part of their debt DFC swaps can help avoid the accumulation of arrears. The remaining debt claims of creditor countries may increase in value thanks to the potential positive effect of DFC swaps on credit ratings (see the example of Belize in Section 3.3). Depending on the design of the DFC swap, creditor countries may report the monetary value as ODA, as already done by many creditor countries of past DFC swaps. Finally, they can also raise their environmental credentials by mobilising co-financing through international funding institutions.

4.4. Challenges of DFC swaps as a debt relief and climate finance instrument

Eight main categories of challenges related to DFC swaps have been identified: (1) **Volume and scalability**, (2) **additionality**, (3) **effectiveness**, (4) **complexity and transaction costs**, (5) **resource allocation**, (6) **ownership and sovereignty**, (7) **enforcement and compliance** and (8) **market-related risks**. Unfortunately, systematic assessments of already conducted debt swaps are rare, and the lack of transparency of project activities and documentation (e.g., Fuller et al. 2018) exacerbates the difficulty of deriving generalisable insights for all these risks and pitfalls.

Volume and scalability

Limited volume and scalability are the first and most important limitations of DFC swaps. TNC expects to do between one and three debt swap deals per year until 2030 which could equal a total of USD 10 billion in debt volume by the end of the decade (Baldwin et al. 2022). Even if this best-case scenario holds true, this will only be a fraction of what would be needed for sustainable debt relief for developing countries. In fact, USD 10 billion is the equivalent of only 2.5% of the current USD 400 billion emerging market sovereign debt (*ibid.*). Besides, the volume of needed private and public climate finance outstrips even the most ambitious debt swap projects by far (e.g., Barbados Government Information Service 2023; Bloomberg 2023; OECD 2021). Moreover, Essers et al. (2021) highlight that historically, DFC swaps have been piecemeal operations that involve millions rather than billions of USD. They do not always create additional fiscal space[14] and often involve setting up parallel structures for project implementation and monitoring – thereby bypassing the debtor government's own systems and procedures and adding to transaction costs (*ibid.*). According to LSE (2023), DFC swaps are only minimally scalable, due to the sheer size of the debt and number of private actors that must be enticed to participate in a wholly discretionary process (White and Duarte 2023).

Other instruments may thus be more suitable to address the debt burden and climate finance issues separately. Indeed, according to UNDP (2017), the total value of debt treated by debt swaps amounts to USD 2.6 billion and has funded development or nature-related spending of about USD 1.2 billion. In contrast, the Brady Plan provided an aggregate debt reduction of USD 65 billion (Bowe and Dean 1997), while climate grants to developing countries in 2019 amounted to USD 17 billion (OECD 2021).

[14] Depending on the discount rate, which might leave the overall macroeconomic situation unaffected (Novikova et al. 2021).

Additionality

Additionality of funding is a contentious issue for DFC swaps. Freed up financial resources through debt swaps are meant to be complementary to traditional climate financing. In many cases, however, additionality is questionable, as in the case of the 2015 Seychelles Swap Programme, where it remains unclear to what extent the projects funded by SeyCCAT can be described as additional to already planned government investments and/or donor support (Essers et al. 2021).

Effectiveness

UNDP (2023b) highlight that the effectiveness of a DFC swap is highly dependent on the creditor composition and debt conditions as well as the impacts on conditions for new debt issuance. Moreover, climate-related projects funded through these swaps may not achieve their intended environmental goals due to a variety of circumstances, including political instability and limited possibilities for enforcement. For example, for Belize there is widespread doubt over the meaningfulness of the now protected status of its marine environment, given the government's inclinations to develop offshore oil exploration and extraction (e.g., Desai 2023). In addition, the lack of public information on the projects financed by the DFC swaps also makes it difficult to assess the impact on climate vulnerability of the debtor countries.

Complexity and transaction costs

DFC swaps can involve complex and lengthy negotiations because debtor and creditor(s) must agree on the non-financial commitments as well as potentially outside oversight and other conditionalities (Nedopil et al. 2023). Debt swaps – like most financial instruments – face transaction costs that are difficult to be brought down (fixed cost and upfront cost, running cost, political risk insurance, underwriting costs, etc.) (e.g., Bloomberg 2023). Managing these complexities can be challenging and time-consuming which, in turn, makes the whole process rather expensive (UNDP 2023a; Chamon et al. 2022).

In fact, if the debt swap volume is small, the positive impact on the debtor's economic situation might be negligible or even be outweighed by the costs of negotiating a swap and setting up a trust fund (for which debtor countries also need to have sufficient funding to deposit into in the first place) (Novikova et al. 2021). In the case of Belize, for example, almost four times more (USD 85 million) were spent on transaction costs than on savings allocated to environmental funds (USD 23 million) (LSE 2023, African Natural Resources Management and Investment Centre 2022). The case of Belize also illustrates that a key element for the DFN swap was the decades-long relationship with TNC and Belize's commitment to nature conservation, e.g., in forests and ocean (Bloomberg 2023). This may be difficult to replicate and to some extent explains why, so far, only a handful of organisations got involved in debt swaps at all, such as TNC and (formerly) Credit Suisse.

Resource allocation

In terms of resource allocation, the most recent wave of debt swaps only allocated a surprisingly small share of debt service savings to environmental funds. For example, in the cases of Seychelles (2016) and Belize (2021), only fractions of the blue bonds-traded debt had been earmarked for marine protection purposes (USD 6.6 million and USD 23 million respectively) (African Natural Resources Management and Investment Centre 2022). In the case of Belize, environmental funding equalled only 4% of the face value of treated debt (African Natural Resources Management and Investment Centre 2022), raising the question if any ocean-themed bond should be called a 'Blue Bond'.

Interestingly, TNC's Kevin Bender admitted at the Bloomberg Green Summit in April 2023 that definitions of 'blue bonds' and how much of the savings have to be invested in marine protection have been very vague in the past, leading TNC to no longer use the term but to speak of 'nature bonds' instead (Bloomberg 2023). In fact, guidelines on blue bonds only came out after the Belize swap, in contrast to, e.g., 'green bonds' where all proceeds have to go to 'green' projects (*ibid.*). Consequently, future bonds-based debt swaps will likely come with some (more) additional 'green' strings attached.

Ownership and sovereignty

In general, agreeing on nature-related key performance indicators may be difficult: Debtor countries and their relevant ministries first need a feasibility study on the impact of the swap's nature-related commitments, e.g., the designation of marine protected areas, to understand the (non-)economic costs of reorganizing and reorienting the debt (Nedopil et al. 2023, Chamon et al. 2022). In the case of the TNC-led blue bonds DFN swaps, 30% as a protection target for country's marine area has been enshrined in the deal for e.g., the Seychelles and Belize. This raises the question whether pressure on marine areas not addressed by the deal may increase via leakage (e.g., Bedarff et al. 1989).

Besides, in a comprehensive synthesis on the "first 15 years of DFN swaps", Reilly (2006) finds that, despite the presumable win-win nature of this type of transaction, legislative mandates were often not funded and over time, developing countries became increasingly suspicious of swaps as they came to believe that debt swaps posed a threat to their sovereignty. As soon as the 1980s, some swaps have been perceived by national stakeholders as a loss of sovereignty to the land (or marine area) being conserved, even if debt swaps do not include equity exchange (Bedarff et al. 1989, Diálogo Chino 2021). Finally, debt advocacy groups fear that debt swaps may further open the door to conditionality and/or tied aid, undermining citizen participation and democratic ownership.

Enforcement and compliance

Regarding **enforcement and compliance**, the debtor country should have the required capacity, good governance and institutions necessary to achieve the swap's objectives. For existing DFN swaps specifically, WWF US' Director of conservation finance, Esteban Brenes, cautioned that, among others, significant improvements were needed in how wildlife pledges are monitored to prevent accusations of greenwashing (Baldwin et al. 2022). Furthermore, it must be recognized that many countries highly vulnerable to climate change are also having fragile governance which poses a significant risk of non-compliance with the agreed terms of the swap (Warland and Michaelowa 2015).

Market-related risks

Lastly, **market-related risks** include that, occasional improvements in debt markets reduce the attractiveness of swaps at times (Reilly 2006), as happened in the second half of the 2010s when no new debt swaps were negotiated after the Seychelles deal in 2015/2016. Regarding sovereign credit ratings, the vast majority of debt swaps have not been reported to (positively or negatively) affect debtor countries, except for example in Gabon (2023) and Belize (2021) where the credit rating increased immediately and significantly, due to better repayment conditions (White and Duarte 2023). However, as UNDP (2023b) highlights, market-sensitive information needs to be managed carefully to avoid credit-rating downgrades both pre- and post-agreement of a debt swap. According to UNDP (2023), it happens frequently that a debtor country that achieved debt relief through debt swaps or any other type of debt reorganization, may have already lost credibility among international credit rating agencies and been downgraded in their sovereign credit rating.

4.5. Considerations for future DFC swaps

Given the analysis of experiences with DFC swaps above, ten criteria (from highest to lowest importance) for a debtor country's participation in a DCF swap were derived in line with Singh and Widge (2021) and Desai (2023). The fulfilment of these criteria seems to be a necessary condition for DFC swaps to make sense from economic and climate perspectives, although it does not guarantee their successful implementation.

1. **Unsustainable Level of Debt**: The country should have high level of public external debt (measured by the IMF-World Bank Debt Sustainability Framework for Low-Income Countries and sovereign credit ratings) but not being close to a liquidity crisis, (e.g., Fresnillo 2020), face limited access to traditional grants or debt relief (IMF 2022b) and having difficulties raising sufficient domestic public funds for climate-related initiatives due to limited fiscal capacity (CPI n.d.);

2. **Climate change vulnerability:** Countries that are particularly vulnerable to the impacts of climate change or have significant climate-related opportunities (e.g., vast forested areas for conservation or potential for renewable energy) may be prioritized (Jensen 2022);
3. **Governance and Institutional Capacity:** The debtor country should have a relatively stable political environment and an institutional framework that can ensure the appropriate use of funds for climate initiatives (to be measured for example by the Fragile States Index (n.d.)). Additionally, a certain level of transparency and governance is required to ensure that the finance freed through the swap is utilized as intended (Chamon et al. 2022).
4. **Willingness to Engage:** The country must express interest in and be willing to negotiate the terms of the swap. This includes a commitment to invest the resources saved from debt servicing into agreed-upon climate initiatives.
5. **Trust:** Trust between involved parties e.g., through prior collaborations in climate-related activities. For example, in the case of Belize, decades-long trust-building via conservation projects between the government and TNC has been considered key in striking the deal (TNC 2022).
6. **Commitment to Climate Action:** There should be a demonstrable commitment on the part of the debtor country to prioritize climate concerns. This could be evidenced through ambitious NDCs, national strategies, or participation in relevant initiatives.
7. **Legal and Regulatory Framework:** It is crucial for the debtor country to have a legal framework that can support the terms of the DFC swap agreement.
8. **Stakeholder Engagement:** The capacity and willingness of the debtor country to engage with various stakeholders, including local communities, NGOs, and private sectors, can be a crucial criterion. This ensures that the projects derived from the swap have broad-based support.
9. **Potential for Leveraging Additional Resources:** Some swaps are structured to leverage additional funding from other sources, such as private investors or multilateral institutions. A debtor country's ability to attract such funding might be a criterion.
10. **Monitoring, Reporting and Verification (MRV) Capabilities:** The debtor country should have, or be willing to develop, systems for monitoring, reporting, and verifying the climate initiatives funded by the swap.

Overall, the future of DFC swaps in the climate finance landscape remains uncertain. On the one hand, the Bridgetown Agenda (Barbados Government Information Service 2023) stresses that annually more than USD 1.5 trillion of private sector investment would have to be mobilized for the green transformation, outstripping by far all DFC swap projections (e.g., White 2023) and globally mobilized climate finance so far (e.g., OECD 2021). From this point of view, debt swaps cannot solve the finance gap, but can potentially contribute to freeing up public finance that in turn could attract more private finance if structured accordingly. On the other hand, debt swaps hardly contribute to transforming the governance of international financial institutions to make them more representative, equitable and inclusive, another key demand. If anything, they allow for a

continuation of the status quo by different means. If external commercial debt levels would be lowered by other measures than debt swaps – including debt relief and more favourable debt terms as demanded by the Bridgetown Agenda – it is an open question to what extent debt swaps would even be needed in the future.

For re-designing debt swaps, the most elaborated proposal has been made by the Commonwealth Secretariat (Grigoryan et al. 2022): (1) Donors write off small states' multilateral debt using their climate finance pledges in exchange for investments in mitigation or adaptation projects; (2) the funds transferred from donors to multilateral institutions can be scheduled annually, as subscriptions, or as one upfront lumpsum payment; (3) small states then make annual payments into a trust fund in an amount close to the initial debt service, but in local currency, over 10-15 years; (4) interest earned by the trust fund can be used to provide additional finance to environmental projects. Using such redesigned DFC swaps would allow for securing stable and predictable flows of finance for climate change mitigation and adaptation projects.

To enable the upscaling of DFC swaps, the International Institute for Environment and Development (IIED) advocates for a shift in the design of DFC swaps from being project-focused, as seen in traditional DFN swaps, to being more comprehensive, using a so called 'programmatic approach'. This entails relying on the domestic government systems of the debtor country, rather than having third party NGOs, such as CI, WWF or TNC involved in establishing and managing a climate fund. In addition, instead of having conservation/climate agreement with objectives co-developed by an international organization, this novel approach aims to introduce climate and nature key performance indicators which are aligned with debtor governments' commitments and local stakeholders' priorities. Lastly, instead of a transaction between a debtor country and one type of creditor (bilateral or commercial), the IIED approach proposes to introduce an 'all creditor'-approach including MDBs, bilateral and private bond holders to increase scale and lower transaction costs of debt swaps (IIED 2023).

As many developing countries owe more to MDBs than they receive in funds from them and given that MBDs are providers of credit enhancement, they are also seen as part of the solution to scaling up DFC swaps (UNDP 2023a). At COP28, a consortium comprising MDBs and climate funds launched the 'Joint Declaration and Task Force on Credit Enhancement of Sustainability-Linked Sovereign Financing for Nature and Climate'. Led by the Inter-American Development Bank (IDB) and the US DFC, with participation from AfDB, Agence Française de Développement, Asian Development Bank, European Investment Bank, Green Climate Fund and Global Environment Facility, the task force aims to expand and increase the impact of DFC swaps. The group, set to begin work in January 2024, will assess past deals, develop necessary tools, and collaborate with countries ready for debt swaps, potentially involving around USD 800 billion in emerging market sovereign debt (Jones 2023).

5. Conclusions

This report provided a comprehensive analysis of DFC swaps as an innovative financial instrument within the international climate finance landscape. The current volume of such finance is vastly insufficient to meet the 1.5°C climate target set by the Paris Agreement. Developing countries, particularly SIDS, face challenges in accessing public international climate finance, especially a skewed distribution towards mitigation over adaptation, and adding to the debt burden of vulnerable countries. The global public debt has reached an all-time high, with developing countries experiencing rapid debt accumulation due to multiple crises, including climate change. This hampers their ability to invest in climate change mitigation and adaptation, creating a vicious cycle of borrowing and increasing climate change vulnerability.

DFC swaps involve reducing a portion of a country's external debt in exchange for local investment in climate change mitigation and/or adaptation. These swaps can be bilateral, involving direct agreement between debtor and creditor countries, or tripartite, involving third parties like NGOs. The review of past experiences with DFC swaps led to the identification of ten key participation criteria for the successful implementation of DFC swaps. These include unsustainable debt levels, high climate change vulnerability, good governance and institutional capacity, willingness to engage in swaps, existing trust between involved parties, commitment to climate action, appropriate legal and regulatory frameworks, potential for leveraging additional resources, and capabilities for monitoring, reporting, and verification of funded initiatives.

DFC swaps offer the following advantages to debtor countries from both financial and climate perspectives: an additional way for heavily indebted countries to reduce their debt burden, allowing them to finance climate change mitigation and adaptation projects, which often struggle to access funds. By involving multiple stakeholders, DFC swaps can potentially unlock additional funds from various sources, including international organizations, private sector, and NGOs. Developing countries can save on foreign currency by paying in local currency for climate projects. Finally, DFC swaps can help manage credit risk for creditor countries and reduce the likelihood of default by debtor nations, benefiting both parties.

Disadvantages of DFC swaps include their limited scale, complex negotiation and implementation leading to high transaction costs. Moreover, there are concerns about whether funds are additional to existing aid and whether they can effectively contribute to significant mitigation or adaptation. Finally, establishing robust mechanisms for monitoring, reporting, and verification of climate projects funded through DFC swaps is challenging. Indeed, the review of past experiences with DFC swaps showed limited evidence of positive climate impacts due to the lack of transparency regarding the projects supported. DFC swaps thus can only be seen as part of a broader toolkit for climate and debt crisis management.

We recommend increasing the scale of DFC swaps and widen their scope to include more countries and larger debt amounts. DFC swaps should be redesigned in a way that would secure stable and predictable flows of finance for climate change mitigation and adaptation projects. We also suggest moving from project-based towards a programmatic approach for upscaling of DFC swaps. Building on the programmatic approach under the CDM may be useful in this regard.

Furthermore, streamlining the negotiation and implementation processes can help reduce transaction costs and make DFC swaps more appealing to both debtor and creditor countries, while establishing clear guidelines and monitoring frameworks can ensure that funds are used effectively for intended climate projects. Adapting DFC swaps to local contexts and exploring innovative approaches, like linking them with sustainable development goals, can also enhance their effectiveness and uptake. Lastly, regular assessments of the impact of DFC swaps on both debt relief and climate action can provide insights for future improvements.

From the political standpoint, it is crucial to ensure that the sovereignty of debtor countries is upheld. The design of the DFC swap mechanism should therefore correspond to national climate commitments. In particular, DFC swaps should be fully anchored in and aligned with national climate change priorities and the objectives as outlined in the NDCs, NAPs and long-term low-emission development strategies (LEDS).

In conclusion, while DFC swaps present significant opportunities for addressing the dual challenges of climate change and sovereign debt, their effectiveness depends on addressing the challenges through strategic enhancements and innovations. As part of a larger toolkit for sustainable development and climate finance, DFC swaps have the potential to play an important role in the future, provided they are effectively scaled, managed, and integrated into broader financial and environmental strategies.

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Annex I: Overview of implemented and planned debt swaps (1987-2023)

#	Region	Country	Year	Type	Creditor	Face value of treated debt (USD million)	Environmental funds allocated (USD million)	Source
1	LATAM and Caribbean	Bolivia	1987	Tripartite	CI, Frank Weeden Foundation	0.7	0.25	ANRC 2022
2	LATAM and Caribbean	Ecuador	1987	Tripartite	WWF, Frank Weeden Foundation	1.0	1.00	ANRC 2022
3	LATAM and Caribbean	Costa Rica	1988	Tripartite	National Parks Foundation and others	5.4	4.05	ANRC 2022
4	LATAM and Caribbean	Costa Rica	1988	Tripartite	Netherlands	33.0	9.90	ANRC 2022
5	Asia	Philippines	1988	Tripartite	WWF	0.4	0.39	ANRC 2022
6	LATAM and Caribbean	Costa Rica	1989	Tripartite	TNC	5.6	1.68	ANRC 2022
7	LATAM and Caribbean	Costa Rica	1989	Tripartite	Sweden	24.5	17.15	ANRC 2022
8	LATAM and Caribbean	Ecuador	1989	Tripartite	TNC, Missouri Botanical Garden	3.6	3.60	ANRC 2022
9	LATAM and Caribbean	Ecuador	1989	Tripartite	WWF	5.4	5.39	ANRC 2022
10	Africa	Madagascar	1989	Tripartite	WWF, USAID	2.1	2.11	ANRC 2022
11	Africa	Zambia	1989	Tripartite	WWF, Anonymous Swiss donor	2.3	2.04	ANRC 2022
12	LATAM and Caribbean	Costa Rica	1990	Tripartite	Sweden, TNC, WWF	10.8	9.60	ANRC 2022
13	LATAM and Caribbean	Dominican Republic	1990	Tripartite	TNC, Puerto Rico Conservation Trust	0.6	0.58	ANRC 2022
14	Africa	Madagascar	1990	Tripartite	WWF	0.9	0.92	ANRC 2022
15	Asia	Philippines	1990	Tripartite	WWF, USAID	0.9	0.90	ANRC 2022
16	Europe	Poland	1990	Tripartite	WWF	0.1	0.05	ANRC 2022
17	Europe	Poland	1990	Bilateral	Finland	17.0	17.00	ANRC 2022
18	LATAM and Caribbean	Bolivia	1991	Bilateral	USA	30.7	21.80	ANRC 2022
19	LATAM and Caribbean	Chile	1991	Bilateral	USA	15.9	1.40	ANRC 2022
20	LATAM and Caribbean	Costa Rica	1991	Tripartite	TNC, Rainforest Alliance	0.6	0.54	ANRC 2022
21	LATAM and Caribbean	Guatemala	1991	Tripartite	TNC	0.1	0.09	ANRC 2022

#	Region	Country	Year	Type	Creditor	Face value of treated debt (USD million)	Environmental funds allocated (USD million)	Source
22	LATAM and Caribbean	Jamaica	1991	Tripartite	Puerto Rico Conservation Trust, TNC, USAID and others	0.4	0.44	ANRC 2022
23	LATAM and Caribbean	Jamaica	1991	Bilateral	USA	216.7	9.20	ANRC 2022
24	Africa	Madagascar	1991	Tripartite	CI, UNDP	0.1	0.12	ANRC 2022
25	LATAM and Caribbean	Mexico	1991	Tripartite	CI, Sequoia Foundation, MacArthur Foundation	0.3	0.25	ANRC 2022
26	LATAM and Caribbean	Mexico	1991	Tripartite	CI	0.3	0.25	ANRC 2022
27	Africa	Nigeria	1991	Tripartite	Nigeria Conservation Foundation	0.1	0.09	ANRC 2022
28	LATAM and Caribbean	Paraguay	1991	Tripartite	TNC, USAID, Applied Energy Services	9.0	5.00	ANRC 2022
29	Europe	Poland	1991	Bilateral	USA	370.0	370.00	ANRC 2022
30	LATAM and Caribbean	Brazil	1991	Tripartite	TNC, American Express Foundation, Second Nature Software	2.2	2.19	ANRC 2022
31	LATAM and Caribbean	Chile	1992	Bilateral	USA	14.7	17.30	ANRC 2022
32	LATAM and Caribbean	Colombia	1992	Bilateral	USA	31.0	41.60	ANRC 2022
33	MENA	Egypt	1992	Bilateral	France	NA	11.60	ANRC 2022
34	LATAM and Caribbean	El Salvador	1992	Bilateral	USA	268.4	25.60	ANRC 2022
35	LATAM and Caribbean	El Salvador	1992	Bilateral	USA	195.5	15.60	ANRC 2022
36	Africa	Ghana	1992	Tripartite	CI, , USAID	1.0	1.00	ANRC 2022
37	LATAM and Caribbean	Guatemala	1992	Tripartite	CI, USAID	1.3	1.30	ANRC 2022
38	LATAM and Caribbean	Mexico	1992	Tripartite	CI, USAID	0.4	0.44	ANRC 2022
39	Asia	Philippines	1992	Tripartite	WWF, USAID	9.6	8.82	ANRC 2022
40	Asia	Philippines	1992	Bilateral	France	NA	4.00	ANRC 2022
41	MENA	Tunisia	1992	Bilateral	Sweden	1.3	1.34	ANRC 2022
42	LATAM and Caribbean	Uruguay	1992	Bilateral	USA	0.4	0.09	ANRC 2022
43	LATAM and Caribbean	Uruguay	1993	Bilateral	USA	3.3	6.10	ANRC 2022
44	LATAM and Caribbean	Argentina	1993	Bilateral	USA	3.8	3.10	ANRC 2022
45	LATAM and Caribbean	Bolivia	1993	Bilateral	Belgium	13.0	NA	ANRC 2022

#	Region	Country	Year	Type	Creditor	Face value of treated debt (USD million)	Environmental funds allocated (USD million)	Source
46	LATAM and Caribbean	Bolivia	1993	Tripartite	TNC, WWF, Morgan Guaranty Trust Co.	11.5	2.82	ANRC 2022
47	LATAM and Caribbean	Bolivia	1993	Bilateral	Sweden	35.4	3.90	ANRC 2022
48	LATAM and Caribbean	Bolivia	1993	Bilateral	Switzerland	35.4	1.37	ANRC 2022
49	LATAM and Caribbean	Colombia	1993	Bilateral	Canada	12.0	12.00	ANRC 2022
50	MENA	Egypt	1993	Bilateral	Norway	17.3	NA	ANRC 2022
51	MENA	Egypt	1993	Bilateral	Norway	6.2	NA	ANRC 2022
52	LATAM and Caribbean	El Salvador	1993	Bilateral	Canada	7.5	6.00	ANRC 2022
53	LATAM and Caribbean	Honduras	1993	Bilateral	Canada	24.9	12.45	ANRC 2022
54	LATAM and Caribbean	Honduras	1993	Bilateral	Switzerland	42.0	8.43	ANRC 2022
55	LATAM and Caribbean	Jamaica	1993	Bilateral	USA	94.1	12.30	ANRC 2022
56	Africa	Madagascar	1993	Tripartite	CI, USAID	3.2	3.20	ANRC 2022
57	Africa	Madagascar	1993	Tripartite	WWF, USAID	3.7	1.87	ANRC 2022
58	Africa	Madagascar	1993	Tripartite	Missouri Botanical Garden	0.7	0.73	ANRC 2022
59	LATAM and Caribbean	Mexico	1993	Tripartite	CI	0.3	0.25	ANRC 2022
60	LATAM and Caribbean	Nicaragua	1993	Bilateral	Canada	13.6	2.70	ANRC 2022
61	Africa	Nigeria	1993	Bilateral	UK	7.3	NA	ANRC 2022
62	Africa	Nigeria	1993	Bilateral	Norway	10.2	NA	ANRC 2022
63	LATAM and Caribbean	Peru	1993	Tripartite	WWF	NA	NA	Sheikh 2018
64	LATAM and Caribbean	Peru	1993	Bilateral	Switzerland	131.0	32.70	ANRC 2022
65	Asia	Philippines	1993	Tripartite	WWF, USAID	19.0	17.10	ANRC 2022
66	Europe	Poland	1993	Bilateral	France	66.0	66.00	ANRC 2022
67	Europe	Poland	1993	Bilateral	Switzerland	63.0	63.00	ANRC 2022
68	Africa	Tanzania	1993	Bilateral	UK	15.4	15.40	ANRC 2022
69	Africa	Tanzania	1993	Bilateral	Switzerland	25.6	0.19	ANRC 2022
70	Africa	Nigeria	1993	Bilateral	U.K.	7.3	NA	Sheikh 2018
71	Africa	Tanzania	1993	Bilateral	U.K.	15.4	NA	Sheikh 2018
72	Africa	Tunisia	1993	Bilateral	Sweden	0.5	0.48	ANRC 2022

#	Region	Country	Year	Type	Creditor	Face value of treated debt (USD million)	Environmental funds allocated (USD million)	Source
73	LATAM and Caribbean	Ecuador	1994	Bilateral	Switzerland	46.4	4.52	ANRC 2022
74	Africa	Madagascar	1994	Tripartite	WWF, Deutschebank	1.3	1.07	ANRC 2022
75	Africa	Madagascar	1994	Tripartite	CI	0.2	0.16	ANRC 2022
76	LATAM and Caribbean	Mexico	1994	Tripartite	CI	0.3	0.28	ANRC 2022
77	LATAM and Caribbean	Mexico	1994	Tripartite	CI	0.5	0.48	ANRC 2022
78	LATAM and Caribbean	Mexico	1994	Tripartite	CI	0.3	0.29	ANRC 2022
79	Africa	Zambia	1994	Tripartite	IUCN - World Conservation Union	1.0	0.16	ANRC 2022
80	LATAM and Caribbean	Peru	1994	Bilateral	Germany	16.1	NA	Sheikh 2018
81	Europe	Bulgaria	1995	Bilateral	Switzerland	16.7	16.20	ANRC 2022
82	LATAM and Caribbean	Costa Rica	1995	Bilateral	Canada	16.6	8.30	ANRC 2022
83	MENA	Egypt	1995	Bilateral	Switzerland	121.0	18.00	ANRC 2022
84	Africa	Guinea-Bissau	1995	Bilateral	Switzerland	8.4	0.40	ANRC 2022
85	MENA	Jordan	1995	Bilateral	Germany	13.4	6.70	ANRC 2022
86	MENA	Jordan	1995	Bilateral	Germany	22.7	11.30	ANRC 2022
87	LATAM and Caribbean	Mexico	1995	Tripartite	CI, USAID	0.5	0.34	ANRC 2022
88	LATAM and Caribbean	Peru	1995	Bilateral	Canada	17.0	0.35	ANRC 2022
89	LATAM and Caribbean	Peru	1995	Bilateral	Germany	20.2	6.09	ANRC 2022
90	Asia	Philippines	1995	Bilateral	Switzerland	16.1	16.10	ANRC 2022
91	LATAM and Caribbean	Costa Rica	1996	Bilateral	Netherlands	14.1	14.10	ANRC 2022
92	Africa	Madagascar	1996	Tripartite	WWF, DGIS (Netherlands Development Cooperation)	2.0	1.50	ANRC 2022
93	LATAM and Caribbean	Mexico	1996	Tripartite	CI	0.4	0.25	ANRC 2022
94	LATAM and Caribbean	Mexico	1996	Tripartite	CI	0.5	0.44	ANRC 2022
95	LATAM and Caribbean	Mexico	1996	Tripartite	CI	0.7	0.56	ANRC 2022
96	LATAM and Caribbean	Peru	1996	Bilateral	Finland	24.6	6.15	ANRC 2022
97	Asia	Philippines	1996	Bilateral	Germany	5.8	1.80	ANRC 2022
98	Asia	Vietnam	1996	Bilateral	Germany	18.2	5.40	ANRC 2022

#	Region	Country	Year	Type	Creditor	Face value of treated debt (USD million)	Environmental funds allocated (USD million)	Source
99	LATAM and Caribbean	Bolivia	1997	Bilateral	Germany	3.7	1.15	ANRC 2022
100	LATAM and Caribbean	Mexico	1997	Tripartite	CI	0.3	0.24	ANRC 2022
101	LATAM and Caribbean	Mexico	1997	Tripartite	CI	0.3	0.30	ANRC 2022
102	LATAM and Caribbean	Peru	1997	Bilateral	USA	177.0	22.80	ANRC 2022
103	Europe	Poland	1997	Bilateral	Sweden	13.0	13.00	ANRC 2022
104	LATAM and Caribbean	Mexico	1998	Tripartite	CI	0.3	0.31	ANRC 2022
105	Europe	Poland	1998	Bilateral	Italy	32.0	32.00	ANRC 2022
106	LATAM and Caribbean	Costa Rica	1999	Bilateral	Spain	5.2	2.18	ANRC 2022
107	LATAM and Caribbean	Honduras	1999	Bilateral	Germany	1.1	0.53	ANRC 2022
108	LATAM and Caribbean	Peru	1999	Bilateral	Germany	5.0	1.99	ANRC 2022
109	LATAM and Caribbean	Peru	1999	Bilateral	Germany	5.0	1.99	ANRC 2022
110	Asia	Vietnam	1999	Bilateral	Germany	16.4	5.00	ANRC 2022
111	Asia	Bangladesh	2000	Bilateral	USA	10.0	8.10	ANRC 2022
112	LATAM and Caribbean	Bolivia	2000	Bilateral	Germany	15.8	3.20	ANRC 2022
113	Africa	Ghana	2000	Tripartite	CI	0.1	0.12	ANRC 2022
114	MENA	Jordan	2000	Bilateral	Germany	43.6	21.80	ANRC 2022
115	Europe	Poland	2000	Bilateral	Norway	27.0	27.00	ANRC 2022
116	LATAM and Caribbean	Belize	2001	Bilateral	USA	9.7	9.00	ANRC 2022
117	MENA	Egypt	2001	Bilateral	Italy	7.5	7.45	ANRC 2022
118	LATAM and Caribbean	El Salvador	2001	Bilateral	USA	7.7	14.00	ANRC 2022
119	MENA	Jordan	2001	Bilateral	Germany	11.3	5.70	ANRC 2022
120	MENA	Syria	2001	Bilateral	Germany	31.7	15.90	ANRC 2022
121	Asia	Vietnam	2001	Bilateral	Germany	7.0	NA	ANRC 2022
122	LATAM and Caribbean	Ecuador	2002	Bilateral	Germany	9.5	3.08	ANRC 2022
123	LATAM and Caribbean	Ecuador	2002	Bilateral	Germany	10.2	3.24	ANRC 2022
124	LATAM and Caribbean	Peru	2002	Tripartite	WWF, CI, TNC, USA	28.3	10.60	ANRC 2022
125	Asia	Philippines	2002	Bilateral	USA	5.5	8.30	ANRC 2022

#	Region	Country	Year	Type	Creditor	Face value of treated debt (USD million)	Environmental funds allocated (USD million)	Source
126	Africa	Madagascar	2003	Bilateral	Germany	25.1	14.84	ANRC 2022
127	LATAM and Caribbean	Panama	2003	Bilateral	USA	10.0	10.0	ANRC 2022
128	LATAM and Caribbean	Peru	2003	Bilateral	Germany	25.0	7.5	ANRC 2022
129	LATAM and Caribbean	Colombia	2004	Bilateral	USA	7.0	10.0	ANRC 2022
130	LATAM and Caribbean	Jamaica	2004	Bilateral	USA	6.5	16.0	ANRC 2022
131	LATAM and Caribbean	Panama	2004	Bilateral	USA	6.5	10.9	ANRC 2022
132	Asia	Indonesia	2004	Bilateral	Germany	29.3	NA	Sheikh 2018
133	Africa	Botswana	2006	Bilateral	USA	8.3	10.0	ANRC 2022
134	Africa	Cameroon	2006	Bilateral	France	NA	25.0	ANRC 2022
135	LATAM and Caribbean	Guatemala	2006	Bilateral	USA	15.0	24.0	ANRC 2022
136	Asia	Indonesia	2006	Bilateral	Germany	10.9	5.02	ANRC 2022
137	Asia	Indonesia	2006	Bilateral	Germany	10.9	5.02	ANRC 2022
138	LATAM and Caribbean	Paraguay	2006	Bilateral	USA	4.8	7.40	ANRC 2022
139	LATAM and Caribbean	Costa Rica	2007	Bilateral	USA	12.6	26.10	ANRC 2022
140	LATAM and Caribbean	Peru	2008	Bilateral	USA	19.6	25.0	ANRC 2022
141	Asia	Indonesia	2009	Bilateral	USA	29.9	29.9	ANRC 2022
142	LATAM and Caribbean	Brazil	2010	Bilateral	USA	21.0	21.0	ANRC 2022
143	LATAM and Caribbean	Costa Rica	2010	Bilateral	USA	21.0	27.0	ANRC 2022
144	Asia	Indonesia	2011	Bilateral	USA	28.5	28.5	ANRC 2022
145	Asia	Philippines	2013	Bilateral	USA	28.2	31.8	ANRC 2022
146	Asia	Indonesia	2014	Bilateral	USA	11.2	12.7	ANRC 2022
147	Africa	Mozambique	2014	Bilateral	Germany	NA	7.54	ANRC 2022
148	Africa	Mozambique	2015	Bilateral	France	15.8	1.80	ANRC 2022
149	Africa	Seychelles	2015	Tripartite	TNC and others	29.6	6.60	ANRC 2022
150	LATAM and Caribbean	Belize	2021	Tripartite	TNC	552.9	23.0	ANRC 2022
151	LATAM and Caribbean	Barbados	2022	Tripartite	TNC	150	50	TNC 2021
152	Africa	Gabon	2023	Tripartite	TNC, Bank of America	500	163	Bank of America 2023

#	Region	Country	Year	Type	Creditor	Face value of treated debt (USD million)	Environmental funds allocated (USD million)	Source
153	LATAM and Caribbean	Peru	2023	Tripartite	USA, TNC, CI, WCS, WWF	20	20	U.S. Department of treasury 2023
154	Africa	Cabo Verde	2023	Bilateral	Portugal	12.6	12.6	Gallagher 2022
155	LATAM and Caribbean	Ecuador	2023	Tripartite	Pew Charitable Trusts, Inter-American Development Bank	1600	227	Gallagher 2022
156	Asia	Sri Lanka*	2022	NA	NA	NA	NA	Gallagher 2022
157	Asia	Pakistan*	2022	NA	NA	NA	NA	Volcovici 2022
158	Africa	Kenya*	2023	Bilateral	Germany	65	NA	Miriri 2023
159	Asia	Lao PDR*	2023	NA	NA	NA	NA	UNDP
160	Africa	Mozambique*	2023	Bilateral	Belgium	2.5	NA	The Brussels Times 2023
161	LATAM and Caribbean	Barbados*	2024	NA	NA	300	NA	Savage and Jones 2023

Notes: * under discussion

Annex II: Analysis of selected debt swaps

#	Key transaction details	Description	Special features, outcomes and lessons learned
1	**Type of debt swap:** Debt for nature / conservation **Year:** 1987 **Region:** LATAM and the Caribbean **Debtor:**	With a grant of USD 100,000 from the Frank Weeden Foundation the non-profit organization CI purchased USD 650,000 of Bolivia's USD 4 billion external debt from the secondary market (from Swiss bank through Citicorp investment Bank) at an 85% discount. In return, the Bolivian Government committed itself to setting aside 3.7 million acres in three conservation areas adjacent to the existing Beni Biosphere Reserve in the Amazon Basin. The Bolivian Government has also	**Special features:** The overall goal of the model was to balance the management of natural resources with the economic needs of developing countries. This was to be achieved with debt relief as a means of stimulating domestic investment in conservation efforts. Additional support for the programme came when local people attended a congress of civic associations and voted to earmark 7% of

#	Key transaction details	Description	Special features, outcomes and lessons learned
	Bolivia **Face value of treated debt:** 0.65 million USD **Environmental funds allocated:** 0,25 million USD **Structure:** Tripartite **Creditor(s):** Unknown **Other actors involved:** WWF (Thomas Lovejoy) Conservation Internationa (CI) Citicorp Investment Bank Frank Weeden Foundation	agreed to set up a trust fund in the amount of USD 250,000 worth of local currency to cover operating costs of managing the reserve.	their forestry tax revenues to support the biosphere reserve. Local support and active engagement are likely to be key factors in the programme's success. **Outcomes:** NA **Lessons learned:** Significant costs occurred during negotiations. One crucial takeaway is the importance of addressing the presence of indigenous peoples in protected areas during negotiations. The failure to consider their presence resulted in disputes over land ownership and poorly defined property rights. The volume of the transaction was minimal compared to the country's substantial indebtedness. Enforcement of the debt swap agreement is difficult and, in this case, remains unresolved. Limited knowledge of the areas involved has increased the overall costs to all parties.
2	**Type of debt swap:** Debt for nature / conservation **Year:** 1993 **Region:** Asia **Debtor:** Philippines **Face value of treated debt:** 19 million USD **Environmental funds allocated:** 17,1 million USD **Structure:** Tripartite **Creditor(s):**	Inspired by the success of the 1988 Debt for Nature agreement in the Philippines and the projects it funded, leaders from the Philippine NGO community, the Philippine government, WWF and USAID began planning a more substantial swap in 1990. Their goal was to establish the Foundation for the Philippine Environment (FPE) as a major institution with an endowment fund that would enable FPE to drive conservation efforts independently for many years to come. Through two significant swaps, USD 9.8 million in 1992 and USD 19 million in 1993, FPE acquired an endowment of 640 million pesos (approximately USD 26 million), solidifying its position as the largest capitalized environmental NGO in the developing world. FPE is governed by a diverse Board of Trustees representing various sectors and currently funds a range of conservation and development projects throughout the Philippines.	**Special Features:** Continuation of the actions started with the creation of the FPE in 1992. As this swap relied on an endowment structure, it ensures that the debt swap proceeds are consistently reinvested, preserving the principal, and only the annual investment income is directed towards conservation projects. **Outcomes:** FPE is currently financing a wide variety of conservation and development projects throughout the Philippines. **Lessons learned:** NA

#	Key transaction details	Description	Special features, outcomes and lessons learned
	WWF, USAID **Other actors involved:** Foundation for the Philippine Environment (FPE)		
3	**Type of debt swap:** Debt for nature/ environmental protection **Year:** 1992 **Region:** Europe **Debtor:** Poland **Face value of treated debt:** 3000 million USD **Environmental funds allocated:** 370 million USD **Structure:** Bilateral **Creditor(s) and other actors involved:** Paris Club	In 1992 the Government of Poland reached an agreement with the Paris Club, allowing the latter's members to swap Polish debt for environmental concessions by Poland in amounts up to USD 3 billion (amounting to approx. 10% of the debt to the Paris Club members). In exchange, the Polish government promised to transfer annual debt repayments in national currency to the local financing facility EcoFund. The NGO, established to manage all debt swaps for Poland, provided non-returnable grants to the implementation of projects in five key environmental protection areas: air, water, nature pollution, climate protection, and waste management.	**Special features:** As the first institution in Central and Eastern Europe to be set up to manage the proceeds of debt-for-environment swaps, the EcoFund has succeeded in attracting co-financing for conservation projects to leverage resources from domestic public and private sectors. **Outcomes:** NA **Lessons learned:** Difference between the Latin American and the Poland swaps demonstrated the need for flexibility in designing swaps to address the unique economic, political, and environmental contexts of each country. The establishment of EcoFund ensured that funds derived from the swap were used transparently for environmental projects. Proper governance structures are critical for ensuring that the proceeds from debt-for-nature swaps are used as intended.
4	**Type of debt swap:** Debt for Development and Environment **Year:** 1995 **Region:** Middle East and Northern Africa **Debtor:** Egypt	Biggest debt swap in the MENA region, amounting to CHF 150 million, which represented part of the debt burden owed by Egypt to Switzerland. Of this volume, 40 % was allocated for budget support to the Ministry of Finance, and 60 % for the establishment of the Egyptian Swiss Fund for Development (ESDF), which is in charge of financing development projects that could create jobs and increase of income and improve the environmental and social situation through public health, especially maternity and childhood. The projects were selected	**Special features:** The swap deposited funds in a single upfront transaction into an interest-bearing account with the Commercial International Bank (CIB), raising the initial amount from 265 to 665 million EGP. The ESDF consisted of a bilateral committee (comprising Swiss and Egyptian representatives) and a technical committee, supported by an executive secretariat serving as a project coordination unit. The debt exchange was integral to Switzerland's foreign assistance

#	Key transaction details	Description	Special features, outcomes and lessons learned
	Face value of treated debt: 166 million USD (150 million CHF*) **Environmental funds allocated:** 21.5 million USD (665 million EGP**) **Structure:** Bilateral **Creditor(s):** Switzerland **Other actors involved:** Commercial International Bank (CIB)	and monitored by the Fund and implemented by NGOs through deposits in commercial banks.	and debt relief strategies. Switzerland ensured that swap financing would not impact the existing foreign aid budget allocated to Egypt. **Outcomes:** The ESDF supported 91 projects in 21 governorates, benefiting over 2,700 individuals and 265 families across four key areas: environment (51%), job creation and income generation (24%), basic education (12%), basic health (10%), with an additional 3% of Funds allocated to NGO and CSO capacity development. **Lessons learned:** Debtor countries' NGOs and government bodies must possess the necessary capacities for project implementation. ESDF relies on NGO proposals for project funding, but encountered significant issues with Egyptian NGOs, including a lack of high-quality proposals, insufficient collaboration between NGOs, government agencies, and other donors, and the limited capacity of Egyptian NGOs to match the Fund's goal of disbursing resources within a 10-year timeframe. Critics argue that these agreements may substitute the debtor country's social spending instead of supplementing it. One solution could involve monitoring additionality by assessing the debtor country's historical spending baseline. Monitoring and evaluation of funds should be built into the swap agreement and allow for adjustments when needed
5	**Type of debt swap:** Debt for nature/ conservation **Year:** 2003 **Region:** Africa **Debtor:** Madagascar **Face value of treated debt:**	In April 2003, as part of a debt relief agreement and special arrangement with the German government, Germany wrote off Euro 23.3 million in exchange for Madagascar's commitment to pay Euro 13.8 million in counterpart funds over two decades. Of this amount, the Government of Madagascar pledged to channel Euro 10.2 million through the Madagascar Foundation for Protected Areas and Biodiversity. An initial deposit of Euro 1.7 million was to be made by 15 December 2003, with Euro 425,000 to be paid annually until 2023. In addition, Madagascar's National Association for the Management of	**Special features:** In 1989, Madagascar pioneered Africa's first debt-for-nature swap. Over the years, they conducted a total of 11 debt swaps, with the bilateral swap with Germany being the most substantial (the latest DFN swap is scheduled to conclude in 2023). Valuable insights from earlier swaps have influenced the design of the German bilateral debt swap. CI and WWF played a crucial role in facilitating the bilateral swap negotiations and, alongside the Government of Madagascar, co-

#	Key transaction details	Description	Special features, outcomes and lessons learned
	24.5 million USD (23.3 million EUR***) **Environmental funds allocated:** 10.7 million USD (10.2 million EUR***) **Structure:** Bilateral **Creditor(s):** Germany **Other actors involved:** KfW, ANGAP - Parcs Nationaux Madagascar, CI, WWF	Protected Areas (ANGAP - Parcs Nationaux Madagascar) was to receive Euro 3.9 million for designated protected areas.	founded the foundation responsible for managing debt swap proceeds. **Outcomes:** NA **Lessons learned:** NA
6	**Type of debt swap:** Debt for nature / conservation **Year:** 2009 **Region:** Asia **Debtor:** Indonesia **Face value of treated debt:** 29.9 million USD **Environmental funds allocated:** 29.9 million USD **Structure:** Bilateral **Creditor(s):** USA **Other actors involved:** CI, KEHATI	The US government forgave six debt claims, totaling USD 29.9 million, owed by Indonesia to USAID, on the condition that Indonesia committed to depositing the same amount into a Debt Service Account with HSBC in Singapore. This fund, spanning eight years, is designated for grants supporting local NGOs engaged in tropical forest conservation projects in Sumatra. The trust fund, managed by local environmental NGO KEHATI, disburses annual grants to conservation NGOs operating in various Sumatran ecosystems following approval by an oversight committee.	**Special features:** This swap retained the original debt value in foreign currency, and in 2011, a similar arrangement was made to support forest conservation in Kalimantan, Indonesian Borneo. Despite being the most substantial debt-for-nature swap under the Tropical Forest Conservation Act to date, the USD 30 million nominal value is low when viewed in the context of Indonesia's total external debt. **Outcomes:** NA **Lessons learned:** Middle-income countries such as Indonesia, not qualifying for extensive debt relief programs due to their moderate debt levels, seek to reduce their external debt and enhance access to development funds through bilateral debt-for-development swaps. The total absence of hard currency relief implies that deforestation rates could not have been affected purely by reduced demand for hard currency.

#	Key transaction details	Description	Special features, outcomes and lessons learned
7	**Type of debt swap:** Debt for conservation and adaptation **Year:** 2015 **Region:** Africa **Debtor:** Seychelles **Face value of treated debt:** 21.4 million USD **Environmental funds allocated:** 6.6 million USD **Structure:** Tripartite **Creditor(s):** Paris Club and South Africa **Other actors involved:** TNC, the Jeremy and Hannelore Grantham Environmental Trust and others	Seychelles restructured its debt with the Paris Club and initiated a 5-year economic reform program. They repurchased their maturing debt from participating Paris Club creditors at a discount to face value in 2015. Seychelles utilized this debt conversion to support its commitment to protect 30% of the marine ecosystem. This buyback was financed by generous grants from a group of international marine conservation foundations and a loan from TNC to the Seychelles' Conservation and Climate Adaptation Trust (SeyCCAT).	**Special features:** First country to participate in a debt swap to protect the oceans, resulting in a commitment to protect 30% of its marine area. Five years passed from the start of negotiations to the first investments in marine protection (2013 to 2018). **Outcomes:** Seven rounds of the SeyCCAT Blue Grants Fund have already occurred. (SeyCCAT 2023) Eleven SeyCCAT projects have been completed successfully and there are 25 on-going SeyCCAT partnerships and projects. (SeyCCAT 2023 b) **Lessons learned:** This new financing mechanism (SeyCCAT) is critical in providing reliable and additional financing to build resilience and sustain livelihoods.
8	**Type of debt swap:** Debt for nature / marine/costal conservation **Year:** 2021 **Region:** LATAM and the Caribbean **Debtor:** Belize **Face value of treated debt:**	The government's entire stock of external commercial debt (USD 553 million) was bought back at a discounted price of 55 cents per dollar, equaling 30% of Belize's GDP. (Bala, Behsudi and Owen 2022) A subsidiary of TNC funded the repurchase by issuing 'blue bonds' worth USD 364 million, with the sale managed and underwritten by the investment bank Credit Suisse. The US government's development institution, the International Development Finance Corporation (US DFC), provided insurance, which facilitated a low-interest loan with a 10-year grace period during which no principal payments were required and an extended maturity of 19 years. In exchange, Belize committed to	**Special features:** This debt swap was complicated and unprecedented for two reasons: First, the bond market itself offered a grant through discounted pricing. Second, the transaction involved debt owed to private creditors and was ultimately financed by a different category of private investors. The involvement of the US development bank, DFC, was crucial. The DFC's insurance elevated the Blue Bonds to a robust investment grade rating (Aa2 according to Moody's), giving even risk-averse investors such as pension funds confidence that they would be repaid.

#	Key transaction details	Description	Special features, outcomes and lessons learned
	553 million USD **Environmental funds allocated:** 23.5 million USD **Structure:** Tripartite **Creditor(s):** Commercial debt/Capital markets **Other actors involved:** TNC, Credit Suisse, DFC	allocating approximately USD 4 million annually for marine conservation initiatives until 2041 including an endowment fund of USD 23.5 million will support conservation efforts beyond 2040. The swap provided money to protect the world's second-largest coral reef and reduced Belize's debt level by 12% of GDP.	**Outcomes:** NA **Lessons learned:** Belize faces skepticism about the true effectiveness of its marine protection, as the government appears interested in offshore oil exploration (Desai 2023) Additionally, private financial institutions like Credit Suisse are expected to reap significant profits from facilitating and insuring the debt swap, potentially burdening Belize's taxpayers.
9	**Type of debt swap:** Debt for nature / marine conservation **Year:** 2022 **Region:** LATAM and the Caribbean **Debtor:** Barbados **Face value of treated debt:** 150 million USD **Environmental funds allocated:** 50 million USD **Structure:** Tripartite **Creditor(s):** Commercial debt/Capital markets	Like for most SIDS, funding marine conservation and climate change adaptation activities has historically been a key challenge for Barbados. This has been exacerbated by a high debt burden of as much as 178% of gross domestic product (GDP) in 2018, at that time one of the highest ratios in the world (TNC 2023a). Other difficulties included the COVID-19-pandemic, it's devastating effects for Barbados' tourism-led economy (with tourism contributing to 40% of the nation's GDP and total employment) as well as severe storms in the last few years (TNC 2022). In 2022, the small Caribbean island state agreed to a USD 150 million DFC swap to restructure its external commercial debt (TNC 2023a). After the Seychelles (2016) and Belize (2021), this debt swap has been the third project of the TNC's "Blue Bonds for Ocean Conservation" strategy (TNC 2023b). Barbados committed to directing 100% of the debt service savings towards ocean conservation over 15 years and binding marine conservation targets – expanding its marine protected areas from close to 0% to 30% – aligned with global goals to protect 30% of the world's	**Special features:** Barbados completed its USD 150 million debt conversion via a new co-guarantee structure including a USD 50 million guarantee from TNC and a USD 100 million guarantee from IDB. Credit Suisse – before its collapse[15] – acted as international lead arranger, and CIBC FirstCaribbean International Bank as domestic lead arranger to raise USD 150 million through a dual currency (USD, Barbados dollar) term loan facility For the first time ever within a DFN swaps, the co-guarantee structure in Barbados included a natural disaster debt deferment clause as well as a new pandemic clause (TNC 2022), both of which are likely to help the country manage future crises **Outcomes:** Barbados was able to replace relatively expensive pre-existing debt (7.2% average cost) with significantly lower all-in cost of financing (4.9%) (TNC 2023a). **Lessons learned:**

[15] Prior to that, Credit Suisse was involved in the DFN swaps with Belize and Ecuador as well (Bryan et al. 2023). For the most recent deal with Gabon, however, Bank of America (2023) emerged as a new actor with no previous experience in debt swaps.

#	Key transaction details	Description	Special features, outcomes and lessons learned
	Other actors involved: TNC, IDB, Credit Suisse	ocean, lands and freshwater by 2030 (TNC 2022; TNC 2023a). The net savings will allow Barbados to channel an estimated USD 50 million into conservation funding: USD 23 million into an independent conservation fund – the Barbados Environmental Sustainability Fund (BESF) – and USD 17 million towards a long-term endowment for BESF, which is expected to generate an additional USD 10 million of returns (TNC 2023a).	A third-party guarantee can lead to a higher CRA rating. Wrapped debt is more attractive to investors
10	**Type of debt swap:** Debt for climate and conservation **Year:** 2023 **Region:** Africa **Debtor:** Cabo Verde **Face value of treated debt:** 12.6 million USD **Environmental funds allocated:** 12.6 million USD **Structure:** Bilateral **Creditor(s):** Portugal **Other actors involved:** Ministries of Finance of Portugal and Cabo Verde, IIED	The Portugal and Cabo Verde agreed in 2023 to swap 12 million euros of debt repayments scheduled until 2025 ('Contract for Consolidation of Cape Verde's Debt to Portugal'). The effectiveness of this mechanism will be assessed in concrete projects. Based on the assessment in 2025, the mechanism might be extended to the EUR 140 million that Cabo Verde owes to the Portugal Government. (Government of Cabo Verde 2023). The created fund will support energy transition as Capo Verde is highly dependent on imported fuels and climate adaptation and biodiversity conservation.	**Special feature:** High probability that Portugal will account this swap as climate finance. It remains to be seen how Portugal will account for the debt swap and if it will be new and additional. **Outcomes:** No outcomes known yet **Lessons learned:** No lessons learned yet

Note: * SF/USD exchange rate used 1:1.11 of Oct 11 2023, ** EGP/USD exchange rate used 1:0.032 of Oct 11 2023), *** EUR/USD exchange rate 1:1.05 of Oct 13 2023

Annex III: Interview questions

1. Do you consider DFC swaps as a viable climate finance instrument? If yes, what characteristics should DFC swaps feature? What scale would you expect for DFC swaps by 2030 (billion USD per year)?
2. Could you please briefly elaborate on your experience with DFC swaps?
3. How high are the transaction costs of implementing the DFC swap(s) in which you have been involved? How could they be reduced?
4. Where do you see the main benefits of DFC swaps for both debtor and creditor countries? Please differentiate by type of country (e.g. level of income, level of development, level of indebtedness etc.).
5. What do you see as the main risks of a DFC swap for the creditor and debtor countries? Please differentiate by type of country (e.g. level of income, level of development, level of indebtedness etc.).
6. It is often not clear from the available information what exactly the (climate change-related) activities are that are carried out as part of a DFC swap. How could this be improved?
7. Should private actors – particularly banks – be more involved in DFC swaps? If yes, how?
8. What are the main features of a well-planned and executed debt swap generally, and DFC swap specifically?
9. There are many voices saying that DFC swaps take too long to negotiate and are too bureaucratic, with comparatively high transaction costs. It is also often emphasised that grants or unconditional debt relief would be more effective instruments to support climate-vulnerable developing countries than DFC. How would you respond to such a statement?
10. DFC swaps can interact with other debt-related instruments, e.g., disaster-debt clauses Should such interactions be encouraged or limited?
11. There are several longstanding debt relief initiatives, such as the IMF´s Highly Indebted Poor Countries Initiative (HIPC) or the Multilateral Debt Relief Initiative (MDRI). Should DFC swaps be brought proactively into a possible new round of comprehensive debt relief? Which impact of such an approach would you see on existing DFC swaps?
12. How can additionality be ensured (i.e., DFC not replacing traditional climate finance)?

Optional questions:

13. For which countries are DFC swaps worthwhile? Could you think of a long list of eligibility criteria to be met to consider a DFC swap?
14. Do you have an idea why the US, Germany and Switzerland are the top 3 creditor countries in DFC swaps? Relevant policies of the countries?
15. Do you see any repercussions from the Credit Suisse collapse – the main actor in the financial sector during the most recent 'wave of debt swaps'?

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