

Debt-to-Sustainability Swaps (D2S): A Practical Framework

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Executive Summary

Commercial debt-for-nature swaps have become increasingly popular over the past two years, as they allow governments to target two policy objectives: reduce risks on public debt and mobilize investment for development and sustainability. Indeed, a debt-for-nature swap involves two main operations: a debt exchange, which reduces public debt service and pre-emptively addresses future refinancing needs; and an allocation of the savings derived from the exchange to fund sustainability projects.

While all transactions to date have focused on marine conservation projects, this type of instrument could also be used for other objectives. Other Sustainable Development Goals, such as health or food security, could also be relevant targets for such transactions. Financing streams from swaps are deployed over long horizons, making them particularly relevant for sectors with low capital but large operational expenditures, such as nature conservation, of course, but also climate adaptation, health, or education. In this regard, they would fall under a broader category of “debt-to-sustainability swaps” (“D2S”).

Despite their popularity, such instruments are no panacea and are impactful in very specific contexts. This policy paper aims to (i) provide a definition of the potential objectives of such transactions, (ii) analyze recent experiences regarding these objectives, (iii) establish general lessons from those experiences for potential future transactions, and (iv) outline a set of recommendations to further enhance the impact of debt-to-sustainability swaps.

After some preliminary definitions and context (Section 1), we propose to assess the swaps’ performance along three core dimensions - Economics, Impact, and Governance (“E-I-G”) - and we develop a set of objectives under each dimension (Section 2).

We then confront this “E-I-G” framework with four recent D2S transactions - Belize, (2021), Barbados (2022), Ecuador (2023), and Gabon (2023) -, with a focus on the economic dimension. **Our conclusion is that these instruments have the most impact in two different contexts: during liquidity stress and when facing significant refinancing needs (Section 3).**

Finally, **we propose a check-list for policymakers** who want to assess the relevance of a D2S (Section 4), and **we outline a set of recommendations** to strengthen the impact of future D2S, through a leaner architecture and a wider pool of capital providers.

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1. Recent trends surrounding debt swaps

a. An introduction to debt-for-nature swaps

Debt-for-nature swaps have become increasingly popular over the past years because they allow governments to make progress on two important policy objectives. First, they enhance the sustainability of public debt, by refinancing commercial debt lines at more affordable conditions. This is especially beneficial for a developing country, which typically pays a large risk premium on its sovereign debt and for whom a third-party credit enhancement can unlock more affordable financing. The savings derived from this refinancing operation can then be used to target a second objective: catalyze the efforts put into nature conservation by financing a sustainability project. Swaps became even more attractive in the aftermath of the COVID-19 crisis and the rise in interest rates in 2022, as they increased the cost of financing developing countries and depressed their bond prices - hence further magnifying the potential savings of such transactions.

Debt-for-nature swaps offer a template that can be used for a broader set of projects with specific Sustainable Development Goals (SDGs), well beyond nature conservation topics. Indeed, the structure of the swaps can easily be transposed to any type of program with “sustainability” objectives, for example, in health or education, through debt-for-health or debt-for-education swaps. A credible and well-defined objective is central to the scheme, as it influences the participation of credit enhancers.

We will therefore refer to the broader category of Debt-to-sustainability swaps (D2S)¹, which we define as voluntary transactions, whereby (i) *commercial debt* is refinanced at more favorable financial terms, thanks to the mobilization of (ii) a *credit enhancement* by a high-grade third-party, in exchange for (iii) *incremental* spending and policy commitment to a *sustainability project*. Such a project is financed out of the debt service savings derived from the debt exchange and overseen by an international third party, generally an NGO with a strong reputation and local expertise.

¹“Debt conversions” is also increasingly used to help distinguish from the “traditional” bilateral debt swaps. This report does not consider the latter.

Box 1. Focus On Credit Enhancements

Credit enhancements are essential for the success of the D2S transaction. They can come in the form of credit guarantees and/or insurances attached to the new debt instrument. Their main purpose is to reduce the credit risk and lower the associated funding costs. Typically, multilateral and bilateral development finance institutions are willing to provide credit enhancements to support sustainability projects by leveraging their balance sheets. Additionally, private insurers and philanthropic funds may also offer credit enhancements. However, it is important to note that there are costs associated with credit enhancements for D2S, and these costs can vary based on the structure and the entity involved. Debtors have four main options to consider:

- The Political Risk Insurance (PRI) provided, for example, by the US-DFC is the most commonly used structure. Creditors can trigger the insurance only once after obtaining an arbitral award against the sovereign issuer, which may take several months. In the meantime, debt payments are secured by a reserve account, which is capitalized at the launch of the transaction. Setting up the PRI is more complex than a guarantee and typically entails the creation of a Special Purpose Vehicle (SPV) based overseas. Additionally, the PRI comes at a relatively high financial cost as compared to guarantees, as it involves – on top of an insurance fee – the capitalization of the reserve account. On the flipside, the PRI envelope at US-DFC is relatively flexible and does not limit other concessional funding for the debtor.
- The credit guarantees extended by multilateral or bilateral development banks are relatively affordable and straightforward. Such instruments have been used on regular debt issuances in recent years. However, using these guarantees ties up capital within the sovereign’s funding envelope at the bank, in turn incurring an opportunity cost. The mobilization of such guarantees in the framework of D2S is still new for most banks and, besides the IDB, further efforts would have to be made to widen the range of options for the debtors. Rethinking the weight of guarantees in MDBs portfolios, both in terms of countries’ envelope and capital costs can contribute to a better harmonization of D2S transactions.
- The debt service payment private insurances could stand as a third option for credit enhancement. They have not been mobilized yet in D2S transactions, but could complement partial credit guarantees – coming on top of a partial credit guarantee from a multilateral or bilateral development bank (i.e. in a first-loss, second-loss structure). Such insurances would come at higher cost, yet would allow the sovereign issuer to minimize the use of its concessional funding envelope. They could be extended by private insurers and re-insurers.
- Equity injections by philanthropic funds could finally stand as a fourth option for credit enhancement. So far, this has been mobilized from an NGO already involved in the transaction – in the case of Belize, from TNC. Such direct equity commitments could be required from the sovereign issuer, so as to ensure that the NGOs involved have greater “skin in the game”.

D2S transactions typically involve three key stakeholders from the outset: (i) *a sovereign debtor*, willing to reshuffle its debt structure and to commit to a sustainability project; (ii) *credit enhancers*, willing to mobilize their balance sheet in exchange for a credible commitment by the sovereign on a sustainability project; and (iii) *a sustainability expert*, in charge of coordinating the development of the sustainability project. Creditors are also involved in the transactions, yet come to stage only upon execution: existing creditors are offered a tender for their existing debt, while new creditors are enlisted to finance the new (credit-enhanced) instrument.

D2S are a commercial declination of the “bilateral” debt swaps, which have already been used for decades and focus on exchanging official sector claims. In such schemes, an official creditor agrees to *write off* its claims in exchange for a commitment by the sovereign debtor to fund a sustainability project in its country. These schemes have been commonly used by many G7 Treasuries, such as France under its *C2D* program and the US under its Tropical Forest and Coral Reef Conservation Act (TFCCA). These types of transactions have declined as Paris Club countries’ exposures have fallen since the HIPC initiatives. They might still have some relevance (Lazard 2021) as a modality of ODA provision.

b. Debt swaps in the literature

A focus on D2S fiscal & debt sustainability impact ...

The general view of D2S transactions is mixed: they have benefits, but only in specific cases. In March 2024, the Global Sovereign Debt Roundtable held a workshop with various practitioners, including legal and financial experts involved in some of these transactions, civil society organizations, and officials. While opinions varied widely, there was a relative consensus on the fact that the benefits of swaps focus on creating fiscal space for investing in sustainability objectives. These tools are relevant for countries that do not necessarily require direct debt relief. Georgieva et al. (2022) advocate for the use of debt-for-nature swaps to fund resilience expenditure and recommend scaling up such schemes by (i) maximizing the amount of debt bought back, (ii) controlling the price of buyback and (iii) minimizing the cost of the new financing through guarantees. Similarly, Cassimon et al. (2021) view D2S as a response to very constrained budgetary capacities.

D2S are typically considered a valuable tool when alternative funding sources are limited. Indeed, Chamon et al. (2022) have argued that D2S are complex operations that entail a debt cancellation and a conditional grant, making it a superior option when debt cancellation and/or grants are not feasible or desirable. Bolton et al. (2023) also highlight the many cases where grants are simply not available and D2S are the best substitute. Steele and Patel (2021) argue for a broader interpretation of “program swaps”, which could be linked to budget support and the definition of climate and biodiversity targets. This paper will focus on more targeted recent transactions built around projects.

Some analyzes conclude that D2S should be contemplated only in the absence of debt sustainability issues, which rather require a comprehensive and substantial debt relief (see Cassimon et al., 2021). In this regard, Chamon et al. (2022) argue that the limited scope and size of D2S precisely prevents them from restoring debt sustainability in most cases.

Economically, a swap on commercial debt provides value for the debtor if the old debt is undervalued by the markets. This definition relies on a complex set of assumptions, such as the avoidance of “buyback boondoggle” historically described by Bulow and Rogoff (1988). According to them, prices rise when the deal is signaled on the market, making a buyback self-defeating. While auction mechanisms could be considered to contain prices (Willems, 2020), some argue that “opportunistic” tender offers provide more flexibility and reduces volatility (Medeiros et al., IMF, 2007), especially for such “niche instruments” as D2S (Campbell et al., Morgan Stanley, 2024). Another case, where the swap can be superior, is when the sustainability project has economic benefits not necessarily internalized by the markets.

... as well as on their signaling potential

From a political standpoint, D2S transactions are viewed favorably as they signal the government’s commitment to sustainable development. Successful operations typically demonstrate that issuers have been able to convince creditors about their ability to implement sustainable policies domestically (OECD, 2007). In addition, at a micro level, Acharya and Diwan (1993) shed light on the valuable information provided by debt buyback operations, which demonstrates indebted countries’ commitment to investing and increasing debt repayment. This helps to address the information imbalances between creditors and debtors in theory.

From a credit rating perspective, leading agencies have expressed mixed reactions to recent D2S operations. Moody’s focuses on the discounted buyback of the targeted sovereign bonds, which is negatively perceived and labelled as a distressed exchange (Nestmann, 2023), while S&P finds no impact of D2S operations on the fundamental credit characteristics of the issuer (S&P, 2024).

Finally, from a market perspective, a recent report shows that investor sentiment remains divided (Campbell et al., Morgan Stanley, 2024). Some actors are indeed wary about (i) the credit risk associated with the new debt, (ii) the transparency of governance structures, and (ii) the absence of a clear and sizeable market for D2S bonds – which neither fall in the sub-investment grade category nor in the sustainable bond categories.

2. A framework for decision: Economics, Impact and Governance of deals

The objective of this paper is to provide decision-makers, and in particular policymakers in debtor countries, with the tools to assess the potential benefits of these operations. This can be useful *ex-ante*, for a sovereign considering a D2S, to help think through the benefits and costs. But our framework can also be seen as an *ex-post* set of evaluation criteria to better understand their performance.

In this regard, we propose to assess D2S' performance along three core dimensions: "Economics, Impact, and Governance" ("E-I-G"). Most of the attention has been on the economics of D2S, and in particular on their debt sustainability impact, as it is more easily observable than the other two. However, the sustainability impact of the transaction is – in our view – as important as its economics and deserves further in-depth exploration. Finally, setting up D2S requires significant efforts in governance, both during the structuring of the transaction (to reach political consensus on a wide set of parameters, especially regarding the scope of the sustainability project) and throughout the delivery of the project.

a. The economics of the debt operation

Objective #1 – Smoothing public debt profile.

The debt swap transaction offers sovereigns the opportunity to favorably reshape their public debt profile and lower the risks attached. This can be achieved through various means – by reducing the stock of debt, lowering the interest rate and/or by extending the maturity dates. The exact calibration of these parameters depends on the structure of the existing public debt and its related vulnerabilities.

The inclusion of a credit enhancement in the D2S structure plays a key role in this regard. It helps reduce the interest rates on the new debt, which is of paramount importance, especially for countries with moderate creditworthiness. However, this credit enhancement comes at a cost, which needs to be accounted for in the analysis.

The benefits of public debt sustainability are amplified in two specific scenarios. First, when a sovereign market debt trades at significant discount², a simple buyback at market price would automatically crystallize a reduction in public debt stock. Second, when the debtor country faces large and immediate refinancing needs – typically principal repayments coming due in the next 12 to 24 months –, a maturity extension could significantly alleviate liquidity risks.

² Be it as a result of a debt distress situation, or due to the structure of the bonds when issued at a discount following a debt restructuring

Objective #2 – Supporting the country’s creditworthiness.

Credit rating agencies (CRAs) have had ambiguous reactions to D2S transactions. In theory, there could be an expectation that D2S will improve the debt profile, thus resulting in an uplift. While CRAs recognize that such swaps generally reduce debt sustainability risks, they also consider the price level at which the debt exchange takes occurs. According to their rating methodology, they may qualify a market buyback at distressed prices as a “distressed exchange”, thus automatically triggering (temporary) negative rating actions. The general definition of a distressed exchange is that investors receive less than the original promise and that, without the exchange, there would be a realistic prospect of a default.

Negative rating actions have a limited impact on the country’s perceived creditworthiness by markets, as they mainly apply in situations where the bonds bought back are structurally trading at a discount due to their characteristics (typically issued as part of a prior debt restructuring). Market players have been more sanguine, as they view these transactions as providing new opportunities. However, credit downgrades can reduce incentives by countries to enter into such a transaction.

Objective #3 – Mobilizing new sources of financing.

D2S offer a compelling case for financial investors who have sustainability objectives and a limited appetite for emerging markets risk. Real money investors who are not usually involved in emerging markets (EM) can be attracted by the offer of high-grade credit – “Aa”-rated instruments – at a reasonable return, about 200bps premium over Treasury. In addition, traditional emerging market investors have also, like the rest of the market, increased ESG commitments. The asset class remains thin for such actors, but they would be natural buyers as it expands.

In addition, official and non-traditional investors can also be attracted by D2S investment opportunities. Development finance institutions and philanthropic funds committed to sustainability goals could be included to extend credit enhancements (guarantees, insurances) and/or commit to direct funding of the project (grants, loans).

b. The sustainability impact of the project

The robustness of the sustainability project is highly dependent on the specific context and can only be evaluated by relevant experts. However, at a broader level, the financial features of swaps have direct implications on the kind of sustainability projects that can be supported. We summarize those implications with two principles: additivity and complementarity.

Objective #1: Additivity, or the need to unlock financing for innovative programs.

D2S' sustainability impact is greatest when they target projects of long-term importance, yet where budget constraints have prevented any investment. D2S indeed occur in countries with limited fiscal space, typically constrained by high existing debt service. As such, the savings can most efficiently be allocated towards sectors that suffer from under-investment. In contrast, they should not be used to fund projects that would have otherwise been funded through alternative pockets, typically from traditional development partners. In that scope, the D2S should be additive to the sustainability agenda in the country.

Objective #2 – Complementarity, or entering a broader government strategy

Given the average size of D2S transactions, the savings that can be re-channeled to the sustainability initiatives remain limited yet spread over time. It, therefore, constrains the structure of the projects that should be targeted: yearly funding needs should be limited but could potentially extend over a decade or longer. Civil society organizations have criticized such operations as possibly being akin to donor conditionality (Fresnillo 2023), which can be a risk. Therefore, complementarity with existing policy priorities of the government is essential. In the context of climate change, where priorities evolve, swaps can trigger planning efforts towards climate and conservation that would not have happened otherwise and feed into processes such as National Adaptation Plans.

D2S should prioritize sustainable initiatives that require long-term recurrent and stable spending. Recurrent spending (such as conservation, maintenance, health, or education operations, with specific purposes beyond usual government expenditure) can indeed be favorably financed with a predictable and relatively steady stream of funding derived from the D2S. This is in contrast with typical infrastructure investments, which require more sizeable and frontloaded financing and are, therefore, best suited for direct bond or loan finance.

The two criteria are somewhat in tension but not in contradiction: debt swaps are precisely useful when both are met. They unlock fiscal space towards important sustainability objectives that are prevented by budget constraints and do so as a long-term commitment.

c. The governance of the operation

The success of a D2S transaction should also be measured from a governance perspective. Indeed, the swap involves a very large amount of financing for the sovereign and, therefore, requires very peculiar attention. In addition, and unlike other financial transactions, they also necessitate long-term planning and decisions about future budget allocations, as the sustainability project will typically span over several years.

The swap's governance can be seen as a means to an end: through an efficient and legitimate process, the swap can eventually be impactful. Indeed, efficiency is key throughout the transaction, as administrative capacities are often constrained, political capital can be fragile, and investors' attention span is often limited. Additionally, the governance platform of the sustainable project is of paramount importance for its viability over time and should be deemed legitimate for all stakeholders, be they domestic (local communities, government, etc.) or external (capital providers, NGOs, etc.). In this regard, the following governance objectives could be considered.

Objective #1 – Efficiency: limiting the administrative and political burden of the transaction

D2S are complex, as they combine two sophisticated workstreams – debt financing and project structuring – and require strong coordination among a galaxy of stakeholders with very different agendas. On the financing front, the swap structure needs to be calibrated by the Ministry of Finance in interaction with the credit enhancer(s). Existing and potential lenders have to be mobilized. On the project structuring front, line ministries have to collaborate with NGOs and/or sustainability experts, as well as local constituents, to best define the objectives and the scale of the initiatives.

Coordinating these workstreams needs to be carefully planned to minimize the burden on the administration, generate strong interest among investors, and avoid potential political deadlocks further down the road. On the latter point, a political endorsement of the transaction at the highest level is often crucial for the swift delivery of the project. In addition, the overall transaction fees have to be carefully tracked and pressured down as new transactions typically build on recent precedents and hence limit the negotiation process.

The structuring of the transaction raises several technical issues. First of all, some credit enhancements may require the establishment of a Special Purpose Vehicle, which comes at a cost and could be challenged. Besides, the new debt instruments may include a cross-default clause, which could be triggered in case of payment default on the new debt and/or the sustainability projects. Including such a clause involves a difficult trade-off: on the one hand, the NGO may see in it a stronger incentive for the government to stay current on its sustainability commitment, while, on the other hand, the government may be reluctant to tie its hands and put its broader public debt structure at risk. Finally, the governance of the Conservation Fund has to be carefully calibrated, particularly in terms of board representation for the government, local communities, and sustainable experts.

Objective #2 – Legitimacy: crafting a robust project governance platform

Sustainability projects are typically governed by a Trust Fund, which monitors progress made under the project and decides on fund disbursements. Investors and credit enhancers often praise this, as the

Fund provides them with some control over the implementation of the project and, when it is domiciled offshore, mitigates the country's risk. The Trust Fund can also remain active after the completion of the initial project and can be used to finance new initiatives that have been developed in continuity.

The governance structure of the Trust Fund is decisive for the success of D2S. Before expressing any opinion on the transaction, capital providers, NGOs, and local constituents would expect high transparency, efficiency, and agility standards. The Trust Fund is often entitled to receive capital beyond the project's lifespan. Therefore, its governance structure should be sufficiently (i) robust to serve as a platform for future funding operations and (ii) inclusive, involving all relevant stakeholders—from local communities to NGOs and the national government.

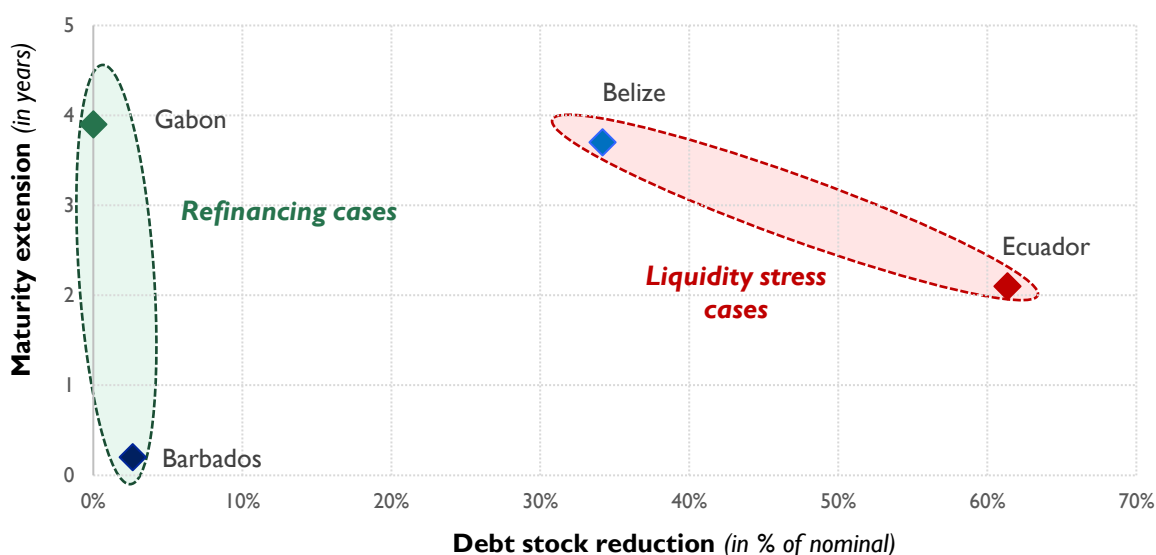
3. Analyzing recent D2S transactions

Building on the approach described above, we critically reviewed four recent D2S (Belize, 2021; Barbados, 2022; Ecuador, 2023; and Gabon, 2023) with a specific focus on their economic aspects. These transactions stood as pioneers in the field and all centered on nature conservancy objectives. We deliberately put the emphasis on the “E” dimension (i.e. the Economics of debt swap), as analyzing the Impact and Governance dimensions would require broader expertise.

The economics of a swap are complex, with diverse objectives. We argue that debt conversions are less homogenous than they appear to be, and the most recent precedents have been rolled out in two main contexts: (i) under liquidity stress and (ii) faced with large refinancing walls. In other words, while the four operations look similar superficially, their financial objectives were ultimately quite different. Details of each deal are described in the appendix.

Belize (2021) and Ecuador (2023) conducted swaps on bonds issued as part of a prior restructuring, which were trading at very distressed prices due to liquidity stress. These swaps could, hence, generate large savings from a buyback. On the other hand, Barbados (2022) and Gabon (2023) conducted swaps outside of stress episodes, and most of the economic benefits were derived from a gain on flows, either through maturity extension (Gabon) or interest rate reduction (Barbados).

GRAPH 1. MAPPING THE IMPACT OF D2S ON DEBT PROFILE



Source: authors' calculations

a. Swapping debt for sustainability in liquidity stress (*Belize and Ecuador*)

Having established this distinction, what were the specific purposes of the operations in Belize (2021) and Ecuador (2023)? Both countries experienced liquidity stress during their respective D2S, and their external bonds had been issued as part of a prior restructuring.

Econ. obj. #1 – Debt profile: a sharp stock reduction, but no large impact on interest rates

On the upside, we argue that distressed situations offer a compelling opportunity to reduce public debt stock. Both in Belize and in Ecuador, sovereign bonds were trading at distress levels, well below 50 cents the dollar. Therefore, the debt write-off potential was sizeable and could offer meaningful relief to the issuer, especially as they faced financial pressure. Ecuador was able to reduce its stock of external debt by a nominal value of USD 1 bn through its D2S, from a face value of USD 1.6bn to USD 600m, and Belize by USD 189m, from an initial stock of USD 553m. The retirement of Belize’s Superbond also brought some perception benefits, as it was associated with a certain stigma—having been issued out of successive debt restructurings.

The cost of borrowing did not decrease significantly. Indeed, although credit enhancements greatly reduce the interest rate on the new facilities – especially given the strained economic outlook –, the coupon rate on the new instruments may still remain higher than the coupon rates paid on past facilities, which had been issued in a more favorable and stable context. However, this is not the right comparison: what matters is the issuer’s current market rate – i.e. the one prevailing at the time of the D2S transaction, and at which the issuer would have raised funds absent the D2S option. This market rate reflected a high probability of default in both cases, and stood well above the interest rate on the new instrument.

In absolute terms, the debt service amounts for both countries were significantly lower after the transaction, by USD 1.5bn for Ecuador and USD 200m for Belize over the life of the bond. Although the interest rate did not significantly decrease, as discussed in the prior paragraph, the reduction in debt stock was substantial. As a result, the debt service was automatically reduced.

Econ. obj. #2 – Creditworthiness: some risks of negative rating action

Credit rating agencies have approached these operations differently, reflecting their methodologies. According to Moody’s, the debt exchange in Ecuador was considered “distressed” based on their methodology, which measures the losses incurred by creditors. However, this differs from Fitch’s and S&P’s analyses, which positively assessed the Ecuadorian transaction and maintained the country’s credit rating at “B-”. In the case of Belize, the transaction led to positive rating actions, as

the sovereign was already in default and could not be further downgraded. In other words, there is value in assessing each CRA's methodologies in function of the objective of the D2S.

Such signaling effects have a limited impact on market players. Most investors and market observers look beyond rating decisions and focus on the deal's financial aspects. They assess whether objective #1 is achieved. This is supported by the strong market appetite observed for both transactions, which raised USD 656m for Ecuador and USD 363m for Belize.

Econ. obj. #3 – Diversification of funding sources: a successful mobilization of new investors

Both transactions involved a wide range of participants. Credit enhancement mechanisms helped expand the scope of creditors to institutional investors and public institutions, which were particularly eager to participate in the deal due to its sustainable nature, despite a rather volatile global market environment. This helped reduce the risk for all parties involved. It is worth noting that the US DFC demonstrated a willingness to consider transactions even in the face of debt distress. The DFC adopted a flexible approach regarding the amounts it would eventually need to insure, building on the fact that it is not tied to a pre-defined country-specific envelope but rather focused on the amount of debt that could be repurchased.

Considerations on governance: confidentiality and administrative capacity is key

Market expectations of a D2S transaction may increase bond prices and reduce the anticipated benefits of the swap. The so-called buyback boondoggle, as observed in the Belizean case—where bonds jumped from 40 cents to 55 cents—can be value-destructive for the sovereign. Therefore, maintaining confidentiality on the D2S for as long as possible is important.

While the transaction cost must be considered, the administrative workload is equally high and may create unnecessary stress on the Ministries' staff. In this regard, it appears challenging to roll out a D2S transaction during a sovereign debt crisis, and it would be better suited to address less dramatic liquidity stress.

In conclusion, there is a fine line where D2S can be useful as a tool for debt reduction. With a low debt price and sufficient administrative capacity, they can bring significant benefits, but those conditions restrict the scope of relevant countries. In particular, they exclude countries that require a large and comprehensive restructuring.

b. Swapping debt for sustainability in refinancing situations (*Barbados and Gabon*)

The recent D2S in Barbados (2022) and Gabon (2023) were both carried out in non-distress contexts – outside of any liquidity or solvency issues. These transactions aimed to refinance existing debt and, at the same time, fund some sustainability initiatives at no fiscal cost. Although these transactions differ in size (USD 150m for Barbados and USD 500m in Gabon), some general conclusions are possible.

Econ. obj. #1 – Public debt profile: reducing interest rates and/or increasing maturity, but the stock of debt remains constant

The limited price discounts in debt markets prevented stock reductions. Indeed, as sovereign bonds were trading close to par, neither Barbados or Gabon were able to reduce their debt stocks through their respective D2S. Therefore, in the absence of a significant interest rate reduction, savings can be limited at the end of the day.

However, the public debt profile was improved by way of interest rate reduction (Barbados) or maturity lengthening (Gabon). In Barbados, the refinancing of relatively expensive debt lines generated sizeable savings. The Barbadian government was indeed able to reduce interest rates by about 2%, thus saving about USD 40m of interest payments over 15 years. For Gabon, the D2S rather helped to reduce immediate refinancing risks. The swap targeted near-term maturities (notably 2025) for the buyback, which allowed the country to extend the maturity of the debt at stake by about 4 years.

Econ. obj. #2 – Creditworthiness: some (limited) rating upside

Rating analysts overall positively reacted to the D2S. They valued the reshuffling of the countries' public debt profile, and noted the alleviation of debt sustainability risks. In the case of Barbados, this ultimately triggered a rating upgrade by Moody's.

Importantly, the D2S were not tagged as “distressed exchange”, considering the level at which the buyback took part: 87 cents for Gabon and 96 for Barbados. Instead, credit rating agencies labeled these transactions as opportunistic liability management operations (e.g., S&P for Barbados).

Econ. obj. #3 – Diversification of funding sources: a successful crowding in effect

The sustainability commitment embedded in the D2S effectively attracted in new investors and other sources of capital. In addition to the credit enhancers, each of these deals drew in investors who are typically interested in high-grade instruments as well as non-traditional investors. For instance, in Gabon, the D2S project acted as a catalyst and attracted direct investments in sustainability initiatives from other capital providers, such as the Bezos Earth Foundation.

Box 2. Setting The Denomination Right – The “Blue Loan” Imprecision

As proceeds are only partially earmarked to the sustainability program, the debt issued under the D2S cannot be labelled as “sustainability bonds”. Indeed, they do not comply with the rules defined by ICMA, notably with regards to the specific – and reported – use of proceeds. In the case of Gabon (2023), the bonds issued as part of the D2S transaction had been publicized as “Blue Bonds” and exposed the stakeholders to criticism from ICMA itself together with other IFIs. In reaction, TNC clarified the labelling of the new debt instruments and anchored the term of “Nature Bonds”.

Future D2S should therefore use a clear denomination, which does not mislead for investors and market observers.

Considerations on Governance: a more legible financial structure

The transparent allocation of funds to support sustainability-linked projects – particularly focused on marine conservation– has **effectively facilitated the development of sustainability initiatives.** It also sent a positive message regarding the sovereign issuer’s ability to build resilience. Indeed, the governments were typically co-designing the sustainable programs, and associated projects and commitments.

In conclusion, D2S can be effective refinancing instruments. They help alleviate some refinancing pressures via the proactive management of upcoming liabilities, which also sends positive signals on the sovereign’s commitment to debt sustainability.

4. A summary of the uses (and misuses) of debt swaps

Building on the above review of recent D2S, we summarize below characteristics that could serve as a guide to policy makers when considering debt swap transactions.

What D2S are not:

- They are *not* restructuring instruments and *not* suited for dire situations, which need a large and comprehensive debt treatment.³ They are most helpful when they focus on carefully selected commercial debt lines.
- They are *not* use-of-proceeds bonds, which can mobilize hundreds of millions of dollars upfront. The funding potential for sustainability projects is relatively limited and spread over time, yet direct funding could complement it.

What D2S are:

- They are new tools to address specific debt sustainability risks—namely two key risks: (i) liquidity issues, which can be characterized by trading performance at distress levels, and (ii) refinancing walls, which require pre-emptive refinancing.
- They are enablers of sustainability programs in new areas and/or new topics, which can be further scaled and expanded over time.
- They are powerful communication tools that enhance the sovereign debtor's perceived creditworthiness and showcase its sustainability potential.

Building on the above considerations, we propose an “E-I-G” check-list for sovereign debtors, which may be considering the relevance of a D2S. Along each of the three dimensions, it sketches out the main characteristics that the sovereign should (or should not) present for a D2S to be relevant.

³ In this regard, Belize D2S set a misleading precedent: it successfully addressed a debt distress situation owing to an uncommon set of conditions – a limited amount of external public debt (USD 553bn), which was combined in a single instrument (the so-called “Superbond”), and a very large and well-structured sustainability project.

Table 1. An “E-I-G” check-list to assess the relevance of a D2S

	D2S can be useful when...	D2S should <u>not</u> be used to ...
ECONOMICS	<ul style="list-style-type: none"> ✓ The sovereign’s debt is trading at a discount, which offers large debt relief potential in case of buy-back ✓ The sovereign faces a refinancing wall, which could be addressed by a pre-emptive refinancing ✓ The sovereign investor base is heavily concentrated, and could be expanded thanks to credit enhancers 	<ul style="list-style-type: none"> × ... address debt sustainability issues, as (i) the scope of public debt exchanged is usually limited, and (ii) the exchange is conditioned to a robust sustainability (which may be difficult to develop in times of crisis)
IMPACT	<ul style="list-style-type: none"> ✓ Some sustainability projects are ready to be financed, with most of the structuring efforts behind (i.e. sustainable & governance framework in place) ✓ These projects are of reasonable economic size, to be fully funded out of the savings generated from the debt exchange. They can however be ambitious in terms of sustainability impact 	
GOVERNANCE	<ul style="list-style-type: none"> ✓ Political consensus has already been gathered on the sustainability project, which reduces operational and political risks ✓ The public administration has the relevant capacity to coordinate ambitious project, such as D2S that gather a wide set of actors on two dimensions (economic/financial and sustainability) 	<ul style="list-style-type: none"> × ... fund projects crafted “from above”, without onboarding local communities, as they would be core stakeholders of the project × ... secure a “one-off” reputational gain, as project governance and delivery must be made sustainable over time so as not to hinder the country’s reputation in the longer term

5. Policy recommendations

When it comes to financing, a first set of policy recommendations aims to address the two key hurdles observed in most recent D2S: (i) their complex structuring, which is essentially due to a lack of standardization, and **(ii) the limited pool of credit enhancers**, which could be pro-actively expanded.

Priority #1 – Standardizing the D2S architecture could be achieved by:

- **Setting a clear definition**, possibly endorsed by a renowned institution such as ICMA. This could facilitate the emergence of D2S as a new asset class and address concerns regarding potential “green” or “blue” washing. Besides, this would eventually help mobilize new investors and further catalyze demand;
- **Streamlining the structuring of D2S, both financially and legally**, so as to reduce the cost of such transactions and shorten the time to execution. In particular, the recourse to SPVs by some credit enhancements could be rethought, so as to avoid any unnecessary hurdle during execution (legal structuring, regular audits, etc.). Additionally, some standardization could be developed on the recourse to cross-default clauses as well as on the Fund governance structure.

Priority #2 – Broadening the scope of credit enhancers would entail:

- **Building on the establishment of the taskforce announced at COP28⁴, extending and streamlining the range of partners both on the credit enhancement side and the NGO side.** Multilateral development banks have shown increasing interest in such transactions, but should coordinate their approach. Sovereigns exploring a potential D2S transaction would be supported by a larger set of credit enhancers. In practice, this would entail building capacity within each of these institutions, possibly within the team in charge of guarantees, and clearly identifying when country teams can offer such terms.
- **Encouraging the assessment of D2S opportunities, in all post-restructuring IMF programs.** This could incentivize countries to build sustainability programs while taking advantage of distress secondary prices to smoothen the public debt profile. The IMF may also extend some financing for post-restructuring D2S, under its Resilience and Sustainability Trust (RST) as recently floated (Georgieva & al, 2022).

⁴ See the “Joint Declaration and Task Force on Credit Enhancement for Sustainability-Linked Sovereign Financing” (December 4th, 2023)

- **Exploring additional mobilization by using large capital pools of private insurers and reinsurers.** Those actors could help top up on the credit enhancements that may be mobilized from the official sector. Although this would come at a higher cost, such blended credit enhancement structures would allow the sovereign debtor to allocate part of the official capital to other initiatives.

Priority #3 – Empowering the independent Trust Fund beyond the initial project would entail:

On the sustainability front, some concrete initiatives could be pursued to empower the Trust Fund and ensure the viability of the sustainable initiatives over time.

- **Leveraging on the enhanced governance to raise additional project financing from the inception.** The governance structure of the Trust Funds, which are set up to monitor sustainability projects, typically respond to high standards of transparency, accountability and reporting. In this regard, it could be envisaged that such structures are used to receive additional financing – typically philanthropic funds –, throughout project lifespans. Such direct financing could even be mobilized right from inception, so as to increase the size of the projects and raise visibility on the initiatives. This would typically address the concern that sustainability funding is often limited.
- **Creating a global platform of knowledge sharing across Trust Funds,** in order to spread best practices and join forces in mobilizing new capital inflows. Such an informal club could gather on a regular basis, typically at the occasion of COP meetings, so as to communicate on progress made in each initiative, discuss the hurdles they have been faced with, and agree on a way forward to address them collectively.

APPENDIX I – A comparative overview of recent D2S

THE ECONOMIC IMPACT OF RECENT DEBT-FOR-NATURE SWAP TRANSACTIONS

	Gabon (2023, USD 500m)	Ecuador (2023, USD 1,628m)	Barbados (2022, USD 151m)	Belize (2021, USD 553m)
Financials of debt buyback operations				
1) A debt buyback				
Bonds repurchased	3 Eurobonds (partially)	3 Eurobonds (partially) issued from the 2020 debt restructuring	1 Eurobond & 1 Dom. Bond (partially)	1 Eurobond (entirely)
Amount repurchased (face)	USD 500m	USD 1,628m	USD 151m	USD 553m
Tender price (% face)	87% (average)	40% (average)	96% (average)	55%
2) A debt issuance				
New instrument issued	USD 500m bond	USD 656m “Galapagos bond”	USD 147m joint loan	USD 364m loan
Maturity (average)	15 years (10 years)	18.5 years (13 years)	15 years (9 years)	19 years (15 years)
Coupon	6.097%	6.975%	3.8%	Step-up from 3.0% to 6.04%
Rating (Moody’s) ¹	Aa2 – a 15-notch upgrade	Aa2 – a 16-notch upgrade	Aaa & Aa2 ² - a 16- & 14-notch upgrade	Aa2 – a 16-notch upgrade
Main stakeholders involved				
Credit enhancers	US DFC	US DFC & IDB	IDB & TNC	US DFC (& TNC, indirectly w/ equity)
Arrangers	Bank of America	Credit Suisse	Credit Suisse & CIBC First Caribbean	Credit Suisse
NGOs	TNC	Ocean Finance Company & Pew Bertarelli Ocean Legacy	TNC	TNC
Overview of the financials for the sovereign				
Debt stock reduction	None	USD 1.0bn	USD 4.0m	USD 189m
Debt service reduction	None	USD 1.5bn over 18.5 years	USD 40m over 15 years	USD 200m over 20 years
Average maturity extension	+3.9 years	+2.1 years	+0.2 year	+3.7 years
Credit rating impact	None	“Distressed exchange” for Moody’s	None	Upgrade by S&P

Note: (1) Rating differential between the new issuance credit rating and the issuer’s credit rating; (2) Rating of the two tranches, resp. class A and class B

THE SUSTAINABILITY IMPACT OF RECENT DEBT-FOR-NATURE SWAP TRANSACTIONS

	Gabon (2023, USD 500m)	Ecuador (2023, USD 1,628m)	Barbados (2022, USD 151m)	Belize (2021, USD 553m)
Main conservation benefits and impacts				
1) An ambitious sustainability program				
Sustainability impact	Nature	Nature	Nature	Nature
Areas targeted	Marine conservation	Marine conservation	Marine conservation	Marine conservation
Key metrics of sustainability	<ul style="list-style-type: none"> • Completion of a Marine Spatial Plan (MSP) aimed at (i) enlarging marine protected areas to 30% of its oceans and (ii) improve these protected areas' management • Combat illegal fishing in Gabon's coastal areas 	<ul style="list-style-type: none"> • Improvement of Hermandad Reserve and Galapagos Marine Reserve management (c. 198,000 square marine kilometers combined) • Monitoring and protection of local tuna and other fish stocks negatively impacted by overfishing 	<ul style="list-style-type: none"> • Completion of a MSP aimed at protecting 30% of Barbados' ocean area and promote ocean sustainability • Completion and adoption of comprehensive management plans for all protected areas 	<ul style="list-style-type: none"> • Completion of a MSP and increase in Biodiversity Protection Zones from 16% to 30% by 2026 • Revision and implementation of Belize's Integrated Coastal Zone Management Plan to include marine and coastal biodiversity offsets
2) A dedicated financing scheme				
Financing size¹ (duration of the project)	USD 163m (15 years)	USD 450m (18.5 years)	USD 50m (15 years)	USD 180m (20 years)
Financing structure	<ul style="list-style-type: none"> • Annual contributions to the Conservation fund • Annual contributions to an endowment fund taking over once the bond matures 	<ul style="list-style-type: none"> • Annual contribution to the newly created Galapagos Life Fund (GLF) • Annual contributions to an endowment fund taking over once the bond matures 	<ul style="list-style-type: none"> • Annual contribution to the Barbados Environmental Sustainability Fund (BESF) • Annual contributions to an endowment fund taking over once the loan is repaid 	<ul style="list-style-type: none"> • Annual contribution to the Conservation Fund • One-off prefunded endowment capitalized
Upfront payment	None	None	None	One-off USD 23.4m endowment
Annual financing flows² – from the government	c. USD 8.5m	USD 17.5m	USD 2.6m	USD 4.2m
o/w to the endowment fund	c. USD 3.5m	USD 12.1m	USD 1.1m	None
o/w to the project	USD 5m	USD 5.4m	USD 1.5m	USD 4.2m
Annual financing flows² – to the project (on average)	USD 10.9m	USD 24.3m	USD 3.3m	USD 9m

Notes: (1) Includes (i) annual financing flows from the government to the conservation fund, channelled throughout the life of the new debt instrument, as well as (ii) the amount outstanding on the endowment fund, upon maturity of the new debt instrument, after upfront and/or annual funding from the government and assuming a capitalization (at a 7% net annual return); (2) Annual flows throughout the life of the new debt instrument

APPENDIX II – Detailed case studies

1. BELIZE (2021) – USD 553m debt conversion for marine conservation

In November 2021, Belize completed a USD 553m debt conversion for marine conservation that improved the country's debt profile and allocated USD 180m to finance conservation over 20 years.

Context:

Belize's economy faced significant challenges in 2021 due to the adverse impact of the COVID-19 pandemic, which put a strain on economic activity and deteriorated the country's fiscal and external position.

Despite undergoing multiple restructurings since 2006⁵, Belize's public debt sustainability had once again reached a distressing level. Its Superbond – the financial outcome of the successive restructurings – was trading at significant discount and, in May 2021, the country missed its coupon payments.

Against this backdrop, Belize engaged in an ambitious debt conversion for marine conservation transaction, which entailed (i) a full buyback on its Superbond (USD 553m) coupled with (ii) the issuance of a 19-year USD 364m "Blue Loan" in support of Belize's marine conservation. The transaction was announced in November 2021.

The economics of the debt operation

The buyback allowed the retirement of the relatively expensive Superbond, at an attractive price (55 cents). The Superbond amounted to USD 553m and paid semi-annual coupons in excess of 13%. It was trading at 40 cents to the dollar a few months before the transaction, and was eventually bought back at 55 cents to the dollar – which represents a significant increase and may have been linked to expectations of such a transaction.

The exchange was financed by the issuance of the so-called "Blue Loan", with a 15-year average maturity (20-year final) and relatively low coupons (5.55% on average, with a step-up structure – from 3% in 2022, up to 6.04% over 2026-31). The Loan benefitted from a credit enhancement extended by US DFC through its Political Risk Insurance (PRI), which dramatically uplifted the creditworthiness of the new facility (rated Aa2 by Moody's).

Objective #1 – Smoothing public debt profile.

The transaction had a significant positive impact on Belize's public debt sustainability. Its stock of public debt was reduced by USD 189m or 12% of GDP, as the Ministry of Finance took advantage of the distress trading prices on its Superbond to buy it back. The operation allowed the authorities to reduce the external public debt service by USD 200m over 20 years (assuming no roll-over operation), as well as to extend the final maturity of their external debt by 3.7 years. In addition, it avoided the reinstatement of USD 58.4m of principal payments that would have triggered in case of default, according to Superbond's financial terms.

⁵ Belize undertook sovereign debt restructurings in 2006-07, 2012-13 and 2016-17. See Asonuma T, Papaioannou M, Togo E, van Selm B, 2018, *IMF Working Paper: Belize's 2016-17 Sovereign Debt Restructuring - Third Time Lucky?*

The swap operation generated savings on public debt service, estimated in present value terms, of about USD 200m considering the new facility standalone, and USD 120m net of cashflows committed to the marine conservation.

Objective #2 – Supporting the country’s creditworthiness.

From a rating standpoint, the swap was overall positively perceived – especially by S&P. Belize’ sovereign rating was immediately upgraded by S&P, from selected default (SD) to B-. Moody’s reactions were more cautious: it rated the new loan at Aa2 thanks to the presence of US DFC’s PRI, which represented a 16-notch uplift from Belize’s Caa3 rating. However, Moody’s’ analysts highlighted the remaining “debt sustainability challenges” and “large implied bondholder losses”. It took a year for Moody’s to eventually upgrade Belize’s credit rating, to Caa2 from Caa3.

Objective #3 – Mobilizing new sources of financing.

The credit enhancement provided by US DFC on the instrument helped crowd-in a more diverse set of investors, such as pension funds traditionally not involved in distressed emerging market bond trading.

The Sustainability Impact of the project:

The proceeds from the debt conversion have allowed for the dedication of USD 180 million over 20 years toward sustainability efforts. This consists of a USD 23.5 million pre-funded endowment using the proceeds from the so-called Blue Loan, as well as an annual grant transfer of USD 4.2 million to the newly created “Belize Fund for a Sustainable Future” (BESF), an independent fund dedicated to overseeing the conservation activities. The remaining anticipated proceeds (USD 71m) would stem from the expected market returns of the BESF over the course of 20 years.

Proceeds derived from the transaction will be used to support scalable ambitions such as (i) increasing biodiversity protection zones from 16% to 30% of the territory, and **(ii) completing the Marine Spatial Plan by 2026** to further protect marine coastal areas – which are of strategic importance for Belize’s economy, as it heavily relies on fishing and tourism. Overall, these marine conservation objectives can reasonably be assumed scalable by nature, through the expansion of their geographical scope or incremental targets, should additional funding be crowded-in in the future.

The governance of the operation:

Given the Political Risk Insurance policy, for which a link with the US is a pre-requisite, **the financial structure was complexified by the mandatory inclusion of an SPV incorporated in Delaware (US):** the “Belize Blue Investment Company LLC” or “BBIC”, also benefiting from an equity contribution from TNC. The Political Risk Insurance covers the Government payments to BBIC, which also holds a parametric catastrophic insurance policy.

The multi-step transaction began with the issuance of a so-called “Blue Loan” on the capital markets, placed with the intermediation of Credit Suisse. The “Blue Loan” proceeds were then lent by Credit Suisse to BBIC, which in turn loaned the money to the Government of Belize for the purpose of repurchasing the Superbond. While benefiting from Political Risk Insurance, the complex financial

structure entailed administrative costs (for project management and running the SPV), which may have hindered investors' understanding of payment flows, but also of other stakeholders such as CSOs.

The conservation fund, known as Belize Fund for a Sustainable Future, relies on a relatively diversified board consisting of 10 members: five from the Government (Ministry of Blue Economy and Civil Aviation; Ministry of Finance Economic Development and Investment; Ministry of Sustainable Development, Climate Change & Disaster Risk Reduction; Prime Minister Office; Bipartisan representative), three from local communities (Belize Tourism Industry Association; University of Belize; Belize Fisheries Council) and two from NGOs (The Nature Conservancy; Belize Network of Non-Governmental Organizations).

2. ECUADOR (2023) – USD 1.6bn debt conversion for marine conservation

In May 2023, Ecuador completed a USD 1.6bn debt conversion for marine conservation that improved the country's debt profile and allocated USD 450m to finance the conservation of the Galapagos reserve over 18.5 years.

Context:

The Republic of Ecuador was faced with a distressed situation. In the aftermath of the 2020 sovereign debt restructuring and the negotiation of an IMF program, Eurobonds were still trading at a substantial discount, between 40 and 60 cents to the dollar. Moreover, the political landscape was tense and fragmented, which created additional risks to the country's creditworthiness.

Against this backdrop, Ecuador conducted the biggest debt-to-sustainability swap to date in May 2023, as it managed to buy back USD 1.63bn of Eurobonds – over three tranches – at a 60% discount, while benefiting from a USD 656m of proceeds stemming from the issuance of a "Galapagos"-labelled facility.

The economics of the debt operation

The debt conversion took advantage of the substantial discount on the Eurobonds' trading. Prior to the transaction, Ecuador 2030, 2035, and 2040 Eurobonds were being exchanged at 55 cents to the dollar for the 2030 bond, 39 for the 2035, and 36 for the 2040, reflecting the distrust of international markets vis-à-vis Ecuador's creditworthiness despite the previous debt workouts. The outstanding instruments were bought back at an average tender price of 40 cents to the dollar.

While being virtually cut from international capital market access, Ecuador benefited from the proceeds of a USD 656mn "Galapagos Bond". As the instrument was credit enhanced by the US DFC (Political Risk Insurance) and the IDB (guarantee), Ecuador benefitted from favorable terms for a country whose creditworthiness was questioned. These enhancements were notably reflected in the credit rating 16-notch uplift by Moody's (Aa2). The 18.5-year facility bore a 6.975% coupon rate and represented a more than 2-year maturity extension.

Objective #1 – Smoothing public debt profile.

The transaction undoubtedly enhanced and smoothed Ecuador's debt profile. First, owing to the substantial discount at which the bought-back instruments were trading, the country benefited from a massive and mechanical USD 1.0bn (2% of the country's total external debt) write-off. On top of that,

the transaction alleviated part of the country's debt service burden, through USD 1.5bn debt service savings over 18.5 years. The operation therefore unlocked funds both for (i) the marine conservation program and (ii) to broaden the country's very constrained fiscal space to navigate further crises.

Finally, the 18.5-year facility came along with a 2.1-year maturity extension, as well as a smoothing of the public debt redemption profile, mitigating the medium-term 2031 to 2035 refinancing wall on the 2030 USD 8.5bn Eurobond.

Objective #2 – Supporting the country's creditworthiness.

The debt conversion had mixed effects on Ecuador's credit rating. While the Galapagos bonds were rated Aa2 by Moody's, the latter also communicated on its perception of the buyback as a "distressed exchange", hence a default under Moody's definition, justified by the sizeable loss incurred to investors "compared to the original promise of the bond contracts and generating a substantial reduction on the principal for the sovereign". No further rating action eventually followed from Moody's.

The transaction was positively welcomed by S&P and Fitch, which maintained Ecuador's credit rating to the same level as before the transaction ("B-"). The former labelled the transaction as an opportunistic liability management operation rather than a distressed exchange, as analysts considered that Ecuador would have been able to meet its debt service obligations absent such a transaction. Likewise, the latter did not consider that Ecuador had undertaken the debt swap to avoid a default and therefore did not label it as a distressed debt exchange.

Objective #3 – Mobilizing new sources of financing.

In spite of Ecuador's distressed situation, the transaction arguably attracted new financing sources in light of its sustainability-committed character. Among others, one can note the support from the European Commission, through the participation of its Climate Investor Two (CI2) fund in the structuring of the transaction⁶.

The sustainability Impact of the project:

The transaction enabled to free up USD 450m over 18.5 years for marine conservation – by far the largest amount generated in a debt-to-sustainability swap. USD 323m were directly channeled through an average USD 12.1m of direct annual payments to the Galapagos Life Fund (GLF), a nonprofit in charge of the conservation project, and USD 5.4bn annual payments feeding an endowment to be transferred to the Republic upon maturity of the loan. As was the case for Belize, the rest of the announced proceeds (USD 125m) will stem from the expected market returns over 18.5 years.

The conservation funding over 18 years is said to fulfill biodiversity conservation needs. In this regard, it shall notably fund the new Hermandad Marine Reserve, and support to existing Galápagos Marine Reserve. The long-term construction of this marine conservation project is arguably scalable, all the more given that the proceeds should broadly finance "monitoring/surveillance, environmental education, science and economics research, and sustainable tourism development" activities.

⁶ <https://climatefundmanagers.com/2023/05/09/climate-fund-managers-announces-largest-debt-for-climate-conversion-in-history-to-protect-the-galapagos-islands/>

Moreover, the unprecedented size of the Galapagos D2S makes it a landmark project and shall favor the execution of other D2S in the future. The Ecuadorian government notably expressed willingness to achieve a similar operation in the near term⁷.

The governance of the operation:

As for Belize's case, the financial structure entails back-to-back arrangements and proceeds stemming from a private loan granted by an SPV (the "GPS Blue Financing DAC" incorporated in Ireland), with the SPV issuing in turn, the Galapagos facility, arranged by Credit Suisse.

In this case, even more than in Belize, the large number of counterparties added complexity to the project. First, three Eurobonds were repurchased – instead of the sole Belize's superbond. In addition, the concurrent existence of the Ireland-based SPV and the Delaware-based GLF (in order to benefit from the US DFC political risk insurance) blurs the traceability of cashflows between institutions, notably as regards proceeds earmarked for sustainability endeavors, and multiplies the administrative costs and fees of running both institutions.

Lastly, from a governance perspective, decision-making power eventually seems vested in the GLF. The GLF's Board is composed of 11 members, with 6 seats representing private actors – including two from Pew Bertarelli Ocean Legacy and Oceans Finance Company (Climate Fund Managers subsidiary) – and representatives from the local tourism and fishing industry and researchers. The remaining 5 seats are to be allocated among Ecuador's government⁸. The Ecuadorian Government is therefore in the minority, which has been perceived as a loss in sovereignty. However, this is compensated by the diversity of the board and the inclusion of local stakeholders.

3. BARBADOS (2022) – USD 151m debt conversion for marine conservation

In September 2022, the Government of Barbados completed a USD 151m debt conversion for marine conservation that improved the country's debt profile and allocated USD 50m to finance marine conservation over 15 years.

Context

Barbados was not in a distressed financial situation, despite real difficulties following the COVID-19 pandemic. Its tourism-dependent economy had been through a successful sovereign debt restructuring finalized in 2019 when the COVID-19 pandemic broke out. Nevertheless, the Government successfully contained damages to the economy and remained committed to the implementation of an Economic Recovery and Transformation plan, showing good progress on the latter.

The country was instead suffering from increasing costs of funding that complicated future financing operations. Costs of funding represented 7.2% on average on the existing public debt, while

⁷ <https://latinfinance.com/daily-brief/2024/03/07/ecuador-plans-second-debt-for-nature-swap-finmin/>

⁸ <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2023/05/to-protect-galapagos-islands-ecuador-turns-to-innovative-financing>

market conditions had pushed the country's yields over 8.5% - not cutting the country from international capital markets, but making any new issuance much more expensive.

At the same time, the Government's political agenda had set marine conservation as a top priority - on the national level as well as on the global stage. A Minister for Maritime Affairs and Blue Economy was created for this purpose. In this context, the Barbados Government announced in September 2022 a USD 151m debt-to-sustainability swap unlocking USD 50mn for marine conservation over 15 years.

The economics of the debt operation:

The transaction involved the repurchase almost at par of two outstanding securities: USD 77.6m of the USD 530m maturing in 2029 (at 92.5%), and a domestic bond maturing in 2043, of value equivalent to USD 73m (at par).

The conversion was structured around a jointly arranged dual tranche dual currency (USD-BBD) 15-year blue loan, part of which was arranged by Credit Suisse *via* an SPV ("BB Blue", and the other was directly financed by a regional commercial bank (CIBC First Caribbean) in local currency (Barbadian dollars, or BBD). The jointly arranged security also benefited from a dual credit enhancement, with a first loss guarantee from the IDB (on the first USD 100bn), and a second loss guarantee from TNC (on the remaining USD 50bn). The guarantee covers outstanding principal, plus one semi-annual coupon. It also grants Barbados a 2-year deferral option following a natural disaster or a pandemic event

Objective #1 - Smoothing public debt profile.

The transactions resulted in a very small debt stock reduction (about USD 4m), that was arguably limited by the little discount on the two bonds' trading - notably for the domestic bonds.

However, the debt-to-sustainability swap led to substantial debt service reductions of USD 40m net of transaction costs. Indeed, the double credit enhancement enabled Barbados to secure a 3.8% fixed coupon rate - well below market rate - with even a maturity extension (+0.2 year)

Objective #2 - Supporting the country's creditworthiness.

The transaction did not lead to any immediate rating action, but it has been overall positively welcomed by the main credit rating agencies. As in the case of Ecuador, S&P labeled the transaction as an opportunistic liability management operation, as Barbados would have been able to meet its debt service obligations even absent such a transaction. Moody's did not react at the time of the transaction but ultimately upgraded Barbados' rating to B3 (stable) in August 2023 from a Caa1 (stable) grade, on the back of enhanced fiscal and debt sustainability.

Objective #3 - Mobilizing new sources of financing.

The issuance of two instruments could mobilize a diversified set of creditors. Indeed, it attracted both investors willing to be exposed to BBD as well as less risk-prone investors preferring investing in USD.

The sustainability Impact of the project:

Over 15 years, the debt conversion will free up USD 50m for marine conservation and ocean area protection. The scheme for proceeds committed to nature conservation is here rather similar to that of Ecuador: a yearly USD 1.5m cashflow is to be paid by the Government to the Barbados Environmental

Sustainability Fund (BESF) for grant funding, in addition to an annual payment of USD 1.1m by the Government to another trust (Barbados Blue Conservation Trust) to capitalize an endowment. The endowment is also expected to generate an additional USD 10m.

Once again, the decision-making authority lies with the BESF, which is the recipient of the recurrent grant transfer. Similar to the BESF in Belize and the GLF in Ecuador, it will allocate funds to the project deemed relevant by its Board. The latter is composed of 11 directors, the majority of whom are appointed from the non-government sector (academia, fisheries, tourism, and NGOs) and the government sector.

The governance of the operation:

The financial structure involved a classic back-to-back arrangement for D2S. However, in the Barbadian case, there is an additional layer of financial sophistication due to the involvement of two different currencies. Since the BBD is pegged to the dollar, the change is not drastic but paves the way for more complex operations.

Regarding the distribution of cashflows, one could argue that the concurrent existence of BB Blue, the BESF, and the Barbados Blue Conservation Trust also hinders understanding of the operation.

Nevertheless, and in contrast with the Ecuadorian case, the structural split of the sustainability-committed cashflows from the financing ones was beneficial. On the one hand, BB Blue is only concerned by the issuance of the blue bonds and the lending of USD to the Republic, and as such benefits from the credit enhancers attached to these cashflows. On the other hand, the BESF and the Barbados Blue Conservation Trust only benefit from payments from the Government for nature conservation.

4. GABON (2023) – USD 500m debt conversion for marine conservation

In August 2022, Gabon completed a USD 500m debt conversion for marine conservation that improved the country's debt profile and allocated USD 163m to finance marine conservation over 15 years.

Context:

The Gabon D2S occurred shortly before the September 2023 coup in the context of relative macroeconomic stability. However, Gabon was faced with large near-term refinancing needs, notably on its 2025 Eurobond, while access to the market was made tougher by exogenous shocks (the recovery from the COVID-19 pandemic, the Russian invasion of Ukraine).

In August 2023, with a liability management perspective, Gabon bought back USD 436m from its 2025 and 2031 Eurobonds, while benefitting from proceeds of a USD 500m loan from an SPV (the "Gabon Blue Bond Master Trust, Series 2" or SBBMTS2), which the SPV had raised by issuing "Blue Bonds" arranged by Bank of America.

The economics of the debt operation:

Gabon bought back USD 500m of three existing maturities. The buyback operation targeted (i) the 2025 Eurobond, which was trading very close to par as well as (ii) the two 2031 Eurobonds trading at a c. 15% discount. While the 2025 Eurobond posed the most immediate refinancing risk for Gabon, USD 95m of tenders were accepted only, and most of the buyback amount was concentrated on the two 2031 tranches.

Gabon benefited from a USD 500m private loan from the SPV which raised a “Blue Bond” arranged by Bank of America. The political risk insurance provided by US DFC – despite the premium payment associated – to secure an attractive 6.097% coupon rate, priced 200 bps over US Treasury yields for the Blue Bonds, to be compared with the current 10.25% yield for Gabon. The political risk insurance provided by DFC is for the full principal amount and seven months of interest.

Objective #1 – Smoothing public debt profile.

The operation entailed no debt write-off and no substantial debt service reduction (once factored in the sustainability project payments), **but it partly smoothed Gabon’s redemption profile**, by extending the average maturity by 3.9 years. The transaction was executed at a time when the country had virtually lost market access and was, therefore, lacking alternative financing options due to adverse global financial conditions.

Objective #2 – Supporting the country’s creditworthiness.

The operation obtained an Aa2 rating from Moody’s (15 notches above the sovereign that stands at Caa1), **but the deal did not lead to any rating action on Gabon’s sovereign rating.** Nevertheless, Moody’s commented that the transaction “marginally alleviates refinancing risk” and was most importantly “not considered a distressed exchange”.

Objective #3 – Mobilizing new sources of financing.

The new financing drew in a diverse set of investors, some of them not usually involved in Gabon. Indeed, according to Debtwire, the book order for the new issue was “deep and diverse” and made up of multiple investors from different asset classes and institutional makeup, including asset managers, money managers, impact funds, emerging market funds, and hedge funds.

The sustainability Impact of the project:

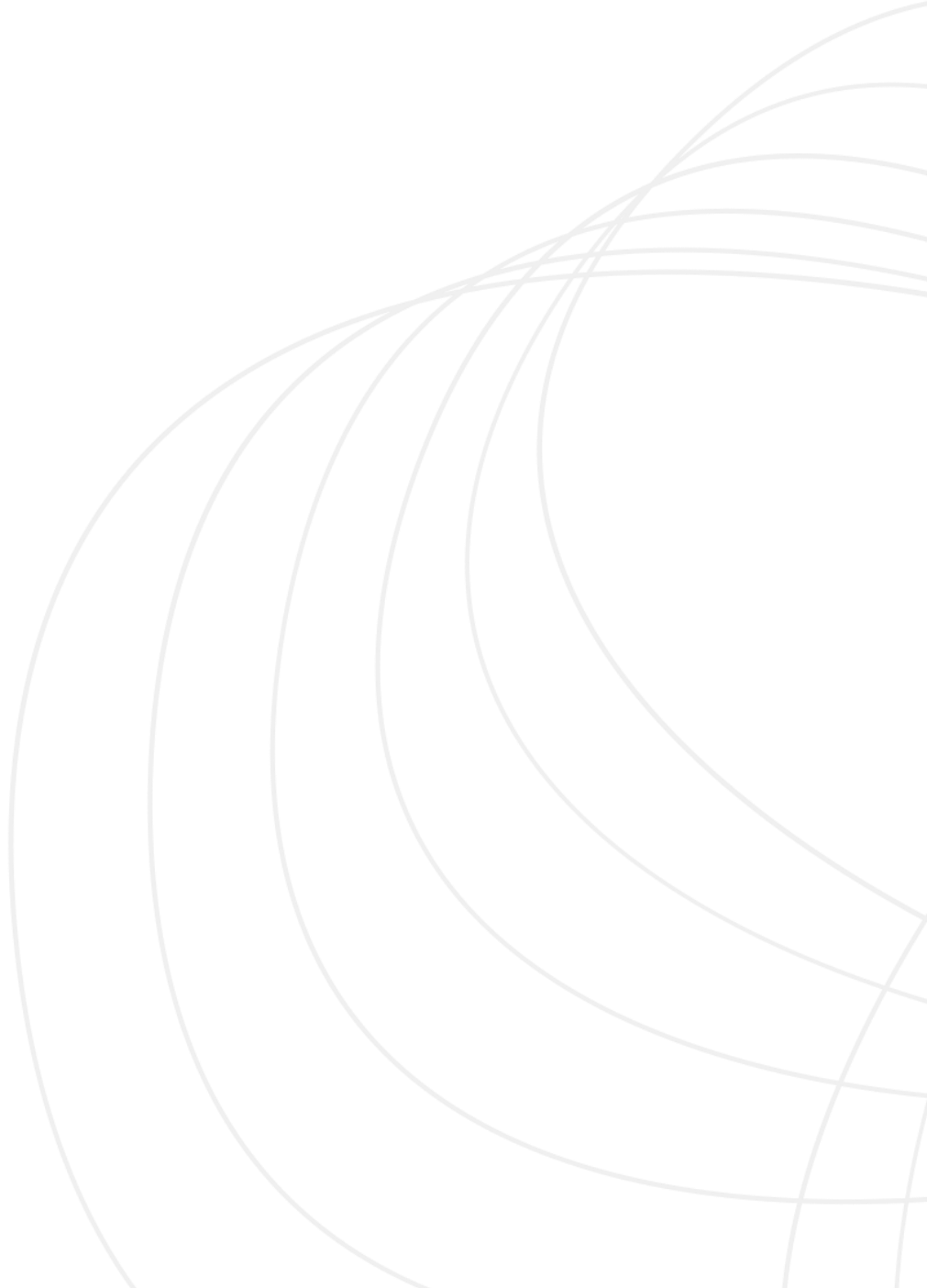
Out of the transaction, USD 163m was earmarked for marine conservation over 15 years. As in previous transactions, this amount is composed of (i) USD 5m annual payments to the conservation project (managed by the Fonds de preservation de la biodiversité), (ii) USD 3.5m annual payments to an independent endowment fund (Gabon Blue Conservation LLC) while (iii) the remainder of the proceeds is expected to stem from anticipated market returns (over 15 years).

The debt-to-sustainability swap aims to facilitate the development and implementation by Gabon of a marine protection and marine spatial plan, as well as other sustainable development projects in close coordination with TNC – acting as a technical advisor. Gabon notably intends to improve its management of protected territorial waters.

The governance of the operation:

In contrast with the abovementioned cases, the Gabonese debt-to-sustainability swap benefited from previous operations and was better understood by investors due to enhanced communication.

However, many institutions were set up for the financing, of which the Gabon Blue Bond Master Trust Serie 1 (GBBMST1), which is the lender to the Gabonese Republic and benefits the DFC's PRI, and the Gabon Blue Bond Master Trust Serie 2 (GBBMST2), which is the lender to GBBMST1, issues the Blue Bonds and appears to pay for the DFC's PRI premium. This complex arrangement makes it difficult to understand the financing scheme and raises accountability questions.



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