A trickle to a stream: Can Debt-for-Development Swaps become an asset class?

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About Finance for Development Lab

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Introduction

Commercial debt swaps have emerged as an appealing dual-policy tool for governments. Debt-for-Development Swaps (D4D) are transactions where an existing, expensive (and/or shorter-term) commercial debt is exchanged for a new, more affordable (and/or longer-term) instrument[1]. This cost differential is enabled by a concessional credit enhancement mechanism, such as a guarantee or insurance provided by a development partner. The borrowing government then earmarks part of the savings generated from this financial operation for a development programme. In short, a development partner enables the country to refinance its debt at a lower cost, and in return the government commits to channel the resulting fiscal space into SDG-related programmes.

D4D have attracted growing interest from policymakers. A series of large transactions since 2021 has raised the attention of civil society, the media, governments, and international institutions. While D4D were never presented as a "magic bullet" to resolve the challenges of debt, nature, and climate, expectations that they could deliver transformative results were high. In practice, they are now seen as one of several instruments to help address these challenges and, more importantly, to fund a country's nature and climate commitments without increasing its debt burden. D4D featured prominently at the Spring Meetings in Washington (April 2024), notably in discussions on the World Bank-IMF three-pillar approach to tackle debt vulnerabilities. D4D were also referenced in the "Compromiso de Sevilla", the outcome document of the Financing for Development process in 2025, which supports the scaling up of debt swaps to lower the cost of borrowing for solvent developing countries. In Sevilla, the Spanish government and the World Bank launched platforms aimed at responding to this call.

As transactions increased in 2024, now is a good time for a detailed analysis of their financial impact. Until recently, the market remained small in terms of both the amount of debt refinanced and the development financing pledged. However, 2024 marked a turning point: the number of D4D increased from five to nine, with debt refinancing reaching $6.8 billion and generating $2.1 billion for development and nature/climate objectives.

These amounts remain modest, as swaps are complicated transactions involving a large set of actors. To make swaps matter for development, some degree of simplification and homogenization is needed. Meaningful efforts have already been displayed, such as a recent publication by a group of NGOs outlining best practices. But are we there yet? How far are debt swaps from becoming a coherent asset class? This note seeks to answer this question. It begins with a review of the four most recent deals to show that while some lessons have been integrated and transaction costs are falling, many details still make it difficult to transform swaps into an asset class (section 1).

Additionally, this note examines gaps in the reporting of financial savings methodology. A central argument in favour of swaps is that credit enhancement allows funds to be freed up for development. However, we demonstrate that "how much money" is often impossible to determine. Reported aggregate savings are, at best, incomplete; at worst, misleading. Greater transparency about how savings are

[1] This paper does not cover bilateral/official debt swaps (e.g. grant based government-to-government arrangements), whose economics, governance, and policy processes differ materially.

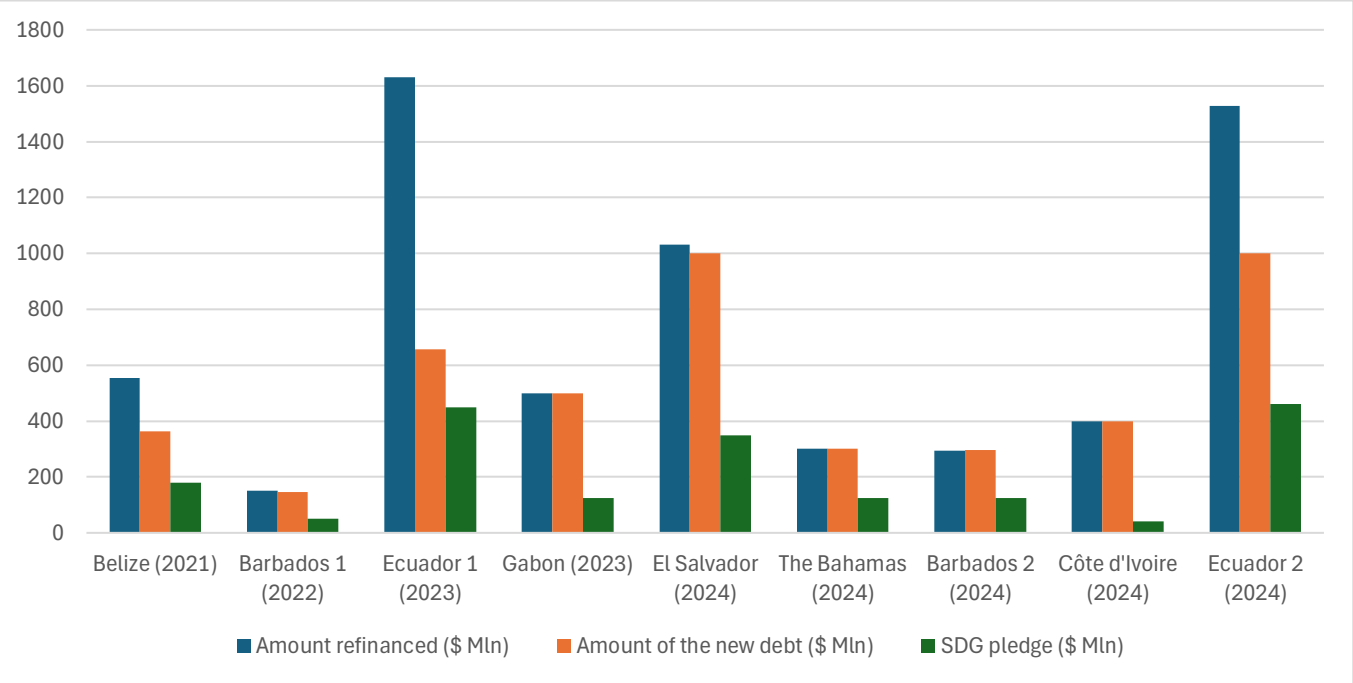
calculated would enable governments, as well as financial actors and potential credit enhancers, to better understand the possible gains (section 2).

1. Can swaps become an "asset class"?

1.1. A growing set of deals

In late 2024, the D4D market experienced **its most significant expansion to date.** The number of operations doubled (from 5 to 9), the total volume of debt refinanced increased from $2.8 billion to $6.4 billion, and sustainability-linked pledges rose from $1 billion to $2.1 billion. This wave of deals appeared to validate D4D as a scalable instrument for channelling climate and nature finance.

Figure 1 – D4D since 2021



However, the surge ended abruptly. As of mid-2025, no new transactions have been finalized. The last recorded deal, the second Ecuador swap, closed in December 2024. One major factor behind this slowdown appears to be heightened uncertainty regarding the role of the U.S. Development Finance Corporation (DFC), which had previously been the most active credit enhancer, supporting half of all D4D deals. Another key factor could be bandwidth: since most credit enhancers do not originate these deals and only a few qualified sponsors and practitioners can elevate them to investable quality, the limited pool may have been occupied by 2024 transactions. This could slow the introduction of new projects in 2025.

It is tempting to attribute this stall entirely to the return of the Trump administration and its shift in development finance priorities. While the diminished role of the U.S. DFC is indeed significant, 2024 also saw new players step in, such as the European Investment Bank (EIB), the Development Bank of Latin America and

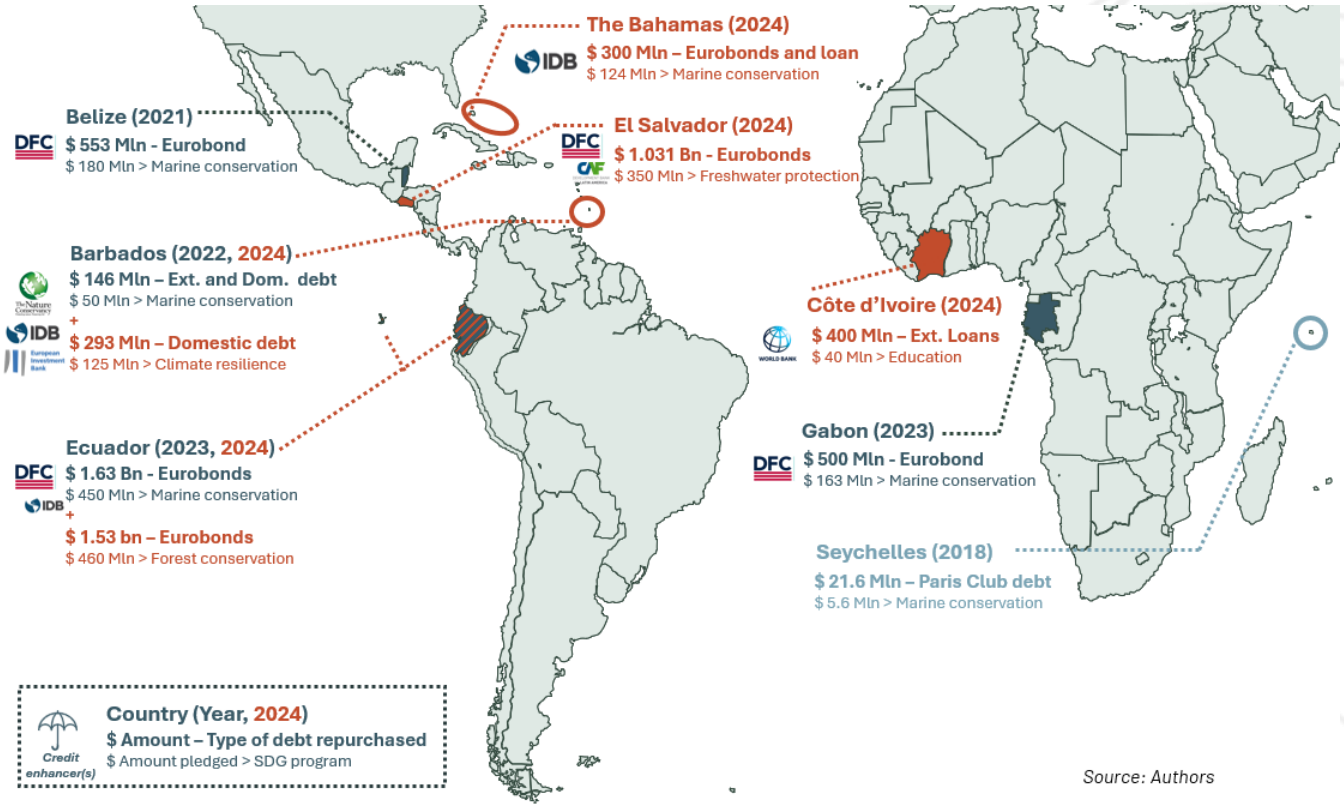
the Caribbean (CAF), but also the World Bank, which is not just an additional credit enhancer but offers the possibility to structure D4D quite differently. Their involvement could have helped offset the withdrawal of the DFC. The fact that this did not occur is probably a sign that these new players require some time to adjust, but it could also imply that other structural issues may be at play.

This section seeks to unpack what drove the 2024 boom and why it did not continue into 2025. It begins with a snapshot of the five most recent deals. A more detailed analysis of each is provided in the annex, using FDL's E-I-G framework (Economics, Impact, Governance) developed by Kessler, Albinet, and Chekir (2024). We then assess the factors that enabled the surge, and why momentum has since faded.

1.2. A pivotal year: deal-by-deal snapshot of 2024

In the final quarter of 2024, five commercial Debt-for-Development Swaps were successfully executed across Latin America, the Caribbean, and West Africa (see Figure 2). These operations varied significantly in their economic characteristics (see Table 1) and in their thematic focus, ranging from biodiversity conservation and ocean protection to climate resilience and education (see Table 2). Collectively, they demonstrate the growing sophistication and diversity of the D4D market, offering a valuable snapshot of the innovation that defined the 2024 wave.

Figure 2 – Map of D4D since 2018



El Salvador (October 2024): $1 billion swapped – A first river conservation swap

In October 2024, El Salvador completed a D4D transaction supported by the U.S. DFC and CAF. The operation refinanced $1 billion in external debt and allocated $352 million to initiatives aimed at preserving vital river ecosystems. Alongside Ecuador's two deals, this transaction was one of only three in the billion-dollar range and marked a pioneering step to incorporate freshwater resource protection into sovereign debt strategy. However, the impact of this transaction is difficult to assess based on available information. It drew scepticism from market analysts due to El Salvador's relatively low biodiversity scores and elevated bond prices (Bloomberg, 2024). Applying the E-I-G framework, this deal appears to be primarily a liability management operation (LMO) with limited economic upside: while it may have slightly lowered borrowing costs, it did not reduce the debt stock or significantly extend maturity. From an impact perspective, closer scrutiny will be needed to assess the government's long-term commitment to the conservation programme.

The Bahamas (November 2024): $300 million swapped – Does this deal get closer to a pattern?

Announced in late November, this was The Bahamas' first D4D, and it bears a strong resemblance to previous swaps conducted since 2021. It involved a mix of bonds and loan buybacks, with the resulting savings redirected to a fund for ocean conservation, and was implemented with the support of The Nature Conservancy (TNC). At first glance, the transaction seemed to follow an increasingly familiar pattern. However, the credit enhancement structure reveals once again that there is no standard to speak of yet. As the Inter-American Development Bank (IDB) credit enhancement structure requires a co-guarantor, the operation also includes a commercial insurance policy from Axa XL and a $70 million guarantee from impact investor Builders Vision. While pairing partial MDB guarantees with private insurance is not new, the inclusion of a mission-driven guarantor is novel and important: by accepting concessional pricing and flexibly absorbing specific risks, it extends scarce MDB guarantee capacity and lowers the all-in cost of borrowing. Such catalytic participation from philanthropies and impact investors demonstrates how they can help scale D4D by supplementing limited concessional support, crowding in commercial cover, and accelerating the execution of bankable pipelines.

Barbados (December 2024) and Ecuador (December 2024): setting up a pipeline?

In early December, Barbados carried out a second D4D, this time focusing solely on domestic debt. The operation involved a $293.3 million buyback of local currency bonds held by their national pension fund (with average interest rates around 8%), financed by a $297 million guaranteed Sustainability-Linked Loan (SLL) at a 3.25% interest rate. This second swap marks a departure from the first D4D completed by Barbados in 2022. It featured new participants, the European Investment Bank (EIB) and the Green Climate Fund (GCF), and introduced a new approach: upfront financing of climate-resilient infrastructure, rather than long-term conservation pledges. On December 12, 2024, Ecuador completed its second D4D, restructuring $1.5 billion in Eurobonds. Over 17 years, the country committed $460 million to Amazon rainforest conservation. This operation is the largest to date in terms of SDG-linked commitments and closely mirrors Ecuador's first D4D in 2023, which supported Galápagos protection. Similar to the earlier deal, Ecuador used a special purpose vehicle (SPV) backed by U.S. DFC credit enhancement to issue AA rated notes (while Ecuador holds a CCC+ rating). The swap targeted the same bonds (maturing in 2030, 2035, and 2040), indicating a deliberate strategy to replicate the legal and financial architecture of the first deal. Unlike Barbados' evolving approach, Ecuador opted for repetition, emphasising the importance of legal continuity and market familiarity in executing large transactions.

Côte d'Ivoire (December 2024): €400 million swapped – Education-focused and structurally innovative

On 5 December 2024, Côte d'Ivoire closed a €400 million commercial debt refinancing, supported by a partial Policy-Based Guarantee (PBG) from the World Bank (60%). The operation is expected to generate up to €60 million in fiscal savings, with €40 million (two-thirds) allocated to constructing new schools. The extension of the maturity is notable: the new guaranteed loan has a 15-year term, including a 6-year grace period, leading to a longer debt profile and temporary debt service relief. From a debt management perspective, the operation also defers €330 million of debt service due in the next five years. What makes this operation particularly noteworthy is that it marks the first use of the World Bank and IMF's "Approach Framework" for debt-for-development swaps. Unlike most other swap structures, which often rely on separate trust funds to manage pledged savings, this framework keeps the funds within the government budget. It should reduce transaction costs and avoid setting up parallel systems. Instead, the savings are earmarked within the national public financial management system and channelled through an existing World Bank–supported education programme. This approach is expected to ensure stronger alignment with country priorities and capitalise on existing monitoring mechanisms. On the financial side, the operation provided Côte d'Ivoire with important temporary debt service relief by extending the maturity profile of its debt portfolio. According to Diwan and Devie (FDL, 2025), the operation had a positive impact on market confidence in Côte d'Ivoire's creditworthiness, helping to reduce the country's borrowing costs by an estimated 30 basis points.

Table 1 – The economic impact of last D4D transactions

	El Salvador (2024)	The Bahamas (2024)	Barbados (2024)	Côte d'Ivoire (2024)	Ecuador 2 (2024)
Financials of debt buyback operations					
1) A debt buyback					
Bonds repurchased	***7*** *Eurobonds (partially) with maturities from 2027 to 2052*	***6*** *Eurobonds (partially) with maturities from 2028 to 2038 and* ***1*** *loan*	***3*** *Domestic bonds (partially)*	*Commercial Loans with maturities from 2028 to 2032*	***3*** *Eurobonds (partially) with maturities from 2030 to 2040*
Amount repurchased (face)	*USD* ***1,031*** *m*	*USD* ***300*** *m*	*USD* ***293*** *m*	*EUR* ***400*** *m*	*USD* ***1,527*** *m*
Tender price (% face)*	***91*** *% (average)*	***99*** *% (average)*	*100%*	*100%*	***63*** *% (average)*
2) A debt issuance					
New amount issued (type of instrument)	*USD* ***1,000*** *m (loan)*	*USD* ***300*** *m (loan)*	*USD* ***297*** *m (SLL)*	***EUR 400*** *m (loan)*	*USD* ***1,000*** *m (Bond issued by SPV)*
Tenor (WAL)**	***20*** *years (15 years)*	***15*** *years (10 years)*	***20*** *years (12.6 years)*	***15*** *years (12.5 years)*	***17*** *years (12 years)*
Coupon/Interest rate	*n.a*	***4.70%***	***3.25%***	***5-6%***	***6.03% bond***
Rating	*n.a*	*n.a*	*n.a*	*n.a*	*Aa2 - a 16 notch upgrade*
Main stakeholder invovled					
Credit enhancers	*US DFC & CAF*	*IDB, Builders Vision & Axa XL*	*EIB & IDB*	*The World Bank*	*US DFC & IDB*
Arrangers	*JP Morgan*	*Standard Chartered Plc*	*CIBC Caribbean Bank*	*MUFG*	*Bank of America*
SDG Sponsors	*Catholic Relief Services & Environmental Investment Fund of El Salvador*	*TNC*	*None*	*None*	*TNC*
Overview of the financials for the sovereign					
Reported Savings (of which debt stock reduction)**	*USD* ***352*** *m (USD 31)*	*USD* ***124*** *m (USD 2 m)*	*USD* ***125*** *m (none)*	*EUR* ***60*** *m (none)*	*USD* ***800*** *m (USD 527.5m)*
Average maturity extension***	*-* ***0.8*** *year*	*+* ***5.2*** *years*	*+* ***0.6*** *years*	*+* ***8*** *years*	*+* ***2.1*** *years*
Credit rating impact	*None*	*None*	*None*	*None*	*None*

* When the repurchase price is not available we assumed it to be equal or above 100%. In the case of Côte d'Ivoire, the commercial loan repayment probably generated fees added to the par amount

** The weighted average life (WAL) of the new financing is generally not publicly disclosed. In cases where this information is unavailable or could not be retrieved from sources close to the deal (e.g. El Salvador), we assume a linear amortization schedule beginning at mid-life of the loan.

*** Figures are drawn from official communications. Inconsistencies may arise: for instance, some countries report savings in present value terms (e.g., Côte d'Ivoire), while others appear to use nominal terms (e.g., El Salvador). Debt stock reduction is calculated as the difference between the face value of the new debt and that of the existing debt. In some cases, structuring costs may also be deducted from this amount.

**** Difference between the WAL of the new debt and the WAL of the existing debt repurchased

Table 2 – Sustainability impact of last D4D transactions

	El Salvador (2024)	The Bahamas (2024)	Barbados 2 (2024)	Côte d'Ivoire (2024)	Ecuador 2 (2024)
Financials of debt buyback					
1) An ambitious sustainability program (or project)					
Sustainability Impact	Nature	Nature	Climate	Social	Nature
Areas targeted	Water and biodiversity	Marine conservation	Climate resilience	Education	Forest conservation
key metrics of sustainability	• Conservation and restauration of the Lempa River watershed (49% of the territory, 68% of national water needs)	• Protection of the existing bahamian marine protected area (6.8 millions hectares) • Restoration of mangroves and other new projects	• Investment in a new water treatement plant to enhance water resilience	• Construction of 30 additional schools by 2030	• Conservation of terrestrial and freshwater ecosystems in the Ecuadorian Amazon. • Improvement of the management of 4.6 million hectares of existing protected areas, protect an additional 1.8 million hectares of forests and wetlands and 18,000 kilometers of rivers
2) A dedicated financing scheme					
Financing size (duration of the project)	USD **350**m (**20** years)	USD **124**m (**15** years)	USD **125**m (**20** years)	EUR **40**m (**5** years)	USD **400**m + USD **60**m from endowment returns (**17** years)
Financing structure	• Annual contribution to an existing conservation fund (FIAES) • Annual contribution to an endowment fund to be invested and keep funding the program beyond 2044	• Annual contribution to an existing cnservation fund (BPAF) • Annual contribution to an endowment fund to be invested and keep funding the program beyond 2039	• Upfront investment financed through loans and grants from the IDB and GCF and reimbursed by the savings from D2S • Excess savings allocated to a independent account to support additional investments	• Part of the savings from the D2S to be used to build the schools over 5 years • Excess savings will not be allocated	• Annual contribution to a new conservation trust fund (Fondo Biocorredor Amazonico) • Annual contribution to an endowment fund to be invested and keep funding the program beyond 2041
Upfront payment	None	n.a	USD **110**m	None	n.a
Annual financing flows - from the Governement	US **17**m	US **8.3**m	US **6.3**m	EUR **8**m	US **23.5**m
o/w to the endowment fund	USD **7**m	c. USD **1.3**m	n.a	None	c. USD **4.5**m
o/w to the program	USD **9.75**m	c. USD **7**m	n.a	EUR **8**m	c. USD **19**m

1.3. What fueled the surge of D4D?

Three distinct forces combined to drive the 2024 acceleration in Debt-for-Development swaps. First, countries continued to face liquidity pressures, particularly those with limited or no access to international markets. Second, the scarcity of concessional climate finance made D4D an attractive tool to channel private capital towards long-term SDG goals. Third, the accumulation of experience since 2021 allowed for greater institutional readiness, resulting in larger, more diverse, and more efficiently executed deals. We question whether these tailwinds can lead to the creation of a new asset class.

i. Continuing high liquidity pressures

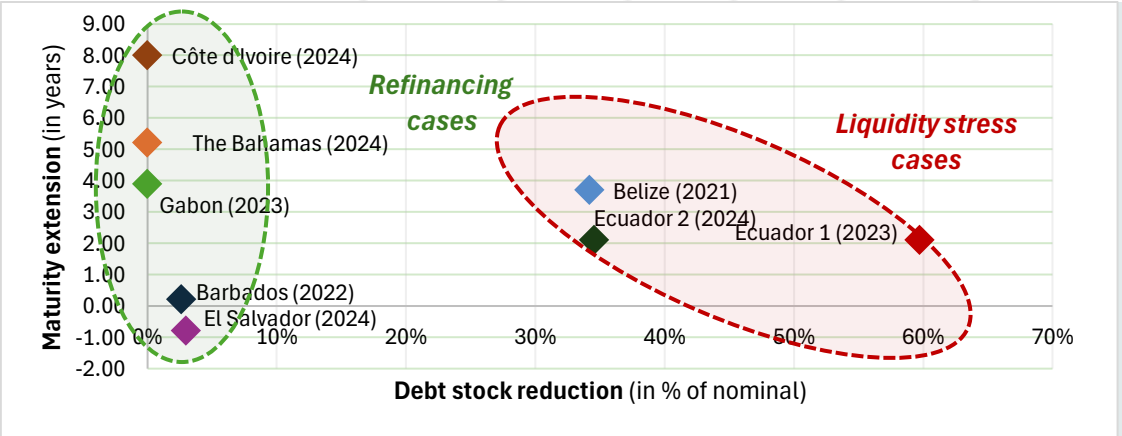
The macroeconomic context that spurred the first wave of D4D in 2021 remained relevant in 2024. After the COVID-19 shock, many low- and middle-income countries (LMICs) were effectively shut out of the Eurobond market, even as major repayments loomed. Elevated yields and discounted bond prices created opportunities for buybacks—provided credit-enhanced funding could be mobilized. Though fears of a widespread debt crisis have since receded, LMICs still face large external debt burdens. Rising U.S. interest rates and global uncertainty have kept financing conditions tight.

Recent transactions reveal a growing bifurcation in the D4D market between two use cases:

- **Refinancing swaps**, where existing debt is repurchased at or near par, and replaced with longer-term, cheaper, credit-enhanced debt. These transactions resemble traditional liability management operations (LMOs), but for countries with restricted access to the capital market, delivering them maturity extension without substantial nominal debt relief.
- **Liquidity stress swaps**, where the existing debt (which generally has a long remaining maturity) is bought back at significant discounts, resulting in upfront debt stock reductions, though often with shorter maturity gains (the new debt's maturity is close to the existing debt maturity).

According to this framework, four of the five deals in 2024 fall into the refinancing category (see Figure 3). In El Salvador, The Bahamas, and Barbados, Eurobonds were bought back at little or no discount. In Côte d'Ivoire's case, the repurchased debt consisted of commercial loans, which could only be prepaid at par or at a premium. Only Ecuador's second swap generated a meaningful debt stock reduction, although even it exhibited some refinancing features (see Box 1).

Figure 3 – Economic map of commercial debt swaps since 2018



Source: authors' calculations

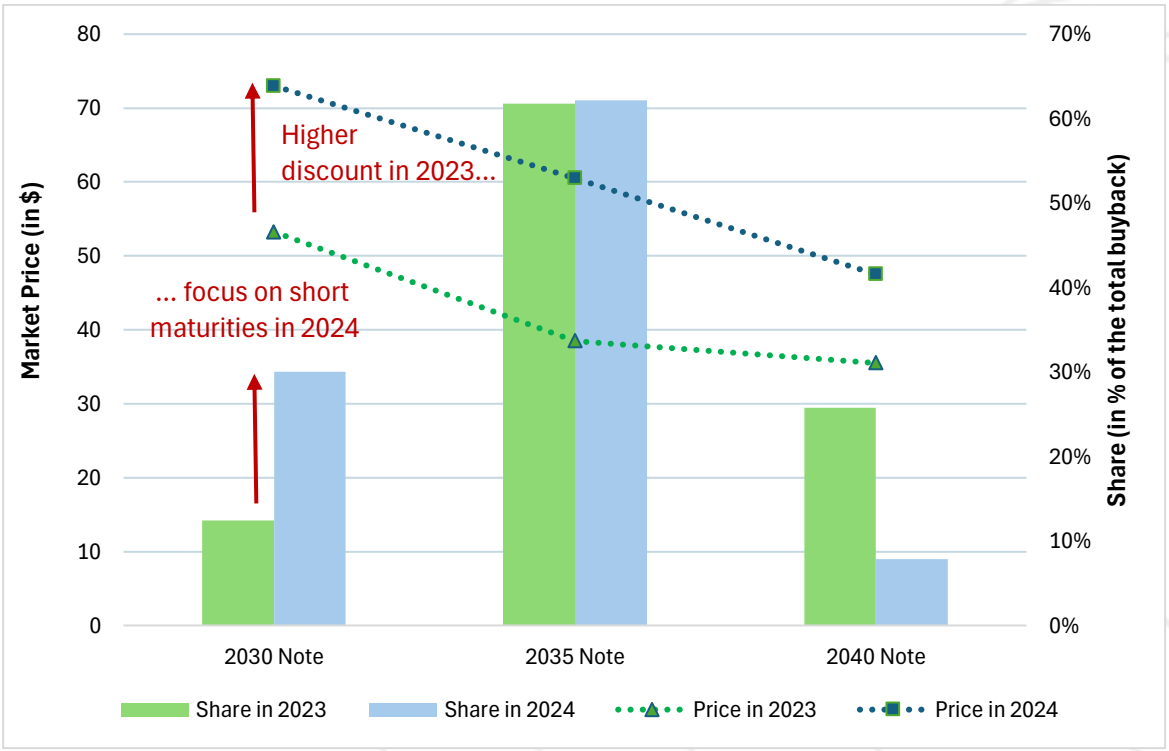
Box 1 – Ecuador's second D4D: Refinancing or liquidity stress?

Ecuador's second D4D is the only recent transaction that qualifies as a liquidity stress case. In 2023, the country's first swap delivered a $974 million debt stock reduction, although it only marginally extended maturities. The 2024 deal featured a smaller nominal reduction (around $528 million) but a more substantial maturity extension.

The average discount on the bonds repurchased in 2024 was 35%, down from 60% in 2023. This lower discount likely indicates improved investor sentiment and bond pricing, which may suggest better perceived debt sustainability. Although Ecuadorian bonds still hold a CCC+ rating from Fitch, no downgrade occurred following the transaction, as it was not considered a Distressed Debt Exchange (DDE).

Interestingly, Ecuador's 2024 swap still achieved a maturity extension of over seven years, compared to just two years in 2023. This difference stems from two factors: (i) a shift in the composition of the repurchase towards shorter-maturity bonds, and (ii) a sharp rise in the price of near-term bonds (e.g., 2030s), which were repurchased at 73 cents on the dollar. The outcome is a hybrid transaction - part debt relief (liquidity stress swap), part inexpensive liability management operation (refinancing swap) - that prioritizes maturity smoothing.

Figure 4 – Comparison of the two Ecuadorian D4D



Source: authors' calculations

ii. Contributing to the private mobilization agenda

The financing gap for climate and biodiversity goals continues to widen. Public funds remain scarce, and calls to scale up private sector involvement have become increasingly urgent. D4D provide a compelling solution by aligning concessional guarantees or insurance with SDG spending, while also enabling private investment flows into countries facing high borrowing costs.

This potential was underlined in two major forums in late 2024. At COP16 in Cali, D4D were highlighted as a key tool for biodiversity conservation. At COP29 in Baku (the "climate finance COP"), the disappointing outcome of the New Collective Quantified Goal (NCQG) further underscored the need for alternative instruments to mobilize both mitigation and adaptation finance.

Recent reductions in Official Development Assistance (ODA) will increase the need to crowd-in private capital, which D4D can do efficiently. The credit enhancement aspect of D4D has shown promise in crowding in private investment for LMICs. By providing a credit uplift, D4D helps countries with low credit ratings to tap pools of investors that would otherwise not be interested in their signature. This unique feature helps create access to private capital while partly aligning it with one's country's SDG strategy.

iii. Channeling predictable, long-term domestic resources to SDG

D4D also help governments commit predictable, long-term domestic resources to SDG programmes. D4D transactions allow savings to be programmed into national budgets over a 15- to 20-year horizon (Ababou 2025). Data from 10 debt swaps, both commercial and bilateral, confirm that average SDG pledge durations align with loan maturities, typically around 16 years, which generally go beyond political cycles.

However, the rigid governance structures used in most D4D deals have triggered legitimate concerns. Many transactions include cross-default clauses meant to give the commitments real 'teeth' by making a failure to honor pledged disbursements trigger broader default consequences. They might also require establishing offshore special purpose vehicles (SPVs) or conservation trust funds (CTFs), which can be legally complex structures (Eurodad 2023).

This has led the IMF and World Bank to develop their "Approach Framework" (IMF & World Bank, 2024), which encourages the use of local public financial management (PFM) systems instead of CTFs established and administered outside the country. Côte d'Ivoire's education swap, the only deal to apply this approach, channels the savings directly through the national budget.

While these concerns are valid, few credit enhancement providers will be willing or legally able to rely solely on government systems. SPVs and CTFs are likely to remain a regular feature in D4D deals. Setting up these legal entities might increase transaction costs and absorb a share of the savings, reducing the attractiveness of D4D for debtor countries. However, when debt swaps target long-term commitments, such as conservation programmes, strong legal safeguards will still be needed to ensure the integrity of the pledged funds, which is the role of CTFs. The challenge is not to discard entirely deal

architectures that involve such elements, but rather to standardize them to reduce costs while preserving accountability, credibility, and transparency.

iv. Converging currents: repeat issuers meet new sponsors.

In terms of issuers, the 2024 wave reflects both consistency and innovation. Two countries (Ecuador and Barbados) returned to the market, likely drawing on their previous experience. However, repeated engagement did not necessarily speed up the process: Barbados' second swap took over a year to complete after its initial announcement. Additionally, the structure and objectives of second-round swaps often varied significantly from earlier ones. Simultaneously, three new countries (El Salvador, The Bahamas, and Côte d'Ivoire) entered the market, adding geographic and sectoral diversification. Côte d'Ivoire, notably, became the first LMIC to complete a commercial D4D.

Credit enhancement actors also diversified the D4D landscape. Until recently, the U.S. DFC had dominated the space, supporting all the largest deals. In 2024, however, new guarantors stepped in. The EIB participated in Barbados, CAF supported El Salvador, and the World Bank facilitated the Côte d'Ivoire operation. This shift could help reduce dependence on any single actor, although the pause in DFC activity still casts a shadow over future scalability.

Implementation partners also evolved. While The Nature Conservancy and Pew Charitable Trusts remain central, new NGOs such as Catholic Relief Services played a lead role in El Salvador. This reflects the growing professionalism and institutional support behind D4D. This wider array of SDG-focused organizations echoes the launch of a coalition of civil society actors at COP16 in Cali.

Finally, new donors played a catalytic role in several deals. Philanthropies and climate-focused funds participated in some deals, following the steps of more established donor institutions, and benefited from the strong legal framework offered by D4D. In Barbados, the GCF added a $40 million grant to the climate resilience investment. In The Bahamas, Builders Vision provided a $70 million guarantee alongside the IDB and Axa XL. These contributions suggest that philanthropies and impact investors can help scale D4D by capitalizing on the transactional framework and supplementing concessional support.

v. From transaction to a product: will D4D become an asset class?

What is an asset class? An asset class is a set of financial instruments that share common features, are priced similarly, and trade consistently enough to allow relative value comparisons. D4D swaps are structuring transactions that retire old debt and create a new instrument; they are not, in themselves, an asset class. If anything qualifies, it would be the resulting instruments that emerge from the swap, typically sovereign loans or SPV notes with official credit enhancement and sometimes an ESG, blue, or green label. Whether these resulting instruments can ever meet a strict asset-class test depends on how far the market moves toward standard term sheets, core covenants, consistent disclosure and reporting, and genuine tradability.

Why are D4D not an asset class yet? The current market remains boutique and heterogeneous. Many

transactions consist of privately placed loans or non-listed notes, with limited or non-existent secondary trading, which limits price discovery and benchmark development. Documentation, amortization profiles, and enhancement structures can differ from deal to deal, making it impossible for investors to rely on a standard template. The investor base remains narrow, with traditional EM bond investors showing limited interest in heavily de-risked assets, while those focused on high-credit-quality instruments may be less attracted to guaranteed structures compared to plain-vanilla bonds. There is also an ongoing debate over ESG labelling, as only a small portion of nominal value funds have SDG programmes.

How could building an asset class benefit the market? A more standardized product family would enable clearer pricing for a broader market, which together could support scaling. The deals closed so far hint at this potential through repeat issuers like Ecuador and Barbados, a larger pool of participants including EIB, CAF, and the World Bank on the enhancement side, new NGO implementers, and catalytic donors such as the Green Climate Fund and Builders Vision. Turning this promise into reality now requires deliberate standardization of term sheets, enhancement configurations, covenants, and disclosures, along with transparent and comparable financial metrics.

In short: the 2024 wave still represents the laboratory phase of D4D. Whether this stream grows into a river depends on exogenous factors, such as macroeconomic conditions and bond trading trends, but also on institutional efforts that can be achieved in the short to medium term. Standardization is a critical lever: by developing practice standards, replicable structuring approaches, and legal templates, transaction time and costs could be reduced, and more deals should come to fruition (see Box 2).

Also important is the establishment of robust and transparent financial metrics, which can help policymakers, investors, and guarantors assess the value of each deal. Without transparency in how savings are calculated, it becomes impossible to build a trusted and comparable market. The following section emphasizes this aspect, highlighting the urgent need to improve the transparency and comparability of D4D transactions and to lay the foundation for a credible expansion of D4D mechanisms.

Box 2 - The path to standardization

Calls for greater standardization have arisen throughout the D4D ecosystem. Civil society advocates were likely the first to call for more transparency and accountability (Eurodad 2023), but private sector stakeholders—whose essential services contribute to the high cost of swaps—have also joined the effort (Clifford Chance, 2023) and were recently supported by international experts (Expert Review on Debt, Nature and Climate, 2025). There is a precedent for how norms can influence a market. The Green Bond Principles developed by ICMA have been instrumental in mainstreaming thematic bonds. They provided the market with a reference framework, lowering barriers to entry and boosting investor confidence.

These calls have finally produced results. Standards focused on sustainability-linked financing, such as D4D, were already established by the Task Force on Credit-Enhancement for Sustainability-Linked Sovereign Financing, which brings together key practitioners and credit-enhancers (2024). At COP16 in

Cali, a coalition of major conservation NGOs launched a joint initiative to formalize good practices, led by The Nature Conservancy (TNC), which had already set an example by publishing a "toolkit for nature bonds" (May 2024). This work culminated at the 2025 Financing for Development Conference (FfD4), where the group released the "Practice Standards for Debt Conversion Projects for Nature, Resilience and People." It is the most comprehensive attempt yet to establish shared expectations in this area.

This new benchmark document provides 26 standards across five categories:

(1) Nature, Resilience, and People: ensuring that commitments are co-developed, rights-based, and environmentally sound;
(2) Governance and Operations, including the designation of credible sponsors and independent Conservation Trust Funds (CTFs);
(3) Financial Transaction Standards, which address transparency before and after closing and fee structures;
(4) CTF Management, aligned with international best practices for these types of structures and ensuring local access to grants; and
(5) Monitoring and Reporting, ensuring that progress is independently verified and disclosed.

These standards represent a major step forward. They have the potential to facilitate the sharing of language and operational benchmarks, and to enhance efficiency, comparability, and confidence in the D4D space. However, it is unlikely that a single standard will exclude other frameworks. The IMF–World Bank framework, with its focus on national PFM systems, already offers an alternative model. Moreover, these new standards will need to align with existing frameworks, such as standards for use-of-proceeds bonds and sustainability-linked instruments, which are increasingly used to finance debt conversion transactions. Much will depend on how the market adopts and adapts these welcome practices, but their publication marks an essential milestone on the path from bespoke innovation to structured, scalable finance.

2. Growing these streams: transparency for practitioners

Despite growing interest, D4D remain niche instruments. We believe that a major constraint to their expansion is the lack of transparency and standardized methodologies, particularly around how financial savings are calculated. Greater clarity on these two fronts would not only increase credibility and comparability but could also help scale the instrument.

One of the four criteria laid out in the Approach Framework, developed by the IMF and World Bank in 2024, highlights the need to assess **the net financial gains for the debtor country.**

This section recommends adopting a **standardized savings calculation methodology**. While increased transparency alone might not trigger new deals, it would establish a common language among stakeholders, facilitate better deal structuring, and help civil society, donors, and market participants evaluate D4D objectively.

2.1. Why transparency in savings calculations matters

Currently, there is no standardized method for calculating the fiscal savings from a D4D. Official announcements often cite headline savings figures without disclosing the methodology, which can lead to confusion and, in some cases, overestimating the benefits. This undermines the credibility of these instruments among stakeholders, especially debtor countries whose future budgets will be constrained by the SDG pledge. We believe it is important to establish this figure in a fair and transparent way.

The IMF and World Bank provide a comprehensive method to evaluate the net benefits generated by D4D. According to the Approach Framework, net benefits are defined as the aggregate of all positive and negative financial effects resulting from a debt swap. These benefits mainly include savings from the operation, whether through a reduction in debt or lower borrowing costs. They should also consider potential "spillovers" triggered by the transaction, such as changes in the country's perceived creditworthiness and, by extension, future borrowing costs. In other words, if a country can borrow at cheaper cost because the market views the D4D favorably, this should be included. Spillovers can be positive, if they enhance creditworthiness; neutral, if the swap is seen as just a routine LMO; or, more rarely, negative, if the market perceives the operation as a Distress Debt Exchange.

Following this principle, the World Bank has proposed the following formula to assess the net benefits of a debt-for-development swap:

$$\text{Net Benefits (NB)} = \underbrace{[\,PV(N - N')\,]}_{\text{(i) Direct benefits}} + \underbrace{\Sigma_{t+1..t+3}\, PV_n(y-y')\,]}_{\text{(ii) Financial Spillover}} * \underbrace{(1-PD')}_{\text{(iii) Non-default}} + \underbrace{[\Delta PD\,(CD - PV(N))]}_{\text{(iv) Lower PD}}$$

Where:

- N= cash flows pre-swap (debt service)
- N' = cash flows post-swap, including debt service and all one-off and recurrent transaction costs and fees - y= yield pre-swap - y'= yield post-swap
- n = net commercial borrowing (per year)
- PD'= probability of default post-swap
- ΔPD = difference in probability of default post-swap
- CD = costs of default

While fundamentally sound, this approach faces practical challenges both ex ante and ex post. Prior to the transaction, accurately predicting financial spillovers is difficult. Even after the deal is completed, assessing its broader impact, especially when swaps are relatively small, remains complex. Since most D4D operations refinance no more than 3% of a country's total debt, their impact on overall debt sustainability may be too subtle to detect or model precisely. However, the situation looks different for Small Island Developing States (SIDS), where swaps can represent a much larger portion of debt; for example, Belize's 2021 deal refinanced nearly a quarter of its total debt, significantly changing the country's debt dynamics.

Given the urgent need for greater transparency, we argue, in line with market practices, that

focusing on the direct financial benefit provides a practical and straightforward way to assess D4D. The potential indirect benefits over time, such as improved market perception, higher ratings, or lower spreads, are metrics that EM investors seek. However, calculating the full range of net benefits, including indirect effects, is often too complicated for most debt managers in beneficiary countries, as well as for investors of newly issued debt who might find it too opaque or time-consuming.

By contrast, isolating the direct financial benefit (defined as the difference in borrowing costs between the new and legacy debt) is simpler and more easily observed. Although it is not a perfect measure, it provides a solid second-best solution and serves as a credible starting point for evaluating the merits of a D4D operation.

2.2. Comparing the three methods to calculate savings

We observe that there are three ways to calculate the direct benefits generated by a D4D transaction.

- **Method 1 - Nominal savings:** Compares the gross debt service (interest and principal) of the existing debt versus the new credit-enhanced debt in nominal terms.
- **Method 2 - Net Present Value (NPV) savings:** Discounts the future debt service of both existing and new debt at a common rate to reflect the time value of money (see Box 3 for explanation on how NPV works).
- **Method 3 - Counterfactual NPV savings:** Compares the NPV of the new credit-enhanced debt against a hypothetical scenario in which the country borrows on market terms (i.e., without the guarantee).

Box 3: What is present value and how is NPV calculated in debt swaps?

The Present Value (PV) is a financial concept that determines the current worth of a sum of money to be received or paid in the future, discounted at a specific interest rate. It reflects the principle that a certain amount of money today is worth more than the same amount in the future due to its potential earning capacity.

The formula for PV is: $PV = \frac{FV}{(1+r)^n}$

Where:

- PV = Present Value
- r = Discount rate
- n = Number of periods of the payment.

For example, consider a 3-year bond with a $1,000 principal and a 6% coupon paid semi-annually (3Y Existing Bond 6%). Assuming a 5% discount rate, the present value of the bond's cash flows would be:

3Y Existing Bond 6%						
Coupon payment	**1**	**2**	**3**	**4**	**5**	**6**
Outstanding	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ -
Principal	$ -	$ -	$ -	$ -	$ -	$ 1,000
Interest	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30
PV	*$ 29.27*	*$ 28.55*	*$ 27.86*	*$ 27.18*	*$ 26.52*	*$ 888.17*
Total PV	***$ 1,028***					

The choice in the discount rate significantly affects the PV calculation and, in the case of D4D, the computed savings. A lower discount rate increases the present value of longer dated debt, making the debt swap appear less beneficial. Conversely, a higher discount rate reduces the present value of longer dated debt since cash flow in the future have less value than today.

Taking again the example of the 3Y Existing Bond 6%, here are the differences in PV for 3 different discount rate (0%, 5% and 10%).

Discount rate	PV of 3Y Existing Bond 6%
0%	*$ 1,180*
5%	*$ 1,028*
10%	*$ 898*

The Net Present Value (NPV) represents the net benefit of replacing the one instrument (the current debt) with another (the new debt), taking into account the cash flows discounted at the same rate over time. Returning to our previous example, let's compute the NPV if the 3Y Existing Bond 6% is repurchased at par (100% of its nominal value) through the issuance of either a bond with a longer maturity at a higher coupon of 10% (5Y New Bond 10%) or a bond with a longer maturity but a lower coupon of 4% due to credit enhancement (5Y New Guaranteed Bond 4%). In that case, we assume a discount rate of 5% and we observe substantial differences:

	PV	NPV (vs. Existing Bond)	
3Y Existing Bond 6%	$ 1,180	Baseline (Benchmark)	0%
5Y New Bond 10%	$ 1,500	$ - 320	Loss/Higher cost
5Y New Guaranteed Bond 4%	$ 1,200	$ + 20	Savings

In conclusion, the discount rate is a key element of the discussion during a D4D elaboration. From a purely financial perspective, the higher the discount rate, the lower the constraints for the debtor country. Conversely, the lower the discount rate, the higher the NPV savings and thus the SDG pledge. The choice of the discount rate may depend on the theoretical approach and the objective pursued. A 5% benchmark rate, commonly used in IMF-WB Debt Sustainability Analyses, provides a consistent baseline across countries. However, when possible, a more refined approach could align the discount rate with the debtor country's actual sovereign yield curve, excluding the effect of credit enhancements. This better reflects the real opportunity cost of funds and allows for a more accurate assessment of the deal's financial value. Conversely, using the yield on the new, credit-enhanced debt may underestimate savings from the debtor's perspective, as it incorporates the implicit subsidy. A transparent justification for the chosen rate should accompany each D4D swap transaction.

Among the three methods to compute the financial benefits of a D4D, Methodology 2 (NPV savings) seems the most logical and reliable. It compares two visible debt profiles and discounts future cash flows to account for the time value of money. This enables a fair, standardized comparison of current and new debt instruments and captures the true financial gain from retiring expensive debt. It evaluates the difference between the country's past and current situation, supporting sound fiscal decisions. This is why NPV savings is the preferred method in the joint IMF–World Bank "Approach Framework," where it is used to measure the "direct benefits" of a debt-for-development swap.

The other two methodologies, although having some merit in specific situations, seem more arbitrary and less rigorously analytical. Methodology 1 (Nominal Savings) simply compares the total debt service (interest and principal) of the new and existing debt in absolute terms. Although this approach is intuitive and useful when a bond is bought back at a significant discount (i.e., when most savings come from reduced principal), it fails to consider the time value of money. In many cases, particularly when there is no discount (i.e., debt stock reduction) and the new debt has a longer maturity, this method can even show negative savings due to the new debt profile, which includes higher cumulative coupon payments. As a result, this approach can be misleading in most refinancing situations.

Methodology 3 (Counterfactual NPV Savings) goes a step further than Methodology 1. It compares the NPV of new, credit-enhanced debt with a hypothetical or counterfactual scenario (such as a bond issued without guarantees). This method can be adapted when a country has access to capital markets and alternative financing options. However, it introduces a fictional element by comparing a hypothetical scenario with potential savings that will be actual and binding for the country's budget. Consequently, this approach might overcomplicate the analysis or distort perceptions if the counterfactual is not clearly defined.

In summary, while all three methodologies have merits depending on the transaction context, NPV savings stands out as the most robust and transparent measure. If another methodology, particularly the nominal savings approach, is chosen instead, this choice should be explicit and clearly justified. Additionally, it is worth noting that these methodologies only capture part of the benefits and rationale of a D4D: for liquidity-constrained sovereigns, simply extending maturities can provide critical breathing space, even if the swap generates limited or no NPV savings. In such cases, the appropriate

discount rate is higher, reflecting that immediate liquidity relief is far more valuable than long-term cost efficiency.

Method & what it measures	Advantages	Drawbacks / cautions	Best used when
1. Nominal savings – Compares gross debt service (interest + principal) of existing vs. new debt in nominal terms	Simple to compute and communicate; Aligns with near-term budget cash flows; Captures immediate debt stock reduction.	Not appropriate for pure refinancing at/near par: Ignores time value; Longer maturities inflate nominal totals and can show "negative" savings.	**Liquidity-stress / deep-discount buybacks** where debt stock reduction dominates.
2. NPV savings – Discounts existing and new debt service at a standard rate	Reflects time value and maturity extension; Comparable across deals; Aligns with DSA-style analysis.	Sensitive to discount rate; May underplay near-term liquidity relief; Requires full cash-flow detail.	**Refinancing cases** with little/no discount, when comparing structures/maturities.
3. Counterfactual NPV savings – Compares NPV of new credit-enhanced debt vs. hypothetical market-term borrowing without credit-enhancement	Measures incremental value of the credit enhancement.	Counterfactual is assumption-based; Speculative if market access is closed.	**When a debtor has market access** or the cost of commercial borrowing can be credibly estimated.

2.3. Putting these methods to the test: evidence from recent deals

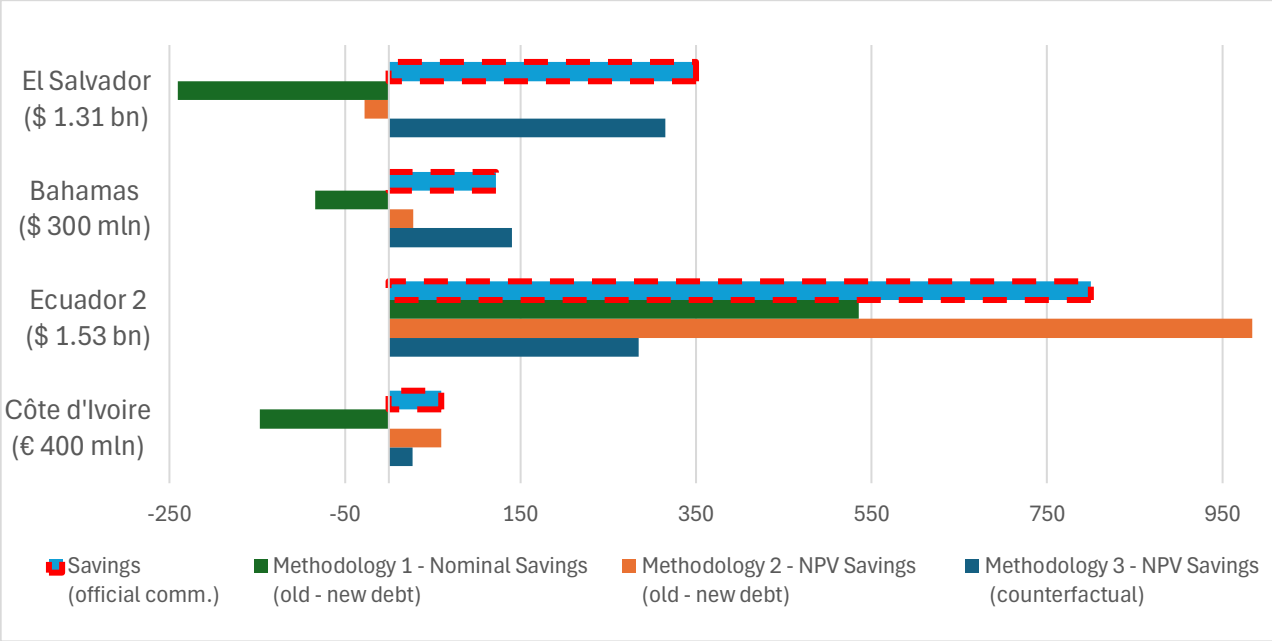
Using available data and a set of simplifying assumptions, we applied all three methodologies to four recent D4D transactions: El Salvador, The Bahamas, Ecuador (second swap), and Côte d'Ivoire. While information on the existing debt is generally accessible (especially for Eurobond repurchases), details about the new financing are often missing (in particular when bank loans are mobilized). Key parameters such as repayment structure (bullet vs. amortizing) and all-in borrowing cost (including guarantee fees) are not always disclosed. Reasoned assumptions were therefore necessary to complete the analysis.

For consistency and comparability, we applied a uniform 5% discount rate across transactions,

aligned with IMF and World Bank practices in debt sustainability analyses (DSAs). An exception was made for Côte d'Ivoire, whose Debt-for-Development Swap was evaluated using the 7.7% rate specified by the World Bank. Alternative discounting methods could also be justified, such as using the cost of the new, credit-enhanced loan (potentially a proxy for a near risk-free rate), or the sovereign's actual borrowing cost without any guarantee, which might better reflect the opportunity cost of public funds.

The results reveal significant variation in savings estimates depending on the methodology used. As expected, Methodology 1 displays negative savings in all cases except when the discount generated upfront savings (Ecuador 2). However, even in that case, it falls short of the official communication and was likely not the basis for calculating the savings. When Methodology 3 yields results higher than those of the other methodologies, it appears to have been used for official disclosures (El Salvador and Bahamas). It seems that only Côte d'Ivoire applied Methodology 2 (NPV Savings) in line with the IMF–World Bank Approach Framework, providing a rare but commendable example of methodological transparency in D4D transactions.

Table 3 – Comparison of savings estimates



Source: authors' calculations except for Côte d'Ivoire (see I. Diwan and J. Devie, 2025)

When a debtor has market access or the cost of commercial borrowing can be credibly estimated. This analysis underscores the need for standardized reporting. A uniform method for calculating savings, particularly when it impacts long-term fiscal commitments like SDG pledges, would greatly enhance accountability and comparability.

Conclusion

As of today, the Debt-for-Development Swaps landscape remains more characterized by potential than by scale. After a surge of activity in late 2024, no new transactions have emerged in the first half of this year. Unless there is another end-of-year spike (which, although unlikely, would be hard to explain), the expected stream of deals has not yet materialized. Instead, we continue to observe isolated flows.

However, the momentum from last year has not completely faded. The expanding group of stakeholders, including credit enhancers, NGOs, debtor governments, and philanthropies, has demonstrated that the instrument can succeed under the right conditions. The challenge now is to turn isolated innovations into structured replication.

This is precisely the concern echoed in the recent Expert Review on Debt, Nature, and Climate, which mapped out the many fragmented initiatives and reinforced a now widely shared conclusion: without standardization, the D4D market will remain shallow and unpredictable. Methodologies for calculating fiscal savings, as well as frameworks for measuring impact, and tools for comparing efficiency across deals need to become more transparent and harmonized if the instrument is to move beyond pilot deals.

As an independent contributor to development finance discussions, the Finance for Development Lab aims to provide practical analysis for practitioners. This article is a modest addition, another perspective in an increasingly crowded debate. We hope it offers more clarity than confusion during a time when action is critically needed.

Beyond our own efforts, other initiatives are also helping to build a stronger foundation for the market. The Practice Standards Coalition, coordinated notably by The Nature Conservancy, aims to codify good practices across design, governance, and monitoring, ensuring greater comparability and credibility of transactions. More recently, the Debt Swap Calculator developed by the World Bank offers an educational and publicly accessible tool to transparently calculate fiscal savings, allowing practitioners to anticipate what a D4D could (and should) generate under different scenarios. Together, these initiatives complement ongoing analytical work and directly address the transparency and standardization gaps that still limit the scalability of D4D.

Whether these streams will merge into a river still depends on political will, institutional alignment, and operational discipline. But if the right norms are adopted now, the next season of D4D could indeed bring more than just another brief surge.

Annex 1: E-I-G Analyses of the recent D4D

El Salvador's River Conservation Debt Swap

Context: Just another debt management operation. This D4D marks El Salvador's fourth debt buyback offer since 2022, initiated during a liquidity crisis. With a debt-to-GDP ratio of 77%, the D4D has been viewed by S&P as a strategic liability management operation rather than a debt distress exchange, with no rating action triggered (B- with a stable outlook)[2]. El Salvador was not technically locked out of the global debt market, having issued its first Eurobond in four years last April [3]. However, with a yield of 12%, this $1 billion "macro-linked bond", whose proceeds were already used to fund a tender offer, signaled the need for a cheaper way of refinancing its external debt. D4D is part of a broader refinancing strategy, alongside access to concessional finance: a few months after the D4D, El Salvador reached a financing agreement with the IMF for $1.4 billion[4].

Economics: a significant debt buy-back but providing a moderate maturity extension of its debt portfolio, without debt reduction. El Salvador repurchased $1.03 billion of bonds across its curve, representing 14% of the total Eurobonds portfolio. The weighted average maturity of the repurchased bonds, maturing between 2027 and 2052, stood at 15.8 years[5]. The operation was financed through a $1 billion loan structured by JP Morgan, credit enhanced by US DFC and the Development Bank of Latin America and the Caribbean (CAF). U.S DFC provided its usual $1 billion in Political Risk Insurance (PRI) while CAF made its first participation in a D4D by providing a $200 million standby letter of credit. This additional stand-by letter guarantees that payments will be made by CAF until the PRI from DFC kicks in. Public information on the financing scheme is limited, particularly regarding loans structured by JPM to an SPV, which allows it to issue "20-year impact notes" by El Salvador to finance the buy-back. The weighted average life to maturity of the Impact Notes is assumed to be lower than the duration of the conservation programme. If the notes are bullet (i.e, fully repaid at maturity), the maturity is 20 years, leading to a maturity extension of 4.2 years. This extension in the mean of D4D is similar to the maturity extension resulting from the D4D conducted in Gabon in 2023, which DFC already supports. If the Impact Notes are amortized with, for instance, a 10-year grace period, the average maturity would be lower, around 15.5 years, cancelling any maturity extension for the operation. We assume the latter option is closer to reality.

Impact: conservation funding, this time for freshwater preservation. El Salvador has committed to allocating $350 million over 20 years to ecosystem restoration efforts in the Rio Lempa watershed, the largest in the country and a crucial source of water security for El Salvador, Guatemala, and Honduras. Out of this pledge, $200 million is directly funding conservation efforts, and $150 million is establishing

[2] https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/type/HTML/id/3265909
[3] https://www.bloomberg.com/news/articles/2024-04-11/el-salvador-returns-to-debt-market-with-marco-linked-bond
[4] https://www.imf.org/en/News/Articles/2024/12/18/pr-24485-el-salvador-imf-reaches-staff-level-agreement-on-an-eff-arrangement
[5] https://www.prnewswire.com/news-releases/the-republic-of-el-salvador-announces-its-acceptance-of-offers-to-tender-for-cash-its-notes-302274435.html

an endowment for future projects. The funds in the endowment will be invested to become a source of ongoing funding for the conservation programme beyond 2044.

Governance: the conservation programme will be jointly managed by stakeholders who are new to the D4D space. Catholic Relief Services (CRS), the Environmental Investment Fund of El Salvador (FIAES[6]) will jointly manage the activities financed in the conservation programme, "in collaboration" with government agencies. CRS is an American international humanitarian agency that has been working in El Salvador for the last 50 years, while the FIAES was created in 1993 following a previous debt swap with the US Government. It manages several funds and claims to have invested $90 million in conservation for the last 31 years. In parallel, the El Salvadoran government will establish an entity to oversee the conservation programme. As required by US-DFC guidelines, this entity will be governed by a Board of Directors where the government represents a minority share (Ababou, 2025). In that case, the seven members include one representative from the Government of El Salvador, one from the U.S. Agency for International Development (USAID), and five non-governmental representatives.

The Bahamas D4D, a standardized deal, at last?

Context: the D4D as a strategic debt management tool. While The Bahamas does not face a particularly high debt burden, it has struggled to secure external financing, prompting the use of D4D to mitigate refinancing risks. The sinking fund, established to mitigate the rollover risk of its external debt, has diminished because the archipelago was unable to raise external financing last fiscal year. The D4D appears as a way to mitigate the refinancing risk, as well as the next available source of relatively cheap **funding in foreign currency.**

Economics: The Bahamas has purchased a large share of its short-dated foreign debt, allowing a record-breaking maturity extension for a D4D. The Bahamas secured a $300 million 15-year loan to repurchase $216 million of Eurobonds and a commercial bank loan of $81 million. The savings from the operations stem from the low borrowing cost of the credit-enhanced 15-year loan, priced at an interest rate of 4.7%. This low level was reached thanks to a $200 million guarantee from IDB, and the remainder was credit-enhanced by the private sector (Builders Vision, an impact investor, guaranteeing $70 million, and Axa XL insuring $30 million). The Bahamas deal was presented as the first involving such participation of the private sector[7], although it is worth noting that the first D4D in Ecuador already involved 11 private insurers, for reinsurance purposes this time. Given that the Eurobonds were bought back at an amount close to par and that the commercial bank loan was probably repurchased at a premium, no debt reduction results from the operation. However, the deal scores well in terms of maturity extension: The Bahamas bought back debt with a weighted average maturity of 4.78 years and subscribed to a 15-year loan with a lower WAL assumed at 10 years, leading to a 5.2-year maturity extension. This could be the most mature extension achieved by a D4D after Côte d'Ivoire.

Impact: The D4D is very similar to other operations involving ocean conservation. The $124 million in estimated savings over the next 15 years will fund the restoration of mangroves, the management of

[6] https://fiaes.org.sv/
[7] https://www.reuters.com/sustainability/sustainable-finance-reporting/bahamas-debt-swap-unlocks-124-million-ocean-protection-2024-11-22/

the archipelago's 6.8 million hectares of marine protected areas and the build out of a new project to protect the entire Bahamian ocean area. This reflects the government's commitment to preserving its **oceanic ecosystems, The Bahamas having established Marine Protected Area back since 1958.**

Governance: A co-managed conservation fund will manage the redirected savings. The Government of the Bahamas will redirect the savings to a pre-existing conservation fund, the Bahamas Protected Areas Fund (BPAF)[8]. An endowment fund is expected to grow to $20 million by 2039 ($12 million in transfers from the government and $8 million generated by the investment in the fund), which will allow it to keep funding marine conservation beyond the life of the programme[9]. The involvement of TNC, which has supported this D4D through its Nature Bonds Program and appears as a founding partner of the BPAF, is not clear. It is expected to be similar to its involvement in transactions in neighboring countries, such as Belize (2021) and Barbados (2022). This aspect, among others, makes the Bahamas deal the closest to a standardized deal, where only country-specific aspects have been adjusted.

Barbados' second D4D: same but very different

Context: Barbados continues to navigate high public debt levels. Barbados, like many Small Island Developing States (SIDS), is highly vulnerable to the impacts of climate change, including rising sea levels and extreme weather events. Concurrently, the nation has been managing substantial public debt, with a debt-to-GDP ratio of 105% as of September 2024. This new debt swap provides a dual benefit: alleviating debt service pressures while securing funding for an essential climate resilience project. It is already the second debt swap operation undertaken by Barbados, the first one being finalized in September 2022, for a smaller amount ($150 million repurchased), a different sustainable objective (marine conservation), and the guarantee and technical support from IDB and TNC (the latter not being part of this second deal)[10]. This second deal seems to have taken a long time to finalize since it was initially announced more than a year ago[11].

Economics: Barbados conducted a domestic debt buy-back financed through a guaranteed Sustainability-Linked Loan (SLL). Barbados repurchased approximately $293.3 million of its existing domestic bonds (with coupon rates of up to 8%). This was financed through a 20-year sovereign SLL of $297 million, carrying a 3.25% interest rate, and denominated in local currency. The loan is backed by $300 million in guarantees, with $150 million each from the European Investment Bank (EIB) and the Inter-American Development Bank (IDB). The operation is neutral to the stock of public debt, but the interest savings are expected to be significant, at up to $125 million, over the next 20 years[12]. Due to

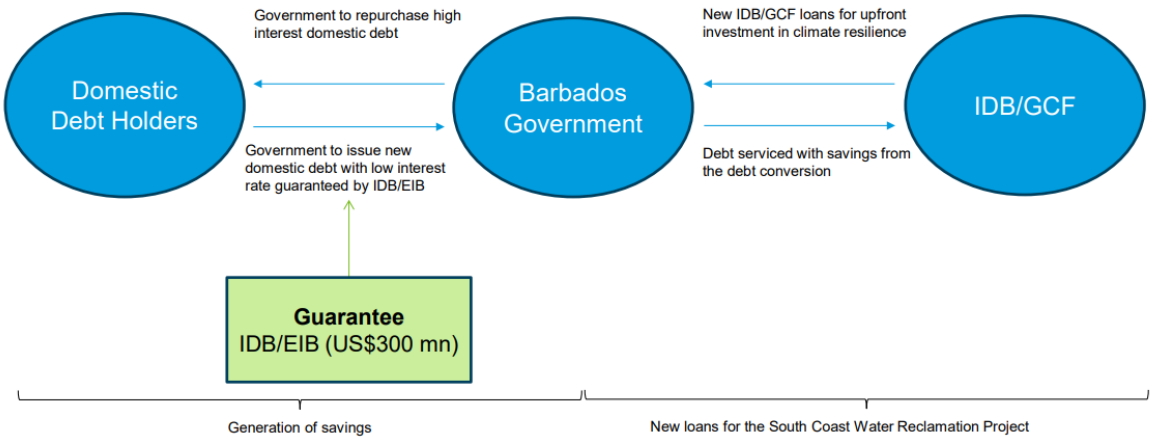
[8] https://bahamasprotected.com/
[9] https://www.nature.org/en-us/newsroom/tnc-announces-new-nature-bonds-project-bahamas/
[10] https://www.nature.org/content/dam/tnc/nature/en/documents/TNC-Barbados-Debt-Conversion-Case-Study.pdf
[11] https://www.bloomberg.com/news/articles/2023-11-10/european-investment-bank-to-back-barbados-debt-for-climate-swap
[12] In the assessment of this operation, the IMF indicates that these savings are "not accounting for the time value of money". The savings estimate of $130 million is a simple summation of future interest payment reductions over the next 15–20 years without discounting them to their present value.

insufficient information on the domestic bonds buy-back by the Government of Barbados, it was not possible to estimate the maturity extension resulting from the operation.

Impact: World's first debt swap for climate resilience. The second leg of the operation involves constructing a new water treatment plant (South Coast Water Reclamation Project) to improve water management and associated facilities, ensuring water quality is suitable for agricultural irrigation and aquifer recharge. The upfront financing for this new facility, contributing to climate resilience, will be provided through two loans from the IDB and the Green Climate Fund (GCF), for $70 million, and an additional grant from the GCF ($40 million). The loans will be serviced through the savings generated by the debt conversion.

Governance: The SLL, guaranteed by the IDB and EIB, represents the main innovation of this operation. This loan provides the necessary low-cost funding to enable the Government to directly conduct the repurchase of domestic debt (rather than through a Special Purpose Vehicle). It is distinct from the other loan provided by the IDB and GCF, which is intended for the upfront funding of an upgraded water plant. While the framework of the guaranteed SLL is not publicly accessible, it is understood that it aligns with ICMA principles[13]. The loan includes sustainable performance targets (SPTs) related to the volume and quality of reclaimed water generated by the plant. Furthermore, it includes a step-up coupon that penalizes the Republic of Barbados if the SPTs are not met; however, there is no step-down coupon if the targets are exceeded, as is the case with the sovereign sustainability-linked bond issued by Uruguay. Should Barbados incur penalties, the funds will be directed to the Barbados Environmental Sustainability Fund, a trust established for environmental investments during the first debt swap of Barbados.

Figure 5. Scheme of Barbados second D4D

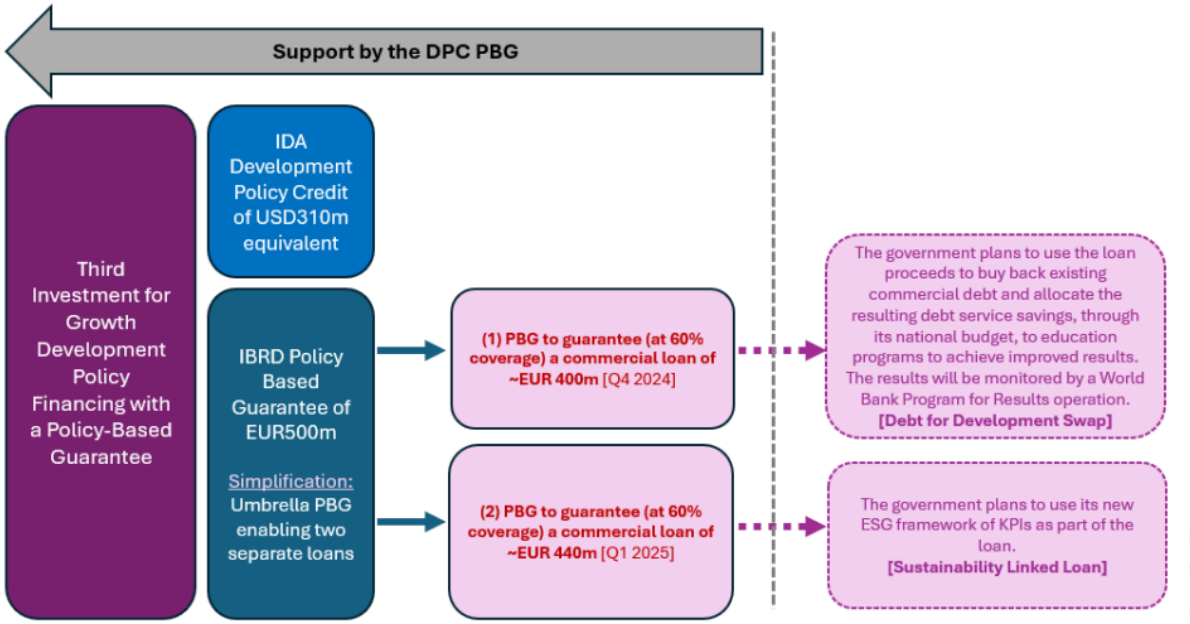


Source: International Monetary Fund

13 https://www.icmagroup.org/assets/documents/Regulatory/GreenBonds/LMASustainabilityLinkedLoanPrinciples-270919.pdf

Côte d'Ivoire's Education-Focused Swap, with World Bank Support (see. I. Diwan and J. Devie, 2025)

Figure 6. Scheme of Côte d'Ivoire's D4D



Source: The World Bank

Ecuador's second D4D, this time for Amazon protection

Context: a second D4D in a similar liquidity stress situation. This transaction is the second for Ecuador, following a similar operation in 2023, which led to the restructuring of the same Eurobond portfolio. Since the first D4D, Ecuador has remained shut out of external markets and kept seeking international financial support. In December 2024, the International Monetary Fund (IMF) completed its first review of the Extended Fund Facility (EFF) arrangement for Ecuador, which was initially approved on May 31, 2024[14]. This arrangement allows Ecuador to access a total of SDR 3 billion (approximately $4 billion), easing financing risks. This second D4D is part of the debt management strategy aiming at maintaining public debt levels on a downward path, with the objective of regaining access to international debt markets in the second half of 2025.

Economics: The D4D operation resulted in a debt stock reduction of $527.5 million and a maturity extension of 2 years. This year's deal involved the buyback of $458 million in notes due 2030 at 73 cents on the dollar, $950 million in 2035 bonds at 60.6 cents, and $119.7 million in 2040 securities at 47.5

[14] https://www.imf.org/en/Publications/CR/Issues/2024/12/19/Ecuador-2024-Article-IV-Consultation-and-First-Review-Under-the-Extended-Arrangement-Under-559780

cents[15]. The total debt reduction, achieved through these discounts, amounted to $527.5 million. The $1.53 billion bond buyback was financed by a $1 billion bond issued by Amazon Conservation DAC, a special purpose vehicle incorporated in Ireland to execute the transaction on behalf of Ecuador. The new bond has a 17-year maturity, due in 2042, and is priced at 6.034%. This favourable borrowing cost was made possible by U.S. DFC Political Risk Insurance covering 100% of principal payments and an additional $155 million liquidity guarantee from the Inter-American Development Bank (IDB) to cover two years of interest payments. These guarantees provide sufficient time for expedited arbitration and payment under the DFC PRI policy. This combination of PRI and insurance is like the Salvadorian deal, where the standby letter of credit from CAF played the bridging role that IDB's guarantee would have played. The average maturity of the bonds repurchased is around 10 years, allowing a maturity extension of 7 years, which is much more than the average maturity extension of D4D.

Impact: conservation of the Ecuadorian Amazon. The transaction is also expected to secure approximately $460 million to support the Amazon Biocorridor Program (Programa Biocorredor Amazónico, BCA) for the conservation of terrestrial and freshwater ecosystems in the Ecuadorian Amazon. The BCA Program aims to improve the management of 4.6 million hectares of existing protected areas and protect an additional 1.8 million hectares of forests and wetlands. This model will also protect 18,000 kilometers of rivers, bolster climate resilience, and support human well-being. As a reminder, the previous D4D in Ecuador was to finance the conservation of the Galapagos reserve.

Governance: The deal is expected to provide approximately $460 million to the BCA program. Most of the conservation funding unlocked by the debt conversion will be disbursed through grants from a new independent conservation trust fund, Fondo del Biocorredor Amazónico, Fondo BCA (Amazon Biocorridor Fund, BCA Fund)[16]. The BCA Fund will focus on the Ecuadorian Amazon and be run by a local board of 9 directors, including 3 representatives from the government, 1 representative from TNC, and 5 from civil society. Of the $400 million ($23.5 million per year over 17 years), $19 million will fund the Amazon Biocorridor Program annually. An additional $4.5 million annually will capitalize an endowment expected to generate approximately $60 million in additional returns. This will result in a total projected end value of $137 million by 2041, bringing the total funds for conservation expected to be unlocked to approximately $460 million overall.

[15] https://news.bloomberglaw.com/bankruptcy-law/amazon-conservation-dac-posts-results-of-ecuador-note-tender

[16] https://fondobiocorredoramazonico.org/en/about-us/

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