GENERALI INSURANCE ASSET MANAGEMENT

FOCAL POINT

Debt-for-nature swaps: an incomplete solution for financing the climate transition of emerging countries

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Our Focal Point series explores topical issues on macro, markets and investment

- **The COP 28 in Dubai has put Debt-for-nature swaps (DFNs) in the limelight while the EM countries are facing the double challenge of difficult access to primary markets and the financing of the climate transition.**
- **DFNs, where distressed debt is buyback in exchange for an ESG policy commitment, are presented as a solution. They are indeed an achievement in sovereign green financing, but they remain an incomplete solution.**
- **Their scalability and replicability remain limited given the small pool of supply available and the low investor demand due to their complexity and the risk of ESG reclassification.**
- **DFNs can contribute to easing the EM debt burden in specific cases, being a sweetener in broad sovereign debt restructuring, but it is not a solution on its own.**
- **DFNs are the solution when there is a link between climate/nature and sovereign risks like in climate-vulnerable island states. In other instances, traditional debt restructurings and conditional grants can be better solutions.**
- **ESG-wise, the DFNs size is limited compared to the financial ESG needs. They may be efficient in supporting individual issuers to restore biodiversity richness but globally, other instruments should also be promoted.**

EMs face climate and debt financing challenges

Debt-for-nature swaps (DFNs) or debt-for-climate swaps[1] are complex financial products that reduce a country's debt in exchange for a policy commitment, be it environmental or climate related. They have been in the headlines recently and have regained popularity with several deals announced over the past years in Belize (2021), Barbados (2022), and more recently Ecuador (2023) and Gabon (2023).

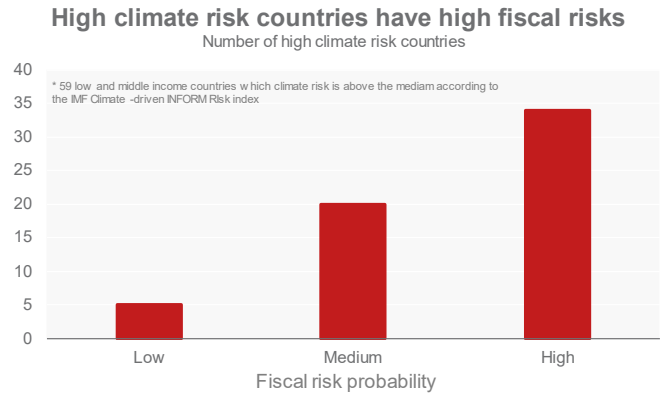
This re-emergence of debt-for-nature swaps coincides with a broader trend of sovereign issuers incorporating environmental and climate aspects into their debt instruments and the development of an ESG sovereign framework at the sovereign level for financial investors (GIAM Research: The challenge of integrating ESG into sovereign fixed income).

They have become popular as biodiversity concerns have grown during recent COPs and across the ESG industry, which was initially more focused on Greenhouse Gas (GHG)

[1] Debt-for-nature swap and debt-climate swap can be slightly different in their final purposes, but the structure remains the same.

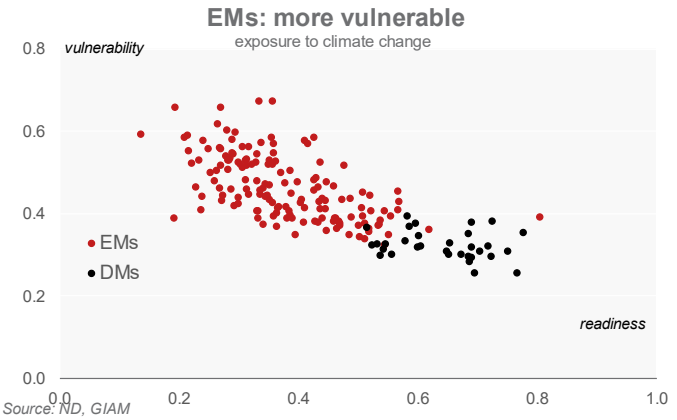
reduction projects. DFNs are seen as a new ESG instrument that can both finance distressed EMs and facilitate debt relief as global yields rise but also channel climate finance to vulnerable EMs.

EM countries are currently facing increasing difficulties in accessing primary markets, with a record number of distressed countries in the EMBIGD index and several ongoing sovereign debt restructuring discussions. 60 % of the world's poorest countries are either in debt distress or at high risk of debt distress.



Source: Chamon-Klok-Thakoor-Zettelmeyer IMF WP

The literature extensively shows that the countries that are most vulnerable to climate change are also the poorest. Climate vulnerability and fiscal risks tend to be correlated. Climate change can affect debt vulnerability by imposing fiscal costs (from the destruction of the tax base and the need to finance the rebuilding), making debt less sustainable in the long run, while high debt levels limit fiscal space for climate mitigation. The recent development of ESG sovereign frameworks across the financial industry has not been able to channel funds towards EMs and may even have the opposite effect. In fact, EM countries tend to have lower ESG scores than developed countries due to the *ingrained income bias* well flagged by the World Bank. It is the countries with the greatest need to finance their ESG transition that are not eligible for foreign inflows.



Source: ND, GIAM

Kill two birds with one stone

Policymakers are discussing new mechanisms to address these fiscal and climatic changes in EMs. In this context, DFNs have been proposed as a new instrument that could kill two birds with one stone.

The most recent transactions are complex three-partite swaps. A sovereign country buys back its bonds from private investors with a loan from a third party, usually an NGO. The third party issues new bonds to ESG investors, which can be thought of as labelled bonds to finance the initial loan to the sovereign.

A DFN has three features:

- The repurchased debt will be issued at a discount, resulting in a debt relief for the sovereign.
- The new bonds will be issued at a rate below the current market rate, easing the funding pressure on the sovereign.
- The structure will result in fiscal savings and the country commits to using some of this fiscal space for biodiversity or climate change mitigation projects. In the latest transactions, a public organisation provides credit support in the form of insurance. It protects the new bondholders against default by the sovereign and raises the rating of the labelled bonds to the IG level.

DFNs are not new products. The earliest DFNs were bilateral debt swaps where official bilateral creditors agreed to redirect debt service to nature/climate projects. They have been part of the restructuring landscape since the Latin American crisis of the 1980s and 1990s (the first deal was in 1987 in Bolivia). The number of operations rose to more than 100 by 1993, involving about 15 official creditors and benefiting about 30 creditors. It then declined before regaining popularity with the Seychelles deal in 2015. Even if the number of transactions is more modest than before, the size of the deals has been much larger. For example, Ecuador's US$1.6 bn 2023 debt swap has generated considerable interest in the instrument.

Belize: the perfect case

To better understand the mechanics and scalability of DFNs to other EMs, the Belize 2021 DFN case study provides relevant insights. At the time of the transaction, Belize had a unique US$553m 2034 bond and its debt-to-GDP ratio was close to 54%. The bond buyback was financed by the issuance of a US$364m blue bond by an SPV. The proceeds were on-lent to another SPV which is a subsidiary of The

Nature Conservancy (TNC)[2]. The TNC in turn made a Blue loan to the Belize government. Importantly, the United States Development Finance Corporation (DFC) provided insurance against default on the Blue Loan, protecting the ultimate holders of the Blue Bonds and raising its to IG. This insurance, available to US investors in foreign debt, is backed by the US government (see appendix for a graphic representation of the deal).

Meanwhile, the Government of Belize has committed to invest in marine conservation projects. This commitment is split between an upfront payment to a conservation endowment fund which is expected to grow over 20 years. In addition, Belize agrees to make quarterly payments. These payments will be made in local currency and will fund local NGOs and local partners working on marine conservation projects. In addition, Belize agreed to meet eight conservation milestones set out in the Conservation Funding Agreement with TNC.

Some features are worth highlighting:

- Payments to the Conservation Fund are made in local currency. The swap converted part of the external debt into more sustainable local currency debt.
- Belize has obligations tied to the Conservation Funding Agreement with TNC, which is linked to the Blue Loan. If Belize cannot make a required payment to the Conservation Fund, it triggers a default on both agreements. In addition, if Belize misses a milestone, payments increase.

This DFN was a breakthrough. Belize secured support for environmental protection by making credible and tangible commitments to marine conservation. The new bond issue was only possible because of the credit enhancement provided by the DFC. However, the DFC would not have provided the credit enhancement if Belize had not made the conservation commitments.

Challenges to the scalability of debt-for-nature swap

The recent successful transactions have given the impression that DFNs are the perfect solution. In our view, while they make a compelling case, they face many challenges and are limited in scalability and replicability. TNC estimates that a similar model could be applied in up to 85 countries. US$2trn of debt has been identified as potentially eligible for debt-for-climate restructuring. In our view, this figure does not seem realistic. Ultimately, only a few deals have been concluded, due to constraints mainly on the supply side, but also on the demand side.

First, the main challenge is the complexity of the legal and financial structure and the final execution, with several sophisticated stakeholders involved. This results in a long-term process (2-4 years according to the OECD) and costs can be significant. The Belize deal was criticised because the final hidden costs passed on to the Belize government were close to US$86m, which is historically high for a debt restructuring. The complexity and cost require full commitment from the parties, which is difficult to achieve. Moreover, the performance monitoring indicators attached to the swaps impose a high administrative burden.

Second, and more practically, the range of offers available is limited. In recent transactions, the inclusion of an official guarantee has been key to the conclusion of these transactions. The combined balance sheets of official institutions that can provide a guarantee are less than US$2trn and so the number of deals will be limited. For instance, the Belize deal would have likely not happened without the credit enhancement of a third party like the DFC[3]. More pragmatically, according to the IMF, among low-income countries, only US$34bn of debt would be eligible by the end of 2021. Looking at larger EMs, only about 153 bonds out of 583 would be eligible.

Third, governments may be reluctant. These deals require a high level of commitment from governments, given the complexity and the insurance provided by third parties. Governments may not see the importance of conservation or may not want to link these objectives to their long-term fiscal stance and tie debt sustainability to them. In doing so, they also lose some sovereignty, with new governance structures and the control of external and NGOs.

Fourth, investor demand is likely to be conservative. Financial headlines suggest that few investors participated in the latest deals and others may be concerned about the illiquidity of the product (no real secondary market). The complexity of the structure may put off some investors, especially real money ones as it is not clear how the new bonds will be treated in terms of capital charge in a Solvency framework.

Fifth, from an ESG point of view, some investors may not qualify this product as ESG given the only partial redirection of savings toward nature conservation or other ESG projects.

A good solution in limited cases

Given their limitations, DFNs can be a relevant solution when certain elements are met, but their scope is limited. In a seminal working paper, the IMF argues that DFNs are superior to alternatives only in narrow circumstances. Their use versus alternative instruments to finance climate

[2] TNC is an NGO that is "working around the world to protect the lands and waters on which all life depends and fight climate change."
[3] The DFC can only provide insurance up to US$1 bn.

investments and reduce debt depends heavily on the country's situation on a case-by-case basis.

Above all, the choice of DFNs depends on the impact of climate action on sovereign risk. If there is no clear link between climate/nature and sovereign risk, a comprehensive and deep debt restructuring is the better approach. While DFNs can prevent a country from following an IMF program and implementing structural reforms, they also involve only certain creditors and not all the country's creditors. On the contrary, DFNs can be extremely useful for small island states where climate change will exacerbate their fiscal vulnerability[4] or is even the cause of unsustainable debt. In these countries, debt relief must go hand in hand with climate action, as it is part of long-term debt sustainability.

More specifically, the IMF argues that direct climate-related loans and grants can also be efficient fiscal support. Climate-related grants/loans have only one purpose, which is climate investment, unlike DFNs. DFNs would be a superior form of fiscal support only if the conservative ESG spending commitment is de facto senior to debt service, otherwise, it subsidises the non-participating creditors in the deal. In the case of Belize, this would imply that it is more costly for Belize to default on its conservative ESG commitment than to default on its remaining debt service obligations.

As for debt restructuring, DFNs are not necessarily the right tool for distressed countries with unsustainable debt dynamics. To be effective, they need to provide substantial debt relief and target countries in severe debt distress. At the very least, the fiscal savings need to be substantial given their effective high cost. A counterexample is the Barbados deal, which provided limited debt relief as the amount of bond buyback was small. In our view, they can be only a sweetener in a large debt restructuring. In large restructuring, it would require very large credit support from the official sector which would be hard to get.

Green bonds and SLBs are not necessarily better alternatives

Despite all the challenges and shortcomings mentioned, DFNs can improve on green bonds.

One of the strongest aspects of the latest DFNs is the cross-default component if the borrower fails to meet its conservation milestones or payments to the conservation fund. On this point, DFNs are superior to classic labelled bonds. The use of proceeds from bonds such as green bonds does not confer rights to enforce the ESG aspect of the bond. There is therefore no guarantee that the proceeds will be used for ESG projects. Failure to use the proceeds properly, or the absence of a reporting obligation, does not trigger a default and causes only a credibility and reputation issue for the borrower, not strictly related to credit risk. On the other hand, in the case of the DFN in Belize, for example, the conservation fund is independent and has strict control over the expenditure of the blue loan proceeds.

Sustainability Linked Bonds (SLBs) share some similarities with DFNs as the latest DFNs look like proceeds bonds combined with the KPIs of SLBs.

For example, the set of KPIs in the SLBs Chilean and Uruguayan issues is based on national climate and biodiversity commitments. In the case of Uruguay, the KPIs were linked to native forest areas and greenhouse gas emissions. Failure to meet the KPIs triggers an increase in the coupon. Thus, there is no clear enforcement of ESG commitments on bondholders, but failure will trigger penalties. For Chile, the maximum penalty would be US$55 m or a 6% increase in the interest cost of the bond, and for Uruguay US$40.5m or around 5% of the interest cost.

However, DFNs are more punitive and therefore can be a more credible product. In the case of Belize, missing a servicing milestone increases the annual servicing payments by 30% and, ultimately, would increase Belize's total annual interest cost by about 6% for each missed servicing milestone For Chile or Uruguay, the increase in interest payments would be less than 0.1% of total external debt.

Not a perfect solution for both global biodiversity loss and ESG investors.

It is undeniable that DFNs provide EM countries with financing tools to protect/conserve their nature without sacrificing government budgets on other important projects. Yet, the t size of the implemented deals is still immaterial (the biggest deal recorded is from Ecuador at US$1.6 bn) compared to the countries' financial needs related to restoring nature and/or implementing sufficient climate change mitigation and adaptation.

Besides, from an investor perspective, classifying DFNs is still a very "confusing" issue. Given that the proceeds from DFNs are not allocated 100% for green or blue projects, investors are hesitant to include them within their green bond targets. The currently released blue bond guidelines from ICMA heighten this issue, as they state clearly that DFNs are not ICMA-aligned since not all proceeds are directly invested in environmental projects. Consequently, it will be difficult for investors to include DFNs in the highly demanded Article 8 and Article 9 funds. On the other hand, to help investors evaluate the environmental benefits of DFNs, issuing countries must form dedicated reporting frameworks and

[4] See IMF-World Bank Climate Change Policy Assessments

functions to monitor the fund allocation, however, the weak governance profile of EM issuers puts this condition in doubt.

At the global level, countries with high urgency for nature protection are not necessarily facing financial fragility. If we use the Kunming Montreal Global Biodiversity Target to achieve 30% of territories under protected areas as a benchmark, among the 17 megadiverse countries[5], 12 countries currently have less than a 20% protected area but only one has issued DFNs (Indonesia in 2006 and 2009 with a total size of US$40 m). Meanwhile, the biggest DFN issued for these megadiverse countries is from Ecuador (US$1.6 bn) with already 23% of protected area. Therefore, at the country level, DFNs may be efficient in supporting individual issuers to restore its biodiversity richness but at the global level, other instruments should also be facilitated to provide financial support for megadiverse countries with less financial fragility.

Country protected area

Mega diverse Countries	% of Protected Area
Papua New Guinea	3,7%
Madagascar	7,5%
India	7,5%
South Africa	9,3%
Indonesia	12,2%
United States	13,0%
Malaysia	13,3%
Congo, Dem. Rep.	13,9%
Mexico	14,6%
China	15,6%
Philippines	15,9%
Colombia	16,4%
Australia	20,4%
Peru	22,5%
Ecuador	23,4%
Brazil	30,3%
Venezuela	56,8%

Source: World Bank

Conclusion

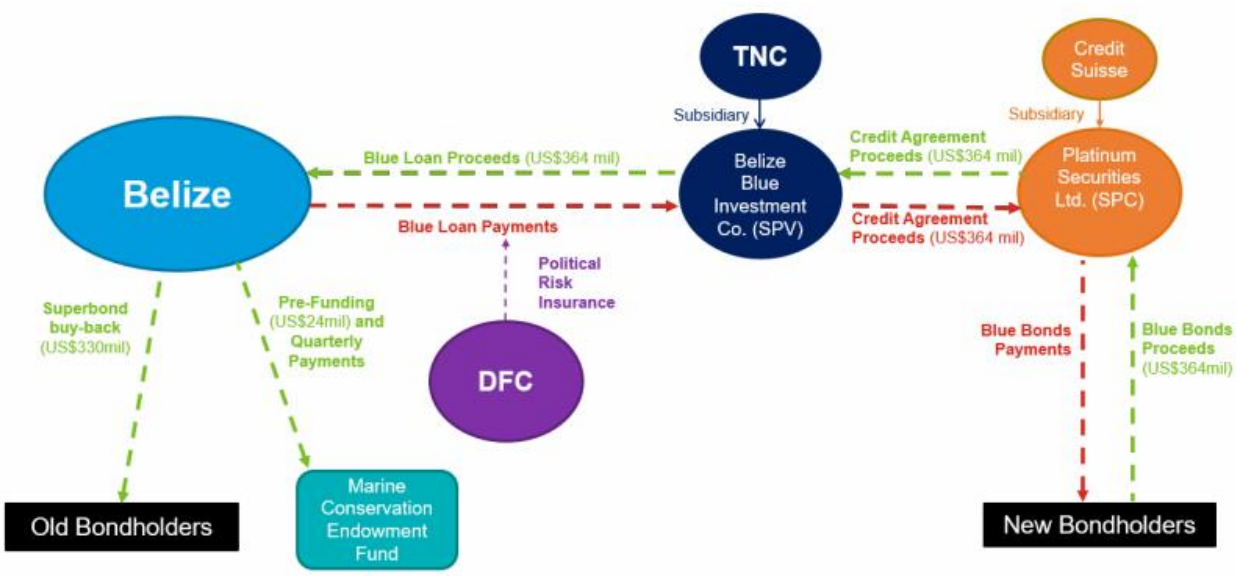
Deft-for-nature swaps are clear progress in the green sovereign financing of EM countries and are a part of the tool kit to ease the debt burden of LICs. The cross-default clause on the ESG commitments can make them credible alternatives. However, we fear their scalability and replicability are low. Indeed, it works well only for countries where the sovereign risk is highly correlated with climate/nature action like in the small island states. Moreover, in large debt restructuring, they should only act as a sweetener and cannot be a solution on their own. Otherwise, conditional grants/loans or even SLBs are also viable solutions.

From an ESG point of view, DFNs are not a perfect solution either as their size is limited compared to the countries' financial ESG needs. DFNs are also not sufficient to solve the Global Biodiversity Loss due to the abovementioned limited size and its particular focus on countries with weaker financial profiles. Besides, to accelerate the restoration of Global Biodiversity, we urgently need the participation of private financing. However, DFNs are not attractive instruments for private ESG investors. Its unclear position within the Green/Blue Bonds frameworks does not match with ESG investors' need to enhance their article 8/9 funds credentials.

[5] A megadiverse country is one of a group of nations that harbors most Earth's species and high numbers of endemic species.

Appendix

Belize debt-for-nature swap structure



Source: copy of Debt-For-Nature Swaps: the Belize 2021 deal by Fonatna-Raina and Grund

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