# Debt-for-climate swaps: Killing two birds with one stone?

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**Abstract**

*The COVID-19 pandemic has further fuelled problems of debt sustainability in developing countries and has sapped the fiscal resources needed to finance climate mitigation and adaptation efforts. We examine whether "debt-for-climate" swaps, instruments whereby debtor countries are relieved from their contractual debt obligations in return for local climate-related spending commitments, may be helpful in tackling worrying debt levels and climate concerns simultaneously. We point out that debt swaps do not have a great historical track record but that common flaws such as their piecemeal nature, lack of additionality and creation of parallel implementation structures, could be overcome by scaling up and careful design. To realize swaps' full potential, a distinction needs to be made between situations where debt is clearly unsustainable and where it is high but sustainable. In the former case, deep and comprehensive debt restructuring should be the primary focus, rather than closely matching debt service savings with increased climate spending; in the latter case, stand-alone debt swaps may be used to transfer resources from creditors to debtor countries that are committed to climate investments but lack fiscal space. Another helpful differentiation is that between middle-income debtor countries, where debt swaps could finance climate mitigation interventions, and low-income debtors, where investments in adaption deserve prioritization. Finally, debt swap proposals need to be mindful of creditor incentives, including positive reputational payoffs, achieving greater scale using a multi-creditor set-up, at the same time as carefully considering governance credentials in each country context.*

**Keywords:** climate finance; debt restructuring; debt swap; debt sustainability; developing countries

## 1. Setting the scene

A broadening set of stakeholders, including academics, NGOs, think tanks, UN financial mechanisms as well as multilateral development banks is now advocating "debt-for-climate" swaps as an instrument that promises to kill two birds with one stone: under such swaps, creditors allow debtor governments to reduce their contractual debt obligations (contributing to debt sustainability) in return for a commitment to devote the freed-up resources to local climate-related spending (contributing to climate change mitigation and/or adaptation). The idea of debt-for-climate swaps builds on long-time experience with debt-for-nature swaps, which in turn can be traced back to debt-for-equity swaps starting in the 1980s. Following the Latin American debt crisis and spurred by a growing secondary sovereign debt market, debt-for-equity schemes - in which investors obtained external debt titles at a discount and then exchanged them with the debtor government for local currency to be invested as equity in local companies - gained much attraction (Buchheit, 1986). Between the first transaction in 1985 and 1996, debt-for-equity swaps involved nearly $40 billion of debt (World Bank, 1998, p.89). Inspired by debt-for-equity, from 1987 environmental NGOs began purchasing discounted debt and swapping it for local currency funds supporting environmental projects (Thapa, 1998). Following this, the debt-for-nature concept was extended to bilateral swaps (executed directly between creditor and debtor governments), as well as to other fields, including education and health (Moye, 2001). Debt-for-nature swaps have been implemented on a much smaller scale and generally with smaller transaction sizes than their debt-for-equity predecessors (OECD, 2007). Due to a general rise in the secondary market prices of debt and a shift towards comprehensive, large-scale debt relief schemes such as the Heavily Indebted Poor Country (HIPC) initiative and the Multilateral Debt Relief Initiative (MDRI) (Cassimon & Essers, 2017), debt-for-nature (and other) swaps have become much rarer from the 2000s onward, even though new swap deals have still been concluded. Since 2010, following increased discussion on international climate finance, the debt-for-nature approach has been reinvigorated under the guise of debt-for-climate swaps (e.g., Hurley, 2010; Fenton et al., 2014; Mitchel, 2015), and some isolated swaps funding specific mitigation or adaptation activities have been conducted (Warland & Michaelowa, 2015).

Recent months have seen a raft of proposals, with varying degrees of detail, to implement debt-for-climate swaps more systematically (e.g., Steele & Patel, 2020; Volz et al., 2020; Lütkehermöller et al., 2021; Simmons et al., 2021; Yue & Wang, 2021). Whilst there is no doubt that both unsustainable debt levels in low- and middle-income developing economies and climate change are pressing issues, there is a need to carefully consider whether and how debt-for-climate swaps can indeed be engineered to benefit or, at a minimum, to not harm those countries, especially those which are most indebted and which face the greatest challenges from climate change.

The current COVID-19 pandemic has placed an additional strain on countries' financial and human resources and has added an extra layer of uncertainty about the future (WFP, 2020; IMF, 2021). Governments will emerge from the COVID-19 pandemic poorer, with less fiscal revenues to meet increased needs, and more indebted, as official development aid, export receipts, remittances and other (non-debt-creating) external inflows are likely to be constrained in the short to medium term (OECD, 2020a). While a large number of developing (especially low-income) countries were already in debt distress or at high risk thereof before the pandemic (IMF, 2020a), the situation has now deteriorated further. This has increased the urgency for the international community to act. In May 2020 the G20 launched the Debt Service Suspension Initiative (DSSI), that offers a temporary suspension of bilateral debt service to 73 eligible low-income countries, and in November 2020 it created the Common Framework for Debt Treatments beyond the DSSI. The Common Framework brings together traditional and "emerging" official bilateral creditors, including China and India, to deliver jointly on deeper debt restructuring for the same group of low-income countries, on a case-by-case basis. It also requires debtors to seek comparable debt relief from their private creditors. Clearly, while the focus of the Common Framework is on restoring debt sustainability, motives to increase debtors' fiscal space are always present too. And even though the pandemic may have caused priority spending to have temporarily shifted away from climate mitigation and adaptation towards health and other pandemic-related expenses, there is now increased recognition that the post-COVID recovery must first and foremost be "green" (OECD, 2020b; IMF, 2020b). Hence, there

appears to be an opportunity to (re-)prioritize climate-related spending of the proceeds from debt relief.

Low- and middle-income countries are particularly affected by climate change and are widely recognised to have contributed less to greenhouse gas emissions than high-income countries. Natural and human systems face serious climate risks without immediate adaptation, especially regarding food production, water management, cities, and infrastructure (GCA, 2019). Low-income countries also have the least ability to adapt, a situation which has been exacerbated by COVID-19. But can high and worrying debt levels in these countries and climate concerns be tackled simultaneously? And if so, how?

**2. Previous debt swap experiences**

Debt swaps, including debt-for-nature, debt-for-education, and debt-for-health flavours, have a mixed track record at best. While debt swaps have features that look attractive to debtors and/or creditors - such as external debt service being diverted towards more deserving (public good) purposes in a highly visible ringfenced manner, hopefully resulting in positive outcomes on the ground, as well as greater awareness, capacity building and beneficial reputational effects - most studies have highlighted a number of limitations and important pitfalls (see e.g., Thapa, 1998; Moye, 2001; OECD, 2007; Warland & Michaelowa, 2015; Sommer et al., 2020 for useful overviews, and Cassimon, Verbeke & Renard, 2008; Gockel & Gray, 2011; Cassimon, Prowse & Essers, 2011, 2014; Cassimon, Essers & Fauzi, 2014 for in-depth case studies). First, traditionally, debt swaps (bar debt-for-equity conversions) have been piecemeal operations with a negligible effect on overall debt burdens (involving millions rather than billions of US dollars), in any case too small to cure debtors from any "debt overhang" (Bulow & Rogoff, 1991). Second, whereas debt swaps tend to increase the resources that remain in the country (to the extent that debt would have been actually repaid in a no-swap scenario), they do not always create additional fiscal and/or external space. Often debtor governments need to make the same or similar payments as under the original debt service (with no or only small discounts), sometimes still in scarce hard currency (US dollars or other foreign exchange). Third, for most swaps it remains unclear to what extent they have generated resources for environmental, education or health causes that are truly additional to what debtor governments and/or donors had already budgeted for those purposes. This seems particularly challenging in the case of debt-for-climate swaps, as there could be ample space for "greenwashing" previously planned activities (i.e., presenting them as new, climate-related projects) on the side of both the debtor and the donor/creditor. And fourth, swap operations have often involved setting up parallel structures for project implementation and monitoring, thereby bypassing the debtor government's own systems and procedures and adding to transaction costs.

Recently documented debt swaps fail to show a radical break with old practices. The 2015 "debt for marine conservation and climate adaptation swap" in the Seychelles is a case in point (see Convergence, 2017; Silver & Campbell, 2018). This swap allowed the Seychelles government to buy back about $21.6 million of its debt owed to a set of participating official creditors (Belgium, France, Italy, UK) for $20.2 million (i.e., at a price of 93.5 cents to the dollar, or with a discount of just 6.5%). Financing for the buyback was provided by several NGOs (comprising a $15.2 million loan from The Nature Conservancy-TNC, and a $5 million grant from philanthropic sources) through a newly established Seychelles Conservation and Climate Adaptation Trust Fund (SeyCCAT). The involvement of international partners in SeyCCAT has likely contributed to enhancing local capacity for climate adaptation. In return, the Seychelles government issued two promissory notes amounting to the same $21.6 million, in order to pay off the TNC loan as well as to endow SeyCCAT to finance its marine conservation and climate adaptation activities. Under this swap, the Seychelles government did realize some, albeit limited cash flow gains, as the notes had a longer maturity and carried a lower interest rate than the original debt. The principal amount due was not reduced, and the payments to SeyCCAT were still largely in hard currency (in US dollars or in its local currency equivalent), so that there was little benefit in terms of reduced currency risk. From the perspective of climate funding, the swap provided SeyCCAT with the means to invest $280,000 per year in local currency equivalent for the next 20 years in marine conservation and climate adaptation, as well as

to capitalize an endowment over the same 20 years for future investments, valued at about $6.6 million. Again, it is unclear to what extent these financial investments can be labelled as additional to already planned government investments and/or donor support (although, overall, the likelihood of adaptation interventions being prioritized within a continuously stretched national budget can be seen to be low). Also, it took four years of negotiations to complete the deal, with ambitions in terms of the number of participating creditors and sums involved shrinking over time in the context of improvements in the general credit reputation of the Seychelles. The latter explains the very small discount that was ultimately applied in the buyback.

Still, all this does not mean that the debt-for-climate swap concept should be discarded altogether. Arguably, most of debt swaps' common flaws could be overcome by careful design and by scaling up. For example, at the minimum, the timing of swap counterpart payments should be aligned with the original debt service schedule (which determines the pace of debt service savings), so that fiscal space is not further reduced. And while strict additionality is hard to prove, debtors and official creditors could be asked to explain why they believe debt swap proceeds come on top of existing budget allocations and creditor interventions in the targeted areas (in our case here, climate mitigation or adaptation). All else being equal, increasing swap size would help realise extra benefits from lower debt burdens and improve cost efficiency.

Previous work by Warland & Michaelowa (2015), Steele & Patel (2020), Simmons et al. (2021) and Lütkehermöller et al. (2021), among others, have proposed (relatively strict) quantitative criteria for adjudicating the appropriateness of debt-for-climate swaps for particular countries, including: country income status, the level of indebtedness and creditworthiness, indicators of climate vulnerability and ambition, and governance scores. While a further exploration and refinement of methods to identify potential swap recipients would be very helpful, in the remainder of this note we differentiate between situations where debt is unsustainable and where it is high but sustainable, and between middle- and low-income debtor countries. We believe these two broad delineations are an important first step for thinking through the current potential of debt-for-climate swaps.

## 3. Going forward

### *3.1. Deep debt relief*

Traditional debt swaps do not appear to be a particularly helpful tool to address severe debt problems. Most early debt-for-climate proposals recognized this and were framed much more in terms of mobilizing extra climate-related financing than as instruments to achieve substantial debt relief (e.g., Fenton et al., 2014; Warland & Michaelowa, 2015). Conversely, some more recent proposals put forward far more ambitious debt-for-climate schemes that target longer-term debt sustainability too (e.g., Steele & Patel, 2020; Volz et al., 2020).

In case of clearly unsustainable debt, what is needed above all is deep, comprehensive debt restructuring, of the kind that was delivered in the previous wave of debt distress through the HIPC initiative and the MDRI, and that could now be delivered through the G20's Common Framework. To the extent possible, IMF programmes accompanying such deep debt treatments could attempt to stimulate a green restart in debtor countries by means of the usual policy conditionality, without necessarily requiring countries to match one-for-one debt service savings with increased climate spending and with respect for countries' existing climate strategies. For example, in a middle-income country that wishes to implement mitigation measures, renewed budgetary room could be targeted towards public investments in renewable energy; this would have the extra benefit of reducing oil import bills and thus saving on foreign exchange reserves. A further option could be to link deep debt relief with policy commitments that do not require new expenditures, such as the phasing out of fuel subsidies or the introduction of carbon taxes/regulation. IMF programmes associated with comprehensive debt restructuring in low-income countries should prioritise investments in adaptation interventions (as these countries have contributed least to emissions and face the greatest threats from climate change), including in the water sector, agriculture, and climate information systems, alongside public investments in renewable energy where possible. Adaptation projects at

scale often require public goods and common pool resource profiles (e.g., public infrastructure networks, water management, ecosystem management), which means purely privately initiated and funded projects are challenging to originate. Forms of public funding can precipitate regulatory or coordination functions for collective action.

*3.2. Stand-alone debt swaps*

Moving away from large-scale, deep debt restructuring towards smaller, stand-alone debt swap initiatives, there may be ways through which specific groups of low-income and middle-income countries could still realise meaningful benefits from debt swaps, if carefully engineered. Four aspects deserve attention.

First, debt swaps could be useful in transferring resources from official bilateral or private creditors to support climate investments in middle-income countries with high but still sustainable debts that are committed to climate change mitigation but lack fiscal space. Markets for certain mitigation investments are mature, such as renewable energy or energy efficiency interventions, and the business case is clear. Debt swaps could finance mitigation interventions which bring considerable co-benefits (such as, again, reducing countries' oil imports). Such interventions could also package up and sell carbon offset credits, such as through voluntary markets. This would require solving technical issues surrounding the attribution and apportionment of mitigation outcomes when carbon markets are blended with climate finance (e.g., Fuessler et al., 2019; Strand, 2019). These swap operations would make sense from a global climate mitigation standpoint: middle-income countries are, overall, less responsible for emissions than high-income countries (on a historical, per capita basis) but currently emit more than low-income countries.

Second, debt swaps could also support climate investments in low-income countries with sustainable debts but limited fiscal space. As with deep debt treatments, climate investments in these contexts should prioritise adaptation. The challenge here is for investments to be revenue-generating, whether in agriculture, water, climate information or in other sectors. Examples of successful revenue-generating interventions come from impact investment funds or blended finance vehicles. Business models associated with these approaches need to be examined in much more detail.

Third, in both middle-income and low-income country cases, we need to consider creditor incentives. If creditors regard their original claims on the debtor as less valuable than the full nominal sum (because of sovereign risk), debt swaps may be more financially attractive to them than providing new conditional cash transfers. For similar reasons, environmental NGOs were very active in sponsoring debt-for-nature swaps in the late 1980s and early 1990s, when debts owed to commercial creditors could be bought at steep discounts in secondary markets. Even in the absence of purely financial incentives, debt swaps' attractiveness would be enhanced if they can help fulfil creditors' climate (Kyoto/Paris) commitments (in the case of official bilateral creditors) and/or have positive reputational payoffs (also for commercial creditors). For example, a 2005-2007 debt-for-wind power swap between Spain and Uruguay through the now diminished Clean Development Mechanism earned Spain certified emission reduction credits (Cassimon, Prowse & Essers, 2014). Going forward, creditors may be able to obtain carbon offset credits in a similar fashion under the Paris Agreement, depending on how Article 6 - on the international transfer of mitigation outcomes through market mechanisms - is implemented in practice (see e.g., Michaelowa et al., 2019, 2020 for a discussion of additionality assessments and other key issues in the design of Article 6). In addition, particular classes of commercial creditors, whose portfolios are increasingly screened against environmental criteria, might be even persuaded to voluntarily swap their claims for new "green bonds" (including a haircut) that earmark bond proceeds to climate-related investments (Volz et al., 2020).

Such incentive-compatible features would ideally facilitate the scaling up of debt swap operations. Another possible avenue would be to adopt a multi-donor/creditor approach under G20 initiative, preferably with a common monitoring system and supported by the IMF and World Bank. Bringing more multilateralism into debt-for-climate swaps may not be easy, due to likely differences in

creditor preferences, but could increase cost effectiveness. One notable example of a multi-creditor debt swap is the Polish EcoFund, whereby the United States and five other bilateral creditors joined forces to cancel part of their debt claims in exchange for more than $500 million in local currency funds for environmental projects between 1992 and 2010 (Zylicz, 2015).

Fourth, sufficient attention should be paid to governance issues. Indeed, a key requirement for any successful debt-for-climate swap is that the debtor country needs to exhibit sufficiently high governance credentials, so that its financial and other commitments in terms of climate mitigation or adaptation are believed by the creditor and concerns about moral hazard are reduced (Warland & Michaelowa, 2015). Involving creditor organizations and/or other international partners such as international financial institutions, multilateral development banks, or international NGOs in the selection, implementation, monitoring and evaluation of the programmes or projects financed by a swap may satisfy creditors' understandable desire for oversight and may improve learning outcomes. However, this has to be balanced against the need for debtor country ownership of the swap programmes or projects, the building of the capacity of (existing) debtor government institutions, the development of local expertise, and keeping transaction costs in check.

Overall, the COVID-19 pandemic has placed many low- and middle-income countries under considerable strain at the same time as the challenges of climate change become more pressing. Both deep debt relief and stand-alone debt swaps need to, at least, differentiate between the types of climate investments that are appropriate within middle- and low-income countries. Doing so could lead to greater momentum for mitigation as well as help closing the adaptation financing gap (UNEP, 2021).

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