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Debt-For-Nature Swaps: An Analysis of a Climate-Financing Tool in Latin America

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Abstract

While the concept of protecting the natural environment is often popular, sourcing the massive funding required to reach global goals is a much more contentious topic. The purpose of debt-for-nature swaps is to supply part of this shortfall by tapping into government funds that are locked in sovereign debt obligations. Since these swaps began in 1987, they have been particularly popular in Latin America, a region that is rich in biodiversity and owes significant debt. While the swaps were popular at the end of the 20th century and the beginning of the 21st, they were criticized for being too small and fell out of favor in the 2010s. In the past four years, the swaps have reemerged, leading this paper to ask: what does the reemergence of debt-for-nature swaps signal for the future use of this financial instrument in Latin America; and furthermore, what are the opportunities and challenges for the future use of these swaps in the region? This paper argues that the recent swaps are uniquely characterized by credit enhancement, allowing them to be a degree of magnitude larger than past swaps; the large sum of funds and the political appeal of these swaps make them promising tools for funding conservation efforts.

Author's Note

My research grew from a desire to connect my studies in International Affairs and Finance and explore how financial systems can be used for sustainable purposes. I was additionally driven by a personal connection to Latin American and a passion for the environment. Debt-for-nature swaps not only addressed each of these issues, but I soon realized it was an especially timely topic due to recent innovations in the field. This research paper was completed as my senior thesis for the University Honors Program at the George Washington University (Washington DC, 20052). My sincere gratitude goes to Dr. Cynthia McClintock who advised my research.

Keywords: Sustainable Finance, Environmental Finance, Debt-for-Nature Swaps, Latin America, Credit Enhanced Swaps, Developmental Economics

Introduction

On November 24th, 2024, the 29th UN Climate Change Conference concluded. The conference, held in Baku Azerbaijan, included a series of hopeful, yet likely insufficient, initiatives to combat environmental degradation and global warming. The Executive Secretary of UN Climate Change, Simon Stiell, remarked, “[W]e leave Baku with a mountain of work to do. ... So this is no time for victory laps, we need to set our sights and redouble our efforts on the road to Belem” (COP29 UN Climate Conference, 2024). The challenge that was central in Baku – and to climate change in general – is how to fund the transition to cleaner energy, conservation, and sustainability.

The purpose of debt-for-nature swaps is to supply part of this shortfall by tapping into government funds that are locked in sovereign debt obligations. Since these swaps began in 1987, they have been particularly popular in Latin America, a region that is rich in biodiversity and owes significant debt. While the swaps were popular at the end of the 20th century and the beginning of the 21st, they were criticized for being too small and fell out of favor in the 2010s. In the past four years, the swaps have reemerged, leading this paper to ask: what does the reemergence of debt-for-nature swaps signal for the future use of this financial instrument in Latin America; and furthermore, what are the opportunities and challenges for the future use of these swaps in the region? This paper argues that the recent swaps are uniquely characterized by credit enhancement, allowing them to be a degree of magnitude larger than past swaps; the large sum of funds and the political appeal of these swaps make them promising tools for funding conservation efforts.

This paper is divided into three sections that allow it to summarize previous research of debt-for-nature swaps and add to the conversation on the future of the swaps. First, it provides an overview of the history of debt-for-nature swaps, while highlighting their various forms and their relevance to Latin America. Second, this paper will explain how the new, credit-enhanced swaps work, while summarizing the six swaps in the most recent wave. In particular, the new credit-enhanced swaps are enabled by several factors: the focus on debt owed to private, rather than public, institutions, the use of insurance to raise the credit rating of the renegotiated debt, and the focus on large, connected swaths of debt. Third, this paper will demonstrate that the two most important benefits that make swaps so valuable going forward are the large funds that they can contribute and their appeal across the political spectrum. However, the challenges of debt-for-nature swaps must also be considered, particularly the claims of poor transparency, greenwashing, and institutional challenges.

It is important to note that two key decisions were made in the process of completing this research which affect its overall scope. The first is that conservation is seen as the primary goal of debt-for-nature swaps, rather than debt cancellation. While debt savings are an important variable of the swaps and are helpful for bringing Latin American countries to the negotiating table, the primary reason that these swaps are ultimately carried out is to generate conservation funds. For that reason, this paper focuses on the statistics of conservation funds generated and not debt savings when comparing swaps. Additionally, this paper measures success by the amount of funds

that make it into a country and not by the outcome of using those funds. While the efficient allocation of money for conservation projects is certainly important, each project is different and it is difficult to construct a measure, such as number of acres zoned off or number of species protected, that can be applied evenly across swaps.

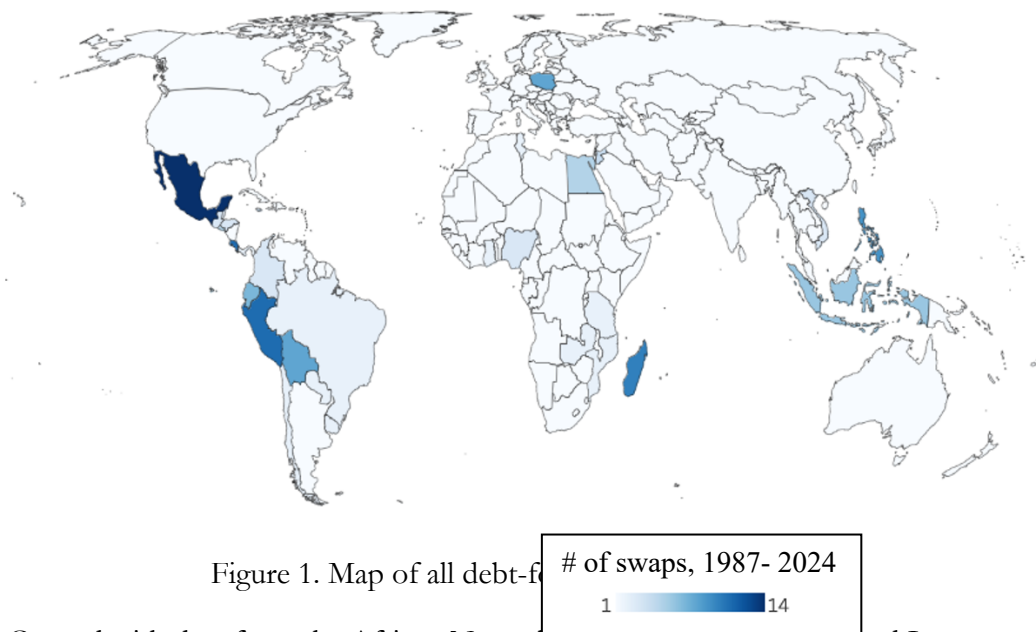
The history of debt-for-nature swaps globally and in Latin America and the Caribbean

Origin of the debt-for-nature swaps

Understanding the history of debt-for-nature swaps is critical to understanding the renewed interest in swaps and how they can benefit sustainable finance. Debt-for-nature swaps were born amid a context of shifting environmentalism in the late 20th century (Macekura, 2016). In the 1970s, alongside changes in culture and politics across the world, environmentalism saw its own transformation. Ordinary citizens grew a heightened awareness of environmental concerns as conservation organizations grew in wealth and influence. Global environmental NGOs now had a seat at the table for powerful conversations about policy. This conversation manifested in greater environmental regulation and political backing for environmental goals. However, the conversation did not stay focused solely on policy for long and in the 1980s, the prevailing thought amongst environmentalists began to shift towards market mechanisms to further their environmental objectives (Macekura, 2016). Interest in solving issues of climate destruction and biodiversity preservation was still strong, but now many changemakers sought to solve these problems alongside—and not apart from – the prevailing free market model.

Amidst this changing philosophy was the debt crisis of the 1980s. This set the stage for the first debt-for-nature swap. In a New York Times opinion article titled “Aid Debtor Nation’s Ecology,” Thomas Lovejoy, the vice president for science at the U.S. branch of the World Wildlife Fund, first suggested that the problem of debt in developing nations and the risk of ecological destruction can be solved in parallel (Lovejoy, 1984). Lovejoy highlighted the fact that high levels of debt caused Costa Rica and Brazil to limit the resources that they designated for ecological programs, and, in regions like Latin America, can prompt the destruction of environmentally important lands for rapid export production. Debt-for-nature swaps could ameliorate these financial challenges while also infusing new funds and energy into environmental efforts (Lovejoy, 1984).

The first of debt-for-nature swap occurred between Conservation International and Bolivia. This swap involved \$650,000 that Bolivia held in a Swiss bank, which Conservation International bought (“Q&A: Can debt-for-nature 'swaps' help”, 2024). In return, Bolivia committed to protect almost four million of the Amazon Basin and invest \$250,000 in conservation management (“Q&A: Can debt-for-nature 'swaps' help”, 2024).



Created with data from the African Natural Resources Management and Investment Centre, “Debt for Nature Swaps,” 69-73. *Map created using Flourish.*

Since this first swap in 1987, more than 140 have occurred worldwide (Whiting, 2024). As the map shows, debt-for-nature swaps have been popular throughout the world, from the Americas to Africa, Southeast Asia, and even parts of Eastern Europe and the Middle East. However, the greatest concentration is found in Latin America, where 85 swaps have occurred since their start (“Q&A: Can debt-for-nature ‘swaps’ help”, 2024).

Latin America is, in many ways, the ideal region for debt-for-nature swaps. The region has a wealth of biodiversity that is a treasure for the region and the world. The UNEP estimates that around 60% of “global terrestrial life” is within the region (“The State of Biodiversity,” 2016). And there are likely even more species in Latin America than we know about, extending to far more than just the widely recognized Amazon rainforest, which already is home to 10% of global biodiversity (Carey-Webb, 2020). In addition to aiding biodiversity, the region is also important in combatting climate change. The Amazon, for instance, is a vital carbon sink (Gatti, 2021).

Latin America also has struggled through various economic challenges. Over the last decade, the region’s debt-to-GDP ratio has crept up due to falling commodity prices. It peaked sharply during the COVID-19 crisis, when countries borrowed heavily to support healthcare and income support as economic activity slowed. The average domestic fiscal support package in Latin American and Caribbean countries was 8.5% of GDP (Powell, 2023). These factors all contributed to total external in Latin America and the Caribbean peaking at 55.89% of GDP in 2020. Some improvements have been seen; external debt in 2024 has lowered to 40% (“World Economic Outlook Database,” 2024).

The remainder of this paper will focus on Latin America, although many of the themes—such as the evolution of the swaps, and many of the challenges and promises of new swaps—can have global implications.

The evolution of debt-for-nature swaps

As Latin America went through economic swings in the past 50 years, debt-for-nature swaps also evolved. The phases of innovations can be broadly categorized into three phases: first, private swaps financed by NGOs; second, public swaps between two countries; and third, credit-enhance swaps. The phases of evolution are not exclusive and there is often overlap in when they were used.

The first debt-for-nature swaps, including the Bolivia swap, were financed by NGOs. Other parties were still involved, such as the bank to which the indebted country owed money (Jha, 2001). Since the country's debt would be trading at a heavy discount due to concerns about their inability to pay, the NGO could buy the discounted debt at a relatively cheap price. This enabled the NGO to negotiate with the indebted country so that a sum between the trading price and face value of the debt could be channeled towards conservation efforts or the NGO could require that various conservation projects be undertaken. This meant that an environmental organization could essentially multiply the impact of their money by first buying up debt. As a very simplified illustration, suppose an NGO wants to invest \$100 million in a country for conservation efforts, and debt from country A is trading at 25 cents on the dollar. The NGO could use the \$100 million to buy back \$400 million face value worth of debt. It is unlikely that the country has the funds to invest the full \$400 million, but, for instance, the NGO could require investment of \$200 million into conservation efforts to forgive the loan (Reiner, 1992).

The second generation of swaps are bilateral public swaps that happen when a country forgives part, or all, of another country's debt in return for conservation commitments or investments. While the first public swap happened in 1988, just a year after the Bolivia swap, they did not truly become the dominant swap until the early 1990s ("Q&A: Can debt-for-nature 'swaps' help", 2024). An analysis of data from Carbon Brief's 2024 article "Q&A: Can debt-for-nature 'swaps' help tackle biodiversity loss and climate change?" shows that from 1987 to 1991, only 27% of swaps in Latin American and the Caribbean were bilateral public swaps. But, from 1992 to 2010, these public swaps accounted for 78% of swaps in the region. The benefit of these swaps was that they were for much larger amounts of debt than the first wave of private swaps. This was aided by the fact that in the early 1990s, the Enterprise for the Americas Initiative pushed forward billions of dollars of swaps for Latin American and Caribbean countries. In 1993, for instance, a half dozen Latin American countries received a total of \$90 million reduced in face value of their debt. In addition to the political willpower behind the public debt swaps, there is also simply more debt to work with, as countries owed more to other countries than private banks (Jha, 2001).

Between 2010 and 2021 there were no debt-for-nature swaps in Latin America, possibly due to the leveling of debt in the region. But, the post-COVID wave has seen a resurgence and has included six debt swaps up to Fall of 2024. The dominant form

of these new swaps appears to be a credit-enhanced swap. While “Credit-enhanced” is not yet a commonly published term for swaps, a November 2024 interview with Zanetti Balparda Maria Pia of the Inter-American Development Bank suggests it is becoming more common within the world of debt-for-nature swaps. The Nature Conservancy (TNC) is one of the largest NGOs involved in this new type of swap, with swaps in Belize and Barbados. This new type of swap holds promise for significantly increasing the size of debt that can be purchased and ultimately the amount of funds that can go towards conservation.

Historical criticisms of debt-for-nature swaps

Throughout their history, debt-for-nature swaps have attracted several criticisms. The main arguments are that the swaps are not large enough, that negotiators struggle to strike the right balance with local stakeholders, and that swaps could introduce inflation.

The most prevalent criticism of debt-for-nature swaps was that they were not large enough to address either a country’s large debt or its environmental needs. A report on the first 25 debt-for-nature swaps globally showed that the total percentage of debt swapped to total debt was only 0.0472% (Kushner, 1991). And, while the swaps did more to address environmental needs, they got nowhere close to the estimated minimum \$470 billion that needs to be invested in Latin America and the Caribbean to reach the Paris Agreement goals (Powell, 2023). Although it would be illogical to argue that debt-for-nature swaps are bad simply because they are not large enough, it could be argued that they detract attention from other strategies that could do more to help our environmental crisis.

Next, some debt-for-nature swaps struggled to properly integrate local stakeholders, including both the local organizations that would administer the projects and the public, whose implicit approval is crucial for successful environmental work. It is often difficult to balance the desire to give the country as much autonomy as possible while also ensuring the managers of the funds and the environmental projects have the necessary expertise. Simply giving local organizations the money and then taking a step back was often not favorable. However, when international organizations took greater control of the funds and their management, they could add to the perception that the indebted country was selling away their land or otherwise giving up part of their sovereignty (“Q&A: Can debt-for-nature 'swaps' help”, 2024).

The third, and arguably the most theoretical, argument against debt-for-nature swaps is that they could cause inflation (Kushner, 1991). The argument proposes that if a country, such as a small island nation, were to receive hundreds of millions of dollars of money infused into the economy, then that country would experience serious inflation. Practically speaking, however, debt-for-nature swaps in the past were not large enough for this to be a real concern. However, this concern may need to be re-visited in the future.

The new generation of debt-for-nature swaps

The recent debt-for-nature swaps are a distinctly new generation of swaps and have reemerged on a significantly larger scale. They leave observers wondering: can this generation of swaps solve the challenges of the past while addressing the new environmental and financial circumstances of today? To address these questions, we will first discuss how these swaps are different from the past, summarize the six most recent swaps, and then discuss the benefits and challenges of debt-for-nature swaps in addressing environmental concerns.

The defining difference of third-generation debt-for-nature swaps

The defining difference in post-Covid swaps is that they are significantly larger than the historic average. If you compare the average conservation funds generated by a swap after 2020, to those before, the recent swaps are more than ten times larger. An analysis of data from Carbon Brief shows that, adjusted for inflation, the average debt-for nature swap before 2020 generated \$16,871,000 in conservation funds, while the average swap after 2020 generated approximately \$172,500,000 in conservation funds ("Q&A: Can debt-for-nature 'swaps' help", 2024). The major contributor to this size difference is the use of the credit-enhanced debt-for-nature swap. Five of the six recent swaps through the end of 2024 all but Peru may be considered credit-enhanced. There are three main factors that appear to have enabled this significant increase in these credit-enhanced swaps: they focus on debt that is owed to banks rather than other countries; they use commercial insurance and guarantees from public organizations to create highly rated bonds; and they focus on large segments of debt to minimize transaction costs.

Constructed with data from "Q&A: Can debt-for-nature 'swaps' help tackle biodiversity" and "Consumer Price Index Data from 1913 to 2024."

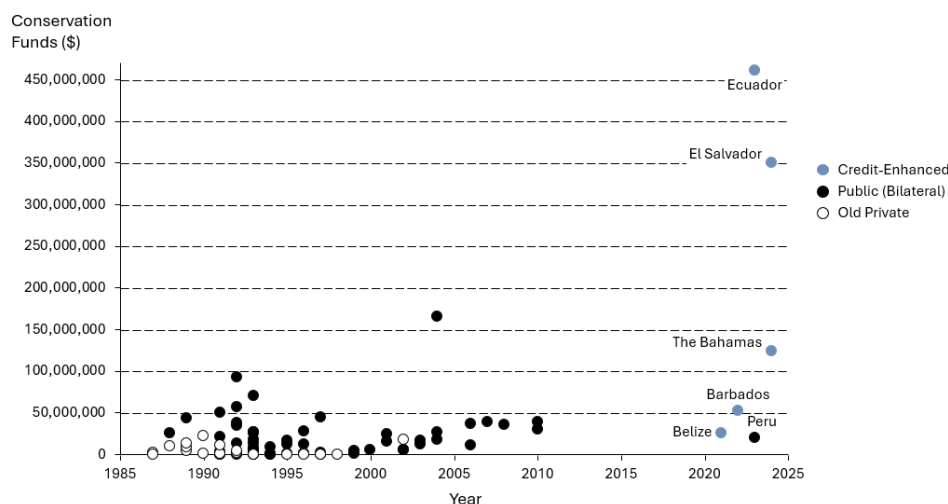


Figure 2. Conservation funds generated from LAC debt-for-nature swaps, inflation adjusted

First, credit-enhanced swaps focus on private, rather than public, debt. Private debt, also known as commercial debt, is owed to large international banks and can be traded among investors. Public debt, on the other hand, is owed directly to other countries. The graph below, constructed with data from the Global Debt Database, demonstrates that commercial debt owed by various Latin American countries in 2022 averaged at around 30% of debt, whereas public debt (labeled “Foreign official”) accounts for about 20%. This means that private swaps have a significantly larger pool of debt to tap into today. In the past, however, focusing on public debt was seen as the way to access more funds. This likely made sense for the time; the graph below shows that in 2001, for instance, private debt in the same selected countries accounted for 22% of the total debt, whereas public debt accounted for almost 30%. However, the advantages of using private debt today, as opposed to public debt, can be evidenced by the correlation with significantly higher conservation funds generated than public swaps and historic private swaps. An analysis of Carbon Brief’s data shows that, adjusted for inflation, public swaps, including the recent Peru swap, generated an average of \$22,987,000 in conservation funds; historic private swaps generated an average of \$4,305,000 in conservation funds. New private swaps have generated approximately \$202,900,000. While the move to public swaps in the 1990s may have seemed the best way to increase swap funds, it may be that greater returns now lie in private debt.

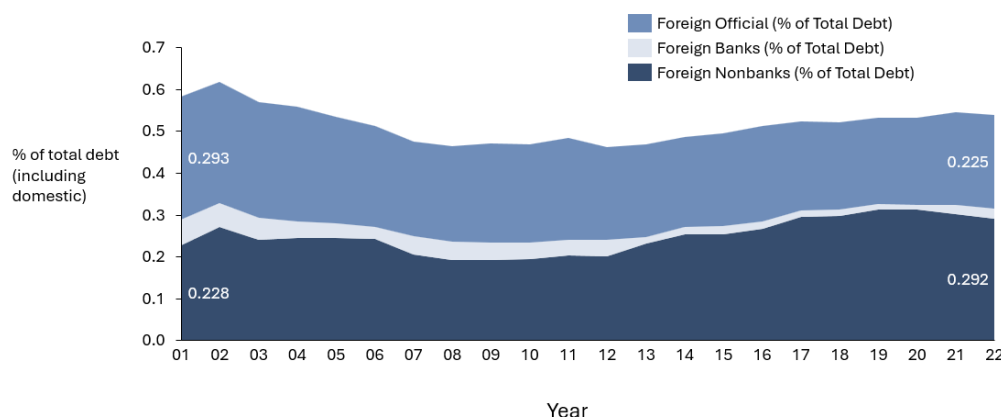


Figure 3. Major sources of foreign debt for LAC countries, as a percent of total debt for 25 LAC Countries tracked by the IMF

Analysis of data from Global Debt Database

A second difference in modern swaps, and a contributing reason for why modern private swaps resulted in more conservation funds than historic private swaps, are that they make use of insurance to create highly rated bonds that generate savings from lower interest rates. Overall, Latin American and Caribbean countries struggle with low credit ratings. The average S&P rating for the region is ‘BB’—a score below investment grade (Mukherji & Joydeep, 2023). Many countries in Latin America fall within the “junk bond” category. This score reflects the economic outlook of the countries and their history of payments. Low credit ratings decrease investors’ confidence that they will receive the full timely re-payment of their bonds and in turn leads investors to require higher interest payments. However, when debt-for-nature swaps include guarantors that can vouch for these countries and put dollars behind the deal—effectively ensuring that investors will get paid, despite a country’s overall low credit score—they can create loans that have relatively low interest payments. All modern, private debt-for-nature swaps in Latin America used insurance and other guarantees to strengthen the deals. Some of these were general guarantees, while others focused on specific risks, like political instability or natural disasters. For example, Ecuador’s “Galapagos Bond,” which was part of the largest debt-for nature swap in history, was backed by a credit guarantee from the IDB and had political risk insurance (Jones and Campos 2023). For a country that received a Fitch credit rating score of CCC+ in 2023, this was vital to making the bonds investment-grade (Fitch Affirms Ecuador, 2024).

Third, modern private swaps have made scale a priority by targeting large sections of debt. A country’s debt can be sold off to different buyers and institutions at various rates; piecing these various sources together can be difficult. However, modern swaps have gravitated towards large groups of debt that can make the transaction costs worthwhile. For example, negotiators in Belize’s 2021 swap targeted the country’s “superbond.” This superbond was a single Eurobond worth \$553 million

and comprising all of Belize's external commercial debt ("Case Study: Belize Blue Bonds", 2023) While these large groupings of debt do not always exist, prioritizing their restructuring or swap allows negotiators to scale the overall process and more efficiently generate conservation funds.

Summary of the six most recent swaps

To grasp the impact of the new wave of debt-for-nature swaps, it is helpful to delve deeper into the six post-COVID swaps that have happened in Latin America and the Caribbean: Belize, Barbados, Ecuador, Peru, El Salvador, and the Bahamas.

Ecuador's 2023 debt-for-nature swap is the largest swap yet. The deal revolved around Ecuador's \$1.6 billion USD in commercial debt. Through a bond mechanism named the "Galapagos Bond," Ecuador has been able to exchange its loan and now adopt a \$656 million bond. The difference in loan amounts, \$450 million, which were previously going to debt service payments to now be directed to the Galapagos Life Fund (Miranda, 2023). The exchange was supported by an Inter-American Development Bank guarantee of \$85 million, as well as political risk insurance from the US Development Finance Corporation of \$656 million (Miranda, 2023). The environmental commitment by Ecuador included the Reserva Marina Hermandad, which covers 60,000 square kilometers of ocean ("Ecuador Completes", 2023).

A more recent swap occurred in El Salvador in October 2024, in protection of the Rio Lempa watershed ("World's Largest Debt Conversion," 2024). El Salvador repurchased \$1.0131 billion of its bonds at a discount. It used a loan through JPMorgan to fund a special purpose vehicle, a flexible financial construct, that allowed it to then issue notes that would raise 1 billion dollars, at a lower interest rate. The lower interest rate was partially made possible by the US International Development Finance Corporation, which provides \$1 billion of political risk insurance. \$200 million of a standby letter of credit was also provided by the Development Bank of Latin America and the Caribbean. In total, the restructuring will allow El Salvador to save more than \$352 million. \$350 million will go to the Rio Lempa Conservation and Restoration Program spanning the next 20 years. In addition to the monetary benefits of the swap, El Salvador has also agreed to other provisions. These include approving a National Integrated Water Resources Plan and enhanced protocol on water ("World's Largest Debt Conversion", 2024).

Unlike other modern swaps, Peru's swap in 2023 reflects much of the second-generation bilateral debt-swaps. The swap was negotiated between the US, Peru, Conservation International, the Nature Conservancy, Wildlife Conservation Society, and the World Wildlife Fund, an admittedly large group for a public swap. However, most of the swap, \$15 million, was between the US and Peru, while \$3 million was supplied by the NGOs. The bilateral part of the deal was negotiated under the Tropical Forest and Coral Reef Conservation Act (TFCCA), the successor of the Tropical Forest Conservation Act (TFCA), under which the bulk of second-generation swaps were negotiated ("United States \$20 Million," 2023). The intended result of the swap will be greater protection of the Peruvian Amazon, and the protection of 10% of the country ("Statements: Environmental Organizations," 2024).

A clear priority of debt-for-nature swaps today is the focus on oceans. Three of the six most recent swaps, Belize, Barbados, and The Bahamas, were aimed at protecting oceans and two were executed through the Nature Conservancy's "Blue Bonds for Ocean Conservation." The strengthening interest in ocean protection shines a spotlight on many Caribbean countries that often deal with smaller budgets and resources.

A recent example is the November 2024 swap in the Bahamas, negotiated by The Nature Conservancy and the Inter-American Development Bank. Through this deal, the Bahamas renegotiated \$300 million of its debt to generate savings of \$124 million for marine conservation. The funds will go towards mangrove protection, which will be aided by national Mangrove Management Plan ("The Bahamas Launched Debt," 2024). Additionally, in 2021, Belize negotiated a swap centered around a \$553 million superbond, aimed at protecting the marine areas around Belize ("Case Study: Belize Blue Bonds", 2023). It resulted in an endowment that is set grow to \$92 million and approximately \$4 million invested a year into conservation. The notable feature of the swap was how its scale was enabled by a blue bonds structure, issued by Credit Suisse. These funds enabled the repurchase of the superbond at a deep discount. ("Case Study: Belize Blue Bonds", 2023). Furthermore, Barbados' 2022 swap funds \$1.5 million a year for grants, through the Barbados Environmental Sustainability Fund, and starts an endowment that is set to grow to \$27 million by 2037 ("Case Study: Barbados Blue Bonds," 2023). A commitment to protect up to 30% of Barbados' ocean is baked into the deal, which would be protected by a thoroughly developed Marine Spatial Planning approach. ("Case Study: Belize Blue Bonds", 2023).

The promise and challenges of debt-for-nature swaps

Debt-for-nature swaps have made an impressive return in the field of Latin American sustainable finance. After ten years of no swaps in the region, they have come back with even greater impacts and have generated significantly larger conservation funds than historical swaps. These new swaps hold exciting promises for the region but certainly come with challenges as well. The greatest benefits of pursuing debt-for-nature swaps, particularly credit-enhanced swaps, are that they generate large investments in conservation funds and are appealing across the political spectrum for both indebted nations and lenders. However, these swaps also come with challenges, including a lack of transparency, greenwashing, and the still-developing institutional strength in debt offices.

The benefits of debt-for-nature swaps

First, debt-for-nature swaps show promise for being able to generate large amounts of conservation funds for Latin America. Data from Carbon Brief shows the total amount of conservation funding generated by the six recent debt-for-nature swaps is more than \$1 billion, concentrated in just the six countries where the swaps occurred ("Q&A: Can debt-for-nature 'swaps' help", 2024). Additionally, the shift to private swaps can tap into the resource of individual investors who would like to prioritize ESG (Environmental, Social and Governance) projects in their portfolios. One Morgan Stanley survey showed that that 40% of respondents were "very

interested in sustainable investing,” and 80% “believe that it is possible to balance market rate financial returns with a focus on sustainability” (Individual Investors’ Interest”, 2024).

Debt-for-nature swaps also carry appeal across the political spectrum, helping them be an effective sustainable finance tool that is less subject to changes in the global political environment. In fact, these swaps seem to be especially popular with conservative governments in Latin America; there is a notably larger number of swaps corresponding with right-leaning administrations, as illustrated in the chart below.

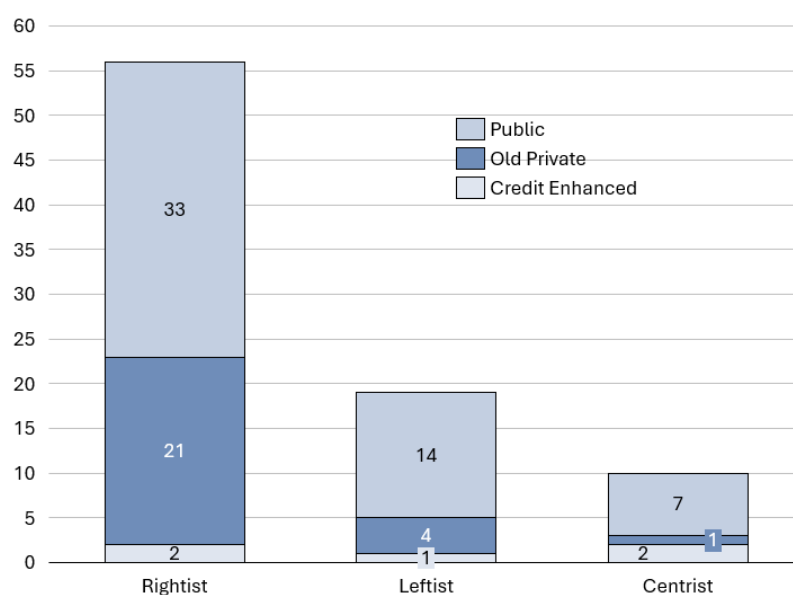


Figure 4. Political leanings of recipient leaders during years in which swaps occurred

Analysis of data from Herre, Bastian, “Identifying Ideologues.”

One explanation for this right-ward lean is the appeal that these swaps have from a fiscally conservative perspective. The swaps allow a leader to shrink a country’s debt while furthering generally popular projects of environmental protection. In Latin America, research points to sustainability and concern about climate change being cross-party issues; climate skepticism does not appear to correlate strongly with political ideology (Spektor et al., 2023). Thus, if one supposes that environmental concern is constant across political ideologies, then it makes sense for fiscally conservative leaders to appease this issue using funding avenues that do not require significant additional investment. Overall, the relatively diverse spread of swaps across ideologies, even when considering the type of swaps completed (bilateral, private, or credit enhanced) is a positive indicator for debt-for-nature swaps.

The challenges of debt-for-nature swaps

The primary critique of debt-for-nature swaps is that they are not transparent enough. Several organizations, such as the Climate Action Network, have spoken against the lack of information publicly available before, during, and after swaps occur (“Climate Action Network, 2023; “Financing the 30x30 agenda,” 2022). They suggest that this lack of transparency prevents the important inclusion of stakeholders and does not allow observers to verify if recipient countries are receiving the best deal possible. A report signed by groups like Greenpeace and various fishing organizations argues that the secrecy of debt swaps is part of their nature and is needed to prevent “unpredictable effects on bond markets,” particular for swaps from The Nature Conservancy (“Financing the 30x30 agenda,” 2022). Therefore, they further, these swaps should not be pursued. They claim that the lack of transparency shrouds other issues, such as subsidiaries in these negotiations being in tax havens (“Financing the 30x30 agenda,” 2022).

Ecuador’s swap, which protects large sections of the Galapagos, has garnered a significant amount of attention for not being transparent. A complaint was filed by 24 groups and individuals to the Independent Consultation and Investigation Mechanism (MICI), an IDB office (Repetto, 2024). The filers, which were based in the Galapagos and Quito, allege that there was a “lack of accessible and relevant information about the program,” specifying that communities in the Galapagos were not properly informed about “conservation initiatives and projects that the operation plans to implement through the conservation fund” (Repetto, 2024, p. iv). While it is difficult say if the Ecuador swap was transparent per IDB’s policy, the fact that advocates decided to file a complaint signals possible gaps in communications with the public.

An additional critique of debt-for-nature swaps is that they fail to achieve significant conservation goals through greenwashing and distracting from other funding avenues. There is a real possibility that these swaps are falsely advertised and that they could be used to cover illegitimate debt.

Recent debt-for-nature swaps are advertised as an innovative way for investors to support the conservation efforts of the recipient country, in addition to alleviating part of their debt burden. Terms like “green bonds” and “blue bonds,” are often used to describe these investment instruments, such as is in the case of Belize and Barbados which are both part of the “blue bonds for nature conservation” model at The Nature Conservancy. However, these terms have technical definitions which imply that 100% of investor’s funds are used towards conservation, something that is not true for the swaps, as a portion goes towards transaction costs, other fees, and debt savings. Analysts at Barclays have described debt-for-nature swaps packaging as “misleading” (“Barclays”, 2023).

Another aspect of greenwashing is that the swaps do not just fail to meet their advertised commitments but actively work with illegitimate debt. Illegitimate debt is debt that is “irregular, inappropriate, irresponsible, dubious, or fraudulent” (Freshnillo, 2023, p. 27). This could be especially prevalent in places with authoritarian

governments or corruption at senior levels. The conventional thinking is that citizens should not be forced to pay back loans, through taxes, which were not made for their benefit. Thus, it is argued that the loans must be outright canceled rather than restructured to accommodate a debt-for-nature swap (Climate Action Network, 2023). However, one perspective suggests that debt swaps could be a means of reparation for illegitimate debts. There has been a proposal, for instance one regarding illegitimate debt that went to a dictatorship in Indonesia, to use funds saved from a debt swap of illegitimate money to fund compensation funds for victims (Freshnillo, 2023). A similar approach could be considered for illegitimate debts that are used in debt-for-nature swaps to benefit indigenous communities in neglected nature reserves.

The third challenge that faces debt-for-nature swaps is that there is an imbalance of institutional knowledge. Recent swaps revolve around negotiations between very experienced and wealthy banks and multinational nonprofits, and finance offices of developing countries. These offices which represent their country in negotiations may be working with smaller teams, fewer resources, and less developed institutional knowledge. As a result, it becomes more difficult to represent the best interests of their country in negotiations, it may be difficult to carry out the complex financial transactions that are decided upon for the swap, and the country may be susceptible to fall back into debt challenges.

A study by the IDB found that there were several challenges around Latin America in debt management offices. They found that some of the main shortcomings were a lack of debt management committees, which help manage macro-fiscal decisions, a lack of a medium-term debt management strategy, and the documentation of lending procedures. However, there was significant variation across the region. The Caribbean was more often lacking in these measures. These countries marked lowest on IDB's scale capacities for "Debt borrowing and other debt related activities" and "Debt strategy and sustainability" (Prats et al. 2022, p. 9). There is also a noted correlation between less equipped debt management offices and smaller economies. This poses a challenge for the growing prevalence of the Blue Bonds, focused on marine conservation, which have been particularly prevalent in small Caribbean nations.

Conclusion

In conclusion, recent debt-for-nature swaps are a compelling tool for furthering sustainability funding in Latin America. While past swaps were criticized for generating only small amounts of conservation funds, the recent credit enhancement model has proven successful in unlocking significantly larger amounts of funds, on the range of around 10 times more than past swaps. With five of the six most recent swaps using the credit enhancement model, the total amount of funding in the region has been impressive. However, there are still some challenges facing debt-for-nature swaps, most importantly the lack of transparency. Without transparency regarding swap negotiations, there may be backlash from local organizations who feel excluded and from international investors who expect information.

It is important to note that the analysis provided in this paper depended heavily on publicly available sources. And while the data was valuable, it is difficult to confirm if they were comprehensive. Additionally, a challenge of sustainability research in general is the use of titles for various projects. As the words we use for sustainability, environmentalism, and climate shift in meaning and take on official definitions, it can be challenging to maintain a consistent approach to how projects are categorized. For these reasons, the research presented here should be taken as relative and not exact.

Further research is still required in the field of debt-for-nature swaps to fully understand how they can better aid global conservation, and it would be interesting to see how the larger credit-enhancement swaps affect the financial wellbeing of a country. For instance: do these swaps lead to higher economic growth as a result of debt payment reductions and greater employment and tourism from the conservation projects? Or, does the large size of the swaps now introduce the risk of inflation? Furthermore, could the use of debt-for-nature swaps lead to more poorly negotiated initial debt terms in the future and less initial conservation work driven by countries, since they may depend on the future possibility of debt-for-nature swaps to solve both their debt and environmental challenges? These questions, and many more, will require time and transparency to fully flesh out.

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