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## Debt for Nature Swaps

Agreement that reduces a developing country's debt stock or service in exchange for a commitment to protect nature from the debtor-government. It is a voluntary transaction whereby the donor(s) cancels the debt owned by a developing country's government. The savings from the reduced debt service are invested in conservation projects

**Key words:** Debt service; HLFP; debt swap; debt relief; debt cancellation; balance of payments; debt distress

### How does it work?

Debt-for-nature swaps (DNS) can mobilize resources for protecting nature while reducing the debt burden of developing countries. In exchange for debt forgiveness, the debtor-government commits to invest the accrued savings in conservation and/or climate-related expenditures. The transaction is made possible by the willingness of a creditor(s) to forgive the totality or part of the credit rights or to similarly sell the debt outstanding to a third party (typically a conservation organization) at a price lower than the [face value \(/content/sdfinance/en/home/glossary.html\)](#). In addition to nature conservation, a number of swap agreements have been used to finance social expenditures, particularly in health ([https://www.researchgate.net/publication/23134836\\_Assessing\\_debt-to-health\\_swaps\\_A\\_case\\_study\\_on\\_the\\_Global\\_Fund\\_Debt2Health\\_Conversion\\_Scheme](https://www.researchgate.net/publication/23134836_Assessing_debt-to-health_swaps_A_case_study_on_the_Global_Fund_Debt2Health_Conversion_Scheme)) and education.

While the fortunes of DNS have fluctuated with time, the amount of resources mobilized is significant. The majority of transactions were completed in the 1990s. For example, over US\$1 billion of credit owned by the United States (<https://www.fas.org/sgp/crs/misc/RL31286.pdf>) was negotiated through debt swaps when the Enterprise for the Americas Initiative (<https://www.usaid.gov/biodiversity/TFCA/enterprise-for-the-americas-initiative>) (EAI) was operational, resulting in circa US\$200 million of direct transfers to conservation projects in Latin America. The success of the Tropical Forest Conservation Act (TFCA (<https://www.usaid.gov/biodiversity/TFCA/programs-by-country>)) helped to conclude agreements with 14 countries, generating over US\$326 million in allocations for tropical forest conservation. After the year 2010, a renewed interest in DNS has emerged, particularly in connection to global pledges on climate finance.

The proceeds from DNS are often allocated to local environmental trust funds (<http://www.undp.org/content/sdfinance/en/home/solutions/environmental-trust-funds.html>), which disburse grants to conservation projects or directly fund parks and protected areas systems (including public protected areas). When the proceeds are invested in an endowment, they might guarantee annual disbursements in perpetuity. Use of environmental trust funds responds to the need to strengthen the commitment of the debtor-government as well as to the willingness of the creditor to remain engaged and monitor the impact of the transfers.

Swap agreements can be categorized by the creditor, i.e. public/bilateral swaps (public, bilateral-DNS) and private/commercial swaps (private, commercial-DNS; in the literature also called third-party). A bilateral-DNS is negotiated between the creditor and debtor government in exchange for conservation activities in the debtor country. The Paris Club has introduced provisions for debt-swaps (<http://www.clubdeparis.org/en/communications/page/debt-swap>) in the form of a debt conversion clause for development in 1991. Most members of the Paris Club (<http://www.clubdeparis.org>) have made swap conversions: Canada and the USA were the pioneers with a focus on nature-based transactions. European countries, including Germany, France, Spain, Italy, Norway and Switzerland have used this instrument more intermittently and often with the objective of increasing their Official Development Assistance ([ODA \(/content/sdfinance/en/home/glossary.html\)](#)). A bilateral-DNS is called a subsidized debt swap when an [NGO \(/content/sdfinance/en/home/glossary.html\)](#) (usually from the same country as the creditor) complements with additional resources the debt-reduction commitment from the creditor government. Agreements signed under the TFCA (<https://www.usaid.gov/biodiversity/TFCA/programs-by-country>) have used this scheme (e.g. Belize), thus requiring a contribution from the foreign [NGOs \(/content/sdfinance/en/home/glossary.html\)](#) to participate in the deal.

A commercial-DNS typically involves a commercial creditor and a third-party donor but can also include official creditors, making deals of a hybrid type. The donor most often a conservation organization agrees to buy a part of the indebted country's debt at a reduced value. While a number of commercial swaps were designed during the 1980s and 1990s debt crises in Latin America, they have been used rarely afterwards due to the evolution in [secondary markets \(/content/sdfinance/en/home/glossary.html\)](#), substantial write-downs of debt, increasing transactions costs, and the emergence of debt-relief programmes such as the Heavily Indebted Poor Country Initiative ([\(HIPC\)](http://www.worldbank.org/en/topic/debt/brief/hipc)), which all reduced the demand for debt swaps as well as the supply. Commercial-DNS were linked to the opportunity of buying commercial credit at very high discount rates in [secondary markets \(/content/sdfinance/en/home/glossary.html\)](#). International conservation organizations were able to leverage the value of their philanthropic donations in the case of debtor-governments committing to invest the nominal value of the debt in conservation against the discounted value paid by the [NGO \(/content/sdfinance/en/home/glossary.html\)](#). For example, in Madagascar ([http://www.conservationfinance.org/guide/WPC/WPC\\_documents/Apps\\_11\\_Moye\\_Paddock\\_v2.pdf](http://www.conservationfinance.org/guide/WPC/WPC_documents/Apps_11_Moye_Paddock_v2.pdf)) the first DNS involved the acquisition of commercial debt at 50 per cent of its [face value \(/content/sdfinance/en/home/glossary.html\)](#). In exchange, the Government pledged to transfer the full face value in Malagasy francs to conservation projects for the first transactions, and 75 per cent for later transactions. From 1997 onwards Madagascar has completed only bilateral-DNS.

The financial structure of each DNS may vary, from being standard e.g. the debt cancellation in exchange for debt service paid by the debtor-government into a conservation fund to complex and multifaceted e.g. the debt is sold at a discounted rate and a new debt instrument is issued. An example of the latter is the DNS recently negotiated in the Seychelles (<http://www.naturevesttnc.org/business-lines/debt-restructuring/seychelles-debt-restructuring/>). The Nature Conservancy (<http://www.nature.org/>) (TNC) provided a low-interest loan of US\$15.2 million which helped to mobilize US\$5 million in grants from philanthropic foundations, including the DiCaprio Foundation (<http://leonardodicaprio.org/ldf-supports-first-ever-debt-for-nature-swap-in-seychelles/>), Oak Foundation (<http://oakfnd.org/>), and others to buy out the debt outstanding. The estimated savings in reduced debt service are about US\$2 million per annum. After the conversion, payments from the government will be directed to a newly established Seychelles Conservation and Climate Adaptation Trust (SEYCAT). Additional resources were also mobilized from the Global Environment Facility (<https://www.thegef.org/>) and the United Nations Development Programme.

Beyond the willingness to undertake the transaction by the creditor, the core elements of a DNS include:

1. The **amount and type of debt converted** or cancelled. The main debt categories include commercial and non-commercial, [ODA \(/content/sdfinance/en/home/glossary.html\)](#) and non-[ODA \(/content/sdfinance/en/home/glossary.html\)](#) and Paris Club and non-Paris Club. For example, a debt owned by the US Treasury or by the KfW, a German public-owned development bank.
2. The **redemption price**, and/or **discount rate**, i.e. the reduction of debt principal or face value if sold or of the amount of debt service if maintained. This determines the cost-effectiveness of the operation as well as the value of the proceeds to be invested in conservation. It varies from debt forgiveness i.e. cancellation of the debt obligation to marginal discounts on the interest burden. For example, a US\$32 million bilateral debt owned by the USA to the Philippines was converted at a 50 per cent redemption rate. In exchange the Philippines agreed to transfer US\$16 million in Pesos to an environmental foundation. Earlier in the 1980s, the World Wildlife Fund (<http://www.worldwildlife.org/initiatives/conservation-finance>) (WWF) purchased US\$390,000 of Philippines' debt from commercial banks at a discounted rate of US\$200,000 (51 per cent of face value).
3. The **exchange rate** and currency. Foreign debt might be held in the currency of the debtor, of the creditor (most likely scenario) or of a third country. Currency markets, in developing countries in particular, are a major source of vulnerability. DNS are generally (but not always) designed to allow payments within the country in the debtor currency. However, even in the latter case the identification of the exchange rate can be critical in setting of the repayment schedule, particularly in cases where negotiations last several years.
4. The **schedule of repayment** of the conservation commitments. Based on the savings accrued in the debt service, this constitutes the obligation of the debtor country to make periodic investments in conservation. The schedule probably involves regular payments to a certain financial vehicle or foundation.
5. The **terms of utilization of the proceeds**, including required evidence of compliance. These might include the creation of special funds, the board of which might include representatives of the creditor/donor. The creditor is interested in obtaining evidence of the impact of the use of DNS-proceeds. Additional legal/regulatory provisions might also be

required. The Government of Ecuador, for example, provided US\$1 million in capitalization to the Protected Areas Fund to abide by its commitment to provide long-term financial support to conservation as part of a debt swap with Germany (<https://www.cbd.int/financial/debtnature/ecuador-debtswap.doc>). Subsequent DNS allowed for additional donations from the government to the same fund.

These core elements of a DNS deal are crystallized in legal agreements to be signed between the debtor-country, the creditor-country, and any additional donor(s) or recipient. An example is the agreement signed between the USA and Indonesia for a debt reduction of US\$12.7 million in 2014 (<https://www.state.gov/documents/organization/234070.pdf>), inclusive of a contribution from Conservation International (<http://www.conservation.org/Pages/default.aspx>) (CI) of circa US\$0.5 million. The typical steps in a DNS include (adapted from CFA (<http://www.conservationfinance.org/guide/guide/indexba4.htm>)):

1. **Awareness:** DNS-sponsors (e.g. conservation organizations, international organizations, environmental trust funds, public officials, etc.) organize orientation meetings to determine levels of interest and political feasibility. Although the presence of external sponsors is a common feature, the process can be initiated directly by public authorities in the debtor country.
2. **Advocacy:** preparation of information materials and presentations describing what a DNS is, including examples from other countries and advocacy with all interested parties. A pre-assessment of the debt to be swapped and of beneficiary projects and financial vehicles might also be conducted.
3. **Feasibility:** independent technical feasibility focuses on the identification of possible debt to swap, including a review of the foreign debt profile, debtor-government policy, creditors' willingness to negotiate, potential co-financing sources, financial design, etc. Technical feasibility might be split into pre-feasibility and feasibility (e.g. Georgia (<http://www.oecd.org/env/outreach/35178696.pdf>) and Kyrgyzstan (<http://www.oecd.org/env/outreach/48654897.pdf>)).
4. **Negotiation:** debtor-government and creditors enter into formal negotiations on the basis of a technical proposal. Concept, design and accountability aspects are discussed and agreed (see list above).
5. **Signature:** debtor-government and creditors sign the DNS agreement and all ancillary agreements with third parties. In complex DNS negotiations, additional steps might be required to put the scheme into effect, for example the issuance of new debt in a buy-back. The signing of the agreement will provide a formal guarantee to the debtor-government with a relinquishment of part or the totality of the creditors' rights.
6. **Transfer of funds:** the debtor-government deposits payment(s) in a pre-arranged bank or trust fund account.
7. **Monitoring of funds transfers and results:** based on the agreements signed, the debtor-government will report evidence of the payments made and results achieved.
8. **Replication and scale-up:** the model of the DNS is replicated with other creditors.

While rare, DNS schemes can also be applied to domestic debt. This is possible particularly in the case of governments managing large credit facilities for farmers. In the US, the Debt for Nature Program ([https://www.fsa.usda.gov/Internet/FSA\\_File/debtformature07.pdf](https://www.fsa.usda.gov/Internet/FSA_File/debtformature07.pdf)) can be accessed by landowners wishing to repay their debt with the Farm Service Agency (FSA) in exchange for a long term conservation contract. The contract is a voluntary legal agreement that restricts the type and amount of development that may take place on the landowner's property. By participating in the programme, the eligible borrowers reduce their debt with the FSA while contributing to conserving natural ecosystems and enhancing the environmental and scenic value of their farms. The design is very similar to the one of a Payment for Ecosystem Services (<http://www.undp.org/content/sdfinance/en/home/solutions/payments-for-ecosystem-services.html>).

#### Stakeholders

- **Creditor(s):** public or private entity holding a credit claim on a developing country's government. The creditor will forgive part or the totality of its rights to receive payments upon the guarantee that these resources will be invested in conservation. The creditor may be the Ministry of Finance of a donor country, an Export Credit Agency or a commercial bank or company. In a commercial-DNS the creditor may be a bank, investment fund, company, or many other types of commercial entity.
- **Donor(s):** creditors are sometime also donors. However, it is not uncommon for other organizations facilitating the deal%e.g. conservation organizations or international organizations%to provide or mobilize additional resources in the form of grants. In the case of commercial debt, the credit is bought with resources provided by a donor in secondary markets ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)). The latter are sometimes referred to as third-party donors.
- **Debtor:** developing country government that has borrowed resources from abroad. The authority responsible for negotiating the agreement is usually the Ministry of Finance.
- **Facilitator/intermediary:** organization supporting the debtor-government in the negotiation and/or implementation of the deal; it might also provide legal or financial services to the debtor country or help to mobilize additional resources in grants. They are often international non-profit organizations but can also be United Nations agencies, and private foundations.
- **Conservation trust funds and foundations (debtor-country):** a local environmental trust fund (<http://www.undp.org/content/sdfinance/en/home/solutions/environmental-trust-funds.html>) or other comparable financial vehicle that is selected to administer the proceeds and the disbursement of grants. The resources are usually transferred by the government in one-off or periodic instalments.
- **Implementing entity/beneficiary:** the entity that is granted access to the funds for the implementation of conservation projects, usually a local conservation organization or a park or other authority responsible for the management of protected areas.

#### Potential in monetary terms (revenues, realignment or cost-savings)

DNS can mobilize additional revenues for conservation, despite a downward trend in the number and value of transactions from the 2000s. Furthermore, the emergence of a strong climate finance agenda has suggested the potential return of "debt for climate" swaps. The likelihood of new deals is also dependent on political developments in creditor-countries that have traditionally entered into DNS agreements along with the use of this instrument by new creditors/donors, including from emerging markets.

Different indicators can be used to estimate the volume and potential of debt swaps for generating new resources: the value of the debt swapped; the debt reduction obtained; the savings from the debt service obligations; the buy-back discount rate; and the commitment from the debtor-government to conservation are the key variables. In addition to the above, the level of leverage ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)) can also be measured by the value of grants channelled to conservation in addition to the debt-relief or the difference between the cost of the debt buy-back ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)) and the resources committed by a third-party donor.

The current claims of the Paris Club (<http://www.clubdeparis.org/en/communications/page/debt-swap>) can be used as a proxy for the maximum amount of debt that could be targeted for DNS. It is an upper estimate and not an indication of actual opportunities. The total of Paris Club claims ([http://www.clubdeparis.org/sites/default/files/2014a\\_0.pdf](http://www.clubdeparis.org/sites/default/files/2014a_0.pdf)), excluding late interest, amounts to over US\$304 billion, of which US\$147 billion represents ODA claims and US\$157 billion represents non-ODA claims. To provide another reference point, since inception, the HIPC (<http://www.worldbank.org/en/topic/debt/brief/hipc>) and the Multilateral Debt Relief Initiative have written down US\$76 billion in debt (<http://www.imf.org/About/Factsheets/Sheets/2016/08/01/16/11/Debt-Relief-Under-the-Heavily-Indebted-Poor-Countries-Initiative?pdf=1>) for 36 participating countries. Historically, the largest debt-swap operations have taken place in medium and high income countries. In the case of Peru debt-swap operations resulted in US\$881.5 million of foreign debt being cancelled between 1992 and 2015, half of which was linked to DNS that mobilized circa US\$115 million for conservation. The use of DNS for leveraging additional resources has proven effective in many other countries, including Costa Rica, Ecuador, and Poland. Poland (<http://www.oecd.org/env/outreach/48654897.pdf>) concluded debt-restructuring agreements for the cancellation of 50 per cent of its debt to the Paris Club creditors. In exchange for cancelling an additional 10 per cent of the debt, Poland proposed the conclusion of DNS where it committed to a 1:1 formula. By 2000, the beneficiary, the Polish Eco Fund (<https://www.oecd.org/env/outreach/35156800.pdf>), had mobilized over US\$500 million through swaps with creditors and other grants. The USA was the largest single contributor (72 per cent) followed by France, Italy, Norway, Sweden and Switzerland.

While DNS make up only a tiny share of the total value of debt-relief, they have helped in mobilizing much-needed investment in conservation, from a few hundred thousand to tens of millions of US dollars. The largest DNS transaction (face value) has surpassed US\$60 million. The value of actual savings that corresponds to the schedule of payments by the debtor-government can however vary slightly, from 1:1 to lower or even higher amounts (i.e. the debtor-country might commit additional resources to the ones being swapped). Larger operations are more common in the case of debt reduction ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)) versus buy-backs ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)).

The value of the debt under DNS agreements surpassed US\$2.6 billion from 1985-2015 and resulted in transfers of circa US\$1.2 billion to conservation projects worldwide. Bilateral-DNS dominate, accounting for over 93 per cent of the total. Most transactions, about US\$2 billion in value, were completed in the 1990s. From 2010-2015 transactions amounted to about US\$150 million.

Commercial-DNS accounted for approximately US\$200 million in restructured debt and US\$123 million in allocations to conservation. These transactions came to an end after 2000 with the number of commercial-DNS declining to just two. This decline can be explained by the conditions in secondary markets ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html))% i.e. where the discount price for commercial debt is determined%and by improved debt sustainability achieved by developing countries after a number of debt crises in the eighties and nineties and

subsequent debt relief efforts under the HIPC (<http://www.worldbank.org/en/topic/debt/brief/hipc>) and other initiatives. These trends have reduced opportunities for buying commercial credit at favourable discount rates.

The donor landscape is largely dominated by the USA, which alone was responsible for over a half of the debt being swapped under bilateral-DNS (53 per cent) and a third of the revenue streams for conservation (36 per cent). Switzerland (16 per cent) and Germany (13 per cent) follow. Other countries—Belgium, Finland, France, Italy, Netherlands, Norway and Sweden—contributed, with values of between 1 and 3 per cent. Thirty-nine countries benefited from these transactions, half of which are in the Latin America and Caribbean region. In terms of face value six countries surpassed the US\$100 million threshold: Bolivia; Costa Rica; El Salvador; Jamaica; Peru; and Poland. With the exception of El Salvador, these countries were able to commit over US\$100 million to conservation projects. Twelve countries negotiated debt for a value of between US\$30 million and US\$100 million and the remaining negotiated debt with a value less than US\$30 million.

The USA is the single largest donor-creditor both in terms of the number of transactions and value in bilateral-DNS. It operated first through the EAI (<https://www.usaid.gov/biodiversity/TFCA/programs-by-country>) and then the TFCA (<https://www.usaid.gov/biodiversity/TFCA/programs-by-country>), two international debt-reduction facilities. Originally with eligibility for tropical countries only, the scope of TFCA (<https://www.usaid.gov/biodiversity/TFCA/programs-by-country>) was extended to conservation efforts worldwide in 2015. US-based foundations, including CI (<http://www.conservation.org/Pages/default.aspx>), TNC (<http://www.nature.org/>), and the US branch of the WWF (<http://www.worldwildlife.org/initiatives/conservation-finance>) are the largest co-financiers of both commercial and bilateral DNS. The TFCA (<https://www.usaid.gov/biodiversity/TFCA/programs-by-country>) has favoured the role of parallel co-financing, the latter recording over US\$20 million. In the latest DNS, recently negotiated in the Seychelles, a number of US-based foundations participated, perhaps opening this instrument to new actors.

*Note on data: while information was cross-checked where possible from primary and secondary sources, the above numbers are only indicative. Known issues include different methodologies used to calculate the value of the debt-relief (e.g. face value vs. net present value or the cost of the debt-reduction) and inconsistency in the use of exchange rates. The main sources are USAID (<https://www.usaid.gov/biodiversity/TFCA/programs-by-country>), Sheikh (<https://www.fas.org/sgp/crs/misc/RL31286.pdf>) (2016) and the WWF (<https://www.cbd.int/doc/external/wwf/wwf-commercial-swaps-en.pdf>). The rationale for such approximation stems from the objective to provide an overview of DNS financing.*

## When is it feasible?

### Legal and/or other feasibility requirements

Upon identification of the potential debt to be swapped, political support from key ministries and coordination within the debtor-government are necessary to start negotiations with foreign counterparts. No legal requirement is usually required in the debtor-country. The DNS is often signed in the form of a bilateral agreement between the debtor and creditors. Some debtor-countries might have adopted guidelines for the negotiation of foreign debt which the DNS may also need to respect.

Donor countries with large debt-reduction facilities might establish eligibility criteria for debtor-countries. For example, the TFCA (<https://www.usaid.gov/biodiversity/TFCA/eligibility-requirements>) has specified criteria for country eligibility (below) and has listed eligible activities (<https://www.usaid.gov/biodiversity/TFCA/eligible-activities>) to be financed:

- Financial: the debt is official debt owed to the USA as a result of concessional loans (i.e. [ODA](#)) or credits under the Agricultural Trade Development and Assistance Act. Low- or middle- income status.
- Political: democratically-elected government; cooperation with the USA on drug control; not supporting terrorism; not violating internationally recognized human rights.
- Economic: International Monetary Fund or World Bank programme/loan; pursuance of investment reforms (e.g. bilateral investment treaty with the USA); and other(s).
- Environmental: hosting at least one tropical biodiversity hotspot.

In addition to legal prescriptions contained in legislation or donor strategies, bilateral relations matter. For example, Costa Rica was in one instance not considered eligible pending payments to the creditor country's citizens due to land expropriations for new protected areas.

Feasibility assessments are common in the preparation of a DNS. They usually feature a review of the foreign public debt outstanding and any debt relief operations with other creditors that may be ongoing. This analysis and due diligence is needed to identify the amount of debt eligible to be swapped, the willingness to swap by the creditors as well as the activities or financial vehicles that might potential receive the DNS proceeds. While not a requirement, the existence of environmental trust funds (<http://www.undp.org/content/sdfinance/en/home/solutions/environmental-trust-funds.html>) capable of managing large grant schemes can facilitate and speed up the process.

### Minimum investment required and running costs

DNS costs are often limited to participating in the negotiation process, carrying out feasibility studies and paying financial and legal fees. These costs can be estimated in a range from US\$50,000-300,000. If there is no legal entity available to manage the proceeds, additional resources will be required to create the financial vehicle, usually in the form of an environmental trust fund (<http://www.undp.org/content/sdfinance/en/home/solutions/environmental-trust-funds.html>). While there are exceptions, the US Treasury usually requires [NGOs](#) (</content/sdfinance/en/home/glossary.html>) to contribute at least 20 per cent of the total debt in order to be a party to the debt swap.

Financial and legal fees might become substantial if the issuance of new debt instruments is required to re-finance the loan ([buy-back](/content/sdfinance/en/home/glossary.html) (</content/sdfinance/en/home/glossary.html>)). Anecdotal evidence of legal and transaction fees points to costs ranging from 1.5 per cent of the [face value](/content/sdfinance/en/home/glossary.html) (</content/sdfinance/en/home/glossary.html>) up to 5 per cent. These fees are usually charged by financial intermediaries and legal service providers. It is not rare for [NGOs](/content/sdfinance/en/home/glossary.html) (</content/sdfinance/en/home/glossary.html>) to receive *pro bono* services from law firms based in the creditor country.

The cost of capital of the new debt will depend on the value, the complexity of the product, the number of markets, taxes, risk profile of the sovereign issuer, extended guarantees, etc. By definition the new cost of capital should be lower than the one of the debt swapped to make the swap worthwhile.

### In what context/when it is more appropriate

DNS can benefit both middle income countries with large natural resources and Least Developed Countries (<http://unohrls.org/about-ldcs/>) or Small Island Developing States (<http://unohrls.org/about-sids/>) (SIDS). DNS are ultimately dependent on the creditor-donor's willingness to forgive or reduce a credit in exchange for preserving nature.

The following scenarios are likely to contribute to successful swap negotiations for bilateral-DNS: a) debtor-country with valuable natural resources at risk; b) a debt outstanding with a donor-country that embeds the protection of the environment in its foreign aid policies, and possibly in the form of [ODA](/content/sdfinance/en/home/glossary.html) (</content/sdfinance/en/home/glossary.html>), credit as it is often preferred by creditor countries; d) the existence of trust funds and/or foundations that can effectively intermediate the use of the proceeds; and e) good bilateral diplomatic relations between the creditor and debtor governments and/or lack of outstanding issues.

The buy-back of commercial debt, commercial DNS, is highly dependent on the value of the debt in secondary markets. The write-off of highly discounted debt obligations is a valuable means to clean the books of developing countries, while investing the savings in development and environmental activities. The existence of a secondary market for commercial credit that features high discount rates is thus an important contextual factor for commercial-DNS.

The debtor-country should have the fiscal capacity to respect the schedule of repayments. If the country is at high risk of a default and/or facing a liquidity crisis, debt cancellation might be the only sustainable solution and DNS might not be appropriate.

## What are the main risks and challenges?

**Pros**

- Debtor-country reduces its debt obligations—including payments in foreign currencies—and frees up resources for environmental spending. If the amount swapped is large enough compared to a country's debt stock, the DNS might help to reduce the country's risk of debt distress. The debtor-government's credit standing might similarly improve, allowing for less-costly access to credit markets. The fiscal space might be expanded thanks to cancellation, reduced interest rates, or the extension of the maturity.
- Converting foreign currency debts to local currency payment obligations can lower the debt-service burden and the vulnerability of the debtor-country to exchange rates fluctuations. This result is however not automatic as in certain instances the debt burden might increase due to the debt-swap.
- Creditors can increase the value of their remaining debt and improve their environmental credentials.
- DNS can leverage funds for conservation. They can be used as co-financing or matching funds for larger conservation endeavors. Similarly, a successfully implemented debt swap may generate interest among other donors.
- A long-term funding mechanism for conservation, DNS stimulate the creation of environmental trust funds (<http://www.undp.org/content/sdfinance/en/home/solutions/environmental-trust-funds.html>) that disperse proceeds over a long period of time.
- Can promote participation by civil society, particularly when local NGOs ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)) or environmental trust funds (<http://www.undp.org/content/sdfinance/en/home/solutions/environmental-trust-funds.html>) are among the beneficiaries.

**Cons**

- DNS have only resulted in relatively small amounts of debt relief, limiting their impact in reducing developing countries' debt burden;
- Transaction costs might be high compared to other financing instruments; negotiations can be time-consuming, spanning several years and might result in limited debt reduction or discount rates. The length of the design and negotiation phase of a DNS can span one to three years, mostly depending on the willingness of the parties and the complexity of the deal.

**Risks**

- Lengthy negotiations. Disagreement between the creditor and debtor country on conservation goals or other details of the agreement can increase the costs of the operation.
- Currency exchange risks, the impact of which (and the response strategy) is dependent on the financial structure of the DNS. The currency risk can be mitigated, for example, by making payments in local currency at the spot rate on the day payments are due. In the latter case the risk is lower for the entity managing the DNS cash flow.
- Inflation risks, the value of future payments in local currencies might be highly by inflation. Mitigation strategies to inflation risks are similar to the ones for currency exchange risks.
- The DNS might prevent the possibility of negotiating a more comprehensive and favourable debt treatment (debt relief and restructuring).
- The debtor-country might not be able or willing to respect its commitments. Fiscal and liquidity crises can undermine the capacity of the debtor-government to meet its obligations.
- Management risks related to the capacity of the fund selected to administer grants from the DNS proceeds, including mismanagement, corruption and failures in the identification of good projects to be financed.
- While rarely reported, it is possible that the projects financed might create discontent in local communities (e.g. removal of access to resources by local communities).
- ODA ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)) substitution (no [additionality](http://www.undp.org/content/sdfinance/en/home/glossary.html) ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html))). While a DNS is an option for increasing ODA ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)), it might just substitute for other committed flows.
- The debtor-country may lose sovereignty in deciding about the spending of public resources. Grants may be disbursed according to donors' preferences, which in turn might or might not better mirror local conservation needs. In most DNS the debtor-government decides in agreement with the creditor(s) about the modalities of funds' disbursements, both participating in the boards of the trust fund responsible for grant-making.
- Debt swaps may be tied to the purchase of goods or services for the creditor(s).

**How can the design be ameliorated to improve the impact?**

The environmental impact of DNS can be measured by the conservation outcomes achieved through the projects financed from the proceeds. DNS were instrumental in expanding fiscal expenditure on conservation, despite the fact that a substitution effect (i.e. [additionality](http://www.undp.org/content/sdfinance/en/home/glossary.html) ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)) of these expenditures) might have occurred. These outcomes are not dependent on the instrument itself—the DNS—but on the quality and design of the grant-making schemes selected. In some countries, results were remarkable, for example the DNS concluded in Jamaica (1990) was instrumental in the establishment of the country's first national park, the Blue and John Crow Mountain National Park. In other countries, the beneficiary organization (of DNS-proceeds) has become a national champion for the protection of the environment, such as Kehati (<http://www.kehati.or.id/en/>) in Indonesia, and was able to leverage DNS resources to attract additional investment. In the case of Profonampe ([http://www.conservationfinance.org/guide/WPC/WPC\\_documents/Apps\\_11\\_Paniagua\\_v2.pdf](http://www.conservationfinance.org/guide/WPC/WPC_documents/Apps_11_Paniagua_v2.pdf)) (Peru), financing from a DNS was mostly channelled to the National Service for Natural Areas Protected by the State, helping to close a structural financing gap in the protected areas system. It is impossible to provide a detailed account of DNS results across the board due to patchy information.

The impact of DNS on a country debt's structure has been minimal, albeit positive. The net present value of fiscal obligations might be at par with the value of the original debt or even increase (e.g. Indonesia (<http://www.tandfonline.com/doi/pdf/10.1080/00074918.2014.896238?needAccess=true>) due to onerous [schedules of payments](http://www.undp.org/content/sdfinance/en/home/glossary.html) ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)) or in the event of (highly probable) larger debt relief negotiations. Due to the low value of the debt swapped, there is no evidence of positive macroeconomic effects. Nevertheless, the theory remains valid. In addition, there is an inherent trade-off between lowering debtor-obligations and investing much-needed resources in the conservation of nature. This trade-off can be partially offset by investing the resources in projects that can generate positive economic returns along with environmental benefits, for example adaptation to climate change or the expansion of protected areas with potential for eco-tourism.

There are two different strategies towards improving the social and environmental impacts of DNS. The first is related to the macroeconomic impact and the second to the effective use of resources. The first strategy is related to the outcome of the DNS negotiations and its terms. It ultimately depends on the value of the DNS and on reducing the risks taken by the debtor-government (e.g. currency risks, etc.). Creditors negotiating DNS agreements should abide by best practices in [ODA](http://www.undp.org/content/sdfinance/en/home/glossary.html) ([/content/sdfinance/en/home/glossary.html](http://www.undp.org/content/sdfinance/en/home/glossary.html)) management and be considerate of the country context and needs.

The second is related to making the spending of DNS proceeds more impactful. Evaluations conducted by local trust funds that have benefited from DNS proceeds provide evidence of results and some lessons learned. Beyond conservation outcomes, qualitative assessments of social benefits have also been conducted, e.g. in Bangladesh ([http://www.arannayk.org/pdf/annual\\_report/af\\_annualreport\\_2015.pdf](http://www.arannayk.org/pdf/annual_report/af_annualreport_2015.pdf)) where the average annual income of beneficiaries has increased by 96 per cent in the projects where there is co-management of protected areas. However, controversies have also mounted as regards the negative social impacts of DNS, as local communities might not have benefited due to the selective nature of projects financed. The critical element lies in the identification of projects that can deliver multiple benefits and that respect social safeguards. For additional information please refer to the environmental trust funds solution (<http://www.undp.org/content/sdfinance/en/home/solutions/environmental-trust-funds.html>).

**Guidelines and Case Studies***Guidance*

- Conservation Finance Guide: Debt Swaps (<http://www.conservationfinance.org/guide/guide/indexba4.htm>)
- Debt-for-Nature Initiatives and the Tropical Forest Conservation Act: Status and Implementation (<https://www.cbd.int/financial/debtnature/g-inventory2010.pdf>)
- Debt-Swaps for Development ([http://www.eurodad.org/uploadedfiles/whats\\_new/reports/debt\\_%20swaps\\_%20eng\(1\).pdf](http://www.eurodad.org/uploadedfiles/whats_new/reports/debt_%20swaps_%20eng(1).pdf))
- Lessons Learnt from Experience with Debt-for-Environment Swaps in Economies in Transition (<http://www.oecd.org/env/outreach/39352290.pdf>)

*Case studies*

- Peru (<http://www.ecologyandsociety.org/vol16/iss3/art13/>)
- Indonesia (<http://portal.research.lu.se/portal/files/2215489/5218925.pdf>)
- Madagascar (<https://www.cbd.int/financial/debtnature/madagascar-debtdev.pdf>)
- Seychelles (<http://www.naturevesttnc.org/business-lines/debt-restructuring/seychelles-debt-restructuring/>)



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Our Perspective

## Our work

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» (</content/rbap/en/home/post-2015/sdg-overview>)



(<http://www.undp.org/content/home/en/home/post-2015/>)

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**Environmental finance »** (</content/undp/en/home/ourwork/sustainable-development/natural-capital-and-the-environment/environmental-finance/>)

**Our Perspective** (</content/undp/en/home/blog/2015/7/9/The-macroeconomics-of-development-financing-/>)

**Jul 9, 2015**

We should reach a consensus on the fact that macroeconomic policies in low-income economies need to also jettison the conventional wisdom of undue restrictiveness.

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