



Nature-related financial opportunity use case

Debt-for-nature swap
supported by credit
insurance for marine
conservation

The University of Cambridge Institute for Sustainability Leadership

CISL is an impact-led institute within the University of Cambridge that activates leadership globally to transform economies for people, nature and climate. Through its global network and hubs in Cambridge, Cape Town and Brussels, CISL works with leaders and innovators across business, finance and government to accelerate action for a sustainable future. Trusted since 1988 for its rigour and pioneering commitment to learning and collaboration, the Institute creates safe spaces to challenge and support those with the power to act.

Organisation

MS Amlin specialises in providing insurance coverage to commercial businesses and offer reinsurance protection to other insurance companies around the world.

It is part of the global top-10 insurance group MS&AD and works in partnership with its brokers and clients to provide proactive risk solutions and support across a broad range of trades and industries. MS Amlin operates through its Lloyd's Syndicate 2001 and can trace its roots in the insurance market back over 100 years.

Authors

Laura Deltenre (CISL) and Louise Scott (MS Amlin) wrote the report in close collaboration with Sid Miller and Dr Nina Seega from CISL, and Amir Sethu and Chris Johnson from MS Amlin.

Citing this report

University of Cambridge Institute for Sustainability Leadership and MS Amlin (CISL and MS Amlin), 2024. Nature-related financial opportunity use case: Debt-for-nature swap supported by credit insurance for marine conservation. Cambridge, UK: University of Cambridge Institute for Sustainability Leadership.

Acknowledgements

The research was grant-funded by the European Climate Foundation (ECF). The authors would like to thank the following individuals for their contributions: Sara Taaffe (CISL) and Dr Mohsen Gul (CISL), as well as academics from the University of Cambridge.

Copyright

Copyright © 2024 University of Cambridge Institute for Sustainability Leadership (CISL). Some rights reserved. The material featured in this publication is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Licence (CC BY-NC-SA 4.0).

Preface

Members of ClimateWise are working with the Cambridge Institute for Sustainability Leadership (CISL) and academic partners from the University of Cambridge to determine a common language and framework for financial institutions to identify and assess nature-related financial risks and opportunities so that these can be measured and managed.

Building on CISL's [Nature-related financial risks](#) workstream, including [Why Nature Matters: Nature-related risks and opportunities for insurance underwriting](#) and [Roadmap: Identification and integration of nature-related risks and impacts in underwriting and insurance brokerage](#), the next phase of work involved the development of use cases with insurance companies that demonstrate how nature-related opportunities can manifest in their portfolios. The opportunity use cases were developed using the LEAP approach from [The Taskforce on Nature-related Financial Disclosures \(TNFD\)](#) framework as a grounding model.

This paper is one of a series of use cases, each assessing a specific type of nature-related financial opportunity. The insurance companies led the opportunity assessment process and subsequent write-ups in close collaboration with the CISL team, who offered guidance, input and support.

The purpose of these use cases is to enable and galvanise further assessments of nature-related opportunities across the insurance industry. In detailing opportunity assessment process, this document aims to provide examples for the wider financial sector. All insurance firms are vulnerable to nature-related financial risks; and the financial materiality of nature loss evidenced constitutes an urgent call to action.

Through the creation of these use cases, insurance companies have started to engage internally on nature loss and catalysing external conversations with clients and investee companies. Through these conversations, collaborative strategies to mitigate nature loss and support a transition to a nature-positive economy can emerge. Aligned with [The Kunming-Montreal Global Biodiversity Framework \(GBF\)](#), which requires that we fully need the financial system to allow nature to start recovering by 2030,¹ providing examples of bringing nature into mainstream financial decision-making will pave the way for other financial firms to follow suit.

Contents

Preface..... 3

Executive Summary 5

Introduction 6

 Stakeholders’ roles7

The LEAP Approach..... 10

 1. Locate your interface with nature 10

 2. Evaluate dependencies and impacts on nature..... 11

 3. Assess risks and opportunities..... 12

 4. Prepare to respond and report 15

Analysis and Findings 16

Conclusion 18

References 19

Executive Summary

Ecuador's geographical positioning at the nexus of rich marine ecosystems, particularly the Galápagos Islands, underscores the region's paramount importance for marine conservation. Despite its status as the world's top exporter of crustaceans in 2021, the country has faced considerable economic destabilisation. Much of it was due to the COVID-19 pandemic, resulting in a notable decline in environmental and social spending. Acknowledging the urgent need to tackle environmental issues like overfishing and habitat degradation, Ecuador endeavoured to diversify its economy to strategically position itself to capitalise on financial opportunities linked to nature-positive considerations.

To address environmental conservation needs and Ecuador's financial constraints, a Debt-for-Nature Swap (DfNS) initiative was implemented. By restructuring debt in exchange for commitments to protect and restore natural habitats, the initiative aimed to alleviate Ecuador's debt burden while promoting environmental conservation through innovative financial mechanisms.

The collaboration involved MS Amlin, a global specialty insurer, alongside various stakeholders, including governmental bodies, financial institutions, and local organisations, to ensure the risks associated with the transaction were mitigated, enhancing investor confidence and transaction stability.

Ecuador DfNS's success underscores financial institutions' transformative potential in driving sustainable development. MS Amlin's involvement highlights the evolving role of insurers towards fostering environmental stewardship alongside financial viability. It addresses risk mitigation and insurance mechanisms to ensure transaction stability and investor confidence, prompting considerations about broader implications on the insurance industry and the need for effective regulatory frameworks.

The success of the initiative may serve as a precedent for future collaborations, inspiring similar ventures in other regions, grappling with debt and ecological challenges. The Ecuador deal may be considered as a blueprint for other countries stimulating growing investor demand, such as Sri Lanka and Colombia, both of which are already considering similar deals. It may also showcase the feasibility and benefits of such swaps to attract participation from other nations.

Moving forward, continuous monitoring, reporting, and adaptation strategies are crucial to ensuring the initiative's integrity and impact over time. Regulatory frameworks and technological innovations also play vital roles in governing and enhancing the effectiveness of such initiatives. Overall, the Ecuador DfNS represents a potential example for aligning economic interests with environmental conservation, paving the way for a more sustainable future.

Introduction

Nature provides a wide range of ecosystem services critical to human well-being. These services include air quality and local climate, water security, food and other good provisions, habitat intactness, and hazard regulations.² When nature is degraded or lost, these services can be disrupted, leading to risks such as food shortages, water scarcity, and increased vulnerability to natural hazards.

Nature and biodiversity are crucial in enhancing resilience to environmental risks and providing ecosystem stability and adaptability.³ According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), an estimated 1 million species are at risk of extinction, with alarming implications for ecosystems worldwide.⁴ Healthy ecosystems can protect and mitigate the impacts of climate change, reduce the severity of events like floods, hurricanes, and droughts, and decrease communities' vulnerability to risks.⁵ Furthermore, the degradation of the goods and services that nature provides poses a financial risk, as underscored by the findings of the UN Environment Programme Finance Initiative's (UNEP FI) Principles for Sustainable Insurance Initiative report.⁶

Ecosystem Services:

"Benefits that people obtain from natural capital, such as air and water purification services, crop pollination and the breaking down of waste. Biodiversity underpins the flow of benefits. Ecosystem services are also known as 'nature's contributions to people'."

Source: CISL [Handbook for Nature-related Financial Risks](#)

The Taskforce for nature related financial disclosures (TNFD) defines nature-related opportunities as activities that create positive outcomes for organisations and nature by avoiding or reducing the impact on nature or contributing to its restoration.⁷ Nature-related opportunities can occur:

- i) when organisations mitigate risk of natural capital and ecosystem services loss; and,
- ii) through strategic transformation of business models, products, services and investments that either actively work to halt or reverse the loss of nature. Or, through the implementation and support for Nature-based Solutions (NbS) through financing or insurance.

Nature-related financial opportunities will vary according to the market, region and industry in which an organisation operates. Some opportunities could include:

- transitioning to more efficient services and processes requiring fewer natural resources,
- development of less resource-intensive products/services,
- access to biodiversity-related and/or green funds, bonds or loans,
- resilience through the diversification of biodiversity-related resources, and
- enhanced reputational benefit as a pioneer in reducing nature loss and protecting/restoring nature.

MS Amlin has explored and assessed a debt-for-nature swap supported by credit insurance for marine conservation in Ecuador.

Debt-for-nature swap (DfNS) is a financial arrangement in which a portion of a country's outstanding debt is forgiven, cancelled, or restructured by its creditor(s) in exchange for commitments to invest in environmental conservation or sustainable development initiatives. The primary objective of a DfNS is to address financial and environmental concerns, providing a win-win solution for debtor nations and the global environment.

Source: The Nature Conservancy (TNC) [The Debt-for-Nature Lifeline](#)

Credit insurance can play a supportive role in DfNS by mitigating the financial risks associated with the investments made by the debtor nation in environmental projects.

Source: The Association of British Insurers (ABI) [Trade Credit Insurance](#)

Stakeholders' roles

MS Amlin

MS Amlin is a global specialty (re)insurer, providing insurance and reinsurance solutions for a wide range of clients across industries such as energy, financial institutions, marine, aviation and property. As a Lloyd's of London Syndicate, MS Amlin is embedded in the London specialist insurance market, leveraging its expertise and experience to offer tailored solutions that address the unique risks faced by its clients.

In 2023, MS Amlin's Credit & Political Risk Team was presented with an opportunity to participate in a DfNS in Ecuador. MS Amlin would be providing a share of the political risk insurance connected to the loan, through use of a Political Risk Insurance (PRI) coverage. Certain market-wide PRI coverage, such as Contract Frustration, Trade Credit, and CEND (confiscation, expropriation, nationalisation and deprivation), are well placed to be utilised in nature financing solutions.

The intertwining of country debt and climate-related loss and damage underscores the challenges developing nations face in allocating funds. According to the World Bank's International Debt Report, in 2022, developing countries collectively allocated nearly USD 500 million to service their external public and publicly guaranteed debt.⁸ This substantial financial commitment drained resources from critical sectors such as health, education, and climate initiatives. The debt-service payments, comprising principal and interest, surged to a record USD 443.5 billion, marking a 5% increase from the previous year, fuelled by the largest surge in global interest rates in four decades. The International Debt Report highlights the dire situation for the 75 poorest countries, revealing a record USD 88.9 billion in external public debt service payments in 2022, with a projected 40% increase over 2023-2024 and quadrupled interest payments since 2012 (USD 23.6 billion). World Bank Chief Economist Indermit Gill highlights Ethiopia's bondholder struggles as a key example of default risk, intensifying concerns about a looming debt crisis and contagion.⁹ Gill urges prompt and coordinated action as debt-servicing costs rise. The report showcases that one in four developing countries is sidelined from international capital markets, with 18 sovereign debt defaults in 10 nations over three years.

The complex interplay between debt dynamics and climate challenges necessitates a nuanced understanding of the financial constraints faced by the emerging and developing economies. The statistics presented in the International Debt Report underscore the urgency for comprehensive and coordinated measures to address the looming threat of debt distress and ensure funds are available for crucial nature protection and restoration efforts.

As a country bears a large debt burden, its ability to afford loss and damage mitigation, anticipatory action and preventative measures decreases. The use of credit insurance in Ecuador's DfNS helps address these problems. In this case, Ecuador's outstanding debt is reduced, freeing up funds, which are then spent on environmental conservation. Ecuador's deal is the world's largest to date, cutting the country's debt by over USD 1 billion once the USD 450 million of total conservation spending is taken into account.¹⁰ However, one crucial problem is making international investors comfortable with taking on this risk. Usually, this risk is 'mitigated' with an appropriate interest rate. The fundamental provision of a DfNS, however, is to reduce the interest rate in question. These mechanisms require certain repayment assurances to assure investors – this is where the Insurance Market can come into play.

The sustainability 'blue' bond is a relatively new concept. It is similar to the 'green' bond in that both securities are issued to finance environmental initiatives. However, the 'blue' bond focuses on protecting and restoring marine ecosystems. With the help of third parties, a blue bond was coordinated and issued by Credit Suisse, facilitating the purchase of Ecuador's debt by the international market. In turn, the debt was purchased on the proviso that it would be sold back to Ecuador at a reduced interest rate, freeing up Ecuadorian capital for 'blue' conservation efforts. Key to this was the U.S. Development Finance Corporation's (DFC) USD 656 million insurance guarantee and subsequent reinsurance policy issued by the Lloyd's market – that MS Amlin participated on – which provided a level of security to investors, enabling a reduction in debt pricing. In essence, the DFC's USD 656 million insurance guarantee serves as a form of protection for investors against potential losses stemming from the Ecuador deal. However, given the magnitude of this guarantee, the DFC sought to mitigate its own risk exposure by seeking reinsurance coverage from the Lloyd's market, a global hub for insurance and reinsurance transactions. By leading the reinsurance policy issued by Lloyd's market, MS Amlin ensured that investors have an additional layer of security, akin to having a safety net in case the primary insurance coverage provided by the DFC is exhausted. This collaboration between the DFC and reinsurance markets is essential in providing investors with the confidence to participate in initiatives like the Ecuador deal.

Ecuador presents an excellent use case as an emerging market nation that includes the Galápagos Islands – a UNESCO World Heritage Site. There are challenges from a risk standpoint, including economic and environmental risks, which should be considered in the underwriting process. Economic factors such as currency fluctuations, inflation, and debt levels can introduce volatility and uncertainty into the market. Environmental risks, like natural disasters, earthquakes, and volcanic eruptions require special consideration. Additionally, preserving delicate ecosystems like the Galápagos Islands is critical. In this case, preserving the Galápagos through debt restructuring methods produces a mutually beneficial outcome for Ecuador and the insurance industry.

In addition, there are several other avenues for insurers to collaborate with Ecuador. The Political Violence class, for example, is a particularly relevant avenue to explore. Within this broader framework, political violence represents a subcategory of political risk. This class of insurance provides coverage against losses resulting from the physical impact of political turmoil, civil unrest, or acts of terrorism. Given the volatility

of Ecuador's political landscape, characterised by protests, demonstrations, and occasional unrest, there is a heightened need for businesses and investors to protect their assets and interests against potential political violence. Insurers can play a crucial role in providing risk management solutions tailored to the specific needs of businesses operating in Ecuador, promoting stability and resilience in the face of political uncertainties. By offering Political Violence insurance, insurers can help mitigate the financial impact of political unrest on businesses, enabling them to operate with greater confidence and continuity despite the challenging environment.

Other partners

Legal & General (L&G): This asset manager invested USD 250 million in Ecuador's Galápagos debt experiment, becoming the biggest cornerstone investor in the world's largest debt-for-nature swap.¹¹

Credit Suisse Group AG: The bank that structured the Galápagos debt deal, facilitating the exchange of USD 1.63 billion of Ecuador's dollar-denominated bonds for a USD 656 million loan with lower repayment rates.¹² Credit Suisse has previously been involved in similar debt-for-nature swaps in Belize and Barbados.

US International Development Finance Corporation (DFC): The DFC played a role in providing guarantees and insurance for the debt-for-nature swap. Its involvement helped mitigate risks associated with the transaction.¹³

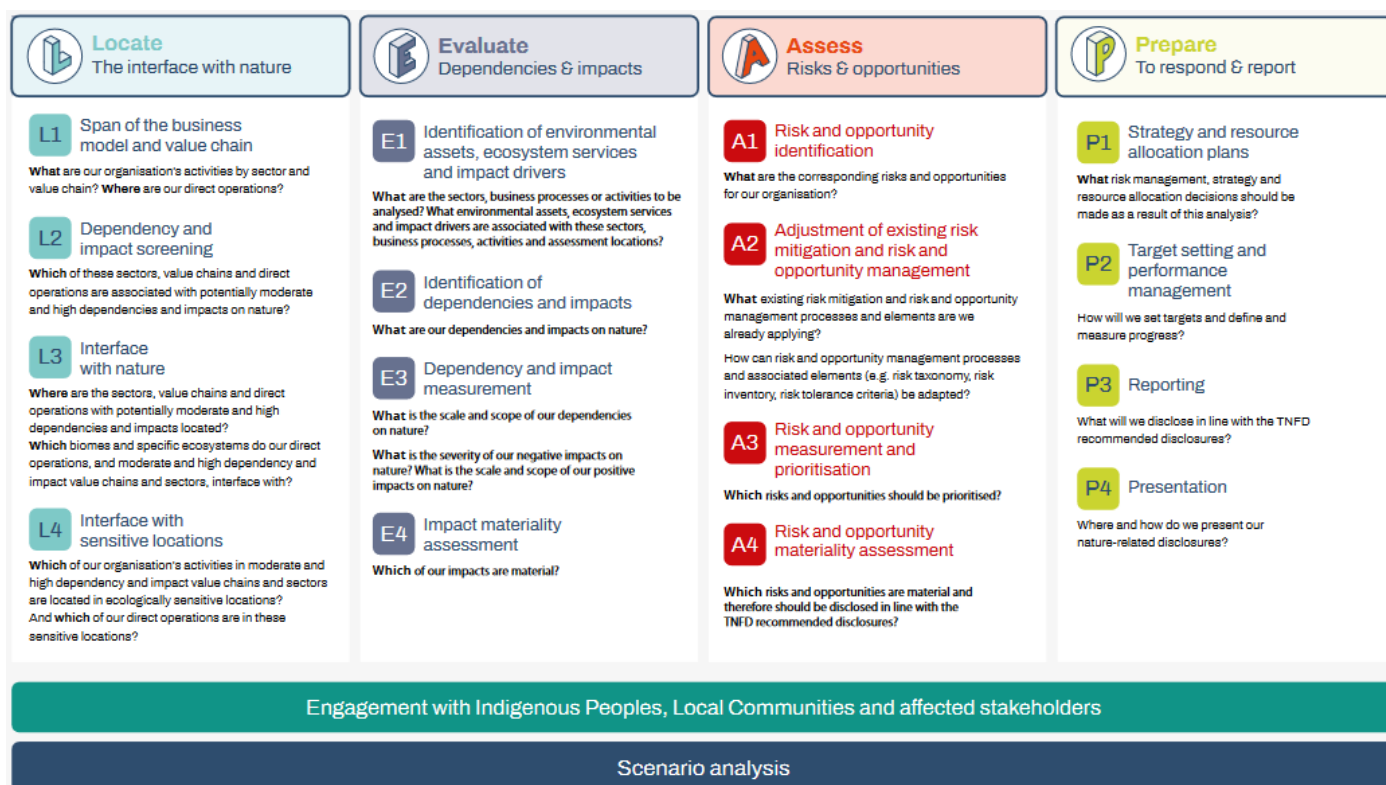
Inter-American Development Bank (IDB): The IDB also provided guarantees for the debt swap in Ecuador. The IDB is actively discussing potential similar debt-for-nature swaps with other Central and South American countries, indicating its potential involvement in future deals.¹⁴

The LEAP Approach

To explore the nature-related financial opportunity of assessing DfNS supported by credit insurance for marine conservation by MS Amlin, this use case is based on Ecuador.

To develop this opportunity use case, the [LEAP](#) (Locate, Evaluate, Assess and Prepare) approach from the TNFD has been used to explore and implement nature-related financial opportunities. See the framework in Figure 1 below:

Figure 1: The TNFD LEAP approach to identifying nature-related financial opportunities¹⁵



1. Locate your interface with nature

Ecuador

Ecuador is situated at the intersection of rich marine ecosystems. The Galápagos Islands and coastal regions serve as ecological hotspots, meaning the region has crucial interest in marine conservation. The Galápagos Islands, known for inspiring Charles Darwin's Theory of Evolution, house unique species like giant tortoises and marine iguanas found nowhere else on Earth.¹⁶ Recognising the country's imperative to address environmental challenges, such as overfishing and habitat degradation, Ecuador positions itself to leverage nature-related financial opportunities. In 2021, Ecuador emerged as the world's largest exporter of crustaceans (USD 5.33 billion), underlining its economic reliance on marine resources.¹⁷ However, the country has been significantly destabilised by the impact of the COVID-19 pandemic, leading to a sharp reduction in environmental and social spending.

As Ecuador navigates economic challenges and endeavours to diversify its economy, this trajectory inherently intertwines with environmental considerations. Efforts to reduce dependence on traditional sectors like oil exports align with global environmental goals, emphasising a shift towards cleaner and more sustainable energy sources. In the context of debt restructuring and financial negotiations, Ecuador's commitment to environmental conservation, particularly in ecologically significant regions like the Galápagos Islands, reflects a strategic approach to capitalise on nature-related financial opportunities.

The ongoing economic diversification, if directed towards environmentally sustainable sectors such as ecotourism and conservation initiatives, has the potential to contribute not only to economic resilience but also to environmental stewardship. Moreover, the political dynamics, including changes in leadership and public discourse, are pivotal in shaping Ecuador's environmental policies. The nation's active participation in international agreements and acknowledgement of environmental challenges underscore a commitment to address ecological concerns within the broader context of economic and political considerations.

2. Evaluate dependencies and impacts on nature

In the realm of marine conservation, insurance companies wield significant influence by providing coverage to businesses and industries involved in activities that can impact the oceans, either directly or indirectly through their supply chains. With potential environmental repercussions, sectors such as mining or manufacturing find themselves under the horizon of insurance policies.

These policies play a dual role: not only do they provide financial protection, but they also serve as instruments for promoting environmentally responsible practices. The insurance sector can act as a catalyst for change by offering more favourable rates to companies embracing sustainable operations. This indirect influence encourages businesses to adopt practices that contribute positively to marine conservation.

In 2023, Ecuador completed the largest DfNS in history, exchanging USD 1.628 billion of its government bonds for a USD 656 million loan at significantly reduced repayment rates.¹⁸ This transaction is projected to generate roughly USD 323 million over the next 18.5 years, with savings earmarked for marine conservation in the Galápagos Islands - a UNESCO World Heritage site and biosphere reserve.

The debt conversion includes a USD 5.41 million endowment for the Galápagos Life Fund (maturing to USD 227 million in 2041) to finance preservation thereafter. The Galápagos Life Fund directs marine conservation funding to the Galápagos National Park Service to manage, monitor and enforce marine protections for the waters surrounding the Galápagos Islands. The funds will also support local, Ecuador-based organisations to conduct research, advance sustainable fisheries, strengthen climate resilience, and develop a sustainable blue economy for the local community.

Debt-for-Nature Swap and Credit Insurance to Mitigate Financial Risks:

- **Dependencies:** Ecuador can leverage international mechanisms such as DfNS, as exemplified by the Galápagos debt swap, to contribute significantly to marine conservation efforts. Credit insurance can be crucial in mitigating financial risks associated with projects directly and indirectly related to marine conservation, such as freeing up resources for conservation projects, enabling the development of more effective and sustainable solutions, or investing in environmental research, as demonstrated in the Galápagos deal. Additionally, the success of this DfNS case in

Ecuador can serve as a precedent, showcasing the feasibility and benefits of such swaps to attract participation from other nations.

- **Impact:** DfNS, exemplified by the Galápagos initiative, can free up financial resources for Ecuador, enabling it to invest in sustainable practices, conservation research, or contribute to international initiatives promoting marine conservation. By providing a safety net against financial losses, credit insurance encourages private investors to participate in projects with positive environmental impacts.

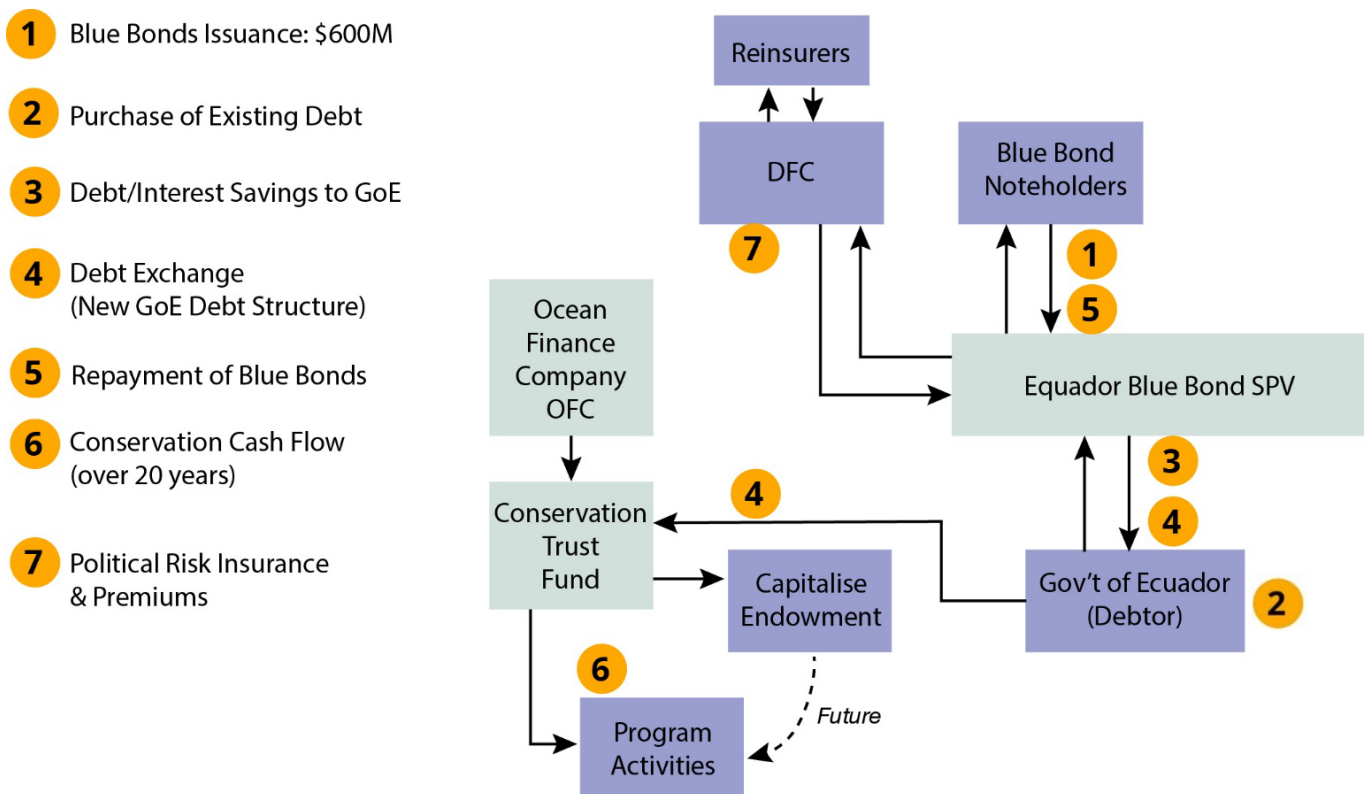
3. Assess risks and opportunities

In the complex world of insurance, risk management strategies like reinsurance play a vital role in safeguarding insurers against potential financial losses.

Development finance programmes combined with private political risk and credit insurance have become popular ways to ease sovereign debt burdens in emerging markets while funding conservation efforts. The Galápagos marine conservation-linked bond is an example.

The diagram below illustrates the key players involved in the DfNS. The collaboration ensured that Ecuador could obtain funding for conservation efforts while reducing its debt burden, investors receive a return on their investment with reduced risk, and insurers and financial institutions play a crucial role in facilitating the process.

Figure 2: Ecuador Debt Restructure



MS Amlin helped enable this transaction by reinsuring a share of the political risk insurance associated with the loan. Without such reinsurance, international creditors would not have purchased the existing Ecuadorian debt at the reduced rate that allowed funds to be freed up and used for conservation projects. The coverage, here Contract Frustration was used, provided protection against upheavals linked to government interference or political risk. Certain market-wide PRI coverages, such as Contract Frustration and CEND, are well placed to be utilised in nature financing solutions.

Confiscation, Expropriation, Nationalisation, and Deprivation (CEND) refer to a set of political risk insurance coverages that protect against certain actions by a government that may result in the loss of assets or investments. The CEND coverage is designed to protect investors and businesses operating in foreign countries from the risks associated with these government actions. It provides a financial safety net by compensating for losses incurred due to such political events.

Contract Frustration refers to coverage that protects parties involved in a contract against losses resulting from events that prevent the fulfilment of contractual obligations. This coverage is often associated with political risk insurance and other types of business interruption insurance.

The Ecuador DfNS represents a significant undertaking with multifaceted implications for environmental conservation, social well-being, and governance.

- **Positive environmental impact and outcomes:** As part of the debt restructuring process, resources that are freed up can be strategically directed toward projects supporting sustainable practices and conservation research. This innovative approach not only addresses financial concerns but also contributes to environmental sustainability, aligning with global initiatives such as the UN Sustainable Development Goal (SDG) 14: Life Below Water. One notable aspect is the establishment of a large-scale marine reserve spanning 518,900 km². This fully protected reserve in the Eastern Tropical Pacific is closed to all extractive activities, including fishing and any human intervention or involvement. Additionally, the formation of a Conservation Trust Fund (CTF) further enhances the sustainability of the marine reserve. The goal is to secure an annual and perpetual income through an endowment fund to implement, manage, monitor, and enforce the marine reserve. This income will also support various projects aimed at improving the sustainability of artisanal fisheries in the Galápagos and other conservation-related endeavours benefiting the local community. In line with global obligations related to fishing activities, the initiative actively addresses issues such as illegal, unregulated, unreported fishing and habitat destruction.
- **Social impact and collaboration:** The support extended to local, Ecuador-based organisations is a pivotal element contributing to the social impact of the deal. Ecuador's government worked alongside artisanal and industrial fishing sectors and local communities through an inclusive process. This included numerous formal and informal consultations, indicating the involvement of local stakeholders in decision-making regarding conservation commitments and funding priorities. Alberto Andrade, an artisanal fisherman and director of Frente Insular, a Galápagonian community organisation, emphasises the importance of a healthy ocean and the benefits it generates for the local community. His statement reflects the perspective of local community members directly impacted by conservation efforts and highlights their support for expanded marine protections and new financial resources to address environmental threats. All funding disbursement will be

directed by the Galápagos Life Fund, established in May 2023 for this very purpose. Collaboration is key here, with the 11-member board, including five Ecuadorian government ministers and six NGO conservation experts. The Board includes a representative of The Nature Conservancy, who originated the deal on behalf of Ecuador and led the way in creating a viable conservation framework. In essence, this will help keep the balance in terms of social impact, appropriate financial contribution and collaboration. Once disbursed, a portion of this funding will be channelled towards the Galápagos National Park Service, which will work to enforce the new parameters laid out in the conservation agreement and monitor their impact. It will also support research, sustainable fisheries, climate resilience, and the development of a sustainable blue economy for local communities. Funding will also reach the Galápagos Marine Reserve and freshly established Hermandad Marine Reserve, which can access funding through requests to conduct research, advance sustainable fisheries and climate resilience efforts, and help expand sustainable economies for local communities. The project aligns with the UN's 'Decent Work and Economic Growth' SDG by facilitating research, advancing sustainable fisheries, strengthening climate resilience, and promoting a sustainable blue economy. The emphasis on community engagement and transparency further underscores a commitment to social well-being. Furthermore, Ecuador's engagement in DfNS and reliance on credit insurance may foster international collaboration. This collaboration can involve partnerships with countries directly engaged in marine conservation, leading to shared knowledge and resources. A key aspect of this initiative is increasing fishery protection zones strategically designed to ensure a stable fishery stock, benefiting local communities, tourism income, and species protection. Sustainable harvest of target species is allowed exclusively to artisanal fishermen, accompanied by restrictions on gillnets, long lines, and the use of Fish Aggregating Devices. These measures contribute to the responsible management of marine resources and support the livelihoods of local fishermen. Additionally, the assignment of monitoring and enforcement responsibilities, coupled with coordination among relevant government agencies, forms a crucial component of the project. Adequate supplies and equipment are provided to facilitate efficient monitoring and enforcement efforts. This ensures compliance with environmental regulations and enhances the overall effectiveness of marine conservation initiatives.

- **Governance:** The contingent nature of (re)insurance, dependent on the Ecuadorian government's commitment to community engagement, transparency, and regular environmental and social impact assessments, emphasises the importance of governance principles. This ensures that the initiative adheres to ethical standards, promoting responsible practices in line with international governance norms.
- **Long-Term Sustainability:** The interplay of insurance mechanisms and debt restructuring can contribute to the long-term sustainability of environmental initiatives in Ecuador. It provides financial stability and encourages ongoing efforts toward environmental conservation. The multilateral stakeholders' collaboration in the project demonstrates a commitment to ensuring sustainability. The assessment of political risks and technical expertise on ESG aspects contributes to the overall assurance of sustainability. The incorporation of ongoing environmental and social impact assessments indicates a proactive approach to adapting to changing circumstances, further reinforcing the long-term sustainability of the initiative.

4. Prepare to respond and report

Credit insurance adds a layer of financial security and stability to DfNS. By mitigating risks, credit insurance contributes to the overall success and sustainability of environmental conservation initiatives supported by DfNS. It is now vital to monitor and report on the Ecuador deal.

- **Legal and Regulatory Framework:** Understand and address legal and regulatory considerations related to debt restructuring and credit insurance, domestically and internationally.
- **Stakeholder Engagement:** To propel marine conservation initiatives forward, it is imperative to engage with pertinent stakeholders both within Ecuador and potentially on an international scale. This collaborative effort could involve government entities, financial institutions, environmental organisations, and the public. Moreover, it is important to keep in mind that the success of the initiative relies on the continued commitment of the Ecuadorian government to ESG principles as well as other stakeholders. Crucial elements for success include continuous community engagement, transparent practices, and strict adherence to environmental and social impact assessments. In tandem with these efforts, TNC points out that approximately a third of the USD 2.2 trillion worth of emerging market sovereign debt globally, potentially reaching USD 800 billion, is deemed "ripe" for swapping.¹⁹ This underscores the financial dimension that aligns with and supports the objectives of marine conservation projects.
- **Monitoring and Reporting Mechanisms:** While the debt conversion frees up funds for marine conservation, the long-term success of these projects hinges on effective management, monitoring, and enforcement by the Galápagos National Park Service. Continuous assessment and adaptation strategies will be essential to address evolving challenges. Establish mechanisms for monitoring the progress of contributions to marine conservation and reporting on financial and environmental outcomes. The Ecuador DfNS deal includes monitoring mechanisms for protection work and fishing vessels, drawing parallels with successful conservation models like Hawaii's Papahānaumokuākea marine park. The initiative addresses immediate environmental challenges and establishes a foundation for responsible and sustainable practices in the broader context of international collaborations. Continuous monitoring and adaptation will be crucial to ensuring the enduring positive impact of this pioneering effort.

Analysis and Findings

This initiative aligns environmental conservation goals with debt reduction strategies. The innovative approach supported local Ecuador-based organisations to conduct research, advance sustainable fisheries, enhance climate resilience, and foster a sustainable economy for the community. The deal determines the risk mitigation and insurance mechanisms to ensure transaction stability and investor confidence while also emphasising the necessity of addressing challenges and risks inherent in such deals. Furthermore, it prompts considerations about its broader implications on the insurance industry and the need for regulatory frameworks to govern such initiatives effectively.

Overall, the Ecuador initiative exemplifies a holistic approach to sustainability that integrates economic, environmental, and social considerations, and provides a blueprint for other countries stimulating growing investor demand, such as Sri Lanka and Colombia, both of which are already considering similar deals.

Sustainability commitments:

From MS Amlin's perspective, the Ecuador initiative aligned with its commitment to advance its ESG mandate. The deal showcased a positive general impact on ESG factors, noticeably contributing to several UN Sustainable Development Goals, such as 'Decent Work and Economic Growth' by fostering economic stability through debt reduction, 'Sustainable Cities and Communities' by directing funds towards environmental conservation, aligning with MS Amlin's commitment to responsible business practices, 'Life Below Water', with funds directly allocated to marine conservation, 'Climate Action' and 'Industry, Innovation and Infrastructure' – the latter representing two of MS Amlin's priority goals. Furthermore, developing a communication plan to explain how Ecuador's involvement in marine conservation aligns with global sustainability goals can benefit the country's environmental reputation.

Risk Mitigation and Insurance Mechanisms:

The success of the DfNS in Ecuador extends beyond its environmental impact. Political risk insurance plays a crucial role in providing assurance to investors, enabling transaction stability and allowing Ecuador to allocate savings for marine conservation.

Economic and Environmental Changes:

While acknowledging success, it's imperative to address the challenges and risks inherent in such initiatives. A comprehensive risk assessment is crucial, considering potential political instability, community backlash, and uncertainties in long-term environmental projects. The blue bond is contingent upon the Ecuadorian government's commitment to community engagement, transparency, and regular environmental assessments, ensuring adaptability to evolving circumstances and enhancing overall sustainability.

Market Dynamics and Innovation:

The initiative's success prompts consideration of its broader implications on the insurance industry. MS Amlin may consider replicating the successful model established in Ecuador by collaborating with other governments or organisations. Identifying regions with similar needs and aligning with entities committed to ESG principles can lead to the creation of impactful ventures with a sustainable focus. It may reshape

industry approaches to environmental and social impact, potentially fostering a shift towards more sustainable and socially responsible models. Exploring technological innovations, such as advancements in risk assessment, data analytics, or blockchain technologies, can enhance the efficiency and transparency of the DfNS process.

Regulatory Considerations:

Additionally, regulatory frameworks play a crucial role in governing DfNS and insurance industry involvement, analysing how regulatory considerations impact project implementation and success. Whether adjustments are necessary to encourage widespread participation and collaboration between the public and private sectors is vital for the continued success of such initiatives.

Conclusion

The success of DfNS in countries like Belize and Barbados underscores their efficacy in reducing national debt while promoting environmental conservation, two mutually reinforcing crises globally. Ecuador's deal benefits its economy by freeing up funds and sets a precedent for other heavily indebted nations with rich biodiversity.

MS Amlin's involvement in the Ecuador initiative underscores the potential role of the insurance industry in driving sustainable and socially responsible initiatives. This partnership reveals the potential for insurers to act as catalysts for sustainable development. MS Amlin's venture in Ecuador highlights how the insurance industry can balance profitability with long-term sustainability and doing the right thing. This growing interest reflects rising demand for similar DfNS and signals an opportunity for international collaboration in addressing shared environmental challenges. The initiative exemplifies the potential for building resilience through collective action.

The Ecuador initiative also imparts valuable lessons for the insurance industry and financial institutions at large. It illustrates how sustainable practices can be integrated into business models, encouraging a broader recognition of the role these entities can play in promoting environmental stewardship. The collaboration's success establishes a guiding example for future endeavours, providing an example of how the financial sector can contribute meaningfully to global sustainability goals. Mechanisms for monitoring the progress and contributions made to marine conservation efforts, and reporting to financial and environmental outcomes, are crucial to ensure that sustainability goals are continued to be met and that any deviations or challenges are promptly addressed. This will ensure the initiative's integrity and impact. The ongoing commitment to continuous monitoring, reporting, and adaptation strategies in the Ecuador DfNS underscores a dedication to navigating evolving challenges. This commitment ensures that the positive impact endures over time, reinforcing the initiative's long-term effectiveness in achieving both economic and environmental objectives.

In conclusion, the Ecuador DfNS emerges as a comprehensive example of how sustainability could go hand in hand with financial viability. The collaboration involving MS Amlin and diverse stakeholders sets a global example for sustainable practices, inspiring further exploration of the transformative potential of financial institutions. This collaborative venture signals a promising future where economic interests are harmonised with environmental conservation, offering hope for the preservation of marine ecosystems and contributing to the broader pursuit of a sustainable planet.

References

- ¹ Convention on Biological Diversity. (2023). 2030 Targets (with Guidance Notes). Retrieved from: <https://www.cbd.int/gbf/targets>
- ² University of Cambridge Institute for Sustainability Leadership (CISL). (2021). Handbook for nature-related financial risks: key concepts and a framework for identification. Retrieved from: <https://www.cisl.cam.ac.uk/system/files/documents/handbook-for-nature-related-financial.pdf>
- ³ United Nations Environment Programme (UNEP). (2022). Decision adopted by the conference of the parties to the convention on Biological diversity. Retrieved from: <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf>
- ⁴ Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). (2019). Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Retrieved from: <https://zenodo.org/records/6417333>
- ⁵ United Nations Environment Programme (UNEP). (2023). Nature-Positive Insurance: Evolving Thinking and Practices. Retrieved from: <https://www.unepfi.org/wordpress/wp-content/uploads/2023/09/Nature-Positive-Insurance-Briefing-Paper.pdf>
- ⁶ United Nations Environment Programme (UNEP). (2023). Nature-Positive Insurance: Evolving Thinking and Practices. Retrieved from: <https://www.unepfi.org/wordpress/wp-content/uploads/2023/09/Nature-Positive-Insurance-Briefing-Paper.pdf>
- ⁷ Taskforce on Nature-related Financial Disclosures (TNFD). (2022). The TNFD Nature-related Risk & Opportunity Management and Disclosure Framework. Retrieved from: <https://tnfd.global/wp-content/uploads/2023/07/TNFD-Full-Report-Mar-2022-Beta-v0-1-1.pdf?v=1690527771>
- ⁸ The World Bank. (2023). International Debt Report. Retrieved from: <https://www.worldbank.org/en/programs/debt-statistics/idr/products>
- ⁹ Shalal, A. (2023). Developing countries spent a record \$443.5 billion to service public debts in 2022. World Bank. Retrieved from: <https://www.reuters.com/business/finance/developing-countries-spent-record-4435-bln-service-public-debts-2022-world-bank-2023-12-13/#:~:text=The%2075%20poorest%20countries%20were,to%20%2423.6%20billion%2C%20it%20said.>
- ¹⁰ Jones, M., & Campos, R. (2023). Ecuador seals record debt-for-nature swap with Galapagos bond. Retrieved from: <https://www.reuters.com/world/americas/ecuador-seals-record-debt-for-nature-swap-with-galapagos-bond-2023-05-09/>
- ¹¹ Bryan, K., & Daniels, J. (2023). UK fund giant L&G bets on Ecuador's Galápagos debt experiment. Retrieved from: <https://www.ft.com/content/e895761d-63c6-44e7-84d8-ca6dd89a6a20>
- ¹² Bryan, K., & Cumbo, J. (2023). Rare good news from Credit Suisse with debt-for-nature swap deal. Retrieved from: <https://www.ft.com/content/66f038ce-292d-4425-af2d-5b6a1592f415>
- ¹³ Bryan, K., & Daniels, J. (2023). UK fund giant L&G bets on Ecuador's Galápagos debt experiment. Retrieved from: <https://www.ft.com/content/e895761d-63c6-44e7-84d8-ca6dd89a6a20>
- ¹⁴ Bryan, K., & Cumbo, J. (2023). Rare good news from Credit Suisse with debt-for-nature swap deal. Retrieved from: <https://www.ft.com/content/66f038ce-292d-4425-af2d-5b6a1592f415>
- ¹⁵ Taskforce on Nature-related Financial Disclosures (TNFD). (2023). Guidance on the identification and assessment of nature-related issues: The LEAP approach. Retrieved from: https://tnfd.global/wp-content/uploads/2023/08/Guidance_on_the_identification_and_assessment_of_nature-related_Issues_The_TNFD_LEAP_approach_V1.1_October2023.pdf?v=1698403116
- ¹⁶ Jones, M., & Campos, R. (2023). Ecuador seals record debt-for-nature swap with Galapagos bond. Retrieved from: <https://www.reuters.com/world/americas/ecuador-seals-record-debt-for-nature-swap-with-galapagos-bond-2023-05-09/>
- ¹⁷ OEC. (2024). Country Profile. Ecuador. Retrieved from: <https://oec.world/en/profile/country/ecu>
- ¹⁸ Jones, M., & Campos, R. (2023). Ecuador seals record debt-for-nature swap with Galapagos bond. Retrieved from: <https://www.reuters.com/world/americas/ecuador-seals-record-debt-for-nature-swap-with-galapagos-bond-2023-05-09/>
- ¹⁹ Jones, M. (2023). Top development banks, funds set up 'debt-for-nature' task force. Retrieved from: [Top development banks, funds set up 'debt-for-nature' task force | Reuters](https://www.reuters.com/business/finance/top-development-banks-funds-set-up-debt-for-nature-task-force-2023-05-09/)