Unlocking Private Capital at Scale

Can Sovereign Thematic Bonds Solve the Financing Gap for the SDGs?

United Nations Development Programme

United Nations Development Programme (UNDP)
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About Impact Investment Exchange (IIX)

Since 2009, Impact Investment Exchange (IIX) has been a pioneer in the global impact investing movement, reshaping finance for sustainable development with a focus on gender equality and climate action through capital mobilization and data-driven solutions.

From establishing the Impact Partners™ platform and creating the Women's Livelihood Bond™ Series, (which includes six publicly listed bonds with zero credit defaults), to launching the Impact Institute™ and Research & Advisory, our work spans 60 countries where we have mobilized nearly US$500 million in private-sector capital, positively impacted over 160 million lives, avoided more than 1.9 million metric tons of carbon emissions, and collected over 90,000+ data points on sustainable micro, small, and medium enterprises.

Foreword

Low- and lower-middle-income countries face a daunting financing gap to achieve the Sustainable Development Goals (SDGs). Yet the core challenge is not a shortage of capital. The challenge lies in creating scalable investment opportunities that offer attractive risk-adjusted returns for investors while delivering meaningful impact for people and the planet.

As the largest and most liquid segment of the global capital markets, sovereign bonds offer unparalleled potential to unlock sustainable finance at scale.

This report, Scaling Sustainable Finance: Sovereign Thematic Bonds as Catalysts for SDG Investment, presents timely analysis and practical recommendations for one of the most scalable and strategic solutions on the horizon: sovereign thematic bonds. When paired with robust de-risking mechanisms, technical assistance, and regulatory clarity, these instruments can help governments tap into capital markets while reinforcing fiscal sustainability and advancing national development priorities.

At UNDP, we see sovereign thematic bonds not only as financing tools but as a way to reimagine the social contract between public finance and development outcomes. When designed with ambition, integrity, and transparency, they enable governments to embed sustainability into the core of fiscal planning and delivery while allowing investors to finance impact at scale.

This study, authored in collaboration with the Impact Investment Exchange (IIX), acknowledges the barriers— from high borrowing costs to limited institutional capacity—and offers a credible recommendation roadmap for governments, investors, and multilateral partners to move forward together, unlocking more private capital to scale the sovereign thematic bond market. It is a call for creativity and coordination, for boldness in designing new financial structures, and for accelerating the global transition toward a more sustainable and equitable financial system, incorporating gender, environment, and social impact outcomes.

The time to act is now. We hope this report inspires the leadership and collaboration needed to scale sovereign thematic finance even further—and to transform capital markets into engines for inclusive, climate-resilient development.

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Executive Summary

Amid a global financing landscape where low- and lower-middle-income countries (L-LMICs) face an annual funding gap of approximately US$3.9 trillion to achieve the Sustainable Development Goals (SDGs), sovereign thematic bonds have emerged as a transformative instrument. In an environment of fiscal constraints and evolving development priorities, sovereign thematic bonds offer a dual advantage: they enable sovereign issuers to tap into private capital at scale and help embed sustainability objectives into national fiscal strategies.

This report, funded by Open Society Foundations, commissioned by the United Nations Development Programme (UNDP) and developed by Impact Investment Exchange (IIX), discusses how these innovative debt instruments can mobilize private capital at scale and accelerate sustainable development. It examines market dynamics, structural barriers, and the critical role of de-risking mechanisms, technical assistance (TA) programs, and multilateral development banks (MDBs) in scaling the bond.

The report also provides several recommendations for policymakers, MDBs, investors, and development agencies to accelerate the expansion of sovereign thematic bond market in L-LMICs. The study highlights the critical need for innovative financial instruments, regulatory harmonization, and institutional capacity-building to ensure that sovereign issuers can effectively leverage thematic bonds to finance sustainable development at scale.

Sovereign thematic bonds have gained traction as a financing tool for development, yet their adoption in L-LMICs remains low due to high borrowing costs, weak credit ratings, and constrained domestic capital markets. While green bonds dominate the market and sustainability-linked bonds offer new opportunities by tying financial incentives to sustainability targets, most issuances remain concentrated in high-income economies. Private sector thematic bonds have helped shape the market but lack the scale and policy alignment needed to bridge national SDG financing gaps.

Expanding sovereign participation will require stronger regulatory frameworks, enhanced market liquidity, and integrated de-risking mechanisms such as credit guarantees, blended finance, and concessional funding. By addressing these structural barriers, sovereign thematic bonds can transition from pilot initiatives to a mainstream financing solution for mobilizing private capital toward long-term, SDG-aligned investments. Structural barriers impeding sovereign thematic bond market expansion include:

- **Credit Risk**: L-LMICs often face weak credit ratings and have access to limited concessional finance, which further restricts market participation. These issuers face higher borrowing costs, while external factors further impact bond pricing. Traditional credit rating methodologies frequently overlook the risk-mitigation features embedded in thematic bonds—such as blended finance elements, guarantees, and concessional enhancements—resulting in overly conservative credit assessments and higher risk premiums.

- **Debt Sustainability**: Several L-LMICs contend with weak credit profiles and high debt burdens, which are compounded by macroeconomic volatility and limited fiscal space. Weak international credit ratings lead to higher risk premiums, reducing investor appetite and impeding access to competitive financing terms. This issue is particularly acute in countries where debt sustainability is already under strain, as issuing additional bonds without adequate safeguards could exacerbate financial vulnerabilities.

- **Currency Volatility and Market Liquidity**: A significant number of sovereign thematic bonds are issued in hard currencies (e.g., USD, EUR), exposing issuers to exchange rate risks and potential currency devaluation. Additionally, underdeveloped domestic capital markets in many L-LMICs result in limited liquidity and higher transaction costs, further deterring investor participation.

- **Regulatory and Institutional Challenges**: The absence of robust, harmonized regulatory frameworks can lead to issues such as inconsistent reporting standards and weak impact verification. These deficiencies not only increase the risk of greenwashing but also undermine investor confidence. Many sovereign issuers lack the institutional capacity required to design, issue, and manage complex bond structures, resulting in a fragmented market where first-time issuances are often heavily dependent on external technical support and guarantees.

To mitigate the identified barriers, the report explores a range of de-risking mechanisms that can improve the creditworthiness of sovereign thematic bonds:

- **Credit guarantees and risk-sharing facilities**—including partial credit guarantees, first-loss provisions, and pooled risk-sharing structures—can absorb initial losses and reduce perceived credit risk. Integrating these tools into a comprehensive financing framework, rather than deploying them in isolation, would enhance their effectiveness in lowering borrowing costs and attracting a broader investor base.

- **Blended finance and concessional capital** provide another critical solution, combining concessional resources with market-rate financing to bridge the risk-return gap. This approach lowers overall financing costs while crowding in private sector capital, reinforcing fiscal sustainability and aligning bond issuance with long-term development priorities.

- **Hedging instruments and political risk insurance (PRI)** further mitigate market uncertainties by protecting against adverse currency movements and potential political instability. These tools enhance investor confidence by stabilizing returns, ensuring that sovereign thematic bonds remain a viable and attractive asset class for global investors.

A key finding of the report is the need to bolster the technical capacity of sovereign issuers through:

- **Capacity building and regulatory alignment** are essential for L-LMICs to effectively navigate sovereign bond issuance. Expanding TA programs through targeted training, institutional capacity-building, and the development of standardized regulatory frameworks will ensure that sovereign bond structures align with international best practices, improving transparency and consistency in impact measurement and reporting.

- **Integrated impact reporting** strengthens investor confidence by providing a clear, verifiable framework to track the social and environmental outcomes of bond-funded projects. Embedding internationally recognized reporting standards within TA initiatives will enhance credibility, ensuring sovereign thematic bonds meet global benchmarks for transparency and accountability.

- **Institutional support for fiscal management** is critical to maintaining long-term debt sustainability. Strengthening fiscal planning and debt management systems through embedded TA will help governments align bond issuance with national financial strategies, ensuring effective resource allocation and resilience in sovereign debt market.

MDBs play an integral role in scaling sovereign thematic bonds, yet their engagement must evolve from traditional credit enhancements to proactive facilitation by:

- **Expanding co-guarantee platforms and regional liquidity backstops** will enhance market stability and investor confidence. By pooling risk across multiple issuers, MDBs can improve credit conditions for sovereign thematic bonds, while regional liquidity facilities can safeguard local capital markets against external shocks and volatility.
- **Integrating TA with structured risk-sharing solutions** will create a more effective de-risking ecosystem. MDBs, in collaboration with national development banks (NDBs) and private investors, should embed TA within credit enhancement frameworks, ensuring sovereign issuers receive both financial support and institutional capacity-building throughout the bond issuance process.
- **Aligning sovereign thematic bond strategies with global financial agendas** will reinforce long-term scalability. The recommendations in this report complement the G20 Roadmap Towards Bigger, Better, and More Effective MDBs and the Financing for Development (FfD4) agenda, which advocate for blended finance, concessional resource expansion, and strengthened sovereign credit support to mobilize sustainable capital at scale.

This report provides a foundation for policy dialogue and practical actionable strategies to institutionalize sovereign thematic bonds as a key financing instrument in L-LMICs to close the SDG financing gap. By fostering coordinated interventions and financial innovation, these instruments can drive resilient, inclusive growth. Key recommendations include:

- **Bundling de-risking mechanisms within financing facilities** to enhance market confidence. Sovereign issuers must integrate concessional financing, credit guarantees, liquidity backstops, and political risk insurance (PRI) into a single financing facility. This approach reduces perceived risk, lowers borrowing costs, and increases private sector participation. UNDP could play a key role in structuring TA alongside financial de-risking tools, ensuring that sovereign issuers have the capacity to manage bond issuances effectively.

- **Strengthening partnerships between MDBs, NDBs, and local financial institutions** will expand risk-sharing platforms. Establishing co-guarantee mechanisms and regional liquidity backstops can improve creditworthiness while stabilizing local bond markets. Pooling technical expertise across institutions will create a more predictable investment landscape, reducing fragmentation in guarantee instruments and fostering greater private capital mobilization.

- **Expanding concessional capital availability** is critical to reducing financing costs for L-LMIC issuers. Current institutional thresholds limit access to concessional resources, particularly for countries transitioning from low- to middle-income status. MDBs and DFIs should create dedicated concessional funding windows for SDG-aligned sovereign bonds, integrating these resources into structured blended finance models. Establishing a de-risking platform backed by agencies like Swedish International Development Cooperation Agency (SIDA), the European Commission (EC) Global Gateway, and AAA/AA-rated entities could provide concessional resources, counter-guarantees, and risk-sharing mechanisms. Aligning concessional financing with impact-linked performance metrics—especially for SLBs—can further incentivize sustainable development outcomes.

- **Developing a thematic bond collaboration hub** will strengthen transparency and market participation. Establishing a centralized platform for sovereign issuers, investors, and regulators will improve knowledge-sharing, align reporting standards, and facilitate direct engagement on bond structuring. By expanding existing initiatives such as UNDP's Sustainable Finance Hub, this collaboration can standardize impact verification processes, harmonize disclosure requirements, and provide issuers with structured access to investor networks and de-risking tools. Expanding initiatives like UNDP's Sustainable Finance Hub and the Global Collaborative Co-Financing Platform to include actors such as the EC Global Gateway and private sector investors would improve coordination and project visibility, facilitating investments.

- **Integrating country-specific nuances into sovereign bond frameworks** to enhance credibility and market resilience. A standardized approach does not account for the diverse financial, regulatory, and institutional contexts of different L-LMICs. Countries with nascent capital markets may require stronger risk-mitigation measures, while those with more developed markets can explore instruments such as SLBs and hybrid bonds to attract broader investor participation. However, excessive customization risks reducing market efficiency and deterring investors seeking comparability and liquidity. Sovereign issuers should prioritize tailoring policy and TA frameworks aligned with national SDG priorities and sustainability-linked performance metrics, while maintaining standardized reporting for transparency. Embedding local financial institutions into bond structuring will further strengthen regulatory oversight and deepen domestic capital markets. Robust impact measurement systems will be essential to maintaining investor confidence and ensuring long-term market credibility.

- **Embedding accountability and transparency across the bond value chain** will reinforce investor confidence. Robust impact reporting, third-party verification, and clearer sustainability performance targets—such as step-up/step-down coupon structures in SLBs—will mitigate greenwashing risks and enhance credibility. MDBs and TA providers should support sovereign issuers in strengthening impact measurement frameworks to align with global best practices.

- **Building Transparency and Accountability in the Impact Assessment and Reporting Value Chain** will help position the sovereign issuers globally, fostering transparency and enabling impact and SDG outcomes within capital markets. By bringing in best practices in last mile impact measurement, verification, and reporting, governments can leverage international expertise and capital to achieve their country's SDG agenda.

- **Enhancing secondary market liquidity** is key to improving investor participation. Limited exit options currently deter institutional investors from engaging with sovereign thematic bonds in L-LMICs. Establishing structured repurchase agreements, developing multi-country bond pools, and creating digital trading platforms can increase market depth and reduce liquidity constraints. While liquidity challenges vary by issuer, countries with robust sustainability frameworks, transparent reporting, and effective market engagement can achieve stronger secondary market performance. Incorporating sustainability-linked metrics into sovereign credit ratings can further enhance liquidity by rewarding issuers that demonstrate resilience and sustainability progress. MDBs, NDBs, and financial regulators should prioritize capacity building for local institutions to strengthen domestic secondary markets and foster stability. Aligning sovereign thematic bond strategies with global financial agendas will reinforce long-term scalability. The recommendations in this report complement the G20 Roadmap Towards Bigger, Better, and More Effective MDBs and the Financing for Development (FfD4) agenda, which advocate blended finance, concessional resource expansion, and strengthened sovereign credit support to mobilize sustainable capital at scale.

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Introduction

The global development financing landscape is undergoing a fundamental shift as governments seek innovative mechanisms to close the Sustainable Development Goals (SDG) financing gap. Despite global wealth exceeding $463 trillion, low- and lower-middle-income countries (L-LMICs) require an estimated $3.9 trillion annually to meet SDG targets [1] , with traditional sources of public finance and concessional funding proving inadequate. Against this backdrop, sovereign thematic bonds have emerged as a strategic tool for mobilizing private capital at scale, providing issuers with access to global capital markets while aligning fiscal planning with sustainability priorities.

Recognizing the need for evidence-based approaches to scale the sovereign thematic bond market, Open Society Foundations has funded this study, commissioned by the UNDP and developed by IIX, to examine the role of these instruments in attracting private investment and accelerating sustainable development. This report aims to identify the constraints limiting their adoption in L-LMICs, assess key risk mitigation strategies, and provide actionable recommendations to strengthen market confidence through enhanced multilateral development bank (MDB) engagement, TA, and de-risking mechanisms.

IIX, a leader in impact investing and having mobilized $500 million through innovative financing instruments such as the Women's Livelihood Bond Series, has been at the forefront of designing financial instruments that bridge capital markets with gender, environment, and development priorities. Drawing from global best practices, case studies, and emerging financial innovations, this study explores various credit enhancement tools, liquidity support measures, risk-sharing arrangements, and TA frameworks in helping scale sovereign thematic bonds.

A core focus of this analysis is the role of MDBs, international financial institutions (IFIs), and development finance actors in fostering an enabling ecosystem for sovereign thematic bond issuances. These institutions can enhance market confidence, mitigate investment risks, and mobilize private capital at scale by leveraging their financial instruments, policy influence, and convening power. Equally, structured TA facilities are essential in equipping sovereign issuers with the tools to develop credible bond frameworks, establish robust sustainability-linked performance metrics, and implement transparent impact measurement mechanisms aligned with international best practices.

Unlocking private capital is crucial to bridging the SDG financing gap, but attracting institutional investors to sovereign thematic bonds requires more innovative and sophisticated financial structures. Traditional mechanisms alone fall short, especially in L-LMICs, where credit risk, currency volatility, and market liquidity constraints persist. Integrating de-risking instruments such as—structured guarantees, blended finance, and liquidity backstops—into sovereign bond frameworks, can mitigate these barriers. Aligning these tools with investor risk appetites will enhance market confidence and position thematic bonds as a scalable, investable asset class.

By presenting a comparative analysis of de-risking modalities and outlining pathways for scaling sovereign thematic finance, this report serves as a strategic resource for policymakers, financial institutions, and investors. It contributes to the global discourse on sustainable finance and debt sustainability, reinforcing the imperative of mobilizing capital in a way that is both economically viable and aligned with long-term development priorities.

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[1] World Bank, 2024. *Labeled Bonds Market Update – November 2024.* Available here.

1. Sovereign Thematic Bonds: The Evolving Landscape

Sovereign thematic bonds are debt instruments issued by national governments to raise funds for projects and activities tied to specific themes, such as climate change, education, housing, marine conservation, and broader SDG-related objectives. They appeal to investors seeking alignment between their portfolios and these thematic priorities while supporting national development goals.

Encompassing green, social, sustainability, sustainability-linked bonds (SLBs), and transition bonds — Sovereign Thematic Bonds have rapidly gained traction as a key financing tool for governments and corporates alike, facilitating the access to global capital markets, unlocking resources for projects linked to climate adaptation, infrastructure, gender equality, and social development. As the demand for ESG-aligned assets continues to grow, thematic bonds have become a critical mechanism to bridge financing gaps, particularly in L-LMICs, where access to affordable, long-term capital remains constrained. However, market participation remains uneven, with issuances largely concentrated in advanced economies and a handful of emerging market sovereigns.

By leveraging innovative financial structures, stronger regulatory alignment, and catalytic investor engagement, policymakers, MDBs, and development partners can collectively expand market participation, reduce financing costs, and mobilize private capital at scale—unlocking new opportunities for sustainable and inclusive economic growth.

Sovereign Thematic Bonds fall into two broad categories: [2]

- **Use-of-Proceeds Bonds**: Green, social, and sustainability bonds allocate proceeds to clearly defined and earmarked projects designed to achieve specific impacts. Funds are ring-fenced for activities such as climate sustainability initiatives or social development programs, ensuring targeted deployment. As an example, Mexico's bond framework is designed to ensure that proceeds are directed toward budgetary programs aligned with the SDGs. It establishes a structured selection process that first identifies programs contributing to the 2030 Agenda, while excluding those that could undermine social or environmental progress. To enhance impact, it also incorporates a geospatial criterion for social expenditures, prioritizing allocations to municipalities and states with the highest social gaps.[3]

- **Key Performance Indicator (KPI)-Linked Bonds**: Sustainability-linked bonds tie financial outcomes, such as coupon adjustments, to the achievement of predefined sustainability performance targets (SPTs). They offer greater flexibility as proceeds are not linked to specific projects. This structure incentivizes issuers to meet environmental, social, and governance (ESG) objectives while providing transparency for investors.[4] However, pricing remains a challenge. Unlike traditional sovereign debt, SLBs incorporate both pecuniary and non-pecuniary factors into pricing, which complicates investor demand. Well-structured SLBs can offer pricing benefits, particularly when sovereigns commit to ambitious, credible KPIs that align with investor expectations. However, without transparent performance mechanisms and enforceable commitments, sovereign SLBs face lower uptake.

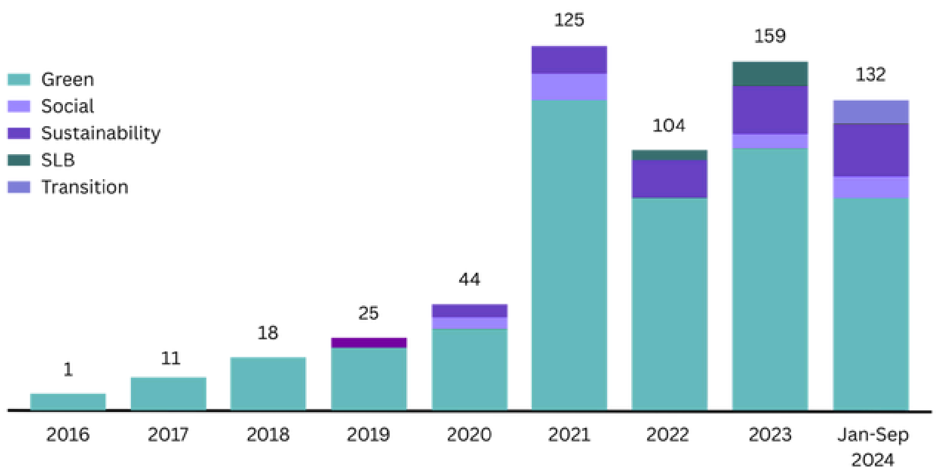
[2] World Bank, 2022. Sovereign Green, Social and Sustainability Bonds: Unlocking the Potential for Emerging Markets and Developing Economies. Available here
[3] Global Investors for Sustainable Development (GISD) Alliance, 2024. Guidance on Sovereign SDG Bonds for Countries and Investors. Available here.
[4] Jain, Gautam, 2022. Thematic Bonds: Financing Net-Zero Transition in Emerging Market and Developing Economies. Available here.

For example, Uruguay's sustainable bond framework is anchored in the country's strategic priorities, with KPIs directly tied to its climate commitments. The selected KPIs—reducing the intensity of greenhouse gas (GHG) emissions and preserving native forest areas—are based on the country's 2025 targets outlined in its first Nationally Determined Contribution (NDC). Uruguay's framework strengthens accountability and reinforces its commitment to long-term environmental stewardship by linking sustainability objectives with bond performance. Uruguay remains the only sovereign issuer to structure an SLB with both step-up and step-down coupon adjustments. This model demonstrates how tailored financial incentives can enhance credibility while maintaining fiscal discipline. Expanding SLBs as a viable sovereign instrument will require aligning bond design with fiscal stability, investor risk appetite, and sustainability impact.

While advanced economies dominate the thematic bond market, emerging market sovereigns have increasingly adopted these instruments to address critical development priorities by attracting private investment, deepening domestic capital markets, and expanding development financing. However, adoption in L-LMIC remains uneven, with only 26 emerging market sovereigns having issued USD 145.5 billion in labeled bonds since 2016 — accounting for just 2.4% of total global issuance.[5] This underscores the barriers that L-LMICs face, including high borrowing costs, fiscal constraints, and limited institutional capacity.

Despite this, sovereign thematic bonds are gaining traction, with total cumulative issuance reaching approximately $6 trillion as of the third quarter of 2024. As **Figure 1** illustrates, the composition of sovereign thematic bond issuances has evolved in the last decade.

Figure 1: Sovereign labelled bond annual issuances, USD bn



Source: World Bank based on data from Bloomberg Terminal

1.1 Notable Trends in the Sovereign Thematic Bond Landscape

a) Diversification of Sovereign Thematic Bond instruments

Green Bonds are the most dominant category, accounting for 57% of all sovereign thematic issuances in 2024. Social Bonds comprise a smaller segment of sovereign issuances, funding social welfare projects such as education, healthcare, and affordable housing. Since their rise in popularity, green bonds have maintained a dominant position. This prevalence can be attributed to their first-mover advantage, the relative ease of identifying

[5] World Bank, 2024. Labeled Bonds Market Update – November 2024. Available here.

eligible green projects, and an engaged investor class. However, mitigating the risk of greenwashing in the bond reporting value chain remains a shared challenge for countries. [6]
While green bonds dominate in advanced markets, L-LMICs are increasingly lean toward issuing sustainability bonds that blend green and social objectives. Meanwhile, sovereign SLBs are perceived to attract limited investor interest, as their long-term performance targets can often extend beyond typical government tenures, increasing the political risk.

The International Capital Market Association (ICMA)- Green Bond Principles (GBP), widely recognized and adopted, provide clear issuance guidelines that promote transparency, accuracy, and reliability, contributing toward investor confidence. While social and sustainability bonds adhere to similar ICMA-aligned frameworks, green bonds often attract greater investor interest due to their quantifiable and measurable benefits. However, some challenges persist for Green bonds due to the less tangible and quantifiable benefits of their outcomes, such as lower GHG emissions, compared to the benefits from social bonds. [7]

There is an opportunity for L-LMICs to adopt a more inclusive approach to sustainable development by building on the green bonds experience to work towards achieving the UN SDGs. There has been a focus on facilitating more cross-cutting SDG themes to further leverage the capital markets for more diverse and inclusive financing. This is reflected in sovereign thematic bonds evolving beyond green, with governments increasingly issuing thematic bonds to finance a broader range of SDG-aligned initiatives as they incorporate sustainability objectives into national financing strategies. Social bonds can finance essential services like healthcare, education, and affordable housing while sustainability/sustainability-linked bonds integrate both environmental and social priorities—a structure gaining prominence among L-LMICs, where economic resilience and sustainability are increasingly becoming intertwined.

In 2024, sustainability bonds represented 47% of total emerging market issuances, a figure projected to rise to 61%. [8] Moreover, as the market matures, governments are pioneering new sub-labels, targeting specific development needs, such as:

- Blue bonds finance marine conservation and sustainable ocean economies, with Seychelles and Belize leading issuances.
- Orange bonds, a growing cross-cutting asset class that channels investments toward gender equality and climate action, with the governments of Indonesia and Bangladesh now integrating Orange into their sustainable finance approaches, reinforcing the social dimension of thematic bonds.

Some of the emerging trends in the thematic bond market reflect this dynamic evolution:

- Thematic bonds in emerging markets increasingly incorporate blended finance structures to mitigate risks and attract private capital. [9]
- A significant portion of thematic bonds in 2022 lacked internationally recognized credit ratings, underscoring the need for mechanisms to improve creditworthiness. [10]

[6] Global Investors for Sustainable Development (GISD) Alliance, 2024. Guidance on Sovereign SDG Bonds for Countries and Investors. Available here.
[7] Jain, Gautam, 2022. Thematic Bonds: Financing Net-Zero Transition in Emerging Market and Developing Economies. Available here.
[8] World Bank, 2024. Labeled Bonds Market Update – November 2024. Available here
[9] IFC-Amundi, 2023. Emerging Market Green Bonds. Available here.
[10] IFC-Amundi, 2023. Emerging Market Green Bonds. Available here.

- Sovereign issuers in L-LMICs are expected to issue sustainability bonds that combine green and social objectives, rather than focusing solely on green initiatives. [11]

The shift toward multi-thematic bonds reflects a growing recognition that financing sustainable development requires integrated approaches rather than isolated environmental or social interventions.

a) Uneven Participation Among Emerging Markets

While sovereign thematic bonds are gaining momentum, issuance remains concentrated among high-income economies and select emerging markets. Since 2016, 26 emerging market sovereigns have issued thematic bonds, representing just 2.4% of total globally-labeled bond issuances.[12] This limited market penetration highlights persistent barriers, including:

- Elevated borrowing costs, due to lower credit ratings, driven by macroeconomic risks, debt sustainability concerns, and market volatility, making thematic bonds less attractive compared to concessional finance.
- Limited investor confidence, particularly for first-time issuers with weaker credit profiles.
- Institutional capacity gaps, constraining project pipeline development and impact monitoring.

Countries such as Indonesia, Chile, and Mexico have successfully issued multiple thematic bonds, refining governance frameworks to attract sustained investor interest. However, many L-LMICs continue to rely on MDB-backed guarantees and blended finance solutions to improve pricing and mitigate risk perceptions.

b) Sovereign issuers have been slow to adopt sustainability-linked bonds

Corporate bonds have been pivotal in driving localized impact and global awareness but their market share of issuances in L-LMICs has decreased in recent years. [13] Moreover, they do not typically involve the social element that many sovereign thematic bonds include. Equally, L-LMIC economies require both financial size and impact that governments alone do not have the capacity to deliver. [14]

Emerging markets, particularly those in the Asia-Pacific region, have driven a 15% year-over-year increase in global green bond issuances as of 2024. [15] Although corporate and financial institution issuers dominate the thematic bond space in many L-LMICs, the negligible share of sovereign SLB issuances in 2024, as shown in **Figure 2**, suggests ongoing challenges in structuring and achieving performance-based sustainability targets. Unlike use-of-proceeds (UoP) bonds, SLBs link financial terms to Sustainability Performance Targets (SPTs), introducing pricing adjustments based on predefined metrics. This performance-based structure enhances accountability and transparency, yet sovereign SLBs remain rare due to:

- Pricing complexities: Unlike standard sovereign debt, SLBs incorporate both pecuniary and non-pecuniary factorsinto pricing, making investor demand less predictable.
- Political risks: Sovereign SLBs depend on long-term policy commitments, which are vulnerable to changes in government priorities, especially in L-LMIC contexts.

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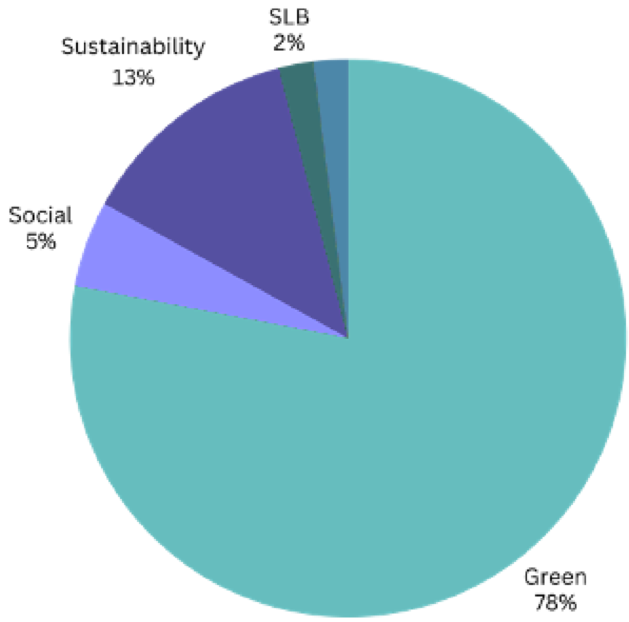
[11] World Bank, 2024. Labeled Bond Market Quarterly Newsletter. Available here.
[12] World Bank, 2024. Labeled Bonds Market Update – November 2024. Available here
[13] IFC, 2024. Emerging Market Green Bonds. Available here.
[14] OECD, 2023. Green, Social and Sustainability Bonds in Developing Countries: The Case for Increased Donor Co-Ordination. Available here.
[15] S&P Global, 2024. Emerging markets drive 15% YOY increase in global green bond issuance. Available here.

- KPI credibility: Investors require measurable, independently verified sustainability targets to ensure transparency, but sovereign issuers struggle to align policy commitments with long-term financial obligations.
- Lack of standardized sovereign SLB frameworks: Investors seek clearer mechanisms for penalty enforcement and performance verification to mitigate default risk.

While these structural challenges persist, a fundamental deterrent is the cost of capital. Many L-LMIC governments remain hesitant to issue SLBs when borrowing costs are high, particularly given their lower credit ratings and associated risk premiums. Without concessional financing options or stronger incentives to reduce capital costs, sovereigns will continue to prioritize more affordable funding sources, further limiting SLB adoption in these markets.

Figure 2.0: Sovereign labelled issuance by type of instrument, % of total amount to date



Source: World Bank based on data from Bloomberg Terminal

a) Scaling Sovereign Thematic Bonds in L-LMICs Needs a Differentiated Approach

Despite thematic bonds transforming sustainable finance, sovereign participation in L-LMICs remains constrained by macroeconomic instability, shallow capital markets, and regulatory bottlenecks. Sovereign thematic issuers can be categorized based on their issuance frequency and approach, as indicated in Figure 3 and Figure 4 for Advanced Markets, Emerging Markets, and Supranational (international entities formed by two or more central governments) bond issuers.

- Frequent Issuers: Countries with well-established frameworks that have issued multiple types of thematic bonds, adapting structures to evolving investor demand. For example, France, Germany, and select emerging markets like Indonesia.
- Emerging Issuers: Countries with initial thematic bond issuances that are refining governance mechanisms to facilitate market expansion. For example, Mexico, Chile, and Thailand.
- First-Time Issuers: Sovereigns exploring thematic debt for the first time, often with MDB-backed guarantees or technical support. For example, Rwanda and Benin.

Many first-time issuers, especially LMICs, encounter challenges in structuring credible frameworks, securing investor buy-in, and demonstrating tangible impact, leading to a fragmented issuance landscape. Key barriers include:

- Limited domestic investor participation: Most sovereign thematic bonds rely on foreign investors, exposing issuers to currency risk and capital flight concerns.
- Lack of standardized impact reporting: Concerns over greenwashing and weak disclosure frameworks deter institutional investors seeking verifiable ESG outcomes.
- Inconsistent risk-mitigation mechanisms: Many L-LMICs lack structured de-risking solutions, such as credit guarantees and liquidity backstops, making market entry costly.

Figure 3.0: Total accumulated issuance by market and bond type, USD bn

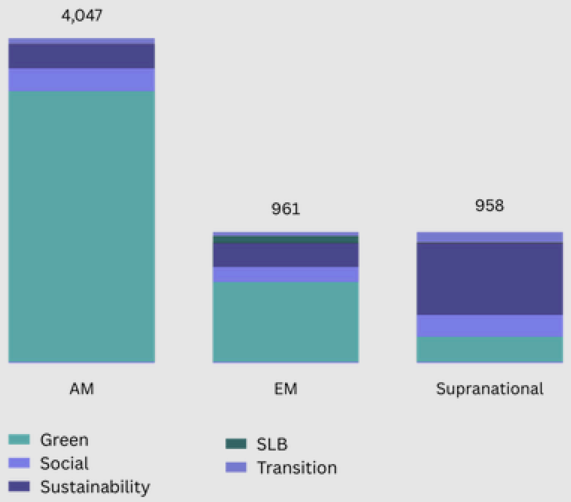
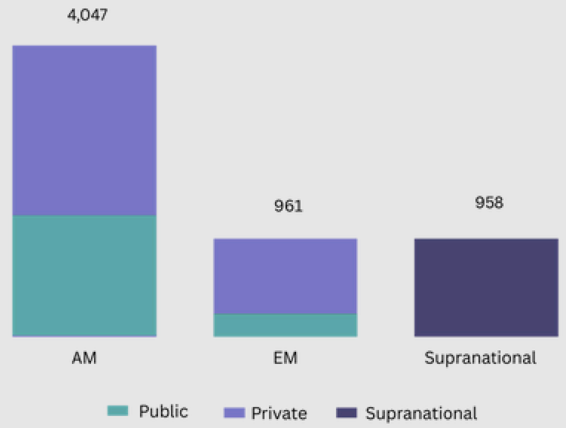


Figure 4.0:Total accumulated issuance by market and issuer type, USD bn



Source: World Bank based on data from Bloomberg Terminal

Overcoming these challenges will require developing domestic capital markets, strengthening regulatory frameworks, promoting blended finance solutions, and embedding structured de-risking mechanisms such as TA to align investor incentives in mobilizing capital that meets sustainable development commitments.

Sovereign thematic bonds are not yet fully optimized for scale in L-LMICs, as the thematic bond market matures, emerging sovereign issuers will still face high borrowing costs, debt sustainability concerns, and limited institutional capacity, presenting structural barriers that need to be addressed before its widespread adoption. As a result, future growth in sovereign thematic bond issuance in these countries still requires enhanced risk-mitigation mechanisms from MDBs, holistic TA support, and more structured financial instruments to improve market confidence, reduce borrowing costs, and increase the effectiveness of sovereign bond programs in SDG financing.

1.2 Outlook for Scaling the Sovereign Thematic Bond Market

Strengthening Market Integration and Investor Confidence

Sovereign thematic bonds have revolutionized sustainable finance, offering governments a pathway to mobilize capital for climate resilience, social infrastructure, and other SDG-aligned priorities. However, scaling these instruments beyond early adopters requires a systemic shift that integrates financial innovation, regulatory advancements, and institutional strengthening. By aligning fiscal planning with sustainability objectives, sovereign issuers can transition thematic bonds from niche instruments into core financing tools within national development strategies while unlocking long-term private capital flows at scale.

For L-LMICs, the challenges of high borrowing costs, currency volatility, and limited investor confidence require a coordinated, multi-stakeholder approach. Institutional investors and private sector participants remain cautious due to concerns over credit risk, liquidity constraints, and inconsistent regulatory frameworks. Addressing these barriers demands structural interventions that improve creditworthiness, enhance market efficiency, and ensure bond issuances align with both sovereign and investor priorities.

Pathways to Unlock Scale:

To accelerate the adoption of sovereign thematic bonds and ensure their viability as a long-term financing tool, L-LMICs must implement the following key strategies:

a) Deepening Domestic Capital Markets

Expanding local investor participation and building a supportive regulatory environment are critical to reducing foreign exchange risks, strengthening liquidity, and promoting issuances. By fostering domestic institutional investor engagement, such as pension funds and insurance companies, sovereign issuers can reduce reliance on volatile external debt markets. Additionally, integrating currency hedging solutions and developing local currency bond markets will mitigate foreign exchange exposure, making thematic bonds a more stable investment vehicle.

b) Institutionalizing Risk-Mitigation Strategies

For thematic bonds to become scalable, blended finance mechanisms, credit guarantees, and concessional funding windows must be systematically integrated. Expanding MDB-backed guarantees and co-financing models will enhance sovereign credit profiles while concessional capital pools can lower borrowing costs for first-time issuers. These interventions align with the G20 Independent Expert Group's (IEG) recommendations to scale de-risking solutions through collaborative MDB and NDB partnerships, ensuring that risk is equitably distributed across public and private actors.

c) Strengthening Standardized Impact Reporting

Regulatory harmonization and third-party verification frameworks are essential to reinforcing investor confidence. Sovereign thematic bonds must adhere to globally recognized ESG standards, ensuring that impact measurement and reporting frameworks align with investor expectations and market best practices. Regulatory advancements that harmonize disclosure requirements will reduce the fragmentation of sustainability reporting and enhance the credibility of thematic bonds as an investment asset class.

d) Enhancing Technical Assistance for Market Readiness

Many L-LMICs lack the institutional capacity to design, issue, and monitor sovereign thematic bonds effectively. Scaling TA programs—particularly for Ministries of Finance and Debt Management Offices (DMOs)—will be key to ensuring regulatory preparedness, strengthening impact measurement capabilities, and embedding market-based financial expertise within sovereign issuers.

e) Expanding Market Integration Through Collaboration

Looking ahead, sovereign thematic bonds must evolve from ad-hoc issuances to systemically integrated financing mechanisms. This requires a stronger enabling environment that fosters collaboration between MDBs, NDBs, and private investors.

- Strengthened MDB, NDB, Donor, and Private Sector Partnerships: Expanding co-financing platforms, increasing concessional capital pools, and developing innovative risk-sharing structures can enhance sovereign creditworthiness and crowd in institutional investors.
- Regulatory Advancements for Market Integration: Establishing cross-border capital flow mechanisms and common sovereign bond standards will foster greater investor participation and long-term market depth.
- Embedding Sovereign Thematic Bonds in National Financing Strategies: Aligning these instruments with Integrated National Financing Frameworks (INFFs) ensures that sovereign issuances are fully integrated into long-term fiscal sustainability and development planning.

By embedding structured de-risking mechanisms, aligning issuance frameworks with global financing strategies (G20, FfD4), and ensuring sovereign thematic bonds are part of broader fiscal sustainability efforts, these instruments can scale effectively, mobilizing long-term private capital while reinforcing macroeconomic stability in L-LMICs.

Sovereign thematic bonds, if scaled effectively, will not only serve as a powerful financing tool but also accelerate progress toward achieving the SDGs and Paris Agreement targets—unlocking sustainable capital at scale while reinforcing fiscal stability in emerging markets.

1.3 Spotlight: Role of Integrated National Financing Frameworks in Scaling Thematic Bond Market

Unlike corporate thematic bonds, which focus on sector-specific investments – without broader policy linkages – sovereign issuances offer governments a macro-level financing instrument to integrate sustainability objectives into national fiscal strategies, such as the INFF. Scaling sovereign thematic bond issuances requires a structured approach to aligning finance with national development priorities. Governments direct resources toward climate resilience, social infrastructure, and broader SDG-aligned priorities, reinforcing sustainability within public financial management systems. Furthermore, sovereign issuances facilitate the creation of standardized regulatory and reporting frameworks that improve transparency, ensuring investor confidence in how proceeds are allocated and monitored. [16]

The interplay between corporate and sovereign thematic bonds is essential for scaling the market, with regulatory advancements and private sector crowding-in remaining central to expanding the thematic bond market in L-LMIC economies.

INFFs are country-led mechanisms designed to align public and private financing flows with national development priorities.[17] Developed in response to the Addis Ababa Action Agenda on Financing for Development, INFFs provide governments with a structured approach to mobilizing, managing, and aligning diverse financial resources—including domestic revenues, private capital, and external funding—to achieve long-term sustainability goals. By fostering policy coherence and strengthening financial planning, INFFs help countries identify financing gaps, set priorities, and establish transparent frameworks that guide investment decisions.[18]

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[16] Global Investors for Sustainable Development (GISD) Alliance, 2024. Guidance on Sovereign SDG Bonds for Countries and Investors. Available here.
[17] UN DESA. Integrated National Financing Frameworks. Accessible here.
[18] INFF, 2022. Integrated National Financing Framework: A Short and Practical Introduction. Available here.

For Ministries of Finance (MoFs), INFFs can serve as a strategic tool to integrate thematic bonds into a country's broader financial architecture. Since sovereign thematic bond issuances require alignment with national fiscal policies, debt management strategies, and sectoral investment plans, INFFs provide a platform for governments to coordinate across ministries, engage stakeholders, and ensure that financing targets are effectively linked to policy objectives.

From a scaling perspective, INFFs play a critical role in institutionalizing sovereign thematic bond markets by embedding them within national financing strategies. Many L-LMICs face structural challenges in developing credible pipelines of investable projects, ensuring regulatory consistency, and strengthening transparency in financial flows—all of which are core components of an effective INFF. By integrating thematic bonds within INFFs, Governments can facilitate greater fiscal coordination, enhanced credibility with investors, and improved monitoring systems.

Although the adoption and implementation of INFFs varies across countries, [19] their potential to create an enabling environment for mobilizing and unifying different financing sources can develop the sustainable finance market, especially as more governments work toward strengthening public financial management (PFM) and public investment management (PIM) systems.

The involvement of MoFs in the INFF also enhances the credibility of sovereign thematic bond frameworks. For example, in October 2024, Fiji's Ministry of Finance, Strategic Planning, National Development & Statistics collaborated with the United Nations Department of Economic and Social Affairs (UNDESA) to prepare an action plan for INFF application. This engagement aimed to align the INFF with Fiji's National Development Plan, highlighting the importance of MoF in the process. [20]

As sovereign thematic bond markets mature, integrating INFFs into the national financing architecture will foster long-term fiscal discipline and investor confidence. When effectively implemented, INFFs can significantly enhance the scalability and effectiveness of sovereign thematic bonds, contributing to the achievement of SDGs.

1. Risks and Challenges in Scaling Sovereign Thematic Bonds

While sovereign thematic bonds offer a promising avenue for financing sustainable development, their adoption remains uneven. L-LMICs face persistent structural barriers that limit their ability to issue these instruments at scale. High borrowing costs, investor risk perceptions, and macroeconomic volatility present formidable challenges, often discouraging private sector participation.

Sovereign thematic bonds hold immense potential to bridge the SDG financing gap while mobilizing private finance. In 2023, sovereign issuers drove a significant acceleration in green bond issuances across emerging markets, with sales more than tripling. However, financial institutions remained the largest issuers.[21] Sovereign thematic bonds are backed by the full

[19] INFF, 2021. Integrated national financing frameworks stocktake. Available here.
[20] UNDESA, 2024. Achieving Fiji's National Development Plan: The Benefits of an Integrated National Financing Framework. Available here.
[21] IFC, 2024. Emerging Market Green Bonds. Available here.

faith and credit of the issuing government. This sovereign guarantee enhances investor confidence and reduces borrowing costs, as government-backed issuances are generally perceived as lower-risk instruments.[22] Additionally, these bonds have been shown to set a benchmark for domestic capital markets,[23] providing a model for private sector participation in sustainable finance while strengthening market depth and liquidity.

2.1 Key Risks: Building the Case for Collaborative Solutions

Despite their promise, the sovereign component of thematic bonds still presents numerous structural and systemic challenges, including regulatory complexity and insufficient market readiness[24] deterring both issuers and investors[25] as highlighted in Table 1. This cumulatively hinders their adoption and scalability, particularly in L-LMICs. Addressing these barriers underscores the need for innovative de-risking mechanisms, stronger institutional capacity, and enhanced multilateral collaboration. By leveraging these solutions, sovereign thematic bonds can become a cornerstone for sustainable development.

Figure 3.0: Total accumulated issuance by market and bond type, USD bn

Key Risk	Challenges	Mitigation Strategies
Credit Risk	High sovereign debt, weak credit ratings	Credit guarantees, concessional financing
Debt Sustainability	Limited fiscal space, external debt burden	Integration with national debt management plans
Currency Volatility	Foreign exchange risk increases borrowing costs	Local currency bonds, hedging strategies
Market Readiness	Weak institutional capacity, lack of TA	Strengthened TA, regulatory frameworks

Credit Risk

Credit risk remains a critical challenge in scaling sovereign thematic bond markets, particularly in L-LMICs, where macroeconomic volatility, fiscal constraints, and weak credit profiles heighten investor concerns.[26] While these bonds offer a long-term financing solution for sustainable development, their success hinges on market confidence in an issuer's ability to meet debt obligations and deliver measurable impact.[27]

Unlike conventional sovereign debt, thematic bonds require issuers to demonstrate both fiscal responsibility and project performance, which amplifies perceived risk for investors. This is particularly evident in sovereign SLBs, where financial incentives—such as coupon adjustments—depend on long-term policy commitments that may extend beyond government tenures. Without robust enforcement mechanisms and clear financial upside, sovereign SLBs have seen lower investor uptake, limiting their scalability.

[22] Hussain, F., Dill, H., Kayaalp, B., 2022. Sovereign Green, Social and Sustainability Bonds: Mobilizing Private Sector Capital for Emerging Markets. Available here.
[23] Cunha, D., Craveiro, G., Rossi, M., 2023. Evidence of the knock-on effect of sovereign ESG bonds on corporate ESG bonds from Latin American and Caribbean (LAC) issuers. Available here.
[24] UNDP, 2023. Integrated National Financing Frameworks and Sovereign Thematic Bonds. Available here.
[25] OECD, 2023. Green, Social and Sustainability Bonds in Developing Countries: The Case for Increased Donor Co-Ordination. Available here.
[26] UNDP, 2024. Thematic Bonds and How to Deliver More Sustainable Finance in Developing Economies: Development Futures Series No. 84. ACL Socotra. Available here
[27] Kim, H.R., & Laskardis, C, 2025. Sovereign Green, Social, Sustainability, and Sustainability-Linked Bonds: An Evaluation of Promises and Prospects in Developing Countries. Available here

For L-LMICs, weak credit ratings, high debt burdens, and limited access to concessional finance further restrict market participation. These issuers face higher borrowing costs, while external factors—such as global interest rate fluctuations and exchange rate volatility [28] —further impact bond pricing. Additionally, traditional credit rating methodologies often fail to account for risk-mitigation features embedded in thematic bonds, such as blended finance elements, guarantees, and concessional enhancements, leading to overly conservative credit assessments, [29] and higher risk premiums.

To overcome these challenges, sovereign issuers must embed robust risk-mitigation mechanisms, leveraging credit guarantees, blended finance structures, and first-loss provisions to enhance creditworthiness and attract institutional capital. Ensuring that credit rating methodologies account for ESG-aligned risk assessments and embedded safeguards is key to improving investor confidence and optimizing pricing. At the same time, strengthening institutional frameworks—through integrated fiscal planning, budget tagging, and impact verification—will align bond proceeds with national development strategies, reinforcing market credibility and long-term sustainability.

By systematically reducing credit risk and enhancing transparency, sovereign thematic bonds can move beyond isolated pilot issuances to become scalable, mainstream financing tools. Strengthening these foundations will not only unlock greater private capital flows but also ensure sovereign issuers maintain financial resilience, market confidence, and long-term investor participation in sustainable debt markets.

Debt Sustainability

Unlike private sector bonds, where credit risk is assessed based on company fundamentals, sovereign thematic bonds are subject to macroeconomic conditions, fiscal constraints, and evolving policy environments. A low proportion of these bonds carry internationally recognized credit ratings; many remain unrated. [30] In 2023, 52 L-LMICs were classified as either in debt distress or at high risk of it. [31] Contributing factors include economic instability, high debt-to-GDP ratios, and limited fiscal capacity,[32] all of which elevate default risk. Consequently, these countries face higher borrowing costs and limited access to capital markets, discouraging private sector investment.

Before issuing thematic bonds, sovereigns must demonstrate that their overall debt position is sustainable, as investors and credit rating agencies assess fiscal indicators such as debt-to-GDP ratios,[33] debt servicing costs,[34] and fiscal space[35] to gauge repayment capacity. The International Monetary Fund (IMF) has reported that more than 20 developing countries currently allocate more to debt servicing than to public investment, highlighting the fragility of debt sustainability in L-LMICs.

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[28] Monnin, P., Feyertag, J., Robins, N., & Wollenweber, A, 2024. Aligning sovereign bond markets with the net-zero transition: The role of central banks. London School of Economics. Available here.
[29] Troina, M. (2021). Why and How the Brazilian Federal Government Will Benefit from Issuing a Sovereign Thematic Bond. ResearchGate. Available here.
[30] IFC, 2024. Emerging Market Green Bonds. Available here.
[31] UNDP, 2023. Building Blocks out of the Crisis: The UN's SDG Stimulus Plan. Available here.
[32] UN DESA, 2023. Credit Rating Agencies and Sovereign Debt: Challenges and Solutions. Available here.
[33] World Bank, 2021. Addressing Fiscal and Financial Vulnerabilities. Accessible here.
[34] IMF, 2024. Sovereign ESG Investing and Debt Sustainability. Accessible here.
[35] World Bank (2023) – ESG Investing and Sovereign Debt. Read here.

For example, For example, Nigeria's collaboration with the Climate Bonds Initiative (CBI) and the Securities and Exchange Commission (SEC) resulted in the publication of Nigeria Green Bond Guidelines in 2018.[36] While Nigeria issued Africa's first sovereign green bond aligned with the CBI's Standard and Certification Scheme, [37] concerns about creditworthiness limited its international uptake.

Debt sustainability remains a key concern for L-LMICs, particularly as concessional financing from MDBs and the IMF is governed by institutional thresholds that restrict access based on income classification. Several lower-income countries already have access to significant concessional finance, such as the World Bank's International Development Association (IDA), with more than 20 developing countries having spent more on servicing debt than on public investment. [38]

However, countries transitioning from low- to middle-income status often experience a sharp decline in concessional financing, forcing them to rely on higher-cost market-based borrowing. This shift increases debt servicing pressures, exposes sovereigns to currency volatility, and limits fiscal space for essential public investments. The loss of concessional finance often results in higher borrowing costs exceeding 7-10% in international bond markets, [39] with additional risks linked to foreign exchange volatility and weaker institutional capacity. [40]

This transition creates a structural financing gap where sovereigns must secure private capital at commercial rates while maintaining long-term debt sustainability. If thematic bonds are issued without a clear cost-benefit analysis, they may exacerbate fiscal vulnerabilities rather than provide relief. Sufficient recovery in the balance of payments must be in prospect to provide appropriate assurance that loans can be repaid on schedule without any financial strain.[41]

With access to concessional finance, coupled with their generally low market readiness for thematic bonds, LICs may evaluate the need and benefits of issuing sovereign thematic bonds to meet their development agenda against the already available concessional finance.

In discussions with the World Bank, debt sustainability was identified as the most critical factor in evaluating a country's readiness to issue sovereign [thematic] bonds. Countries transitioning from low- to middle-income status often experience a sharp decline in concessional financing, forcing them to rely on higher-cost market-based borrowing. This shift increases debt servicing pressures, exposes sovereigns to currency volatility, and limits fiscal space for essential public investments. Without concessional financing as a buffer, borrowing at commercial rates can heighten debt sustainability concerns, particularly for issuers with constrained credit profiles. Higher interest costs and exchange rate risks further deter long-term institutional investors, reducing the scalability of sovereign thematic bonds. To mitigate these risks, governments must integrate debt management strategies that balance concessional and market-based financing while leveraging risk-mitigation tools such as credit enhancements and blended finance structures to improve borrowing terms and sustain investor confidence.

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[36] CBI, FSD Africa, FMDQ Group PLC., 2021. Green Bonds in Nigeria: The Nigerian Green Bond Market Development Programme Impact Report 2018-2021. Available here.
[37] Climate Bonds Initiative, 2019. State of the Market Report: The Nigerian Green Bond Market Development Programme. Available here.
[38] DESA, 2024. 2024 Financing for Sustainable Development Report of the Inter-agency Task Force on Financing for Development. Available here.
[39] World Bank Group, 2023. Making the Low-Income Country Debt Sustainability Framework Fit for Purpose. Available here
[40] World Bank Group, 2021. Paving the Path: Lessons from Chile's Experiences as a Sovereign Issuer for Sustainable Finance Action. Available here
[41] IMF, 2023. 2023 Handbook of IMF Facilities for Low-Income Countries. Available here.

At the same time, investor participation in sovereign thematic bonds is primarily driven by financial viability, with financial returns often outweighing impact considerations. Discussions with the World Bank highlight that investors assess risk thresholds, portfolio credibility, and sovereign debt sustainability credentials before committing any capital. In L-LMICs, where sovereign issuances often carry higher perceived risks, investor appetite remains limited without clear credit enhancement mechanisms. Ensuring that sovereign thematic bonds align with investor expectations while maintaining long-term fiscal sustainability is key to expanding their adoption as a financing instrument. Beyond sovereign issuers, high credit risk spills over into domestic financial markets, raising borrowing costs for local institutions and limiting access to affordable capital. [42] This weakens thematic bonds' ability to drive sustainable investment at scale.

For instance, Chile's sovereign green bond program successfully funded climate adaptation initiatives while attracting investor demand at lower borrowing costs, [43] showcasing the potential of well-structured thematic bonds that align fiscal discipline with sustainability objectives. [44] The 'Greenium' effect, where green and social bonds trade at lower yields than conventional debt, can help sovereigns reduce debt servicing costs. [45] Empirical studies, including the IMF's 2025 Climate Debt Report, confirm that properly structured thematic bonds lower overall borrowing expenses, improving fiscal sustainability, [46] while attracting a broader investor base. However, pricing benefits depend on the credibility of the bond framework and the transparency of impact reporting.

By integrating debt sustainability into bond structuring, MDBs, DFIs, and policymakers can ensure that thematic bonds complement rather than replace concessional finance. Sovereign issuers must assess their long-term fiscal impact by evaluating whether thematic investments strengthen debt-to-GDP ratios, lower borrowing costs, and generate public expenditure savings. Aligning bond proceeds with these fiscal metrics enhances investor confidence, optimizes borrowing terms, and reinforces the role of sustainable finance in economic stability.

Case Study: Sri Lanka's Debt Landscape

Sri Lanka's recent debt crisis underscores the critical challenge of sovereign debt sustainability, particularly for emerging markets seeking to mobilize capital through international bond issuances. Between 2005 and 2020, Sri Lanka's external debt surged from $11.3 billion to over $56.3 billion, largely driven by reliance on international sovereign bonds (ISBs) to finance infrastructure projects. [47] However, many of these investments failed to generate sufficient economic returns, exacerbating fiscal imbalances and placing mounting pressure on the country's repayment capacity. By 2022, the Central Bank required an additional $2.4 billion to meet annual debt obligations totalling $4.5 billion, [48] but depleting reserves and sustained fiscal deficits rendered repayment increasingly untenable.

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[42] Pelaez, D.T., Cortes, A.M.P., Nava, A.S., & Frisari, G.L, 2024. Practical Guide to Sustainable Financial Instruments for Public Credit Bureaus and Treasury. Inter-American Development Bank. Available here.
[43] IMF (2023) – The Future of ESG Sovereign Bond Markets. Read here.
[44] World Bank (2023) – The Potential Implications of Economic and Social Rights for Sovereign Debt Investing. Read here.
[45] IMF (2023) – Low-Income Countries and Market-Based Borrowing. Read here
https://www.imf.org/en/About/Factsheets/Sheets/2023/imf-world-bank-debt-sustainability-framework-for-low-income-countries
[46] World Bank (2023) – Riding the Wave: Navigating the ESG Landscape for Sovereign Debt Managers. Read here.
[47] Chaudhari, G., 2024. Factors Effecting Economic Crises– A Case Study of Sri-Lanka. Available here.
[48] Reuters, 2022. Accessible here.

In the lead-up to default, Sri Lanka's credit rating deteriorated sharply, with Moody's, Fitch, and Standard & Poor's repeatedly downgrading the country due to growing concerns over debt distress.[49] In May 2022, Sri Lanka defaulted on $51 billion in external debt—the first such default in its history—amplifying the broader risks faced by sovereign issuers with high debt exposure.

The crisis highlights a fundamental challenge for emerging markets: reliance on market-based borrowing without sufficient fiscal safeguards can undermine macroeconomic stability, limiting access to concessional financing and increasing future borrowing costs. For countries issuing sovereign thematic bonds, debt sustainability must remain a core consideration, as heightened sovereign risk can deter investor confidence, increase coupon rates, and ultimately constrain the effectiveness of such instruments in achieving long-term development objectives.

Case Study: Ethiopia's Debt Restructuring Efforts

Ethiopia's sovereign debt challenges underscore the delicate balance between financing development and maintaining long-term debt sustainability. As of June 2024, Ethiopia's external debt stood at $28.9 billion, with nearly half owed to multilateral lenders such as the IMF, World Bank, and the African Development Bank (AfDB). [50] While concessional financing played a significant role in supporting the country's development agenda, reliance on commercial borrowing increased fiscal vulnerabilities. In December 2023, Ethiopia defaulted on a $1 billion Eurobond, becoming the third African country to do so, signalling deepening financial distress and prompting the government to seek debt restructuring under the G20's Common Framework.[51] Despite prolonged negotiations, by early 2025, Ethiopia announced that discussions were in their final stages, [52] aiming to ease fiscal strain and stabilize its macroeconomic outlook.

Ethiopia's case exemplifies the risks faced by sovereigns when external borrowing outpaces economic capacity. Defaulting on sovereign debt not only raises borrowing costs but also restricts access to international capital markets, limiting the ability to secure funding for critical development initiatives, including sustainability-linked investments. For sovereign thematic bonds to be a viable instrument for SDG financing, issuers must ensure that debt sustainability frameworks are in place to safeguard investor confidence and prevent future debt distress. Without robust fiscal management, the very instruments designed to drive sustainable development may inadvertently contribute to deeper financial instability, reinforcing the need for integrated risk mitigation strategies in bond structuring.

Credit risk and debt sustainability are critical for sovereign issuers, particularly in L-LMICs, where fiscal constraints heighten borrowing costs and limit market access. A weakened credit profile can trigger higher yields, capital outflows, and currency depreciation, compounding economic instability. Defaults, as seen in Sri Lanka and Ethiopia, erode investor confidence and constrain future financing options. To help ensure thematic bonds are a viable financing tool, sovereigns must integrate sound fiscal policies, transparent debt reporting, and realistic growth projections, reinforcing long-term market confidence and development financing.

[49] Reuters, 2022. Accessible here.
[50] Reuters, 2024. Accessible here.
[51] African Forum and Network on Debt and Development, 2024. Accessible here.
[52] Reuters, 2025. Accessible here.

Currency Risk

Many sovereign thematic bonds in L-LMICs are denominated in foreign currencies (e.g., USD, EUR, JPY) to attract international investors, exposing issuers to significant exchange rate risks. However, an increasing share—37% of the total amount (approx. $43 billion) of Green, Social, Sustainable, and Other Labeled (GSS+) bonds — has been issued in local currencies, [53] with sovereigns looking to leverage their domestic markets to mobilize capital. For instance, the first sub-sovereign SLB by the Development Bank of Rwanda (BRD) focused on engaging and mobilizing only the domestic investor base, including opening up for retail investments, to help mitigate the perceived currency risk that impacted international investor interest.

Volatility in local currencies against major global currencies adds uncertainty to investment returns, posing a significant hurdle for sovereign issuers. [54] Currency devaluation can escalate debt servicing costs, [55] with exchange rate volatility, creating financial strain. Additionally, limited secondary market liquidity in some L-LMICs constrains investor confidence and trading flexibility, increasing borrowing costs.

Local currency issuances are most viable for countries with stable domestic capital markets. They strengthen financial resilience by broadening the investor base and developing a sustainability-linked financing framework. Thailand, for example, has successfully expanded its thematic bond market through local currency sustainability and sustainability-linked bonds, supported by a national taxonomy and strong local investor participation. [56] In contrast, markets with weaker financial infrastructure may struggle with limited investor appetite, higher borrowing costs, and market depth constraints. For these issuers, a phased approach—combining initial hard currency issuances with TA and policy interventions to develop the domestic sustainable finance ecosystem—can facilitate a gradual transition toward local currency bonds.

Regulatory Barriers and Market Readiness

L-LMICs often lack robust regulatory frameworks to ensure transparent issuances, monitoring, and reporting of thematic bonds. Weak institutional capacity, insufficient market readiness, and fragmented policies exacerbate these challenges. Conversely, sovereign issuers have occasionally issued thematic bonds without stringent institutional frameworks and reforms (through 'policy exceptions' rather than institutional reforms), increasing risks of greenwashing and undermining investor confidence. This deters issuers and investors by creating uncertainty, increasing transaction costs and issuance timelines, [57] further undermining reforms and readiness, particularly in LICs, to create an enabling long-term framework for thematic bonds.

Governments can address these challenges by strengthening macroeconomic policies, developing transparent guidelines for thematic bond issuance, and aligning financial and climate goals through strategic country platforms and collaborations with TA and sector experts. [58] Clear and credible regulatory frameworks, compliance, and disclosure norms will reassure international investors and provide emerging market borrowers with access to larger pools of capital while alleviating greenwashing concerns and skepticism about credibility. [59]

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[53] World Bank, 2024. Trends in Allocation & Impact Reporting: Ensuring Transparency in Emerging Market Sovereign Green, Social, And Sustainability Bonds. Available here.
[54] IMF, 2024. Managing Foreign Exchange Rate Risk: Capacity Development for Public Debt Managers in Emerging Market and Low-Income Countries. Available here.
[55] Climate Policy Initiative, 2024. Managing Currency Risk to Catalyze Climate Finance. Available here.
[56] GGGI, 2024. Thailand Issues THB 30-Billion, Asia's First Sovereign Sustainability-Linked Bond, with GGGI Support. Available here.
[57] World Bank, 2022. Sovereign Green, Social and Sustainability Bonds: Unlocking the Potential for Emerging Markets and Developing Economies. Available here.
[58] Climate Policy Initiative, 2024. Managing Currency Risk to Catalyze Climate Finance. Available here.
[59] IFC, 2024. Emerging Market Green Bonds. Available here.

Political and Governance Risks

Political instability and governance challenges remain significant barriers to scaling sovereign thematic bonds in L-LMICs. Frequent shifts in government priorities introduce policy inconsistencies, affecting regulatory stability, budgetary commitments, and project execution—which are key concerns for investors assessing long-term financial viability. Weak institutional governance, lack of transparency in fund allocation, and shifting sustainability targets further exacerbate investment risks,[60] making sovereign issuances less attractive to investors. This has particularly hindered the adoption of sovereign SLBs, where the performance targets are often linked to the current Government's priorities, leading to the risk of the targets being changed or revised in the event of a change in policy priorities or the ruling Government itself.

To mitigate these risks, sovereign issuers must establish robust governance structures, reinforce transparency in fund allocation, and integrate sustainability commitments within national financing strategies. Establishing independent oversight mechanisms and multi-stakeholder governance frameworks—involving ministries, regulators, private investors, and civil society—can strengthen credibility and ensure adherence to bond objectives beyond electoral cycles. Additionally, prioritizing market-based de-risking mechanisms, such as credit guarantees, liquidity backstops, and structured incentives, provide an added layer of security against governance-related risks and reinforce long-term credibility. By embedding these safeguards, sovereign issuers can enhance market confidence, attract sustained investor participation, and position thematic bonds as a reliable and scalable financing tool.

Institutional Capacity Gaps

Structural weaknesses in institutional capacity hinder the ability of many L-LMICs to issue and manage sovereign thematic bonds effectively. Beyond technical expertise in bond structuring and issuance, PFM and PIM deficiencies create systemic barriers to efficient fund deployment and impact monitoring. Weak expenditure tracking frameworks, lack of fiscal discipline, and fragmented inter-ministerial coordination often result in misaligned project selection and inefficient use of proceeds—eroding investor trust and reducing market appetite. Private investors seek clear fiscal governance structures, robust impact monitoring systems, and alignment with global best practices to mitigate risks associated with fund misallocation or policy reversals. MDBs play a pivotal role in addressing these gaps as the largest providers of blended finance globally,[61] offering technical assistance for debt management strategies, PFM diagnostics, and investment tracking mechanisms to enhance transparency and fiscal accountability. Embedding institutional capacity-building initiatives within sovereign bond programs—such as standardized reporting, third-party verification, and integrated risk management frameworks—ensures that thematic debt issuance supports long-term economic growth while maintaining investor confidence. Strengthening these fundamentals is critical to unlocking larger pools of private capital and accelerating the adoption of sovereign thematic bonds.

Investor Perceptions

Investor confidence in sovereign thematic bonds from L-LMICs remains constrained by concerns over weak bond frameworks, limited transparency, and insufficient impact monitoring—heightening fears of greenwashing and misallocation of funds.[62] The G20 has emphasized the need for strengthened de-risking mechanisms, enhanced reporting frameworks, and structured financial instruments to mobilize private capital at scale.

[60] IFC-Amundi, 2023. Emerging Market Green Bonds. Available here.
[61] Convergence, 2024. State of Blended Finance. Available here.
[62] G20, 2023. 2023 Sustainable Finance Report Volume 1. Available here.

Expanding the use of structured finance tools, such as layered risk-sharing mechanisms and co-investment models, could better align sovereign issuances with investor expectations while maintaining risk-adjusted returns. [63]

While MDBs play a key role in supporting sovereign issuances, private investor appetite remains primarily driven by financial viability. Institutional investors assess risk thresholds, portfolio credibility, and sovereign sustainability credentials before committing capital. Unlike MDB-backed issuances, private sector investors require clear pricing benefits and well-structured incentives. Without mechanisms such as step-up/step-down pricing linked to credible KPIs, investor engagement remains low, which impacts the bond's scalability. This was also highlighted in discussions with the World Bank, whereby investor interest in sovereign SLBs has waned due to political risks and lack of structured incentives. Sovereign SLBs often rely on line ministries to meet KPIs, making them vulnerable to policy shifts and governance uncertainties.

To promote investor participation, sovereign issuers must integrate more sophisticated risk-sharing instruments, such as guarantees and structured finance vehicles, alongside private capital mobilization targets.[64] A more active risk management approach, coupled with tailored de-risking solutions, is essential in bridging the gap between sovereign issuers and commercial investors—ensuring that thematic bonds meet both sustainability goals and market expectations.

3. Role of De-Risking Mechanisms in Scaling Sovereign Thematic Bonds

While sovereign issuers face significant barriers—ranging from credit risk to liquidity constraints—some of these challenges can be mitigated though de-risking mechanisms. Effectively designed and implemented, these mechanisms can help sovereigns improve market confidence and facilitate broader investor participation. The following section explores various derisking mechanisms to enhance the creditworthiness of sovereign thematic bonds, ensuring that issuers can access capital at sustainable rates while maintaining fiscal stability.

L-LMICs present significant opportunities for expanding the thematic bond market. For instance, innovations such as Blue (oceans and aqua), Yellow (solar), or Orange (gender-climate) bonds align with cross-cutting SDGs, providing new avenues for financing at scale toward sustainable development. Addressing the risk-return gap for investors through coordinated efforts can attract private financing and bridge the growing SDG funding gap. MDBs, such as the World Bank, are well-placed to play a pivotal role in bridging this gap through financing risk capital, [65] and supporting implementable solutions. Some key examples of de-risking mechanisms can be found in Annex 1.

3.1 Types of De-risking Mechanisms

There are several types of de-risking mechanisms utilized by L-LMICs to support sovereign thematic bond issuances. Some of the key ones include:

Credit Guarantees

Credit guarantees are essential tools for mitigating risks associated with debt instruments. They ensure that guarantors cover principal and/or interest payments up to a specified limit, enhancing the creditworthiness of bonds. It acts as a form of insurance against non-repayment

[63] G20, 2023. 2023 Sustainable Finance Report Volume 1. Available here.
[64] G20, 2023. 2023 Sustainable Finance Report Volume 1. Available here.
[65] World Bank Blog, 2023. New pathways towards mobilizing private capital. Available here.

and reduces the risk of losses from default, making the instrument more attractive to lenders. While international capital markets offer an attractive opportunity for financing, poor credit ratings and limited market presence often hinder sovereign and sub-sovereign entities from securing competitive terms. In this context, guarantees emerge as a transformative risk mitigation tool, addressing lender concerns and unlocking new financing opportunities. Guarantees play a pivotal role in:

- Enhancing private investor confidence in sovereign and sub-sovereign issuers.
- Facilitating access to international capital markets.
- Expanding financing opportunities for sectors critical to sustainable development.

Guarantees have proven to be the most effective instrument in mobilizing private resources[66] with MDBs being the largest providers of guarantees in the market, offering 22 distinct types.[67] Yet, guarantees made up only a minuscule portion of MDBs' investments [for climate adaptation], wherein less than 1% of MDB finance for adaptation went to LMICs in 2021.[68]

On the other hand, commercial investor engagement in sovereign thematic bond markets remains low. Unlike MDB-backed concessional lending, commercial investors prioritize risk-adjusted returns, liquidity, and transparent risk-sharing mechanisms. However, the complexity of sovereign guarantees, their limited track record, and structural inefficiencies have hindered their ability to mobilize capital.

MDBs generally can extend guarantees at a larger scale than bilateral DFIs, but institutional and policy constraints have hindered their widespread use. [69] Yet, Fitch found that 10 of the largest MDBs still had the cumulative headroom of US$480 billion available for lending, before experiencing any downgrades. [70] This equates to a 30-50% increase in MDB lending, in line with the forecast from the Independent Expert Group (IEG) of 30-50% increase in MDB lending. [71] Internal policies and incentive structures within MDBs often favor traditional lending instruments over guarantees, which require greater coordination with private sector actors and third parties.[72]

Reforming internal incentives to prioritize guarantees as a central risk mitigation tool, rather than treating them as secondary to direct lending, is essential in unlocking their full potential. By expanding private sector participation in sovereign guarantee structures and addressing commercial investor concerns, guarantees can help bridge the SDG financing gap and provide L-LMICs with cost-effective, scalable de-risking mechanisms that meet both sovereign and investor needs.

However, without strong demand from sovereign clients, guarantees may be underutilized in place of more straightforward lending mechanisms. Addressing these structural barriers within MDBs will also be critical in ensuring guarantees can play a more central role in de-risking sovereign issuances that enable L-LMICs to tap into broader pools of [private] capital at scale.

[66] OECD, 2021. Scaling up Green, Social, Sustainability and Sustainability-linked Bond Issuances in Developing Countries. Available here
[67] Climate Policy Initiative, 2024. Landscape of Guarantees for Climate Finance in EMDEs. Available here.
[68] IISD, 2023. Innovative Financial Instruments and Their Potential to Finance Climate Change Adaptation in Developing Countries. Available here.
[69] Puerta, J., Ferreyra, G., Taddia, A., and Castellani, F., 2023. Development Lending for a New Reality: The Evolution of Financing Instruments across Multilateral Development Banks. Available here.
[70] Fitch Ratings, 2024. Rated MDBs Have Scope to Lend Up to USD480, All Things Equal, Before Negative Rating Impact. Available here.
[71] IEG, 2023. Strengthening Multilateral Development Banks: The Triple Agenda, Volume 2. Available here.
[72] IEG - World Bank Group, 2021. The World Bank Group's Approach to the Mobilization of Private Capital for Development. Available here.

There are various types of credit guarantees, including the following:

- **Partial and Full Credit Guarantees**: Credit guarantees mitigate risks associated with a borrower's inability to fulfil debt obligations. These guarantees cover non-payment for either borrower or issuer of the guaranteed portion of principal and interest, either partially or fully, depending on the structure. Partial guarantees as is, covering less than 100% of debt obligations, reduce project costs and attract private sector investment by making financing more affordable.[73] Some guarantees act as a liquidity facility by reinstating the guarantee after repayment, reducing both the probability and severity of default during periods of illiquidity.[74]

- **Policy-Based Guarantees (PBGs):** These guarantees partially support sovereign commercial borrowing linked to policy reforms. By mitigating default risk and reducing lender losses, PBGs improve credit profiles and enable governments to access financing with extended maturities and lower interest rates, surpassing what their inherent creditworthiness would allow. [75]

- **First-Loss Credit Guarantees:** Under this mechanism, the guarantor absorbs initial losses up to a predefined threshold in the event of borrower default. By taking on this initial risk, the guarantor alleviates investor concerns, encouraging their participation and fostering confidence in projects that might otherwise struggle to secure financial backing. As highlighted in the G20 Roadmap Towards Bigger, Better and More Effective MDBs, [76] this helps reduce risk and attract institutional investors.

- **Second-Loss Partial Credit Guarantees:** These guarantees cover the value of movable collateral, aligning with the principles of a standard public credit guarantee. They expand access to financing by encouraging lenders [financial institutions] to extend credit against movable assets, fostering economic participation.

- **Risk-Sharing Facilities**: Risk-Sharing Facilities (RSFs), such as from the International Finance Corporation (IFC), are bilateral loss-sharing agreements designed for financial institutions or corporations that require protection against credit risk, but do not need additional funding. [77] By covering a predetermined share of losses that exceed a set threshold—the 'first loss'—on a portfolio of eligible assets, RSFs help originators expand credit access via lending capacity in underserved markets and LMICs; where credit exposure often deters private-sector participation. The primary objective of the RSF is to enhance the ability to generate new assets within a particular category. While RSFs provide a crucial buffer against defaults, they are not a standalone solution. Their effectiveness is maximized when integrated with complementary de-risking tools such as blended finance facilities, PRI, or TA,[78] ensuring a more comprehensive approach to mobilizing private capital in high-risk markets.

[73] World Economic Forum. Accessible here.
[74] IFC. Accessible here.
[75] IFC, 2016. Findings from Evaluations of Policy-Based Guarantees. Available here.
[76] 4th Finance Ministers and Central Bank Governors (FMCBG) Meeting, 2024. G20 Roadmap Towards Better, Bigger and More Effective MDBs. Available here.
[77] Climate Policy Initiative, 2024. Landscape of Guarantees for Climate Finance in EMDEs. Available here.
[78] IFC, 2023. Product Description of Risk Sharing Guarantee. Available here

Limitations of Credit Guarantees

Guarantees have yet to be fully optimized for sovereign thematic bond issuances. Despite the existence of multiple types of guarantee—partial credit guarantees, policy-based guarantees, and risk-sharing facilities—current structures are often fragmented, limiting their scalability. For instance, guarantees have primarily been applied to project-level financing rather than bond issuance itself, leaving sovereigns vulnerable to market fluctuations and investor risk perceptions.

The use of guarantees is further constrained by institutional thresholds, particularly in L-LMICs, where the demand for de-risking solutions outpaces supply. Guarantees issued by MDBs have not been structured for scale, with many remaining isolated pilot initiatives. The limited application of guarantee mechanisms in thematic bond markets underscores the need for more systemic interventions that integrate financial de-risking with institutional capacity-building.

As such, private guarantee partners are a possible avenue to explore to provide credit enhancement solutions that support the structuring of sovereign and sub-sovereign bond issuances, ensuring that debt instruments remain attractive to both domestic and international investors.

For instance, the GuarantCo platform provided a counter-guarantee of NGN 20.23 billion (US$25 million) to InfraCredit in Nigeria, backing the Lagos Free Zone Company's 20-year senior guaranteed infrastructure bond.[79] This intervention enabled the project to access local currency financing from the domestic bond market, a key factor in reducing exchange rate risk and improving market depth for long-term debt issuance. Such mechanisms demonstrate how private-sector risk-sharing tools can complement MDB efforts by expanding credit-enhancement options, improving liquidity conditions, and facilitating first-time access to long-term funding.

Beyond risk mitigation, private guarantee institutions also play a role in structuring innovative financing models that can be adapted to sovereign thematic bonds. Their expertise in credit enhancement and risk-sharing mechanisms provides a valuable learning opportunity for MDBs seeking to optimize guarantee structures at the sovereign level. However, while private guarantee providers have been successful in mobilizing capital for infrastructure-backed instruments, their involvement in sovereign bond issuances remains limited. Expanding their role within MDB-led initiatives could offer sovereign issuers greater flexibility in structuring risk-sharing mechanisms and leveraging blended finance tools to attract institutional investors.

Case Study: Ghana – Learning on Credit Enhancements and Debt Sustainability

Ghana's issuance of a $1 billion sovereign bond in 2015, backed by a $400 million partial guarantee from the World Bank's IDA, provided an early demonstration of how credit enhancements can improve market access and borrowing terms for emerging economies. At the time, Ghana faced deteriorating macroeconomic conditions, including a global commodity price downturn and rising fiscal pressures. The guarantee helped reduce borrowing costs by an estimated 150–200 basis points, [80] and its oversubscription signalled strong investor confidence in the risk-mitigated instrument [81] enabling the country to secure long-term financing at more favorable terms. [82]

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[79] Guarantco, 2034. GuarantCo provides NGN 20.23 billion (USD 25 million) counter-guarantee to InfraCredit for Lagos Free Zone Company 20-year senior guaranteed fixed rate infrastructure bond issuance. Available here.
[80] Cleary Gottlieb. Ghana Guaranteed Bond Restructuring Risks May Undermine Appeal of Credit Enhanced Mechanism. Accessible here
[81] IMF, 2025. The Scalability of Credit Enhanced EM Climate Debt. Available here.
[82] World Bank and Rothschild & Co, 2016. Utilizing World Bank Partial guarantees in support of sovereign or sub-sovereign commercial debt financings. Available here

However, despite its initial success, the credit-enhanced bond did not shield Ghana from broader debt vulnerabilities. By 2023, the country's debt-to-GDP ratio had exceeded 80%, driven by high fiscal deficits, currency depreciation, and mounting external obligations. Interest payments consumed nearly half of government revenues, significantly constraining public spending and increasing default risk. As fiscal conditions worsened, Ghana undertook a sovereign debt restructuring, including the partially guaranteed bond—an unexpected move that raised concerns over the effectiveness of credit guarantees in ensuring long-term investor protection. [83]

Investor expectations that the guaranteed bond would be exempt from restructuring were undermined when Ghana missed a coupon payment in April 2023, triggering a $50 million payout from the World Bank guarantee. [84] While this provided some risk mitigation, investors still faced significant losses, with the bond trading at a 30% discount—less severe than non-guaranteed bonds, which faced discounts of up to 80%, but still eroding confidence in credit-enhanced sovereign debt.[85] The experience underscored the limitations of partial guarantees in fully safeguarding investors against sovereign credit risks, particularly in distressed debt scenarios.

As such, this particular experience from Ghana highlights the importance of integrating credit enhancements within a broader debt sustainability strategy. [86] Guarantees can reduce borrowing costs and attract investors, but sound fiscal management is still critical. Ensuring that bond proceeds are directed toward revenue-generating investments—such as infrastructure projects that enhance economic productivity—could have strengthened Ghana's repayment capacity and mitigated the risk of future restructuring. Additionally, greater transparency around the treatment of credit-enhanced instruments in debt restructuring negotiations could have preserved investor confidence and maintained the credibility of guarantees as a de-risking tool for sovereign issuers.

A higher guarantee coverage or a more structured risk-sharing mechanism could have provided stronger protection for investors while lowering Ghana's overall borrowing costs. Similarly, integrating concessional financing or blended structures alongside the guarantee may have reduced the country's exposure to volatile market-based debt. More proactive fiscal consolidation measures before issuance, combined with greater predictability in debt treatment, could have further improved the bond's long-term resilience.

Ghana's experience underscores the need for more structured and predictable credit enhancement mechanisms that balance investor protection with long-term debt sustainability. While partial guarantees can improve initial market access, their effectiveness depends on how they are integrated within broader risk-mitigation frameworks. This highlights the critical role of MDBs in strengthening sovereign credit profiles, not only by providing guarantees but also by embedding them within coordinated de-risking strategies that align with fiscal management and investor confidence.

MDBs are backed by strong credit ratings and deep institutional expertise, providing a robust foundation for risk mitigation in sovereign bond markets. Their AAA-rated guarantees allow sovereigns to access financing at improved terms while reducing perceived risk for investors.

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[83] Grigorian, D. and Vesserau, L., 2024. Ghana: A Case Study of Sovereign Debt Restructuring Under the G20 Common Framework. Available here.
[84] Reuters, 2023. Some Ghana bondholders received coupon payment of World Bank-backed bond. Accessible here.
[85] Reuters, 2023. Some Ghana bondholders received coupon payment of World Bank-backed bond. Accessible here.
[86] World Bank, 2023. Factsheet: Ghana Policy-Based Guarantee. Accessible here.

For example, the African Development Bank (AfDB) has leveraged its international credit rating to enhance the creditworthiness of special-purpose financing vehicles, broadening access to local currency capital markets. By aligning MDB-led guarantee mechanisms with private-sector expertise in credit enhancement, a more comprehensive de-risking ecosystem can be developed for sovereign thematic bonds. This collaboration can lead to several benefits such as strengthening credit profiles to reduce borrowing costs, attracting more institutional investors, and enhancing the role of MDBs by mobilizing private capital.

For institutional investors, risk-adjusted returns remain the primary consideration, often outweighing impact objectives. Investors assess sovereign thematic bonds not only on sustainability commitments but also on creditworthiness, transparency, and the reliability of repayment structures. In L-LMICs, elevated risk perceptions—driven by currency volatility, political uncertainty, and limited secondary market liquidity—continue to deter long-term capital allocation. While guarantees provide a mechanism to offset these risks, commercial investors often encounter challenges such as:

- Complexity in structuring guarantees: Guarantee-backed bonds often require multi-party coordination, increasing transaction costs and regulatory hurdles.
- Limited credit enhancements for bonds: Guarantees for bonds are perceived as less effective due to fragmented risk coverage mechanisms. Investors typically require more tailored risk-sharing solutions that combine partial credit guarantees, first-loss capital, and liquidity backstops.
- Unclear exit strategies: Private capital remains constrained by the lack of structured refinancing mechanisms that allow for early exits or risk-sharing with public financiers. Without clarity on how and when risk coverage will evolve over a bond's lifecycle, investors may hesitate to commit capital at scale.

Thus, MDBs remain key facilitators to unlocking the full potential of guarantees for sovereign thematic bonds. However, the limited capital structure of MDBs—alongside their preferred creditor status and balance sheet constraints—poses challenges to guaranteeing sovereign issuances at the scale required. [87] This reinforces the urgency of innovative credit enhancement solutions that involve private sector co-investments and risk-sharing mechanisms.

As such, MDBs require deeper coordination with all stakeholders, to align risk-sharing approaches with private capital deployment strategies, and to leverage a diversified pool of risk-mitigation instruments. By adopting more flexible guarantee structures, integrating performance-based pricing models, and expanding liquidity options, sovereign issuers in L-LMICs can remain both financially viable and attractive by enhancing investor confidence, accelerate private capital mobilization, and scale thematic bond markets in a sustainable manner.

Refer to **Section 5** of this report, which further discusses the role of MDBs in the sovereign thematic bond market.

Concessional Grants

Concessional grants and loans are financial instruments provided on terms more generous than market rates, often featuring lower interest rates and extended repayment periods. [88]

[87] Independent Experts Group, 2023. Strengthening Multilateral Development Banks: The Triple Agenda Volume 1. Available here.
[88] IISD, 2023. Innovative Financial Instruments and Their Potential to Finance Climate Change Adaptation in Developing Countries. Available here.

These instruments are pivotal in addressing financial barriers and attracting institutional investors to projects that might otherwise be deemed too risky or unprofitable.

For instance, the Seychelles Blue Bond's $5 million grant from the Global Environment Facility (GEF) reduced upfront issuance costs, making the bond financially viable for a small island nation with limited fiscal space. [89]

Eligibility for grants and concessional loans from MDBs is primarily based on country income levels, prioritizing low-income nations. [90] However, institutional thresholds imposed by MDBs and the IMF limit the total concessional financing available, particularly for countries transitioning from low- to middle-income status, restricting their access as they move toward market-based funding. For example, Tanzania sought $500 million for a development project and had faced predefined country limits on concessional financing from the World Bank after transitioning to lower-middle income status.[91] To navigate this, Tanzania utilized a combination of a $250 million Shorter Maturity Loan with 0% interest and a $250 million scale-up window loan, effectively blending concessional and non-concessional resources to meet its financing needs.

However, there has been room for negotiation, as seen in December 2023 when the IMF temporarily increased access limits under its Poverty Reduction and Growth Trust (PRGT) in response to the global economic challenges. [92] The annual access limit was raised from 145% to 200% of a country's quota, and the cumulative limit from 435% to 600%, allowing low-income countries to access more concessional support during periods of heightened need. However, as these limits—intended to uphold debt sustainability and ensure fair resource allocation—revert to be more restrictive, LICs are forced to rely on higher-cost, non-concessional sources of capital, making it more challenging to fund long-term sustainable development initiatives.

Blended finance offers a solution by strategically combining concessional capital and commercial investment, stretching limited resources while mitigating investor risk. Its structure can further maximize the limited concessional resources, enabling MDBs to maximize impact while mitigating risk for private investors. [93] However, effective implementation requires clear ground modalities—ensuring concessional funds are aligned with country needs, transparently allocated, and governed by strong financial safeguards. Strengthening these blended finance mechanisms, within the constraints of concessional limits, is key to mobilizing private capital while maintaining fiscal stability.[94] This ensures that countries can continue advancing their development objectives without exacerbating debt vulnerabilities.

Hedging Mechanisms to mitigate Foreign Exchange Risk

Foreign exchange risk presents a fundamental challenge for sovereign issuers in L-LMICs, where currency volatility can erode investor returns and deter long-term financing commitments. Hedging solutions offer a crucial mechanism to mitigate this risk by providing structured instruments that protect investors from adverse currency fluctuations. These mechanisms—ranging from full swaps to tailored risk-sharing arrangements—serve to stabilize returns and reduce uncertainty, thereby improving sovereign issuers' access to global capital markets.

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[89] World Bank, 2018. Seychelles launches World's First Sovereign Blue Bond. Available here.
[90] Climate Policy Initiative, 2024. Understanding Global Concessional Climate Finance 2024. Available here.
[91] World Bank, 2022. Tanzania Leverages New IDA Financial Product to Maximize Savings. Available here.
[92] IMF, 2023. IMF Executive Board Temporarily Increases Access Limits under the Poverty Reduction and Growth Trust. Available here.
[93] IFC, 2021. Using Blended Concessional Finance to Invest in Challenging Markets. Available here.
[94] IFC, 2020. The Why and How of Blended Finance. Available here.

Platforms like Brazil's Eco Invest Brasil developed with the Inter-American Development Bank (IDB), demonstrate how hedging solutions can mitigate currency risks. While scalable in some contexts, these solutions require significant adaptation for broader applicability in other L-LMICs.[95] The platform integrates multiple hedging instruments, including full swaps, credit lines for foreign currency investments, and liquidity buffers, in case of exchange rate devaluation events, and "tail risk" hedging mechanisms for extreme devaluations. The platform intends to safeguard investors from the adverse impacts of unexpected currency movements triggered by economic shocks.[96] As an outcome of Brazil's G20 presidency, the platform has an expected potential for foreign exchange hedges of $3.4 billion, with the possibility of further increase.

However, as Brazil's relative financial depth and access to local currency is more accessible, it is admittedly challenging in other markets, as the model is difficult to scale and/or replicate in other L-LMICs.[97]

In economies with less developed currency markets, hedging mechanisms may require significant adaptation, with MDBs playing a critical role in designing scalable foreign exchange risk mitigation solutions. Aligning foreign exchange hedging with broader sovereign risk mitigation strategies could improve applicability across L-LMICs, ensuring that sovereign issuers can safeguard investor returns while expanding access to capital markets.

Political Risk Insurance

Political Risk Insurance (PRI),[98] also known as Partial Risk Guarantees (PRG),[99] protects investors from non-commercial risks associated with political instability, policy unpredictability, and governance challenges. PRI plays an essential role in enhancing investor confidence in high-risk markets, ensuring that sovereign issuers can attract private capital even during uncertain political environments.

By insuring against risks such as expropriation, contract breaches, or regulatory changes, PRI mechanisms mitigate the uncertainty that often deters institutional investors from engaging in L-LMIC markets. Instruments offered by the Multilateral Investment Guarantee Agency (MIGA), bilateral DFIs, and private insurers help create a more predictable investment environment, reducing capital flight and fostering long-term commitments to sovereign bond markets. It also works to empower sovereign issuers to scale their efforts and partnerships to finance SDG-aligned projects. When paired with other de-risking mechanisms, for instance, layering PRI with first-loss guarantees or liquidity support mechanisms can provide a comprehensive risk mitigation package, becoming more attractive to investors by safeguarding against adverse political actions and enhancing investor confidence in high-risk markets. As such, when paired with credit enhancements and blended finance solutions, PRI can significantly improve sovereign bond pricing, enabling issuers to secure more favorable financing terms.

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[95] GFANZ, 2024. Brazil Climate and Ecological Transformation Investment Platform Launches to Help Deliver Brazil's Ambitious Development and Climate Goals. Available here.
[96] IDB, 2023. Brazil's Ministry of Finance, IDB Plan to Create Hedging Platform for Brazil's Green Transformation Plan Investments. Available here.
[97] Climate Policy Initiative, 2024. Managing Currency Risk to Catalyze Climate Finance. Available here
[98] MIGA, 2020. Expanding Political Risk Insurance: A Partnership Approach to Grow Private Investment. Available here.
[99] ADB. Accessible here.

3.2 Spotlight: MIGA's Role in De-Risking Investments

The **Multilateral Investment Guarantee Agency (MIGA)**, part of the World Bank Group, provides guarantees to promote foreign direct investment (FDI) in developing countries by mitigating non-commercial risks that enhance investor confidence and facilitate capital flows, mainly through its political risk insurance and credit enhancement solutions.

- **Political Risk Insurance** encompasses coverage against:
    - **Currency Inconvertibility and Transfer Restriction**: Safeguarding against the inability to convert local currency into foreign exchange or transfer funds abroad.
    - **Expropriation**: Protection against nationalization or other forms of expropriation by the host government.
    - **War and Civil Disturbance**: Coverage for losses due to political violence, including war, terrorism, and civil unrest.
    - **Breach of Contract**: Protection in instances where the host government breaches contractual agreements.

- **Credit Enhancement**: Provides guarantees to improve the creditworthiness of projects, enabling borrowers to secure financing on more favourable terms. This is particularly beneficial for infrastructure and other capital-intensive projects in emerging markets.

Through its specialized guarantees, MIGA enables governments to secure financing on more favorable terms, while ensuring that private sector participation in sovereign bond markets remains viable.

Launched in 2024, the *World Bank Group Guarantee Platform* is being managed by MIGA with the goal of issuing $20 billion in guarantees annually by 2030, and scaling up to create a simplified, one-stop-shop for guarantees by the World Bank Group. [100]

MIGA: Opportunities and Challenges

MIGA's de-risking mechanisms play a pivotal role in facilitating investment in high-risk regions, unlocking potential in underserved markets. By mitigating political risks, MIGA provides investors with the confidence to engage in environments they might otherwise avoid. This, in turn, fosters economic development and creates pathways for growth in sectors critical to sustainable development.

Credit enhancement and PRI products offered by MIGA further bolster this process by improving the financial viability of projects, making them more attractive to a diverse range of investors and lenders. It is worth noting that MIGA's association with the World Bank may also act as a deterrent against adverse actions by host governments, ensuring more predictable and secure investment climates. In addition, MIGA has a new instrument that allows MDBs to shift loans off their balance sheets to private capital markets, which frees up headroom on balance sheets for additional lending and expanding financing options for sovereigns. [101] However, MIGA's balance sheet is structured differently. It can recycle a large share of its portfolio on the reinsurance market, enabling it to issue more guarantees based on its existing capital.

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[100] MIGA, 2023. Sustainability report 2023. Available here.
[101] Summers, L. and Singh N.K., 2024. The G20 Independent Expert Group Report Card on Strengthening Multilateral Development Banks: An Incomplete Grade. Available here.

By strategically combining PRI with diverse financial instruments and innovative structuring approaches, MIGA can better address the complexities of sovereign and project-level risks. [102] This includes leveraging first-loss guarantees or unfunded liquidity facilities alongside PRI to create stronger risk-mitigation frameworks. Additionally, complementing PRI coverage with guarantees from multiple MDBs can provide layered protection, while expanding the use of flexible reinsurance mechanisms would enable MIGA to scale its capacity and support broader, more sustainable investment platforms.

The World Bank Group Guarantee Platform marks a significant shift in MDB engagement with sovereign thematic bonds by prioritizing risk-sharing mechanisms over traditional lending. By consolidating guarantee products across the group [comprising International Bank for Reconstruction and Development-IBRD, IFC, and MIGA] on a single platform, it streamlines guarantees, eliminates inefficiencies, and expands credit enhancement options – to both private and public sector clients. [103]

MIGA's integration into this platform strengthens its role as a sovereign de-risking partner, ensuring that sovereign issuers can access structured and coordinated de-risking solutions. Historically, fragmented guarantee products limited large-scale sovereign risk mitigation; the Guarantee platform is aimed to overcome this challenge by aligning MIGA's PRI and credit guarantees with structured financing tools from IBRD and IFC, creating a layered risk-mitigation structure that enhances creditworthiness, lowers borrowing costs, and extends bond maturities. MIGA's expanded role presents an opportunity to align MIGA's core areas with other enablers for a more comprehensive coverage of risks [104] – moving them toward more holistic blended financing solutions, which integrate guarantees, unfunded liquidity facilities, reinsurance mechanisms, and technical support to scale sovereign thematic bonds.

However, the complexity of assessing and underwriting PRI alone can lead to intricate processes, which may delay implementation. Furthermore, while MIGA provides political risk coverage, the exclusions and conditions in its policies may leave certain investor concerns unaddressed, particularly in highly volatile or unpredictable environments. These include market-related risks such as fluctuations in bond yields, interest rates, or broader economic conditions that can impact sovereign issuers. This means that while MIGA's guarantees enhance investor confidence, they are not a standalone solution.

Moreover, the ***World Bank's evolution roadmap*** [105] has placed renewed attention on MIGA's expanding role in climate finance, particularly as it scales its guarantee operations to mobilize private capital. To fully unlock private capital at scale, MIGA's PRI must be integrated with complementary de-risking tools that address financial and structural [economic and social] risks, which are addressed by the use of proceeds, enhancing transparency, and mobilizing other stakeholders such as TA experts in building scale in the sovereign bond structures.

One way to achieve this is through a bundled facility that pairs MIGA's political risk guarantees with TA and credit enhancement mechanisms. Such a one-stop structure would not only reduce political uncertainties but also help issuers navigate complex financial and regulatory landscapes. TA can support sovereigns in strengthening governance frameworks, improving fiscal management, and aligning bond structures with international best practices, reducing perceived risks for investors. Additionally, incorporating concessional capital, currency risk hedging, or liquidity backstops within the facility would help offset financial risks that MIGA alone does not cover.

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[102] MIGA, 2020. Expanding Political Risk Insurance: A Partnership Approach to Grow Private Investment. Available here.
[103] MIGA, 2024. World Bank Group Guarantee Platform. Available here.
[104] MIGA, 2020. Expanding Political Risk Insurance: A Partnership Approach to Grow Private Investment. Available here.
[105] World Bank Group, 2024. From Vision to Impact: Implementing the World Bank Group Evolution. Available here.

4. Role of Technical Assistance Mechanisms

As financial de-risking mechanisms play a critical role in improving the market viability of sovereign thematic bonds, they must be complemented by robust institutional support. Many L-LMICs lack the technical capacity to structure and manage these instruments effectively, limiting their ability to attract investors and sustain market participation. Strengthening TA frameworks is therefore essential to enhancing sovereign issuers' ability to issue, monitor, and report on thematic bonds in alignment with global best practices. This section examines the role of TA in bridging knowledge gaps, reinforcing governance structures, and ensuring the long-term credibility of sovereign thematic bond markets.
MDBs and DFIs offer tailored TA to support regulatory readiness, capacity building, and governance frameworks. For example, the African Development Bank's Green Bond Program equips governments to align frameworks with international standards, fostering market readiness. Bundling technical assistance with financing is becoming increasingly essential for scaling adaptation finance.

Ensuring that the implementation of sovereign thematic bonds follows responsible financial practices is critical. By incorporating 'Do No Harm' principles within TA frameworks and programs, can support sovereign issuers in conducting comprehensive assessments, addressing debt sustainability, equitable project selection, and the long-term social, environmental, and economic impacts of bond-financed initiatives. Embedding these safeguards into TA frameworks enhances the resilience of sovereign issuances while promoting inclusive and sustainable development outcomes.

Issuing thematic bonds involves complexities that require careful planning, sufficient capacity, and alignment with international standards. These obstacles can hinder the ability of L-LMICs to successfully launch bonds that meet global investor expectations while ensuring the effective deployment of proceeds toward sustainable projects.

To overcome these challenges, TA is an important enabler for sovereigns, particularly in LICs. Through tailored support from MDBs, international organizations, and specialized advisory bodies, governments can access the tools, knowledge, and resources needed to design, issue, and manage thematic bonds effectively.

4.1 Key Technical Assistance Areas

Notable key areas of TA for sovereign thematic bonds include:

a. Capacity Building and Knowledge Sharing

Capacity building equips governments and public institutions with the skills, knowledge, and frameworks needed to navigate the complexities of thematic bond issuance. This includes training stakeholders to understand the instruments and relevant international principles or standards, workshops to develop action plan/roadmap and to share best practices from similar sovereign thematic bonds issuers, and training to develop local expertise in impact measurement and assurance to sustain market growth. In addition, knowledge sharing is also facilitated through the publication of reports, case studies, and policy papers, among others.

b. Framework Development

Having a robust governing financing framework is essential for sovereign issuers of thematic bonds, as it aligns bond issuances with international standards such as the Green Bond Principles or Climate Bonds Standards. TA providers support sovereign issuers in defining clear criteria for eligible projects, establishing processes for project evaluation and selection, and setting up effective proceeds management and robust impact reporting mechanisms. A well-designed framework ensures transparency, accountability, and investor confidence while aligning with national sustainability goals.

c. Policy and Regulation Support

Many countries face challenges such as fragmented regulatory environments and the absence of clear guidelines for thematic bond issuance. TA helps governments create enabling policies, regulations, and disclosure frameworks that align with international standards, fostering a conducive environment for sustainable finance. This includes incentives for thematic bonds issuances establishing frameworks for monitoring and compliance.

Streamlining regulatory processes across MDBs and harmonizing operational procedures with domestic frameworks can further reduce administrative burdens and improve efficiency in thematic bond issuance. These measures help ensure scalability and adherence to global standards, unlocking new opportunities for sustainable finance.

d. Stakeholder Engagement

Sovereign thematic bonds commonly involve a wide range of multi-stakeholder governance, leadership, coordination, and close collaboration among various ministries/government agencies, such as the Planning Ministry as Initiator, Finance Ministry as issuer, and key line ministries as the Project Implementers. [106] In addition, it is necessary to engage market participants at the global level, including underwriters, national and MDBs, stock exchanges, data scientists, and Second Party Opinion (SPO) providers, alongside civil society and potential investors.

TA providers such as the United Nations Development Program (UNDP) and Global Green Growth Institute (GGGI), as well as some private sector entities help issuers design effective engagement strategies to align interests, organize inter-agency coordination and consultation, and conduct investor roadshows to communicate the bond's objectives and impact.

e. Impact Measurement & Reporting

Impact measurement and reporting aim to bring transparency and accountability in thematic bond issuances. TA providers support sovereign issuers in developing robust systems to set up robust environmental, social, gender, and sustainability indicators, as well as measure and disclose the impact of bond-funded projects, creating accurate and accountable impact reports aligning with international reporting standards and assurance processes. Effective impact reporting not only builds trust and credibility but also demonstrates the tangible contributions of bond proceeds toward national sustainability, social, or climate goals.

[106] Global Investors for Sustainable Development (GISD) Alliance, 2024. Guidance on Sovereign SDG Bonds for Countries and Investors. Available here.

f. Incentives

Financial incentives, such as tax exemptions and coupon step-down features, directly address cost and risk challenges. Malaysia's Sustainable and Responsible Investment (SRI) and SRI-linked Sukuk Frameworks, for instance, incentivizes issuers by exempting them from taxes on issuance costs,[107] reducing the financial burden on issuers and aligning reporting requirements with internationally accepted principles and best practices to appeal to international ESG-aligned investors.[108]

Indonesia's Green Sukuk framework also demonstrates how financial incentives, such as lower listing fees, can reduce the initial cost burden for issuers, making it more financially feasible to tap into sustainable financing options. The lower listing fees are especially crucial in stimulating the market for green and social financing instruments, and could be an approach that extends into other emerging asset classes, including Orange Sukuks, which supports the growth of these instruments. Such financial incentives would help lower the barriers to entry, fostering broader participation and improving market conditions for emerging social impact securities.

Similarly, coupon step-down features in SLBs align financial incentives with sustainability goals, reducing borrowing costs when predefined performance targets are achieved. [109] Uruguay is the only sovereign to have issued an SLB with a step-down structure, demonstrating how financial incentives can be embedded to reinforce sustainability commitments. While investor skepticism persists—largely due to concerns that many existing SPTs have been set at easily achievable levels—structuring SLBs with material KPIs strengthens accountability.

By integrating step-up and step-down mechanisms, Uruguay's approach shares risk between issuers and investors, ensuring that outperformance is rewarded while maintaining financial discipline. This model presents an opportunity for future sovereign issuers to enhance market confidence in SLBs while aligning debt instruments with long-term sustainability goals. [110]

Some examples of TA facilities established by different organizations to support sovereign entities aiming to issue thematic bonds include:

- **International Finance Corporation - Green Bond Technical Assistance Program (GB-TAP)**

Launched in 2018, GB-TAP aims to develop the green bond market in developing countries by providing technical assistance to financial institutions. The program provides training, quality reporting enhancement,[111] knowledge sharing, and green finance policy development for public sector institutions.

- **World Bank Treasury - Sustainable Finance Advisory Services**

The World Bank Treasury provides technical assistance to emerging markets to facilitate the development of sustainable bond markets, including green, blue, and social bonds. Their support areas include the development of sustainable bond markets,[112] pre- and post-issuance technical assistance, and capacity building for institutional investors.

[107] DFDL. Accessible here.
[108] Refinitiv, London Stock Exchange, UKIFC and GEFI, 2022. Green and Sustainability Sukuk Report. Available here.
[109] IFC, 2022. Structural Loopholes in Sustainability-Linked Bonds. Available here.
[110] Global Investors for Sustainable Development (GISD) Alliance, 2024. Guidance on Sovereign SDG Bonds for Countries and Investors. Available here.
[111] IFC, Accessible here.
[112] World Bank, Accessible here.

Asian Development Bank (ADB) - ASEAN Catalytic Green Finance Facility (ACGF)

As part of ADB's TA services, ACGF provides technical assistance and advisory support to sovereign, municipality, and state-owned-enterprise issue Green, Social, Sustainable, and Other labelled (GSS+) bonds. The facility provides capacity building and ecosystem development that helps issuers align bond frameworks with international standards, enhance credibility, and attract investors. It supports the development of regional bond taxonomies, sustainability disclosure requirements, and promotion of local verifiers. [113]

- **United Nations Development Programme**

UNDP has helped facilitate over US$27 billion in sovereign thematic bond transactions (as of 2024).[114] Through its Sustainable Finance Hub and Country Offices, UNDP provides tailored technical assistance to governments to support the establishment of debt instruments, particularly thematic bond frameworks. Other support areas include debt policy options that help governments integrate thematic bonds into their broader fiscal and debt sustainability strategies and instruments such as debt-for-nature and debt for-gender/climate swaps. Through this approach, UNDP facilitates the project selection for bonds, obtaining independent third-party review, and monitoring the use of proceeds against the SDGs to ensure accountability. [115]

- **Climate Bonds Initiative (CBI) - Technical Assistance Services**

CBI supports debt issuers in climate-related labeled bonds and other similar forms of debt instruments. Their focus includes developing and reviewing climate mitigation, adaptation, and social strategies in thematic bond frameworks while providing capacity building, impact reporting, and investor engagement support. [116]

4.2 Limitations of Technical Assistance Programs

While de-risking and TA mechanisms play a significant role in enhancing the adoption of sovereign thematic bonds, there are certain limitations.

The guarantee and de-risking mechanisms by MDBs have promoted innovation in the thematic bond market. However, most of these bond mechanisms are not structured for scale and often remain as isolated pilots, such as the SLB by the Development Bank of Rwanda (BRD) in partnership with the World Bank and the Government of Rwanda. It was the world's first SLB by a development bank, but it has seen limited replication and learning for other emerging markets since then. A more collaborative and grounded approach is needed to integrate institutional support and TA to help enhance the adoption of these structures.

Furthermore, the MDBs and institutions advancing sovereign thematic bonds in L-LMICs have, in a few markets, demonstrated low first-mover risk appetite, with over-dependency on factors such as the sovereign government credit ratings, other external partners, or macroeconomic indicators to design the bond mechanisms. This has limited further innovation in bond structures and commercial viability in the long run. This trend also indicates the limited coverage of the existing guarantee and de-risking mechanisms in working with the bond value chain and private sector partners to build scale.

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[113] ADB, 2024. Accessible here.
[114] UNDP, 2024. Sovereign SDG bonds are an opportunity for countries to finance development. Available here.
[115] UNDP. Accessible here.
[116] Climate Bonds. Accessible here.

One of the most significant gaps in sovereign thematic bond issuance is the fragmented application of TA and guarantees. While TA programs support regulatory readiness and market preparation, they do not directly mitigate investor risks. Conversely, pure guarantees address specific risk exposures but do not enhance the capacity of sovereign issuers to structure and manage sustainable financing mechanisms effectively. By creating a refreshed interface between TA capabilities and MDB-led financial de-risking mechanisms, sovereign issuers could benefit from a more structured, iterative approach that embeds capacity-building within a coordinated financing ecosystem. This would ensure that thematic bond issuances are supported not only by technical guidance but also by integrated risk-mitigation tools, enabling a smoother transition from market preparation to execution.

Strengthening TA facilities within a structured, bundled framework can enhance their effectiveness in bridging the gap between financial expertise and impact design. This includes creative use of risk mitigation instruments, such as embedding guarantees and credit enhancements into TA programs, to simultaneously address market risks in real time that crowd in at scale institutional investors; aligning concessional resources with private sector finance to maximize the SDG financing multiplier effect; [117] and streamlining regulatory alignment at a systemic/framework level to improve efficiency in bond issuance. By shifting from standalone TA programs to a more integrated/bundled facility-based approach, MDBs can provide a one-stop solution for sovereign issuers to navigate the complexities of capital markets, while maintaining a clear link to impact-driven outcomes that ensure long-term sustainability and scalability.

Spotlight: The African Green Finance Facility (AGFF)

The case of African Development Bank's African Green Finance Facility (AGFF) exemplifies the potential of bundled finance facilities to mobilize climate finance at scale:

Africa's climate finance requires an estimated $250 billion annually to implement their NDCs and national climate and development goals. [118] Green banks have been recognized as having the potential to increase the capacity of African countries in accessing and mobilizing the climate finance needs. [119]

Launched in 2022, the AGFF responds to this challenge by creating a scalable model that fosters domestic and regional ecosystems for green financing. It integrates TA and financial support to empower local financial institutions in their climate transition efforts. MDBs that provide TA or financing in isolation may lack the synergies created by simultaneous implementation to complement and reinforce each other. As the facility addresses the dual challenges of building institutional capacity and de-risking investments simultaneously, it introduces systems for monitoring, evaluation, and reporting that encourage long-term investor confidence and participation in green growth. [120]

The facility incentivizes private investment into sustainable energy projects by leveraging blended finance approaches, and a comprehensive framework to provide governments, financial institutions (i.e. public, private banks, microfinance, etc.) with TA grants, fundraising support, and

[117] MIGA, 2023. Sustainability report 2023. Available here.
[118] AfDB, African Green Banks Initiative. Available here.
[119] All Africa, 2022. African Development Bank Launches Catalytic Initiative for Green Banks in Africa on the sidelines of COP 27. Available here.
[120] AfDB, African Green Banks Initiative. Available here.

and co-financing opportunities to build a robust pipeline of bankable green projects via Green Finance Facilities (GFF).[121] The AGFF, differs from traditional MDB financing as it leverages concessional funding, such as credit enhancement solutions as a mechanism, to reduce risk and crowd in private capital,[122] thereby multiplying the impact.

AGFF's pilot funding is aimed at mobilizing $10 million for the TA and $90 million to support the capitalization of the first Green Finance Facilities. First beneficiaries include the National Investment Bank of Côte d'Ivoire (BNI) and the Deposits and Consignments Fund of Benin (CDC Benin) to develop a pipeline of renewable/clean energy, resilient infrastructure, or climate-smart agriculture projects.[123]

By establishing partnerships with domestic financial institutions, the AGFF integrates local expertise into its operations, ensuring that green finance solutions are context-specific and create an ecosystem that is sustainable by empowering local actors to take ownership of green finance initiatives.

Unlike traditional MDB interventions designed to address specific challenges in isolation, such as launching one-of-its-kind projects, AGFF's pilot projects establish a model that can potentially be adapted to other L-LMICs through scalable frameworks that address shared regional challenges. This integrated approach creates a contextualized and scalable model that can be deployed across LMICs, adapting to each country's unique challenges while ensuring consistency in risk mitigation. A bundled facility as a one-stop solution can help sovereigns access a tailored combination of political risk coverage, technical expertise, and financial de-risking tools, strengthening the market for sovereign thematic bonds and reinforcing long-term financial resilience.

5. The Role of MDBs in Scaling Sovereign Thematic Bonds

TA is a foundational component of market readiness, equipping sovereign issuers with the knowledge and institutional capacity required for successful thematic bond issuance. However, without adequate financial backing and strategic risk-sharing frameworks, sovereign issuers may still struggle to attract investment at scale. MDBs play a crucial role in bridging this gap by providing guarantees, liquidity support, and structured co-financing mechanisms that can help reduce borrowing costs and enhance sovereign creditworthiness. This section explores how MDBs can transition from passive engagement to proactive facilitation in sovereign thematic bond markets, ensuring that de-risking strategies align with broader financial and institutional support.

MDBs are uniquely positioned to enhance the scale and effectiveness of sovereign thematic bond issuances in L-LMICs. As institutions with both financial and technical expertise, MDBs play a critical role in shaping investment environments, mitigating risks, and mobilizing private capital. Their engagement must extend beyond conventional de-risking approaches to align with the G20's broader goals, which highlight the need for blended finance, concessional resource deployment, and private-sector collaboration to improve sovereign access to thematic financing. This ensures sovereign issuers are better equipped with the financial and institutional readiness to sustain long-term impact. Moreover, in line with the outcomes of the 2024 FfD4 objectives,[124]

[121] AfDB, 2022. African Development Bank launches model for deploying green financing across the continent. Available here.
[122] AfDB, Africa Thriving and Resilient: the African Development Bank Group's Second Climate Change Action Plan (2016–2020) Available here.
[123] Climate Policy Initiative, 2024. Partnering for Finance Adaptation. Available here.
[124] DESA,2025. Zero draft: Outcome document of the Fourth International Conference on Financing for Development. Available here.

it highlights the importance of integrating debt relief measures with innovative financial instruments to ensure fiscal space for sustainable development and helping balance concessional and market-based financing while mitigating debt distress risks.

However, while MDBs have traditionally led de-risking efforts, their capacity to provide and/or subsidize guarantees fees at scale remains constrained due to structural and capital limitations. Due to MDBs' operations under preferred creditor status, they must maintain high credit ratings, limiting their ability to provide guarantees with subsidized fees. Consequently, many MDB-backed guarantees remain too costly for LICs, either due to the high return requirements imposed on investors or the costs being passed down to sovereign issuers and end beneficiaries, who may lack the fiscal capacity to absorb them. In this regard, the G20 also emphasized the need for MDBs to enhance their risk-bearing capacity and innovate financial instruments to mobilize private capital more effectively. [125] However, without the ability to subsidize guarantee fees, MDBs may struggle to implement affordable guarantees in these countries, which limits the scalability of sovereign thematic bonds.

5.1 Differentiated Needs for LICs and LMICs

While both LICs and LMICs face structural barriers to sovereign thematic bond issuance, the nature and scale of these challenges vary significantly, requiring tailored de-risking mechanisms and TA interventions.

LICs: Structural Barriers and High-Risk Perceptions

For LICs, sovereign thematic bond issuance is often constrained by weak credit ratings, limited domestic capital market depth, and high borrowing costs due to elevated risk perceptions. Many LICs remain reliant on concessional financing from MDBs and bilateral donors, given their restricted access to commercial debt markets. The key challenges for LICs include:

- **Credit Constraints and Market Access:** LICs often lack sovereign credit ratings or hold sub-investment-grade ratings, making it difficult to attract institutional investors. Without credit enhancement mechanisms, such as MDB-backed guarantees, investor appetite remains low.

- **Institutional Capacity and Regulatory Gaps:** Weak debt management offices, underdeveloped PFM systems, and inadequate regulatory frameworks hinder thematic bond structuring and implementation. TA is crucial to build institutional readiness, strengthen fiscal governance, and ensure compliance with international bond market standards.

- **Project Pipeline and Use-of-Proceeds challenges:** The availability of bankable, impact-driven projects remains a challenge in LICs. Many governments lack the capacity to develop and assess eligible expenditure pipelines that align with thematic bond requirements. Blended finance instruments—such as first-loss capital or risk-sharing facilities—can bridge this gap by mobilizing concessional capital to de-risk investments.

- **Currency and Liquidity Risks:** Most LICs do not have deep domestic bond markets, requiring issuances in foreign currency, which exposes them to exchange rate volatility. FX hedging solutions, such as those piloted in Brazil's Eco Invest platform, or MDB-backed liquidity backstops could mitigate these risks, improving bond attractiveness to global investors.

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[125] 4th Finance Ministers and Central Bank Governors (FMCBG) Meeting, 2024. G20 Roadmap Towards Better, Bigger and More Effective MDBs. Available here.

LMICs: Scaling Challenges and Investor Readiness

LMICs typically have more developed financial ecosystems than LICs but still face hurdles in scaling thematic bond issuances. These countries may have issued conventional sovereign debt but require targeted interventions to align thematic financing with investor expectations. The main challenges for LMICs include:

- **Balancing Concessional and Market-Based Financing**: As countries transition from LIC to LMIC status, access to concessional finance declines, increasing reliance on market-based borrowing. Ensuring that thematic bonds serve as a complement rather than a substitute for concessional financing is key to maintaining debt sustainability. MDBs can support through hybrid financing structures, where concessional resources are blended with thematic bonds to improve affordability.

- **Investor Perceptions and Market Liquidity**: While LMICs have better access to global capital markets, investor confidence is often constrained by macroeconomic volatility, policy risks, and inconsistent ESG reporting standards. Strengthening bond frameworks through enhanced impact verification mechanisms and aligning credit rating methodologies with sustainability-linked risk assessments can enhance investor trust.

- **Expanding Domestic Capital Markets:** Unlike LICs, some LMICs have more developed local bond markets, providing an opportunity to issue domestic currency-denominated thematic bonds. Broadening investor participation—particularly among domestic pension funds and insurance companies—can reduce reliance on external financing and mitigate currency risks. For example, Indonesia's approach of integrating retail green Sukuk into its bond strategy offers a scalable model for LMICs seeking to deepen domestic market engagement.

- **Integrating Performance-Based Financing Models**: Given investor demand for measurable impact, LMICs are better positioned to explore SLBs, which tie financial terms to KPIs. However, SLB adoption remains limited due to political risks and difficulties in structuring enforceable commitments. Strengthening policy continuity mechanisms, such as embedding targets within long term national development plans, can help mitigate these risks.

5.2 Expanding the Role of MDBs alongside Bilateral Government Agencies

A fundamental challenge in the ecosystem has been the disconnect between financial structuring expertise and development impact design. While MDBs have experience in structuring guarantees and financial instruments, they often lack the perspective and/or expertise to design these instruments around SDGs. Conversely, development-focused institutions and policymakers understand impact objectives and TA, but lack the technical knowledge to integrate them effectively into viable financial structures. Bridging this knowledge gap requires tailored TA that builds financial structuring capabilities and strengthens the alignment of bonds with impact-driven outcomes in parallel.

However, beyond the technical expertise gap, the suitability of MDBs as the primary providers of development guarantees remains a structural limitation—particularly for LICs. Unlike sovereign-backed entities or bilateral donors, MDBs operate under strict capital adequacy requirements and must price guarantees at market-reflective levels, often making them prohibitively expensive for LIC issuers.

To address this, donor and bilateral agency-backed institutions—such as Swedish International Development Cooperation Agency (Sida), German KfW, and other sovereign-focused development entities— can play a role in acting as guarantors, bridging this gap and complementing MDB interventions. Unlike MDBs, which operate within strict capital adequacy constraints, bilateral development agencies and donor-backed facilities have greater flexibility to subsidize guarantee costs when necessary, and leverage guarantees by reserving funds based on calculated risks or expected losses to ensure that guarantees remain viable for low-income sovereign issuers. These entities do not need to hold capital against guarantees in the same way MDBs do, allowing them to reserve only the expected loss rather than the full risk exposure, making for efficient capital deployment, with guarantees being more cost-effective and scalable.

For example, Sida's guarantee model applies a risk-sharing approach where a portion of the guarantee is backed by donor contributions, allowing for concessional pricing and enhanced affordability for LICs. Similar approaches could be explored within the sub-sovereign or possibly sovereign thematic bond market to improve accessibility, particularly for first-time issuers with limited creditworthiness.

Aligning with the FfD4 agenda, donor-backed entities can play a crucial role in reducing the financial burden on L-LMICs by providing guarantees that mitigate perceived risks and attract private investment.[126] A co-guarantee structure—where donor-backed guarantees are layered with MDB risk-sharing mechanisms—could create a hybrid model that balances concessionality with market discipline. Reserving concessional funds specifically for LIC issuers would help lower risk premiums and incentivize private sector participation in sovereign thematic bond markets.

To ensure development guarantees truly enable sustainable finance, a shift from one-size-fits-all risk mitigation to context-specific, layered guarantee mechanisms is needed. This model would blend concessional capital, structured risk-sharing, and targeted technical assistance, expanding sovereign access to thematic bond markets while preventing guarantees from becoming an added cost burden for vulnerable economies.

5.3 Aligning TA with Investor and Sovereign Considerations

MDBs must evolve beyond traditional lending to dynamic, risk-sharing models that align with investor expectations and national development strategies. Strengthening TA alongside financial guarantees is critical to enhancing the resilience of sovereign thematic bond markets and unlocking private capital at scale, reinforcing the broader SDG financing agenda.

For L-LMICs with access to concessional financing, sovereign thematic bonds should complement—not replace—soft capital, serving as a tool for investor diversification and long-term financing. However, MDBs' existing de-risking interventions have largely been reactive, engaging post-issuance rather than proactively building pipelines. Expanding MDB-led TA can address this gap, ensuring bond issuances are integrated into national financing strategies rather than standalone transactions.

Moreover, as per FfD4's objectives, MDBs and DFIs must work alongside national governments to embed robust debt management strategies,[127] ensuring that thematic bond proceeds contribute to sustainable economic growth while minimizing fiscal vulnerabilities. To enhance institutional readiness and investor confidence, MDBs such as the World Bank provide targeted support in key areas, including:

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[126] FfD4, 2025. Outcome document of the Fourth International Conference on Financing for Development: First Draft. Available here.
[127] FfD4, 2025. Zero draft: Outcome document of the Fourth International Conference on Financing for Development. Available here.

- **Debt Management Office (DMO) Capacity**: Strengthening sovereign DMOs to assess optimal financing strategies, balance concessional financing with market borrowing, and coordinate issuance plans.

- **Investor Alignment**: Ensuring that thematic bond structures align with investor expectations, emphasizing financial returns, risk thresholds, and sustainability credentials. Initial issuances may require credit enhancement to attract investors unfamiliar with sovereign thematic debt markets.

- **Thematic Focus and Risk Mitigation**: Sovereign issuers should avoid overly fragmented themes or pursuing multiple sustainability labels without readiness. MDBs can guide countries in structuring focused frameworks that prioritize credible sustainability targets while ensuring clear use-of-proceeds and impact metrics.

5.4 Strengthening Guarantee Mechanisms for Scaling Adoption

A key intervention lies in the development of structured bundled financing facilities that integrate credit enhancement mechanisms, TA, and blended finance instruments. By incorporating PRI, first-loss guarantees, and liquidity backstops alongside TA, MDBs can create a one-stop solution that addresses both financial and institutional barriers to sovereign bond issuance.

- **Liquidity Backstops**: Given the high cost of international debt and exposure to currency risk, MDBs can structure dedicated liquidity facilities that sovereign issuers can access for emergency financing during periods of market distress and volatility, ensuring debt servicing continuity and preventing investor uncertainty.

- **Enhanced Credit Structuring**: While credit enhancement mechanisms are often more effective for loans than bonds, MDBs can combine de-risking mechanisms like PRI with concessional financing or design scalable co-guarantee structures with other MDBs that align with investor needs, while improving borrowing terms for sovereign issuers.

This way, MDBs can leverage their financial structuring capabilities to align sovereign thematic bonds with private sector investment priorities. Given their experience in designing hybrid financial instruments, MDBs are well-placed to develop scalable, standardized frameworks that incorporate tailored risk-sharing mechanisms. [128]

In practice, this means designing TA programs that support impact-aligned bond frameworks, transparent reporting mechanisms, and effective stakeholder engagement strategies—ensuring that financing flows directly translate into measurable development outcomes.

Successful sovereign thematic bond issuances require strong coordination among multiple stakeholders, including finance ministries, central banks, regulatory bodies, and development institutions. MDBs play a pivotal role in structuring multi-stakeholder coordination frameworks that align bond issuance strategies with national development goals. TA providers such as UNDP and GGGI further enhance this process by supporting stakeholder engagement strategies, facilitating policy consultations, and conducting investor roadshows to improve market visibility and transparency. A more comprehensive and coordinated approach—anchored in Bundled Finance solutions—would merge risk mitigation with institutional capacity-building, ensuring both financial viability and long-term impact. One

[128] OECD, 2023. Green, Social and Sustainability Bonds in Developing Countries: The Case for Increased Donor Co-Ordination. Available here.

potential avenue for collaboration is the creation of a refreshed interface between UNDP's TA capabilities and MDB-led financial de-risking mechanisms. This would enable sovereign issuers not only to access capital markets but to do so with the necessary institutional readiness to sustain future issuances and maximize impact.

6. Actionable Recommendations

Ensuring that sovereign thematic bond markets scale effectively requires translating global policy commitments into actionable implementation strategies. By aligning bond issuance frameworks with structured risk-mitigation mechanisms, embedding TA into national financing strategies, and fostering stronger collaboration between MDBs, NDBs, and private investors, sovereign issuers can accelerate their market readiness. This final section presents key recommendations that outline practical steps to enhance the financial, regulatory, and institutional landscape for sovereign thematic bonds, providing a roadmap for sustainable, long-term adoption.

Bundling De-risking TA Support into Financing Facilities for Effective Implementation

Many sovereign bond issuances struggle to achieve their intended impact and scale, not due to flaws in financial design, but because inadequate TA support to end beneficiaries and lending mechanisms do not allow scale beyond 'one-of-its-kind' pilot initiatives. This often results in inefficiencies in fund allocation, misalignment between financing and impact objectives, and/or weaker monitoring and evaluation frameworks. Strengthening TA interventions should focus on ensuring financing flows efficiently to the right projects, supporting project execution, and equipping local institutions with the tools to sustain impact over time.

Likewise, financing facilities, newly created or hosted in existing financial institutions, are a solution to scale sustainable capital mobilization in L-LMICs. Such 'bundled' finance facilities integrate technical and financial solutions within a single, cohesive framework that simultaneously addresses multiple barriers to SDG finance adoption. By combining immediate access to concessional and commercial financing with targeted TA programs, these facilities ensure that sovereign issuers not only secure the necessary capital for project implementation but also build the institutional capacity required to design, deploy, and monitor sustainable initiatives effectively.

Furthermore, embedding risk-mitigation instruments—such as PRI, credit guarantees, and liquidity backstops—alongside tailored TA support allows these bundled facilities to address both market-based and institutional barriers simultaneously, thereby reducing investor uncertainty and enhancing creditworthiness. As highlighted by the G20 Sustainable Finance Working Group,[129] MDBs, DFIs, and other development banks should scale up emerging innovative risk-sharing mechanisms, including structured finance instruments and capital market tools such as green, social, and sustainability (GSS) bonds. Expanding these mechanisms within bundled financing facilities would allow sovereign issuers to access a wider pool of private capital while ensuring that financing solutions remain cost-effective and aligned with debt sustainability objectives.

This integrated approach streamlines the regulatory process and improves coordination between local financial institutions and MDBs, creating a more predictable, investor-friendly environment for sovereign thematic bonds. By addressing both the dual challenge of institutional and

[129] G20, 2024. 2024 G20 Sustainable Finance Report. Available here.

MDBs, creating a more predictable, investor-friendly environment for sovereign thematic bonds. By addressing both the dual challenge of institutional and financial barriers that hinder project implementation by de-risking investments, building institutional capacity, and leveraging blended finance, bundled facilities position themselves as transformative tools to bridge the SDG finance gap and scale sovereign thematic bond issuances in L-LMICs.

Similar to WBG's Guarantee Platform, UNDP's role could complement such an initiative by offering a structured TA mechanism that operates in parallel with risk-mitigation solutions, ensuring sovereign issuers receive both capacity-building support and access to financial instruments within a single coordinated process. Rather than creating new financial mechanisms, UNDP could position its TA services, allowing LMICs to engage in a structured, iterative process for thematic bond issuance. This could include:

- **Strengthening project pipelines** by aligning sovereign issuers with global best practices for structuring green, sustainable, and sustainability-linked bonds while ensuring that bond frameworks are aligned with SDG-aligned KPIs and international market standards.

- **Providing a service-based advisory mechanism** that helps issuers navigate the regulatory and structuring complexities of sovereign bond issuance while coordinating with MDBs to match these efforts with the appropriate de-risking mechanisms.

- **Enhancing coordination among TA providers**, MDBs, and financing institutions, reducing inefficiencies in the bond issuance process and enabling sovereign issuers to engage more effectively with institutional investors and development finance partners.

- **Matching sovereign issuers with UNDP-led funding programs** that support climate resilience, social infrastructure, and sustainable economic growth, ensuring that bond proceeds align with both national priorities and global sustainability commitments.

This collaboration would allow UNDP to serve as a facilitator between sovereign issuers and MDBs, ensuring that countries seeking to issue thematic bonds have access to a structured pipeline-building process that aligns with investor expectations, helping unlock private capital at scale while strengthening the resilience of L-LMIC debt markets.

Strengthening the Role of Local Financial Institutions and MDB Collaboration

Enhancing collaboration between local financial institutions and MDBs requires a more integrated approach that combines robust capacity building, transparent governance, and coordinated TA. The impact of traditional instruments can be greatly amplified when complemented by a holistic support system that aligns with SDGs and NDCs. In this context, strengthening local institutions' technical capacities and aligning their operations with MDB processes is essential to bridge the gap between financial structuring and sustainable impact design. Establishing structured co-guarantee as well as co-financing platforms enables sovereign issuers to access layered risk protection—combining credit enhancements, partial guarantees, and liquidity backstops—thereby lowering financing costs and increasing market confidence. Building on its 2024 outcomes, in 2025, the G20 Sustainable Finance Working Group has recognized the need to address obstacles hindering collaboration between NDBs, MDBs, vertical climate funds, and private finance mobilization. [130] Its 2025 agenda includes recommendations on scaling co-financing mechanisms, particularly emphasizing the role of guarantees in reducing credit risk. These findings highlight the need for expanded guarantee coverage in sovereign

[130] G20, 2025. Sustainable Finance Working Group: 2025 Presidency and Co-Chairs Note on Agenda Priorities. Available here.

thematic bond issuances to address investor concerns over market volatility and project bankability.

Such collaboration also pools the FIs' local-regional knowledge and expertise to inform TA, alongside the extensive risk mitigation capacities of MDBs', to provide a one-stop solution that accelerates private capital mobilization. Stakeholders can create a resilient ecosystem that overcomes the fragmentation of current guarantee mechanisms, improves access to concessional finance, and ensuring that de-risking solutions are tailored to the local context, and are scalable across L-LMICS.

Institutions like the United Nations Capital Development Fund (UNCDF), have the ability to be an independent facilitator that offer L-LMICs a range of financial solutions and technical support, bringing together de-risking mechanisms from different bilateral government agencies and other partners through an objective approach with a broader multi-country focus. Its role in extending risk capital, guarantees, and blended finance makes it well placed for diversifying sovereign thematic bond pipeline beyond large-scale infrastructure investments. By promoting inclusive economic resilience and social outcomes, UNCDF's interventions complement MDBs' broader green and climate infrastructure financing, creating a more equitable risk-sharing environment.

Strengthening risk-sharing partnerships between private investors and MDBs can enhance credit guarantees for sovereign issuances, making them more attractive to institutional investors. By co-developing hybrid guarantee structures, leveraging syndicated risk-sharing models, and integrating market-based pricing incentives, investors gain access to lower-risk, high-impact instruments while MDBs expand their ability to mobilize private capital at scale.
Enhancing Concessional Limit Allocations for L-LMICs

The limited access of L-LMICs to concessional financing remains a significant barrier to sovereign thematic bond market expansion. Institutional thresholds imposed by MDBs and the IMF constrain the availability of concessional capital, particularly for countries transitioning from low- to middle-income status. As concessional limits tighten, sovereigns are forced to rely on higher-cost, non-concessional financing, increasing their debt burden and reducing the viability of long-term sustainable development initiatives. To address this gap, MDBs and FIs could create dedicated concessional financing windows for SDG-aligned bonds, allowing issuers from L-LMICs to access preferential funding terms when issuing sustainability-linked debt instruments.

To address this challenge, establishing a dedicated de-risking platform could provide essential financial support to sovereign issuers. A platform like the European Commission (EC) Global Gateway, a key European Union (EU) initiative for sustainable infrastructure, provides strategic financial backing to enhance sovereign creditworthiness and investor confidence. By aligning concessional resources with private capital, the EC Global Gateway facilitates sustainable financing under more favorable terms. These tools would reduce commercial risks, lower financing costs for L-LMIC issuers, and encourage private sector participation, ensuring sovereign thematic bonds remain viable financing options. Moreover, AAA/AA-rated entities, such as government-backed agencies, can further reinforce the platform's capacity by leveraging their credit ratings to offer counter-guarantees. For example, SIDA has effectively used its guarantee model to de-risk investments in frontier markets. Collaborating with institutions like MIGA to operationalize the platform, may enhance risk mitigation with their offerings, PRI, and credit enhancement products, reducing investor hesitation. By combining MIGA-backed guarantees with donor-supported risk-sharing, sovereign issuers can gain access to a layered, scalable de-risking mechanism that bolsters market confidence and facilitates greater private sector participation.

Another approach would be to integrate concessional resources into structured blended finance vehicles, where grants, concessional loans, and guarantees are deployed in a tiered structure to enhance the creditworthiness of sovereign issuers. This aligns with the G20's call for MDBs and DFIs to develop innovative mechanisms to mobilize private capital, including climate-structured funds and layered risk-sharing agreements that better leverage concessional resources. A shift toward needs-based concessional allocation—rather than rigid income classifications—could improve financing terms for sovereign thematic bonds and ensure capital is directed to the most impactful projects.

Additionally, concessional enhancements should be tied to impact-linked metrics, which is conducive to SLB structures, ensuring that preferential financing terms are contingent upon measurable development outcomes. This would create a stronger alignment between impact-linked metrics and financial returns, reshaping the way concessional capital is deployed. Countries that demonstrate improved climate preparedness, strengthened adaptive capacity, or measurable progress toward SDG targets could gain access to more favorable concessional financing terms. This approach recognizes that sovereigns with greater resilience to climate shocks and social vulnerabilities are likely to maintain stronger debt-servicing capacities, reducing perceived credit risks for investors. In this context, concessional capital becomes a tool for incentivizing sustainable policy reforms that mitigate sovereign risk over the long term.

Integrating this into concessional allocation frameworks would provide investors with a clearer understanding of the financial relevance of SDG alignment. This shift from a purely needs-based concessional allocation to a performance-linked system would reinforce investor confidence and sovereign accountability while aligning with broader principles of sustainable finance. Additionally, by tying concessional support to climate resilience and SDG progress, MDBs and donors can catalyze greater private sector participation, particularly in high-impact sectors such as renewable energy, sustainable agriculture, and public health infrastructure.

Establishing a 'Thematic Bond Collaboration Hub'

Investor confidence remains a critical determinant of adoption and the scalability of sovereign thematic bonds in L-LMICs. Despite the growing appetite for ESG-aligned investments, knowledge gaps, limited transparency, and inconsistent reporting frameworks hinder broader participation from institutional investors. To address these challenges, establishing a collaborative hub—bringing together ecosystem stakeholders—could serve as a centralized mechanism for knowledge-sharing, market development, and structured engagement to accelerate capital mobilization for sustainable development in L-LMICs.

This hub could be modelled as an intuitive platform, drawing upon or expanding existing platforms in sustainable finance such as the UNDP's Sustainable Finance Hub, providing a dedicated forum for sovereign issuers to showcase pipeline projects, receive feedback on bond structuring, and align issuance frameworks with investor expectations.

Acting as an ecosystem hub, it would also facilitate sovereigns planning thematic bonds to access resources, understand and evaluate de-risking or guarantee options, and TA mechanisms based on their identified theme and intended structure. Furthermore, this hub can be linked to de-risking platforms such as the EC Global Gateway (as outlined in the previous recommendation) to facilitate an end-to-end engagement. By enabling dialogue among credit rating agencies, second-party opinion providers, and sustainability verification firms, the hub can strengthen transparency and credibility in sovereign thematic bond market.

The Global Collaborative Co-Financing Platform could also be further developed as an example of such a collaborative hub. It currently serves as a mechanism to streamline co-financing efforts across MDBs, reducing project fragmentation and enhancing transparency. Expanding this platform beyond a membership base, to include UNDP, private sector actors, EC Global Gateway, and sovereign financial institutions, will unlock opportunities for initiatives and projects suited to thematic bond structures.

UNDP can play an enabling role in leveraging these platforms to expand advisory support for L-LMIC issuers through the collaborative hub. By acting as a conduit between governments, investors, and technical experts, UNDP can ensure that sovereign issuers receive tailored assistance aligned with international standards. The hub could also serve as a space for aggregating smaller projects to mitigate challenges faced by L-LMICs in achieving the necessary scale for thematic bond issuances, while fostering regional collaboration and cross-border investment. Additionally, integrating the knowledge resources of the Global Green Bond Initiative (GGBI) and the EU's Sustainable Finance Advisory Hub into bundled finance facilities will enhance transparency, ensure the credibility of thematic bond frameworks, and expand investor confidence.

This recommendation is further reinforced by the G20's priority to expand cooperation on blended finance mechanisms. The G20 has encouraged MDBs and other institutions to improve knowledge-sharing, build expertise, and address structural barriers in scaling climate investments across geographies. [131] By fostering collaboration between sovereign issuers, investors, and regulatory bodies, a thematic bond hub could ensure that market participants have access to consistent data, standardized reporting frameworks, and best practices that reduce barriers to entry for institutional investors.

Beyond knowledge-sharing, the platform could play a key role in market-building by developing standardized reporting templates, investor engagement strategies, and harmonized risk assessment methodologies. By streamlining access to critical market information, this initiative would lower entry barriers for institutional investors while creating a more predictable investment environment for sovereign issuers. As new concepts evolve, establishing platforms such as the proposed Thematic Bond Collaboration Hub will provide a space to explore, pilot, and refine these innovations in collaboration with regulators, investors, and financial institutions. The hub can also facilitate the exchange of best practices and ensure that emerging bond structures cater to the financing needs of L-LMICs.

Integrating Country-Specific Nuances into Sovereign Thematic Bond Frameworks

Despite innovative pilot initiatives, replicating specifically contextual financial models across L-LMICs, risks overlooking the unique financial, regulatory, and institutional realities of different markets – impacting sustained successful issuances. Instead, a more adaptable framework—one that accounts for specific economic conditions, financial sector maturity, and policy priorities of individual countries—is necessary to ensure both market credibility and long-term sustainability.

Developing a structured approach that integrates country-specific considerations into the bond design requires a balance between global best practices and localized market dynamics. For L-LMICs with nascent capital markets, this means prioritizing higher de-risking measures, including blended finance structures, MDB-backed guarantees, and concessional financing, to reduce investor risk perceptions. Additionally, TA must be embedded within the framework to

[131] 4th Finance Ministers and Central Bank Governors (FMCBG) Meeting, 2024. G20 Roadmap Towards Better, Bigger and More Effective MDBs. Available here.

build institutional capacity, establish credible sustainability commitments, and strengthen regulatory oversight—critical factors determining investor confidence in first-time issuers.

For L-LMICs with more established financial markets, the framework should emphasize deeper private sector and institutional investor engagement. Countries with higher credit ratings and stronger financial infrastructure may benefit from innovative bond structures, such as SLBs or hybrid mechanisms that combine use-of-proceeds elements with performance-based incentives. As the G20 highlights, aligning sovereign bond frameworks with private sector needs, including better risk-sharing arrangements, exit mechanisms, and market-driven pricing structures, will be critical to scaling participation. Ensuring these bonds align with national development strategies while incorporating robust impact measurement and transparency mechanisms is essential to maintaining investor confidence and scaling future issuances.

Incorporating localized financial knowledge within the framework is also critical. NDBs and domestic financial institutions can provide essential insights into sectoral investment needs, regulatory constraints, and borrower risk profiles, ensuring that bond structures are aligned with international best practices and adapted to country-specific market conditions. Strengthening risk-sharing agreements with domestic banks, expanding local currency financing options, and leveraging regional financial intermediaries, can further enhance market resilience and accessibility.

By designing a flexible framework that integrates country-specific nuances—rather than applying a uniform thematic bond model—sovereign issuers can optimize financing structures to match their economic realities. This approach enables a more strategic deployment of capital while reinforcing long-term financial stability, ensuring that bond proceeds effectively drive sustainable development outcomes in diverse market contexts.

On the other hand, excessive customization to specific contexts can undermine market efficiency and reduce investor appeal. The global bond market thrives on standardization and scale, with sovereign bonds attracting a diverse range of investors. Highly bespoke bond structures, particularly those deviating from established market conventions, risk deterring institutional investors who seek simplicity, comparability, and liquidity. These often remain as isolated pilots with limited potential for scale and replication.

To strike a balance, sovereign issuers should focus on tailoring policy and TA frameworks rather than the financial structure of the bonds themselves. This involves aligning national development plans, SDG priorities, and sustainability-linked performance metrics without overcomplicating the bond design. Sovereign issuers could also adopt standardized reporting and verification frameworks to ensure transparency and comparability across issuances, while still embedding relevant impact metrics that reflect country-specific goals. Furthermore, where market conditions warrant greater customization—such as through SLBs or thematic hybrid instruments—these should be complemented with robust impact measurement systems and clear disclosure mechanisms.

Ensuring that financial innovations remain aligned with market expectations will mitigate perceived complexity and maintain investor confidence. MDBs and development partners can play a central role in supporting issuers to strike this balance, offering advisory services to align tailored bond frameworks with global market standards.

Strengthening Accountability Across the Bond Value Chain: Lessons from Countries

While use-of-proceeds bonds have traditionally dominated sovereign thematic bond markets, emerging trends highlight the growing importance of integrating transparency and accountability mechanisms to reinforce investor confidence. Ensuring clear traceability of bond proceeds, project implementation, and impact measurement remains critical to maintaining market credibility and mitigating concerns around greenwashing. Sustainability-linked may offer greater flexibility and impact, especially in L-LMIC contexts where thematic bond proceeds often balance multiple development priorities.

SLBs provide a complementary approach that incentivizes sovereign issuers to achieve measurable sustainability outcomes by directly tying financial incentives—such as coupon adjustments—to the achievement of well-defined SPTs.Uruguay's sovereign SLB, which incorporated step-up and step-down coupon adjustments linked to GHG emissions reductions and forest preservation, demonstrated the potential of performance-based bonds to enhance transparency and drive investor confidence through impact-driven financial structures. Yet, as SLBs remain relatively immature, many institutional investors favor UoP bonds for their straightforward monitoring processes and predictable risk-return profiles. Additionally, regulatory preferences—such as the European Commission's emphasis on UoP bonds—underscore the need for clarity and simplicity in the sovereign thematic bond market.

To address these challenges, governments issuing SLBs should prioritize robust impact verification systems and transparent reporting processes. Third-party verification and alignment with established reporting frameworks will enhance credibility and facilitate investor due diligence. Further, MDBs and development partners should provide TA to sovereign issuers in designing clear and measurable SPTs, ensuring that SLBs remain attractive to impact-oriented and traditional investors. Developing standardized templates for impact reporting and promoting knowledge-sharing on SLB performance will accelerate market acceptance and drive future issuances.

However, both UoP bonds and SLBs require strong governance frameworks, rigorous impact verification, and effective TA to align financial instruments with national sustainability objectives. Without clear monitoring and reporting structures, the risk of misalignment between financing flows and development outcomes increases, reducing investor confidence. As per G20's recommendations, improving investor confidence through better risk management approaches—including expanded guarantee instruments and performance-based incentives—can help sovereign issuers enhance creditworthiness and attract larger pools of capital. [132] Developing standardized impact reporting frameworks and strengthening disclosure requirements will be key to maintaining long-term market credibility.

MDBs and TA providers play a critical role in strengthening transparency across the bond value chain, ensuring that KPIs and impact reporting frameworks are aligned with international best practices and long-term sustainable development outcomes, reinforcing investor trust and data integrity. Additionally, integrating regulatory incentives—such as preferential capital treatment for verified impact-linked instruments—can encourage sovereign issuers to adopt ambitious policy reforms while upholding transparency standards. Strengthening the disclosure and verification mechanisms for both UoP bonds and SLBs is essential for the credibility and growth of the sovereign thematic bond market.

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[132] 4th Finance Ministers and Central Bank Governors (FMCBG) Meeting, 2024. G20 Roadmap Towards Better, Bigger and More Effective MDBs. Available here.

Building Transparency and Accountability in the Impact Assessment and Reporting Value Chain

Initiating and scaling a sovereign thematic bond issuance centered on impact measurement and monitoring will help position the sovereign issuers globally, fostering transparency and enabling impact and SDG outcomes within capital markets. By bringing in best practices in last mile impact measurement, verification, and reporting, governments can leverage international partners' and investors' expertise and capital to achieve their country's SDG agenda.

To ensure transparency across the value chain, defining clear thematic impact indicator and outcomes, coupled with conducting post-issuance impact assessment (output, outcomes, impact) achieved by the thematic bonds through last mile interviews, surveys, or other means of collecting data directly from the target population of the bond proceeds can help develop sustained investor interest in thematic bonds, enabling scale. Data and tech-driven platform such as IIX Values, an impact verification solution can help measuring investments' social and environmental impact to the last mile, amplifying the voices of the underserved, creating effective tracking and management of the bond's proceeds and ensuring transparency in reporting.

Strengthening Secondary Market Liquidity for Sovereign Thematic Bonds

A key barrier to scaling sovereign thematic bond markets in L-LMICs is the lack of secondary market liquidity, which limits investor participation and raises borrowing costs. Unlike sovereign bonds in advanced economies, which benefit from deep and liquid trading environments, thematic bonds issued by L-LMICs often lack structured exit mechanisms, making them less attractive to institutional investors. Addressing this constraint requires a market-driven liquidity enhancement strategy, integrating private sector participation, digital infrastructure, and risk-sharing mechanisms in line with the G20 IEG recommendations on scaling private capital and strengthening NDB engagement.

One approach is to establish a structured liquidity facility, where private investors, NDBs, and MDBs collaborate to develop a repurchase market for sovereign thematic bonds. A well-structured repurchasing facility would allow investors to temporarily sell bonds with a commitment to repurchase them later, improving short-term liquidity without requiring immediate bond liquidation. This mechanism, commonly used in mature financial markets, would provide exit flexibility for pension funds, insurance firms, and other long-term investors, enabling them to increase allocations to thematic sovereign bonds while managing short-term liquidity needs. By aligning with the G20 IEG's call for expanding NDB participation in risk-sharing, national development banks could serve as intermediaries, supporting repo transactions while deepening local capital markets. [133]

In parallel, a dedicated digital platform for trading sovereign thematic bonds could be developed, providing real-time price discovery, improved transparency, and seamless transaction execution. This platform would replicate the efficiency of liquid bond markets, integrating thematic sovereign bonds into global ESG investment ecosystems. It would also allow for securitization of thematic bonds into structured investment vehicles, attracting a broader pool of institutional investors. Aligning with IEG's emphasis on structured finance mechanisms,[134] this innovation could help bridge the financing gap by transforming sovereign thematic bonds into more liquid, standardized investment assets.

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[133] Independent Experts Group, 2023. Strengthening Multilateral Development Banks: The Triple Agenda, Volume 2. Available here.
[134] Independent Experts Group, 2023. Strengthening Multilateral Development Banks: The Triple Agenda Volume 1. Available here

To further scale these solutions, sovereign issuers could pool their thematic bonds into a multi-country liquidity facility, reducing individual country risk and enhancing investor confidence. This would create a diversified portfolio of sovereign thematic bonds, making it easier to attract investors by lowering volatility and improving credit quality. Such an approach compliments IEG's recommendations on blended finance and risk pooling, offering a model that could be supported by MDB-backed guarantees or credit enhancement mechanisms. [135]

While some L-LMIC issuers may face liquidity challenges, they can vary significantly depending on the issuer's credit profile, bond structure, and investor base. Sovereign thematic bonds with well-established sustainability frameworks, transparent reporting, and effective market engagement tend to perform well in the secondary market, especially when issued in local currencies.

For L-LMICs, secondary market development can be enhanced by encouraging market-maker participation, establishing repurchase agreements, and expanding the use of credit-enhanced instruments. Regional initiatives, such as the creation of cross-border bond trading platforms and the inclusion of sovereign bonds in bond indices, can improve market visibility and attract a broader investor base. Moreover, incorporating sustainability-linked metrics into sovereign credit ratings could incentivize investors to trade these bonds, further enhancing market liquidity.

To support these efforts, MDBs, development partners, and financial regulators must prioritize capacity building for local financial institutions to foster a robust secondary market ecosystem. Encouraging greater participation from domestic institutional investors, establishing standardized trading frameworks, and promoting transparent data dissemination will reduce perceived market risks. With these reforms, sovereign thematic bonds can transition from niche instruments to mainstream financing tools, and ensure that L-LMICs can access affordable, sustainable financing at scale

Through integrating structured liquidity solutions, market infrastructure, and risk-sharing mechanisms, sovereign thematic bonds can transition from niche instruments to mainstream financing tools, unlocking long-term private capital while ensuring greater financial stability.

[135] Independent Experts Group, 2023. Strengthening Multilateral Development Banks: The Triple Agenda Volume 1. Available here

Annex

Annex 1: Select Use Cases of De-Risking Mechanism

De-risking Mechanism	Example of Sovereign Thematic Bond Issuance	Key Features	Impact & Outcome
Partial Credit Guarantees (PCGs)	Seychelles Blue Bond (2018, $15M)	- $5M partial credit guaranteefrom the World Bank	- Lowered borrowing costs
		- $5M concessional loan from the Global Environment Facility (GEF)	- Fully subscribed by impact investors
	Indonesia Blue Bond (2023, $150M)	Guarantee by Japan Bank for International Cooperation JBIC	- International investor confidence
Policy-Based Guarantees (PBGs)	Benin Debt Refinancing Bond(2023, €500M)*	- $180M PBG backed by $60M IDA allocation	- Improved sovereign credit rating
		- Africa Trade Insurance (ATI) provided second-loss guarantee	- Reduced borrowing costs significantly
		- Issued in euros to mitigate FX risk	
First-Loss Capital	Seychelles Blue Bond (2018)	- Rockefeller Foundation's $425K grant to cover transaction costs	- Increased investor confidence
	Rwanda SLB (2023)	- IDA first-loss risk coverage	- Enhanced risk-adjusted return profile
Results-Based Financing (RBF)	Seychelles Blue Bond (2018)	- Repayment linked to fisheries sustainability KPIs	- Ensured funds were used for conservation goals
	Rwanda SLB (2023)	- Coupon step-downs conditional on ESG targets	- Incentivized environmental and social impact
	Uruguay Sustainability-Linked Bond (2022, $1.5B)	- Performance-based step-up/step-down coupon linked to emissions reduction	- Pioneered climate-aligned sovereign financing
Syndicated Loans + Subordinated Debt	Nigeria Power Plant Green Bond (2022, $686M)*	- IFC + World Bank syndicated loans	- Enabled private sector participation in energy transition
		- $492M MIGA political risk guarantees	
Collateralization of Asset	Rwanda Sustainability-Linked Bond (2023, $100M)	$10 M credit enhancement escrow at the National Bank of Rwanda funded by the Rwandan Govt. through IDA	- Oversubscribed, attracted 100+ investors
Technical Assistance	Colombia Green Bond (2022, COP 750B)	Technical support from the Inter-American Development Bank and The World Bank	- Increased investor confidence by adhering to best practices
	Indonesia SDG Bond (2021, $500M)	UNDP supported the pre- and post- issuance technical assistance for the SDG bond	- Enabled stable pricing and investor participation
	Thailand Sustainability-Linked Bond (2024, THB 30B)	ADB provided Technical Assistance for structuring framework and issuance through the GSS+ Bonds initiative. GGGI supported to identify appropriate sustainability KPIs	- Strengthened credibility of Thailand's climate financing

*Example use case of de-risking mechanism in a thematic bond issuance, not sovereign issued.

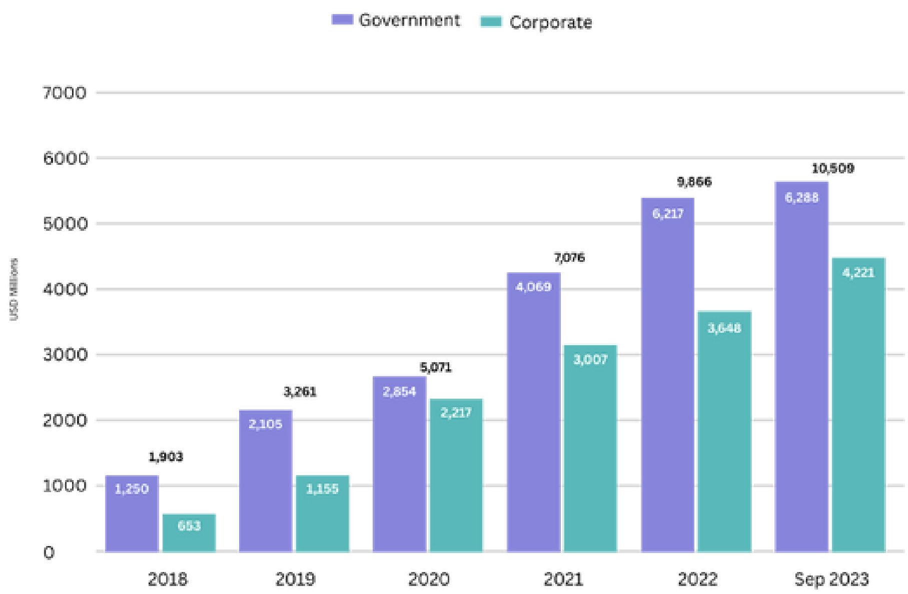
Annex 2: Select Country Case Studies: Sovereign Thematic Bond Market

Indonesia: Expanding Beyond Green

Indonesia has emerged as the prominent leader in sustainable finance within Southeast Asia. Corporates have issued more than 20 Green, Social, and Sustainability Bonds, mobilizing around US$ 4.2 billion since 2018. Meanwhile, sovereign-led initiatives involving Green Sukuk, Blue Bonds, and SDGs Bonds has effectively mobilizing over US$9.5 billion through diverse, sustainable financial instruments as of 2024. [136] *Refer to Figure 1A below.*

This mobilization underscores the country's dedication to embedding ESG principles into capital markets. Indonesia's sustainability initiatives have enhanced its reputation on the regional stage, influencing regional trends and best practices in financing the SDGs. The country's initiatives started through the issuance of the world's first sovereign Green Sukuk in 2018, followed by the first sovereign retail Green Sukuk in 2019, setting a precedent for green finance within emerging markets. The selection of projects for the Green Sukuk issuances are utilizing Climate Budget Tagging, a tool for tracking public expenditure on climate change mitigation and adaptation, developed by the Ministry of Finance in 2015 with UNDP support. [137]

Figure 1A: Indonesia's Sustainable Bond Issuance



Indonesia developed a Green Bond and Green Sukuk Framework in 2017 to provide guidance on green financing (bonds/sukuk) issuance for the government. The framework initially outlines nine eligible sectors that can be financed by sovereign green bonds or green Sukuk. In 2021, expanded this framework into the SDGs Government Securities Framework, increasing the eligible sectors to 14 under two categories: (1) green and blue focus and (2) social focus.The framework is compliant with the ICMA's Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines. This updated framework has served as a guidance for the government to issue its first SDGs Bonds in 2021 and first Blue Samurai Bonds in 2023, reinforcing Indonesia's leadership in sustainable finance. Similar with the Green Sukuk, the Blue Bond also benefitted from Climate Budget Tagging for project selection. [138]

[136] UNDP, 2024. Opportunities to Advance Thematic Bonds and Sukuk in Indonesia. Available here.
[137] The Republic of Indonesia Green Bond and Green Sukuk Framework. Accessible here.
[138] UNDP, 2023. Indonesia Launches the World's First Publicly Offered Sovereign Blue Bond – with UNDP's Support. Available here.

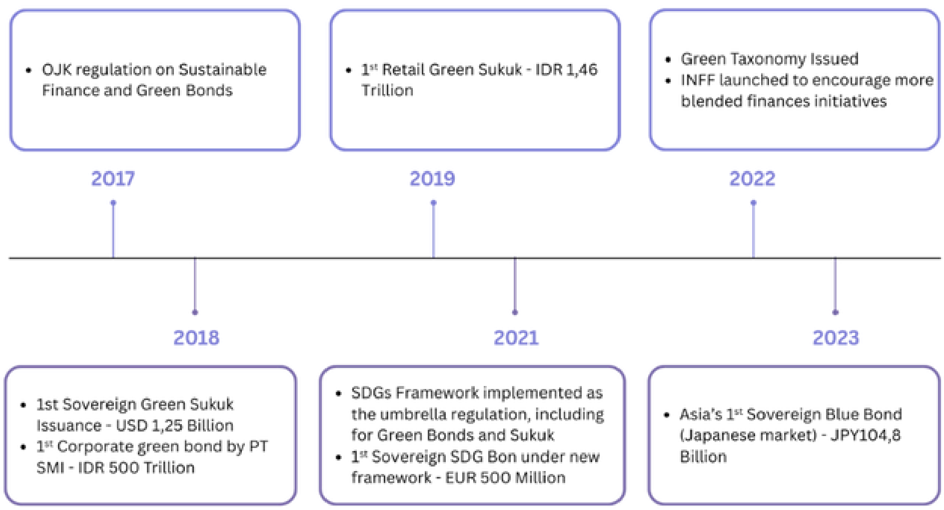
The shift towards broader SDG-themed bonds highlights the country's commitment to addressing nationwide financing gaps while driving innovation in the regional sustainable finance landscape.

To further institutionalize sustainable finance practices, Indonesia's Financial Services Authority (Otoritas Jasa Keuangan, OJK) launched its Sustainable Finance Roadmap to provide a structured and phased strategy for integrating sustainability principles into the national financial system. As the market regulator, OJK's goal through the roadmap is to contribute to sustainable development by promoting green growth, enhancing financial sector resilience, and supporting inclusive economic development. The roadmaps offer regulatory guidance, capacity-building initiatives, and technical support to financial institutions, ensuring the financial sector aligns with Indonesia's broader SDG agenda and Long-Term Development Plan. By establishing clear policies and strengthening market infrastructure, the Sustainable Finance Roadmap Phase I, [139] and Phase II, [140] has been instrumental in fostering the issuance of sovereign thematic bonds and expanding green finance opportunities.

This regulatory advancement was complemented by the successful issuance of the nation's first corporate green bond by PT Sarana Multi Infrastruktur (PT SMI) in 2018, [141] setting a precedent for private sector engagement in green financing. Further amplifying these efforts, PT Indonesia Infrastructure Finance (IIF) launched a USD 150 million Sustainability Bond in January 2021, marking a significant milestone as the first such issuance by a non-bank financial institution in the country. [142] This initiative not only mobilized private capital towards sustainable infrastructure but also showcased the viability of diverse financial instruments in driving green and inclusive development.

By fostering regulatory clarity, incentivizing sustainable instruments, and expanding private sector participation, the roadmap positions Indonesia's capital markets as a key driver of inclusive and climate-aligned economic growth. As the demand for thematic bonds and ESG-linked financing continues to rise, strengthening the integration of sustainability factors into investment decisions, risk assessments, and financial product development will be essential in catalyzing long-term capital mobilization for Indonesia's sustainable development priorities. Key milestones in Indonesia's thematic bond market are highlighted in the Figure 2A below.

Figure 2A: Key Milestones in Indonesia's Thematic Bond Market



[139] OJK, 2015. Sustainable Finance Roadmap Phase I (2015-2019). Available here.
[140] OJK, 2024. Sustainable Finance Roadmap Phase II (2021-2025). Available here.
[141] World Bank, 2018. PT SMI Supports Sustainable Development by Issuing the First Corporate Green Bond in Indonesia. Available here.
[142] World Bank, 2022. Helping an Indonesian non-bank financial institution mobilize private capital for sustainable infrastructure. Available here.

Overall, Indonesia has established itself as a sustainability finance pioneer, with the government taking the lead in developing the market and encouraging more private sector participation. For its sovereign thematic bonds, Indonesia has effectively utilized a multi-faceted TA approach, across budget tagging, framework design, project selection, stakeholder engagement, monitoring and reporting, and training, among other areas – mainly supported by UNDP, with the World Bank for the first Green Sukuk. This has allowed Indonesia to scale its sovereign thematic bond issuances, facilitate innovation in sustainable finance, adopt emerging thematic areas (such as Blue, Orange) by working on both the demand and supply sides of capital, attracting significant global investor interest.

For example, Indonesia's inaugural sovereign blue bond in 2023 was partially acquired by the Japan Bank for International Cooperation (JBIC) under its Guarantee and Acquisition toward Tokyo market Enhancement (GATE) facility. [143] This strategic move not only diversified Indonesia's funding sources but also enhanced the appeal of its sustainable finance instruments in the international market.

Key Challenges and Lessons Learned

Despite Indonesia's leadership in the space, the process of structuring, issuing, and scaling thematic bonds has presented multiple challenges, particularly in aligning investor expectations, developing robust impact reporting, and ensuring long-term policy continuity.

Navigating Market Expectations and Pricing Challenges

One of the key challenges encountered in Indonesia's thematic bond issuances was the expectation that thematic bonds should offer a pricing advantage—or "greenium"—compared to conventional instruments. While investors, particularly in advanced markets such as the EU and US, increasingly seek sustainable investments, the demand for thematic bonds does not always translate into a cost advantage for issuers. The pricing of Indonesia's Green Sukuk or SDGs Bonds reflected broader market conditions, investor risk perceptions, and sovereign creditworthiness, rather than a substantial discount for its sustainability commitments.

Project Identification

The identification of underlying projects eligible for financing through green bond proceeds. Thematic bonds require a well-defined pipeline of sustainable projects, yet sourcing and verifying qualifying expenditures have remained complex. Indonesia faced difficulties in aligning its budget tagging processes, which initially slowed the allocation of proceeds.
Eligible large-scale green infrastructure projects may have limited direct benefits for women, local communities, and marginalized groups, making it challenging to fully capture their social impact. Additionally, as green finance expands, ensuring the reliability of reporting and monitoring systems has become increasingly important to maintain transparency and accountability. Strengthening frameworks for fund allocation, impact measurement, and verification remains essential to enhancing visibility on project outcomes and reinforcing investor confidence in the effectiveness of these instruments.

[143] JBIC, 2023. Partial Acquisition of Publicly Offered Samurai Blue Bonds Issued by Government of Indonesia. Available here.

Institutional Coordination and the Role of Technical Assistance

The early issuances of Indonesia's Green Sukuk also highlighted the importance of institutional capacity and cross-ministerial coordination. The involvement of multiple government entities—ranging from the Ministry of Finance to sectoral ministries overseeing infrastructure and climate projects—required streamlined governance to ensure efficiency. A key lesson from Indonesia's experience has been the value of a centralized coordination unit or structured process to manage inter-agency collaboration. Without clear governance structures, the scaling of thematic bond issuances can be hindered by bureaucratic inefficiencies and inconsistent reporting standards.

TA has played a crucial role in addressing these structural challenges, receiving support from UNDP. Sustained TA support is necessary to ensure that sovereign issuers continuously refine their frameworks, integrate evolving sustainability metrics, and maintain investor trust.

Impact Reporting and Investor Confidence

Investor demand for transparency in the use of proceeds has further shaped Indonesia's approach to thematic bond issuance. During the country's first Green Sukuk issuance, establishing credible impact reporting mechanisms posed a significant hurdle. Investors increasingly require detailed disclosure on how proceeds are utilized, along with measurable environmental and social benefits. To address these challenges, Indonesia leveraged TA from partners such as UNDP and the World Bank, which supported the development of reporting frameworks, data collection processes, and verification standards. Over time, Indonesia's refinements in impact reporting have helped reinforce investor confidence, enabling subsequent issuances to gain traction. Consistency in disclosure practices and a clear demonstration of the impact of financed projects are essential in fostering sustained investor interest.

Opportunities for Future Development

As Indonesia refines its sovereign thematic bond strategy, future issuances could benefit from selectively integrating SLBs to address project selection constraints, policy continuity risks, and evolving investor preferences. Unlike Use-of-Proceeds bonds, which require a defined pipeline of eligible projects, SLBs offer greater flexibility by linking financial terms to sustainability KPIs and SPTs. In line with conversations with the World Bank, such a structure could reduce project identification hurdles but also introduces political risk, as KPI ownership rests with line ministries, making policy shifts a potential challenge. While SLBs align with investor demand for measurable impact and could support long-term sustainability commitments, their effectiveness depends on strong institutional frameworks to ensure policy consistency and accountability. Leveraging Indonesia's existing SDG-aligned frameworks and thematic issuance experience, a balanced approach—integrating SLBs where feasible while maintaining robust oversight—could enhance the scalability and resilience of its sovereign sustainable finance strategy.

While Indonesia has successfully positioned itself as a leader in sovereign sustainable finance, the possibilities of integrating structured de-risking mechanisms—such as credit guarantees from MDBs or partial guarantees from bilateral development agencies—could further amplify its market presence.

In retrospect, with the addition of any of the following de-risking strategies, existing issuances could have experienced the following outcomes:

(1) A partial guarantee from the World Bank or a co-guarantee structure involving multiple MDBs could have significantly improved investor appetite for Indonesia's sovereign thematic issuances. By reducing perceived sovereign risk, a guarantee-backed issuance could have achieved lower yields, allowing the government to finance SDG-aligned projects at more competitive borrowing costs. In markets where investors demand higher risk premiums, credit guarantees could help Indonesia access a broader institutional investor base while maintaining fiscal sustainability.

(2) Concessional financing from bilateral institutions — such as Japan International Cooperation Agency (JICA) —could have further improved Indonesia's cost of capital. If Indonesia's Green Sukuk or Blue Bonds had been partially supported through concessional co-financing or grants, it could have allowed the government to issue at more competitive rates while expanding the thematic scope of its bonds. This form of support could have been particularly impactful in catalyzing private investment. Moreover, bilateral engagement could have enabled Indonesia to pilot new thematic bond structures, such as Just Transition Bonds or Nature-Based Solutions, further positioning the country at the forefront of sustainable finance innovation.

(3) By integrating local currency guarantees or liquidity backstops into sovereign thematic bonds, Indonesia could further deepen its domestic capital markets. While the country has successfully mobilized both international and retail investors, foreign exchange volatility remains a concern. An enhanced de-risking mechanism, such as a guarantee-backed foreign exchange hedge, could mitigate currency risks and increase participation from local institutional investors, reinforcing financial resilience.

Looking ahead, Indonesia has the opportunity to integrate the suggested de-risking mechanisms into its future thematic bond strategy. Strengthening credit enhancement measures, leveraging concessional partnerships, and embedding liquidity safeguards could significantly enhance market confidence, allowing Indonesia to scale its sustainable finance initiatives more effectively. By adopting a more structured approach to risk mitigation, Indonesia could not only reduce borrowing costs and deepen market participation but also pioneer new financial instruments that align with its long-term development and sustainability goals. As part of this approach, Indonesia has recently issued Blue bonds and expressed interest in introducing and integrating Orange Bonds into its sustainable and SDG finance agenda.

Seychelles Blue Bond

Seychelles, an archipelagic Small Island Developing State (SIDS) in East Africa, consists of 115 islands spanning a total land area of 446 km², with an Exclusive Economic Zone (EEZ) of approximately 1.35 million km². With an EEZ-to-land ratio of 2916:1,[144] the nation considers itself a large ocean state, relying heavily on the blue economy, particularly tourism and fisheries. By 2019, tourism accounted for 72% of GDP, while fisheries contributed 17%, [145] underscoring the economic importance of sustainable marine resource management.

As an early advocate of the blue economy on the global stage, Seychelles prioritized this approach within its national policy framework, as reflected in its National Development

[144] Hume, A., Leape, J., Oleson, K., Polk, E., Chand, K., Dunbar, R., 2020. Towards an Ocean-based Large Ocean States Country Classification. Available here.
[145] United Nations Economic Commission for Africa, 2021. Socio Economic Assessment of the Blue Economy in Seychelles. Available here. [1] Ministry of Finance, National Planning and Trade, 2019.Seychelles National Development Strategy 2019-2023. Available here.

Strategy [146] Vision 2033,[147] the Blue Economy Roadmap (2018–2030),[148] and the Blue Economy Action Plan. [149] Oversight of these initiatives falls under the Ministry of Fisheries and Blue Economy, with the Department of the Blue Economy facilitating cross-sectoral collaboration.

However, Seychelles' transition to high-income status in 2015 restricted its access to concessional finance and official development assistance (ODA), presenting challenges in financing sustainable economic growth. Against this backdrop, the government sought innovative financing solutions to support its fiscal objectives,[150] including reducing its debt-to-GDP ratio, in alignment with IMF recommendations. Key initiatives included the 2015 Debt-for-Nature Swap, facilitated by The Nature Conservancy (TNC) and the World Bank, and the issuance of a sovereign blue bond in 2018 [151] — both structured to align macroeconomic stability with sustainable ocean management.

Debt Restructuring, Swap and the SeyCCAT

As part of its broader economic reforms, Seychelles executed an innovative Debt-for-Nature Swap to alleviate its debt burden while directing resources toward marine conservation. Facilitated by TNC, the transaction focused on restructuring a portion of Seychelles' sovereign debt owed to the Paris Club, a consortium of creditor nations. Given that TNC could not directly lend to a government, the SeyCCAT was established in 2015 as an independent entity to manage the funds and ensure transparency.

TNC raised $20.2 million through a mix of grants and impact investment, which SeyCCAT then loaned to the Seychelles government. This enabled the repurchase of $21.6 million of national debt at a slight discount, which was then restructured into two parts:

- $15.2 million was converted into a loan repaid over ten years at a 3% interest rate, covering Seychelles' obligation to TNC.
- $6.4 million, derived from grants and the debt discount, was structured as a 20-year loan at 3% interest, with annual payments supporting both conservation grants and an endowment fund.

A core condition of the swap was Seychelles' commitment to Marine Spatial Planning (MSP), expanding marine protected areas from 1% to over 30% of its EEZ. [152] SeyCCAT played a pivotal role in implementing this framework, ensuring that funds were managed transparently—enhancing investor confidence. The trust's strong governance and track record positioned it as a key vehicle for future conservation finance, leading to its designation as a recipient of $3 million from Seychelles' Blue Bond to further fund marine sustainability initiatives. Today, SeyCCAT disburses up to $700,000 annually in grants, supporting climate adaptation, marine conservation, and the Blue Economy, demonstrating how innovative financial mechanisms can align debt relief with long-term environmental and economic resilience.

Structure and Financial Mechanisms

In 2018, Seychelles became the first country to issue a sovereign blue bond, a 10-year, $15 million instrument designed to mobilize private capital for sustainable fisheries management.

[146] Ministry of Finance, National Planning and Trade, 2019.Seychelles National Development Strategy 2019-2023. Available here.
[147] Ministry of Finance. Seychelles Blue Economy Strategy. Available here
[148] Seychelles' Blue Economy, 2018. Strategic Policy Framework and Roadmap: Charting the Future (2018-2030). Available here.
[149] Ministry of Finance, 2020. Seychelles Blue Economy Action Plan. Available here
[Joywin, M. and Robertson, C., 2021. Shades of Blue in Financing: Transforming the Ocean Economy with Blue Bonds. Available here
[150] Common Wealth Secretariat, 2020. Sustainable Blue Economy Innovative Financing–Debt for Conservation Swap, Seychelles' Conservation and Climate. Available here
[151] Joywin, M. and Robertson, C., 2021. Shades of Blue in Financing: Transforming the Ocean Economy with Blue Bonds. Available here
[152] Commonwealth Secretariat, 2020. Sustainable Blue Economy Innovative Financing – Debt for Conservation Swap, Seychelles'

The bond carried a 6.5% coupon rate, redeemable in three equal instalments of $5 million in 2026, 2027, and 2028.

The Seychelles Blue Bond at its core, featured a $5 million partial credit guarantee from the International Development Association (IDA) to cover principal and interest payments, significantly mitigating investor risk. This was complemented by a $5 million concessional loan from the Global Environment Facility (GEF), which subsidized partial interest payments and reduced Seychelles' net borrowing cost by at least 5% per year. Additionally, a $425,000 grant from the Rockefeller Foundation offset issuance expenses, ensuring that most transaction costs were covered.

The issuance of the bond involved collaboration among multiple stakeholders. The Prince of Wales' Charities International Sustainability Unit played a role in identifying the business case, while a multidisciplinary team from the World Bank provided technical assistance in structuring the bond. The World Bank Treasury (WBT) played a central role in structuring the financing package, which successfully mobilized USD $15 million in private investment for the third South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish), aiming to enhance sustainable fisheries management and maximize economic returns from the fisheries sector.

The bond's structure saved the Seychelles government over USD $8 million in interest charges over ten years,[153] demonstrating the financial efficiency of its de-risking mechanisms. WBT also engaged investment banks to secure an optimal placement agent and trustee, with Standard Chartered serving as the bond's placement agent. Moreover, the blended finance model was instrumental in attracting institutional investors such as Calvert Impact Capital, Nuveen, and Prudential, addressing credit risk concerns and enhancing overall creditworthiness. Other key stakeholders in the bond's structuring included the World Bank, supported by external counsel from Latham & Watkins LLP, with Clifford Chance LLP providing transaction counsel for the issuance.[154]

By integrating concessional capital, guarantees, and private investment, the Seychelles Blue Bond set a precedent for leveraging blended finance in sovereign sustainability-linked issuances.

The proceeds of the blue bond were managed through two key financial mechanisms:

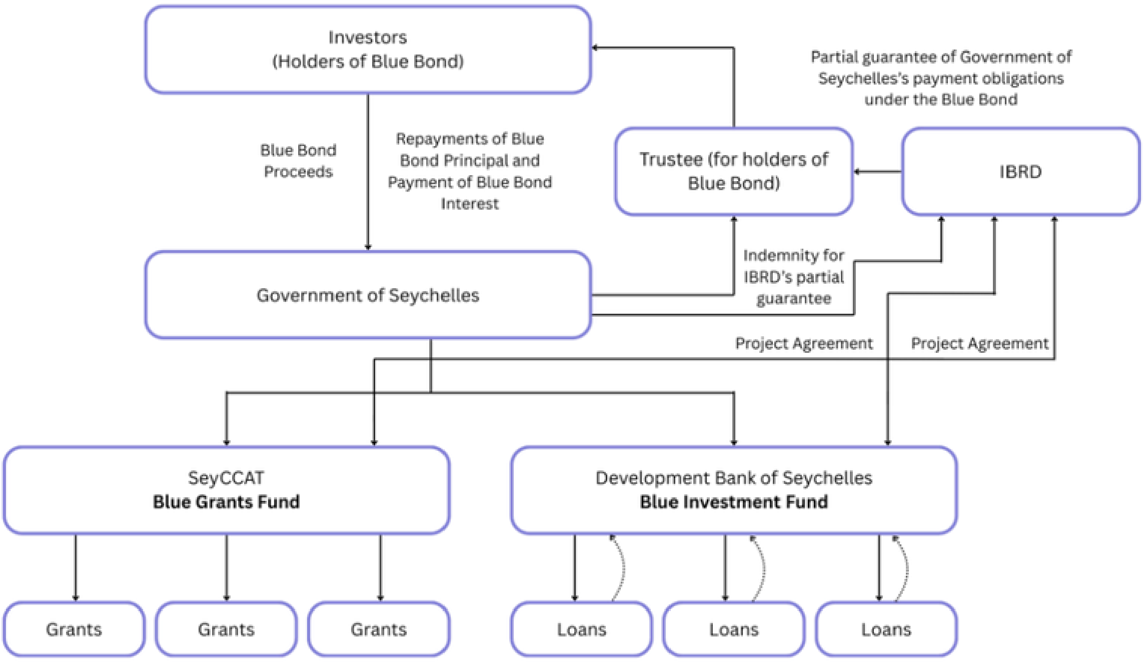
- Seychelles Conservation and Climate Adaptation Trust (SeyCCAT)[155]
    - Administered $3 million through the Blue Grants Fund (BGF), complementing financing from the 2015 Debt-for-Nature Swap.
    - Provided grants of up to SCR 2 million (~$148,000) for projects supporting marine conservation, fisheries management, marine protected areas (MPAs), and broader blue economy initiatives.
    - As of 2022, 69 projects had been financed across six rounds of funding.

- Development Bank of Seychelles (DBS)
    - Managed $12 million through the Blue Investment Fund (BIF), focusing on strengthening sustainable fisheries value chains in Seychelles.
    - Supported investments in aquaculture, cold storage, food processing, scientific research, and logistical infrastructure.
    - Provided loans ranging from $10,000 to $3 million at a 4% interest rate with a 15-year repayment period and a 10% down payment requirement.

[153] World Bank, 2019. Seychelles: Introducing the World's First Sovereign Blue Bond. Available here.
[154] World Bank, 2019. Seychelles: Introducing the World's First Sovereign Blue Bond. Available here.
[155] SeyCCAT. Blue Finance. The Seychelles Conservation and Climate Adaptation Trust. Available here

Through these structure, Seychelles has leveraged innovative funding mechanisms to advance its blue economy strategy while ensuring long-term sustainability in its marine resources sector.

Figure 3A: Structure of the Seychelles Blue Bond [156]



Source: World Bank

Strengths and Key Success Factors

The Seychelles blue bond set a global precedent for sovereign blue finance, demonstrating the potential of blended finance, combined with strategic policy commitments, could catalyze investment for ocean sustainability. The bond's success was underpinned by Seychelles' proactive economic reforms, creating the fiscal space necessary to explore innovative financing mechanisms – with the Debt-for-Nature (DfN) Swap in 2015 laying the groundwork for future sustainable finance instruments. [157] DfN swaps serve as a financial mechanism that allows sovereigns to restructure their external debt obligations in exchange for commitments to environmental conservation. These agreements function as debt buybacks under concessional terms, featuring lower interest rates and extended maturities. In the case of Seychelles, the swap was structured to facilitate marine conservation efforts, requiring the government to expand its Marine Protected Areas (MPAs) to cover 30% of its EEZ by 2020. By channeling restructured debt payments into conservation initiatives, DfNs provide a dual benefit—alleviating fiscal pressures while promoting long-term environmental sustainability.

A key institutional strength was the role of SeyCCAT, which provided a structured governance model for allocating bond proceeds, ensuring alignment with national development priorities. The effectiveness of its operations has been supported through collaborative financing mechanisms involving multiple stakeholders. By locally administering grants through the BGF to ensure

[156] World Bank, 2017. Project Appraisal Document (PAD2156).
[157] Benzaken, D., Voyer, M., Pouponneau, A., 2022. Good Governance for Sustainable Blue Economy in Small Islands: Lessons learned from the Seychelles experience. Available here.

financial allocations are aligned with Seychelles' national development priorities, SeyCCAT's enhanced financial accountability and transparency, highlights the potential of innovative financial mechanisms can serve as a best-practice model for future blue finance initiatives.

Moreover, Seychelles' longstanding commitment to marine conservation, exemplified by protected areas like Cousin Island, [158] reinforced its position as a leader in sustainable ocean management. This legacy helped attract both domestic and international investment in the blue bond, which aligned financial innovation with conservation objectives. Strategic external backing, including funding from the Rockefeller Foundation, reduced transaction costs and enhanced investor confidence. Beyond its financial impact, the bond advanced research and development in sustainable fisheries, aquaculture, and marine pollution mitigation, supporting the diversification of Seychelles' blue economy while ensuring long-term ecological resilience.

Challenges and Structural Limitations

Despite its successes, the Seychelles blue bond faces structural and financial challenges that could impact long-term sustainability. A primary concern is the bond's repayment structure, which remains a government obligation rather than being linked to project performance via the BIF.[159] The BIF operates as a revolving fund intended to support ongoing blue economy initiatives, its viability is dependent on the successful repayment of loans. This disconnect creates fiscal risk, as debt servicing is independent of the revenue-generating success of funded projects.[160]

The initial implementation faced challenges related to project pipeline development and accessibility, resulting in slow uptake. Limited institutional coordination and gaps in strategic planning created barriers to efficient financial allocation, underscoring the need for stronger governance structures to support future issuances. Establishing incentives for projects that can quantify their environmental and social benefits—particularly with verification from local entities—would enhance transparency and foster a competitive yet effective disbursement ecosystem.

The accessibility of financing also presents challenges. The BIF's stringent requirements, including a 10% down payment and a 1:1.25 collateral ratio, disproportionately favor established businesses while excluding artisanal fishers and small-scale entrepreneurs. Since its inception, only one loan has been disbursed, highlighting the difficulty in reaching target beneficiaries. Simplifying loan eligibility criteria and expanding outreach could improve inclusivity and impact.

Additionally, the limited horizontal integration between DBS and SeyCCAT has resulted in inefficiencies in fund disbursement. The absence of an integrated sequencing mechanism between BGF (grants) and BIF (loans) has created barriers for beneficiaries, particularly in transitioning from grant-funded initiatives to loan-financed ventures. Stronger coordination between these institutions could improve capital accessibility and ensure a smoother progression for enterprises seeking to scale operations.

Moreover, the bond's design does not adequately reflect Seychelles' macroeconomic dependencies on the EU, its primary fisheries trade partner.[161] Institutional capacity constraints within DBS further complicate administration, with resource-intensive processes delaying fund deployment.

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[158] Samways, M., Hitchins, P., Bourqin, O., and Henwood, J., 2008. Restoration of a tropical island: Cousine Island, Seychelles. Available here
[159] World Bank, 2019. World Bank and Credit Suisse Partner to Focus Attention on Sustainable Use of Oceans and Coastal Areas–the "Blue Economy". Available here
[160] Bolliger, P., 2020. Seychelles: Beyond Dramatic Imaginary. Available here
[161] Drakeford, B., Failler, P., Toorabally, B., Kooli, E., 2020. Implementing the fisheries transparency initiative: Experience from the Seychelles. Available here

Additionally, a lack of a robust monitoring and compliance framework raises concerns regarding long-term sustainability. Post-loan compliance is currently limited to financial repayment metrics, with insufficient emphasis on environmental and social impact assessments. The impending conclusion of the SWIOFish program further underscores the need for a long-term governance structure to ensure sustained oversight. This limited scope of evaluation restricts the ability to measure the bond's actual impact on sustainable development.

Opportunities for Future Refinement

To strengthen the financial sustainability and impact of blue bonds, future issuances should integrate performance-based incentives, ensuring that repayment structures are linked to the success of funded projects. Refining the coordination between SeyCCAT and DBS will improve fund disbursement and accessibility, while restructuring loan conditions can enhance participation from small-scale fisheries and blue economy enterprises.

Additionally, expanding the monitoring framework beyond financial metrics—including third-party verification of environmental impact—can reinforce investor confidence and ensure adherence to sustainability objectives. Finally, aligning future blue bond issuances with macro-trade considerations and institutional capacity-building initiativeswill enhance their resilience, ensuring that financing instruments continue to support Seychelles' long-term blue economy ambitions.

To enhance the scalability and replicability of Seychelles' 2018 blue bond, several structural improvements could have retrospectively been implemented, to improve investor participation and long-term market viability. The bond's reliance on a limited set of risk mitigation tools constrained its appeal, particularly among institutional investors seeking well-defined risk-return profiles. A layered de-risking strategy—incorporating partial guarantees from MDBs, first-loss capital, and climate funds—could have broadened its investor base by offering differentiated risk tranches tailored to both conservative and high-risk investors. [162] By addressing fragmentation in the investment landscape, such mechanisms would have enhanced liquidity and provided a stronger foundation for future blue bond issuances.

Standardization of the bond's structure also posed a challenge, limiting the potential for replication. Establishing a clear, transparent issuance framework aligned with international best practices would have simplified due diligence and improved market acceptance. Standardized instruments create familiarity among investors, reduce transaction costs, and enhance secondary market tradability, [163] which would ultimately making blue bonds a more attractive asset class. Expanding de-risking beyond traditional guarantees to include structured risk-sharing mechanisms—such as securitization and collateralized structures—would have provided additional flexibility for investors while improving long-term sustainability by balancing risk and returns. [164]

A critical opportunity for strengthening the bond's impact lay in aligning financial returns with conservation outcomes. A results-based financing model, where investor incentives are directly tied to measurable sustainability achievements, could have reinforced confidence in the bond's long-term ecological and financial viability. Such a structure would mitigate concerns over fund misallocation and ensure that capital deployment remained aligned with conservation priorities. [165]

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[162] IMF, 2025. The Scalability of Credit Enhanced EM Climate Debt. Available here
[163] IMF, 2025. The Scalability of Credit Enhanced EM Climate Debt. Available here
[164] IMF, 2025. The Scalability of Credit Enhanced EM Climate Debt. Available here
[165] KfW Development Bank, 2020. Innovative Development Finance Toolbox. Available here

Foreign exchange volatility was another significant barrier, adding uncertainty to returns and increasing capital costs. Incorporating local currency financing mechanisms or foreign exchange hedging solutions could have mitigated this risk, making the bond more accessible to domestic investors [166] while reducing exposure to external market fluctuations. Strengthening market infrastructure and integrating targeted technical assistance for local financial institutions would have further supported investment readiness, [167] ensuring that blue bond financing could be more effectively deployed.

Additionally, diversifying the bond's portfolio of blue economy projects—rather than concentrating funding on a limited set of initiatives—could have enhanced resilience and financial stability. A pooled investment model would have distributed risk more effectively, reducing vulnerability to sector-specific downturns and ensuring more predictable returns. [168] Strengthening monitoring frameworks through third-party verification of environmental impact could have further reinforced investor confidence, ensuring adherence to sustainability objectives and safeguarding the credibility of future issuances.[169]

By embedding these enhancements, Seychelles' blue bond could have served as a scalable, replicable model for other small island developing states and coastal economies, unlocking greater private sector investment in the blue economy while reinforcing financial resilience and sustainability.

Thailand: Sustainability Bond Market Development

Thailand has emerged as a regional leader in thematic bond issuances, leveraging sustainable debt instruments to mobilize capital for environmental and social initiatives. The country has established a diverse portfolio of Green Bonds, Social Bonds, Sustainability Bonds, and Sustainability-Linked Bonds (SLBs), with participation across both sovereign and corporate sectors. As of September 2024, Thailand's thematic bond market has surpassed USD$25 billion, with sovereign issuances comprising approximately 61% of the total share. [170] The corporate sector has also demonstrated significant engagement, with over 30 leading financial institutions and corporations issuing thematic bonds, predominantly green bonds, to support renewable energy, sustainable infrastructure, and low-carbon transitions.

Thailand issued its first sovereign sustainability bond in 2020, which raised THB 30 billion (~$944.88 million), to finance green infrastructure and social welfare projects, including pandemic recovery efforts. This marked the beginning of a structured approach to sustainable finance via bonds, with annual issuances reinforcing the government's commitment. Refer to Table 1A for Thailand's sovereign Sustainability Bonds issuances.

In 2024, Thailand became the first Asian nation, and the third globally after Chile and Uruguay, to issue a Sovereign SLB, valued at THB 30 billion (USD $890 million). This SLB is tied to KPIs focused on GHG emissions reduction and electric vehicle (EV) adoption, aligning with the country's broader climate action and energy transition agenda.[171]

[166] IMF, 2025. The Scalability of Credit Enhanced EM Climate Debt. Available here
[167] KfW Development Bank, 2020. Innovative Development Finance Toolbox. Available here
[168] KfW Development Bank, 2020. Innovative Development Finance Toolbox. Available here
[169] KfW Development Bank, 2020. Innovative Development Finance Toolbox. Available here
[170] Data from Asian Bonds Online. Accessible here.
[171] ADB, 2024. ADB Supports Asia's First Sovereign Sustainability-Linked Bond in Thailand. Available here.

Table 1A. Thailand's Sovereign Thematic Bonds Issuance per Year

Year	Type	Amount Issued	
		Billion THB	~Billion USD
2020	Sustainability Bonds	50	1.39
2021	Sustainability Bonds	162	4.5
2020	Sustainability Bonds	120	3.33
2023	Sustainability Bonds	135	3.75
2024	Sustainability Bonds	70	1.94
	Sustainability-Linked Bonds	30	0.89

The expansion of Thailand's sustainable finance market has been underpinned by the development of clear regulatory frameworks to ensure transparency, accountability, and alignment with national and global sustainability goals. The government introduced its Sustainable Financing Framework in July 2020, outlining the country's approach to issuing green, social, and sustainability bonds and loans. [172] It set an eligibility criteria across seven green sectors—including renewable energy, clean transportation, and energy efficiency—and three social sectors, such as access to healthcare and education. This framework established clear guidelines for the issuance and allocation of green, social, and sustainability bonds.

Building on this foundation, Thailand launched its Sustainability-Linked Financing Framework in October 2024 to guide the issuance of sovereign SLBs and other sustainability-linked debt instruments. [173] This framework outlines specific KPIs and SPTs, reinforcing Thailand's commitments under the UN SDGs and the Paris Agreement.

Further embedding sustainability into the financial sector, the government launched Sustainable Finance Initiatives in 2021, integrating sustainability principles into financial sector strategies.[174] These initiatives are structured around five core priorities: the development of a national taxonomy, to provide clear guidance on sustainable economic activities, [175] encompassing improving the data ecosystem, implementing financial incentives, fostering demand-driven financial products, and strengthening human capital.

In July 2023, Thailand introduced the Thailand Taxonomy Phase I, focusing on the energy and transportation sectors—two of the country's largest sources of emissions. The taxonomy follows a "traffic light" classification system (green, amber, and red) to assess activities based on their environmental impact. The Thailand Taxonomy Board, comprising representatives from both public and private sectors, oversees its development and governance to ensure alignment with sustainability objectives and financial sector readiness.

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[172] Kingdom of Thailand Sustainable Financing Framework, 2020. Available here.
[173] Kingdom of Thailand Sustainability-Linked Financing Framework, 2024. Available here.
[174] The Securities Exchange and Commission of Thailand, 2021. Sustainable Finance Initiatives for Thailand. Available here.
[175] Climate Bonds Initiative, 2023. Thailand Taxonomy Phase I. Available here.

Thailand's progress in sovereign thematic bonds has been supported by TA from MDBs and intergovernmental organizations. The Asian Development Bank, through the ASEAN Catalytic Green Finance Facility (ACGF), played a critical role in Thailand's inaugural sustainability bond issuance in 2020. ADB provided inputs to the framework, facilitated external reviews, and assisted in project selection, third-party certification, and annual reporting. [176] ACGF has also supported Thai corporations in issuing thematic bonds between 2020 and 2023, [177] and was instrumental in structuring Thailand's 2024 sovereign SLB. [178] Additionally, GGGI contributed to the sovereign SLB by supporting the identification and validation of KPIs and SPTs, preparing the first annual progress report, and facilitating independent reviews to enhance transparency and accountability. [179] Complementing these efforts, the IFC, through its Green Bond Technical Assistance Program (GB-TAP), sponsored the development of Thailand's national taxonomy, further strengthening the country's sustainable finance ecosystem. [180]

Through a combination of strategic policy interventions, clear regulatory frameworks, and sustained MDB engagement, Thailand has positioned itself as a leader in sustainable finance. Its evolving thematic bond market provides a model for other emerging economies seeking to integrate environmental and social considerations into sovereign and corporate finance structures.

Rwanda: Innovative Sustainability-Linked Bond

In October 2023, the Development Bank of Rwanda (BRD) issued the first SLB bond by a development bank, valued at RWF 30 billion (US$24 million equivalent). The transaction was a milestone for Rwanda's capital markets, as the bond's innovative design linked financial performance to measurable sustainability targets. This issuance operated as a sub-sovereign corporate bond, demonstrating how national development banks can mobilize private capital while aligning financing structures with national sustainability objectives.

The bond sought to align private capital with Rwanda's sustainability objectives, introducing an outcome-based financing model, with financial incentives tied to measurable sustainability performance targets. These encompassed affordable housing, ESG improvements, and gender equity in financing. Its KPIs include; enhancing ESG practices among participating financial institutions from 0% to 75%, increasing funding for women-led projects from 15% to 30% of the bank's portfolio, and financing 13,000 affordable housing units by 2028.

Structure

BRD's innovative credit enhancement mechanism was designed and facilitated by the World Bank's TA, to address investor concerns around credit risk and financial stability. The derisking mechanism included a partial collateral-backed guarantee funded through a US$10 million escrow account funded by Rwanda's government through the IDA. [181] The funds were held in the National Bank of Rwanda, acting as collateral carrying a zero-risk weight to reduce borrowing costs and mitigate default risks. By securing this de-risking structure, the issuance was able to mitigate default risks, enhance credit quality, and improve investor confidence in the bond's risk-return profile. Beyond financial structuring, the TA package also provided BRD with:

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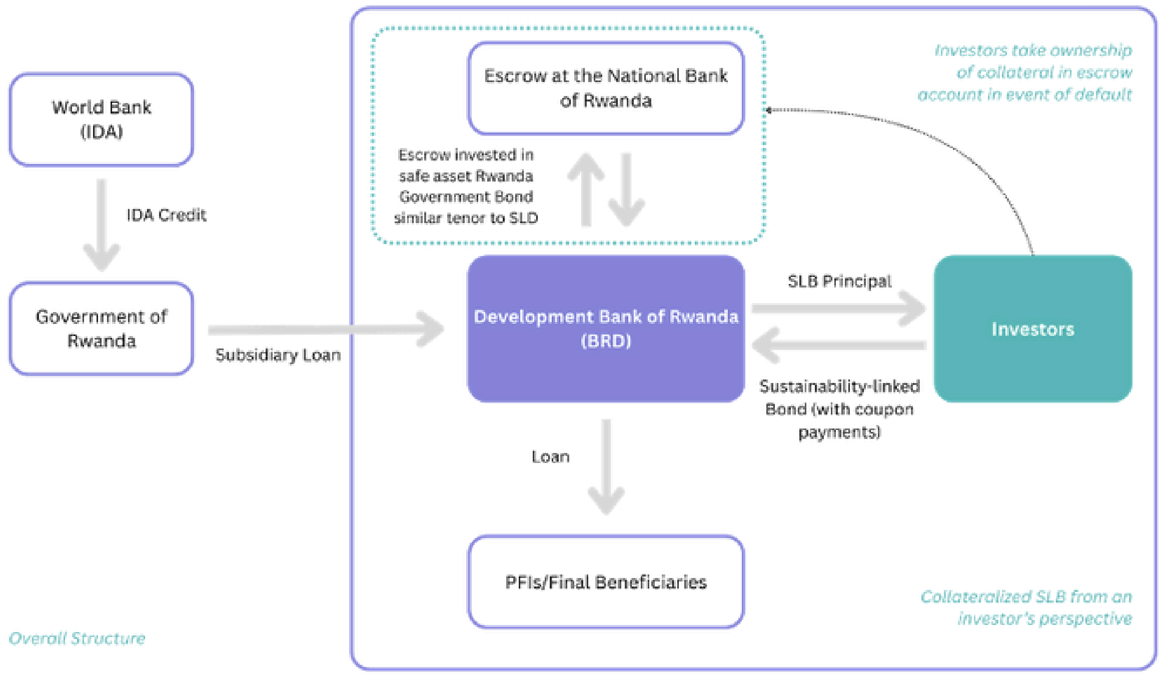
[176] ACGF and ADB, 2022. The Green, Social, Sustainable and Other Labeled (GSS+) Bonds Initiative for Southeast Asia. Available here.
[177] ADB, 2024. Mobilizing Capital Markets for a Climate-Responsive and Inclusive Southeast Asia. Available here.
[178] ADB, 2024. ADB Supports Asia's First Sovereign Sustainability-Linked Bond in Thailand. Available here.
[179] GGGI, 2024. Thailand Issues THB 30-Billion, Asia's First Sovereign Sustainability-Linked Bond, with GGGI Support. Available here.
[180] Bank of Thailand. Thailand Taxonomy: A Reference Tool for Sustainable Economy. Accessible here.
[181] https://blogs.worldbank.org/en/psd/how-rwandas-inaugural-sustainability-linked-bond-broke-new-ground-leveraging-private-capital

- Technical expertise in KPI calibration and framework development, ensuring alignment with ICMA principles for sustainability-linked bonds.
- Guidance on legal and financial advisory selection, supporting the due diligence required for a first-time thematic issuance.
- Investor engagement strategies, targeting both international and domestic market participants to generate demand and establish credibility.

Recognizing the constraints posed by currency risk in L-LMIC debt markets, consultations with BRD revealed that the issuance was structured in local currency as it reduced foreign exchange volatility and ensured long-term affordability for domestic borrowers.

Figure 4A: Bond Structure and Transaction Details of Rwanda's SLB [182]



Source: World Bank

Private Capital Mobilization

The issuance of the SLB by BRD marked a significant milestone in mobilizing private capital for sustainable development. BRD took a deliberate approach to diversify the bond's investor base, by firstly eliminating currency risk, and obtaining a second-party opinion S&P. The SLB was oversubscribed with over 100 investors, including local institutional and retail investors.

Additionally, the bond's structure enabled BRD to offer loans to end borrowers at nearly half the interest rate compared to traditional bonds, which typically carried a 14% coupon rate for plain vanilla issuances. This dual achievement of reducing financing costs and advancing sustainability targets highlights the effectiveness of the SLB in balancing fiscal prudence with developmental impact, providing a compelling model for similar initiatives in emerging markets.

[182] World Bank, 2023. How Rwanda's inaugural Sustainability-Linked Bond broke new ground in leveraging private capital. Available here.

Collectively, BRD and the bond itself became a testament to market confidence, as it managed to expand market liquidity but also contributed to deepening Rwanda's domestic capital markets, particularly;

- Catalyzed Rwanda's Capital Market Authority (CMA) to issue guidelines for issuance of GSS+ Bonds, fostering greater regulatory support and new incentives.

- Rwanda witnessed its first corporate green bond issuance, signaling early momentum for private-sector participation.

- The bond's execution provided a blueprint for future thematic issuances, with frameworks and reporting systems now in place to scale sustainable bond markets domestically.

These developments demonstrate growing market acceptance and fostering broader financial inclusion in sustainable finance. This underscores the catalytic role of public-sector support in attracting private-sector investment for impactful initiatives aligned with sustainability objectives.

Challenges

While with notable achievements, it also faced certain limitations that warrant consideration for future iterations:

- The bond carried a high coupon rate of 12.85% for a 7-year tenor, which, although reduced by the de-risking mechanism, remained elevated compared to similar instruments in developed markets. This underscores the influence of Rwanda's broader sovereign risk profile on borrowing costs, highlighting the need for more robust risk mitigation measures to further reduce rates in subsequent issuances.

- Even with full achievement of KPIs, the step-down in the interest rate was marginal at only 40 basis points. This limited markdown, while innovative, constrained the overall cost-saving potential for the issuer and may dampen the appeal of such incentives for future investors.

- Despite the innovative de-risking mechanism that successfully lowered financing costs compared to conventional options, the bond's final rate still reflected Rwanda's broader sovereign risk. This points to the need for enhanced frameworks to further align borrowing costs with the sustainability objectives of similar instruments, ensuring they remain both impactful and cost-effective. This leaves room for further cost reductions in future iterations.

These challenges provide valuable insights for refining the design of future SLBs, paving the way for even more effective mechanisms to attract private capital while optimizing financial efficiency.

Opportunities for Scale and Replication

Interview insights highlight limited investor awareness as a key barrier to scaling Rwanda's thematic bond issuances. While institutional investors showed strong interest, local market participation remained low due to unfamiliarity with sustainability-linked instruments, KPI structures, and financial incentives. Expanding investor education and targeted engagement efforts will be crucial for broader market adoption. Additionally, repeat issuers must demonstrate measurable impact to maintain investor confidence. Investors increasingly expect clear progress reporting on sustainability performance, particularly in ESG adoption, gender-

-responsive financing, and affordable housing outcomes. Strengthening impact reporting frameworks can enhance future issuances. These insights underscore the need for multi-faceted action to sustain Rwanda's momentum in thematic finance.

The integration of early-stage TA with financial de-risking mechanisms played a decisive role in ensuring the SLB's successful execution. This complementary approach—combining technical support, risk mitigation, and market-building efforts—offers a scalable model for future [sub-]sovereign thematic bond issuances in L-LMICs, reinforcing the need for comprehensive pre-issuance support to drive adoption and investor confidence in emerging markets.

Rwanda's SLB offers a well-structured and adaptable model for financing sustainable development, providing valuable insights for replication in other emerging economies. One of its key strengths was its success in mobilizing domestic capital, with full subscription from local retail investors, including pension funds, commercial banks, corporates and individuals. This reliance on domestic financing minimized exposure to foreign exchange risk and strengthened local ownership, demonstrating the importance of developing robust local capital markets. Expanding this approach in other contexts would require supportive regulatory frameworks, enhanced market infrastructure and more comprehensive investor education to deepen market participation.

The introduction of a digital subscription and payment platform during the second tranche issuance played a critical role in improving market accessibility. This technological intervention significantly increased individual investor participation, illustrating how digital platforms can broaden the investor base and streamline transaction processes. Replicating this approach in other countries could enhance market efficiency and foster more inclusive participation in sustainable finance.

De-risking mechanisms were essential to the SLB's success in lowering borrowing costs and attracting investment. The use of the IDA credit to collateralize the bond, alongside the National Bank of Rwanda's absorption of foreign exchange risk, resulted in a competitive total debt cost compared to regional commercial financing rates. These mechanisms provided a strong financial cushion and increased investor confidence, making the bond a viable instrument even in challenging market conditions.

However, while effective, this de-risking approach raises questions about its replicability in other emerging markets. Reliance on concessional financing and central bank-backed currency risk absorption may not always be feasible, particularly in countries with limited access to international support. These strategies can place pressure on national reserves and fiscal stability, making them difficult to scale across multiple issuances. To address these limitations, alternative risk mitigation tools such as partial credit guarantees, first-loss capital arrangements and political risk insurance could provide more sustainable and adaptable options for managing investment risk.

A defining feature of Rwanda's SLB was its performance-linked incentive structure, tying the bond's coupon rate to the achievement of specific KPIs. These KPIs—focusing on the adoption of environmental and social management systems (ESMS), loans to women-led small and medium-sized enterprises (SMEs), and affordable housing loans—ensured a direct link between financial performance and measurable development outcomes. This outcome-based pricing model holds strong potential for replication, but its effectiveness depends on the development of ambitious, transparent, and verifiable KPIs alongside consistent and clear impact reporting.

Institutional capacity-building and technical assistance also played a significant role in the successful implementation of the SLB. The World Bank’s support in developing the BRD’s Environmental and Social Management System helped strengthen governance and align the bond’s framework with international best practices. Expanding technical support through multilateral development banks and knowledge-sharing networks could help other countries develop similar institutional readiness, ensuring effective project implementation and performance monitoring.

The phased issuance strategy adopted by Rwanda, with the oversubscription of its second tranche, highlights the benefits of a gradual and iterative approach to bond programs. This strategy builds market credibility, enables issuers to demonstrate results from earlier issuances and attracts a broader pool of investors over time. By incorporating feedback and adapting to evolving market conditions, phased issuances can contribute to the long-term success and scalability of thematic bonds.

Overall, Rwanda’s SLB model provides a comprehensive framework for scaling and replication, with a focus on domestic capital mobilization, risk mitigation, performance-linked incentives and institutional capacity-building. Addressing existing challenges such as the reliance on concessional financing, the need for diversified de-risking mechanisms and the importance of robust impact reporting will be essential to ensuring the model’s broader applicability and long-term sustainability across emerging economies.