



GREEN, SOCIAL, SUSTAINABILITY AND SUSTAINABILITY-LINKED BONDS IN DEVELOPING COUNTRIES: HOW CAN DONORS SUPPORT PUBLIC SECTOR ISSUANCES?

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Please cite this paper as OECD (2022), *Green, social, sustainability and sustainability-linked bonds in developing countries: How can donors support public sector issuances?* OECD Publishing, Paris.

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This document is also available on O.N.E Members and Partners under the reference: DCD(2022)23.

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Abstract

This paper analyses the rationale for, and challenges to the scaling of green, social, sustainability and sustainability-linked (GSSS) bond issuances by public sector actors in developing countries. It serves as an introduction to donors, policymakers and potential GSSS bond issuers interested in the potential of these financial instruments to achieve the global development and climate agendas, and provides recommendations on how donors can support public sector actors to tap into this potential.

Foreword

In 2021, the G20 Development Working Group, under Italy's Presidency, mandated Cassa Depositi e Prestiti and the OECD to take stock of the GSSS bond market, and identify gaps and challenges to using GSSS bonds as a means to raise long-term financing for SDG-related projects, and attract institutional investors. The report found considerable untapped potential to scale up issuances in low and middle-income countries, as GSSS bond activity remains concentrated in developed markets.

This note provides a more comprehensive analysis of market trends and developments, with a focus on issuances from actors in countries eligible for official development assistance (ODA). The note also advises donors and policy makers on how to use development co-operation to advance the use of GSSS bonds as a tool to finance national development agendas, and help governments honour their pledges in the context of the Paris Agreement.

Acknowledgements

This report was prepared by the OECD Development Co-operation Directorate, under the strategic guidance of Haje Schütte. The Ministry of Foreign and European Affairs of Luxembourg provided essential financial support, expertise and insights.

The report was written by Jieun Kim, Selin Millward and Paul Horrocks (OECD). The authors would like to warmly thank the following individuals for their time, input, feedback or reviews:

Sergei Strigo (Amundi); Anouj Mehta, Karthik Iyer (Asian Development Bank); Jean Marie Masse (Blue Like an Orange Sustainable Capital); Cedric Rimaud (Climate Bonds Initiative); Barbara Oldani, Claire Meier Underhill, Ashok Parameswaran (Emerging Markets Investors Alliance); Chiara Mariotti, Iolanda Fresnillo (Eurodad); Peter Munro, Gerhard Gunz, Jean-Philippe Stijns (European Investment Bank); Yannick Motz (German Corporation for International Cooperation); Bertram Dreyer, Juliane Loch (German Investment Corporation); Johanna Richter, Johannes Scholl, Florian Sekinger, Sabine Bank (German Development Bank); Alexander Vasa, Isabelle Braly-Cartillier, Giovanni Leo Frisari, Daniel Ricas da Cruz (Inter-American Development Bank); Nicholas Pfaff (International Capital Market Association); Flora Chao, Denise Odaro (International Finance Corporation); Thato Seritili, Shameela Ebrahim (Johannesburg Stock Exchange); Chiara Caprioli, Paul Chahine, Lawrence Peeraer (Luxembourg Stock Exchange); Cécile Sangare, Jens Sedemund, Özlem Taskin (OECD); Gavin Power (PIMCO); Philippe Valahu, Marco Serena, Janice Kotut (Private Infrastructure Development Group); Tim Turner (Trade and Development Bank); Jimmy Greer, Veroniki Zerva (V,E/Moody's); Alain Tschibozo (West African Development Bank).

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Executive summary

As the consequences of the COVID-19 pandemic further widen the global SDG-financing gap, the budding green, social, sustainability and sustainability-linked (GSSS) bond market opens new avenues for aligning financial returns better with sustainable development outcomes. GSSS bond issuers make a commitment to either use the proceeds raised for green, social and sustainable projects in the case of use-of-proceeds bonds, or to meet a pre-defined sustainability objective in the case of sustainability-linked bonds. In addition, their longer-term nature makes them well suited to matching long-term SDG funding requirements. By linking capital raised to commitments towards people and the planet (either through use of proceeds or organisational level targets), GSSS bonds could help bring about systemic change to global finance.

GSSS bonds represent but a fraction of the overall bond market, albeit showing rapid growth from this low base, as shown by OECD work (Dembele, Schwarz and Horrocks, 2021^[1]) and new data analysis from the Luxembourg Stock Exchange.¹ Globally, GSSS bond issuances have grown by an average annual rate of 80%, meaning that the market size has almost doubled from one year to the next since 2014.

GSSS bond activity remains concentrated in developed markets. Issuances from entities in developing countries, (henceforth also referred to as emerging markets) and, in particular those eligible to official development assistance², account for only 6% of total issuances, a percentage that has remained relatively stable throughout the last years. Yet, these issuers have shown the greatest appetite for innovative instruments such as the newer sustainability and sustainability-linked bonds.

Public sector actors, including sovereign, sub-sovereign and agency actors, have a role to play, both in providing technical assistance for the issue of GSSS bonds, and as issuers and investors. GSSS bonds offer them the opportunity to effect systemic transformations in the way public budgets are planned for and executed, facilitating an alignment of public sector financing with sustainable development objectives. As such, they lend themselves well to the implementation of Integrated National Financing Frameworks and Nationally Determined Contributions. Globally, public sector bonds already represent the largest issuances in terms of amounts. With the support of donors, more public sector entities in developing countries can benefit from this growing market.

However, hampered by macroeconomic and regulatory conditions, the GSSS bond market is currently a long way from meeting the financing requirements of developing countries. Core transformations are required for GSSS bonds to be issued at scale by developing country actors. Developing country contexts call for more detailed guidance on green, social and sustainability standards that are both rigorous and inclusive. Developing country issuances also need to be backed by robust pipelines of scalable and bankable projects, and significantly increased participation from a broader set of financial actors such as institutional investors (pension funds and insurance companies) including from local markets.

Donors can facilitate and support these transformations by tapping into a comprehensive suite of development finance tools and levers. These can be categorised into four 'i's:

- Improving market infrastructure – Donors can support the development of localised standards and guidelines, and embed GSSS bonds in technical assistance programmes for prudent public debt and investment management.
- Facilitating issuances - Targeted support for the preparation and aggregation underlying specific kinds of issuances and for the setting up of GSSS bond frameworks can have demonstration effects, and help issuers familiarise with the technicalities and requirements of GSSS bond issuances.
- Providing inurance - A wide range of credit enhancement tools are available for donors to make the risk-return profile of GSSS bonds more appealing to private investors.
- Crowding in investment - Donors can promote GSSS bonds by acting as anchor or cornerstone investors.

To effect systemic change, all of the four 'i's need to come into play, building on the respective skills and comparative advantages of different donors and agencies.

Notes

¹ <https://www.bourse.lu/lgx-datahub>

² Official development assistance is defined by the OECD Development Assistance Committee as government aid that promotes and specifically targets the economic development and welfare of developing countries.

1 Mobilising capital markets to finance climate and development goals

Financing challenges loom large and threaten progress against global climate and development agendas. According to the Intergovernmental Panel on Climate Change Sixth Assessment Report, the increased frequency and intensity of climate and weather extremes have led to widespread and pervasive impacts on ecosystems, people, settlements and infrastructure and reduced food and water security, hindering efforts to achieve the Sustainable Development Goals (SDGs) (IPCC, 2022^[2]).

The pandemic has dramatically set back progress against the SDGs, widening an already immense financing gap. Due to the dire economic consequences of the global health crisis with drastic declines in international trade and capital market activity, external private inflows¹ to developing countries (excluding to the People's Republic of China, henceforth China) fell by about USD 250 billion, or 21% compared to 2019. This drop is alarming because for many developing countries, external private finance represents the largest source of financing for sustainable development.

Determined government action to contain the socioeconomic effects of the crisis unleashed unprecedented fiscal measures. Central banks and governments, mostly of developed countries, mobilised large policy packages to ease financing conditions, provide income support and protect firms and sectors (OECD, 2020^[3]). While proactive government policies helped to reverse the worst, they put enormous pressures on public budgets, limiting the scope to finance action to meet long-term climate and development objectives. Fiscal measures were also starkly uneven across developing and developed countries, exacerbating existing inequalities.

For example, while many developed countries were able to draw from a wide range of policy measures such as job loss support, wage subsidies, and social security support, most developing countries relied only on social assistance measures such as cash transfer (World Bank, 2022^[4]). This reflected a lack of fiscal resources of many developing countries who entered the COVID-19 pandemic with a combination of high (private and public) debt, limited fiscal space and – at least for some countries – a significant exposure to debt denominated in foreign currency (OECD, 2020^[5]). While the issuance of GSSS bonds could contribute to higher debt levels in these countries, they can offer opportunities to raise debt at relatively low cost and ensure that the spending financed by this debt is well-aligned with a country's sustainable development needs.

Moreover, the pandemic has affected the availability of climate finance for developing countries. The World Resources Institute found that developing countries have reallocated or decreased their domestic climate flows because of the high costs of responding to the pandemic. As a result, climate-related projects have been delayed (Alayzya and Caldwell, 2021^[6]).

Members of the OECD Development Assistance Committee (DAC) have increased their official development assistance (ODA) spending during the pandemic. In 2020, bilateral ODA from DAC members reached an all-time high of USD 161 billion, having risen by 3.5% in real terms compared to 2019 (OECD,

2021^[7]) However, these contributions represent only a small portion of the trillions of additional financing needed.

The imperative to address global pressing challenges such as the climate crisis and the COVID-19 pandemic has brought a renewed urgency to the need to align existing and raise additional sources of financing to achieve global development and climate goals. But private finance mobilised through development finance remains stubbornly low. Between 2012 and 2019, USD 257.6 billion were mobilised from the private sector by official development finance interventions. While these figures alone lag far behind the financing needs for the SDGs, the most recent trends are even more alarming. After an upward trend between 2012 and 2018, the amounts declined by 9% in 2019 (OECD, 2022^[8]).

Global bond markets, which represent a significant volume of long-term assets and which have shown relative resilience to the crisis, draw attention as a potential source of large-scale financing for sustainable development. With more than USD 110 trillion in value outstanding, bonds constitute the largest asset class in global financial markets and represent double the size of equity markets (SIFMA, 2021^[9]). Gross issuance of government bonds in emerging and developing market economies alone amounted to USD 2.5 trillion in 2019 (OECD, 2020^[10]).

After initial shock reactions to the pandemic, stress in global financial markets eased rapidly, largely due to the massive and unprecedented scale of actions by major central banks. Towards the end of 2020, investor sentiment including for emerging market bonds improved, and yield spreads compressed significantly approaching pre-pandemic levels (OECD, 2021^[11]).

Scaling up bond markets or moving them towards greater alignment with climate and other sustainable development objectives would set us towards a new path towards closing the SDG financing gap, which before the COVID-19 pandemic was estimated at an annual USD 2.5 trillion (OECD, 2021^[12]). It would also enable progress against the Paris commitment of aligning all financial flows with the global mitigation and adaptation goals (United Nations / Framework Convention on Climate Change, 2015, Art. 2.1 c^[13]) There is already considerable private sector interest in partnering on these goals, illustrated by initiatives like the Glasgow Alliance for Net Zero and by the increased interest in environmental, social and governance investing.

The growing green, social, sustainability and sustainability-linked (GSSS) bond market, in particular, harbours ample potential. GSSS bond issuers make a commitment to either use the proceeds raised for green, social and sustainable projects in the case of use-of-proceeds bonds, or to meet a pre-defined sustainability objective in the case of sustainability-linked bonds. For this reason, they have potential to bring greater alignment with SDGs and global climate objectives.

As will be discussed in Chapter 2, the market has grown at a cumulative annual rate of 80% even throughout the pandemic. At the same time, the market has grown increasingly diverse, with the launch of new products and innovative features, of which the advent of sustainability-linked bonds is the most prominent. The challenge in the coming years will be to unleash the potential of GSSS bonds for developing countries, facilitating access to a variety of issuers across regions and types of financing needs.

As mentioned in the OECD report “Scaling up green, social, sustainability and sustainability-linked bond issuances in developing countries” (Dembele, Schwarz and Horrocks, 2021^[1]), public sector issuances can play a crucial role in promoting further market development. For example, sovereign bonds serve as a benchmark against which the performance of other bonds can be measured. Moreover, many of the projects owned by municipal governments, for example in the water and transport sector, lend themselves well to the issuance of GSSS bonds.

In light of these market trends and GSSS bonds’ untapped potential, this note addresses both a gap in the market and the GSSS bonds literature, and focuses on how to facilitate the issuance of bonds by public sector entities in developing countries. The scope of the public sector includes sovereign and sub-sovereign governments as well as quasi-government agencies such as state-owned enterprises (SOEs).

In the following chapter, the note will provide an overview of recent market developments in GSSS bonds globally, zooming in on key specificities of developing country issuances. By developing countries, the report refers to the Development Assistance Committee (DAC) list of countries, or emerging markets, eligible for official development assistance (ODA). In the third chapter, the report then sheds light on the role of public sector issuances, arguing that the way forward to scale up public sector GSSS bonds is to facilitate issuances by sub-sovereign entities and SOEs. Chapter 4 explores the challenges of public sector issuances, and the last chapter suggests how donors can provide support to overcome these challenges.

2 Market overview – What are the stakes for developing countries?

The green, social, sustainability and sustainability-linked (GSSS) bond market has grown at the spectacular pace of 80%² per year on average since 2014. However, this growth performance has been highly uneven with a predominance of green bonds and developed country issuers. Developing country issuances represent only a fraction of the overall volumes.

This chapter gives an overview of overall GSSS bond market trends and developments, highlighting the distinctive features of GSSS bonds from entities in emerging markets that are eligible for donor support in the form of official development assistance (ODA)³. For this purpose, the analysis categorises issuers according to their affiliation with developed markets (DM), emerging markets excluding those eligible for ODA (EM), and ODA-eligible markets.

It informs the analysis in later chapters that propose a way forward to scale up GSSS bonds in emerging markets and developing countries and explore the potential role of donors.

2.1 Access to the green, social, sustainability and sustainability-linked bond market is uneven

The global GSSS bond market has reached almost 700 billion EUR in annual issuances in 2021.

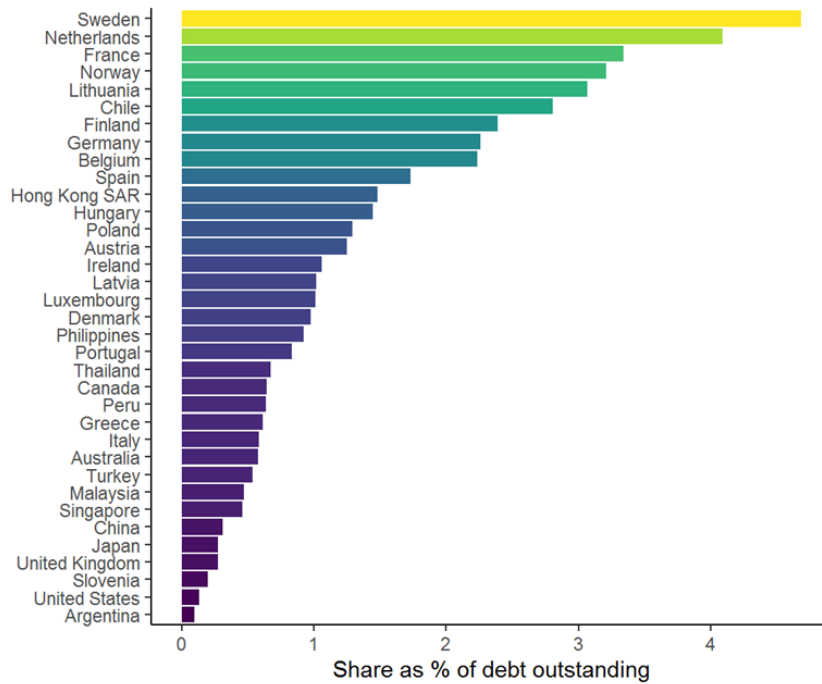
The term GSSS refers to the combination of green, social and sustainability (GSS) bonds and sustainability-linked bonds (SLB). Whereas GSS bonds are essentially use-of-proceeds bonds, where issuers commit to use the financing raised for projects and expenditures that meet green, social and sustainability eligibility criteria, SLBs are instruments where financial and/or structural characteristics can vary depending on whether the issuer achieves predefined sustainability or environmental, social and governance (ESG) objectives.

After the European Investment Bank first pioneered the launch of the inaugural green bond in 2007, the GSSS bond market has grown at a spectacular pace. By the end of 2021, cumulative issuances of GSSS bonds amounted to over USD 2.7 trillion (Harrison, MacGeoch and Michetti, 2022^[13]). The market grew especially rapidly in recent years.

Despite this spectacular growth, the market constitutes only a fraction of the global bond market so far. Representing only 1% of total assets outstanding and around 2% of new issuances, it is still considered a niche sector⁴. Figure 2.1 gives a sense of the relative size of the GSSS bonds market. At its highest point, the share of GSSS bonds in the overall bonds outstanding issued by public sector entities in a country are below 5%. In many countries they are below 1%.

Figure 2.1. GSSS bonds present a fraction of total public sector bonds outstanding

Share of GSSS bonds in total public sector bonds outstanding at end 2020



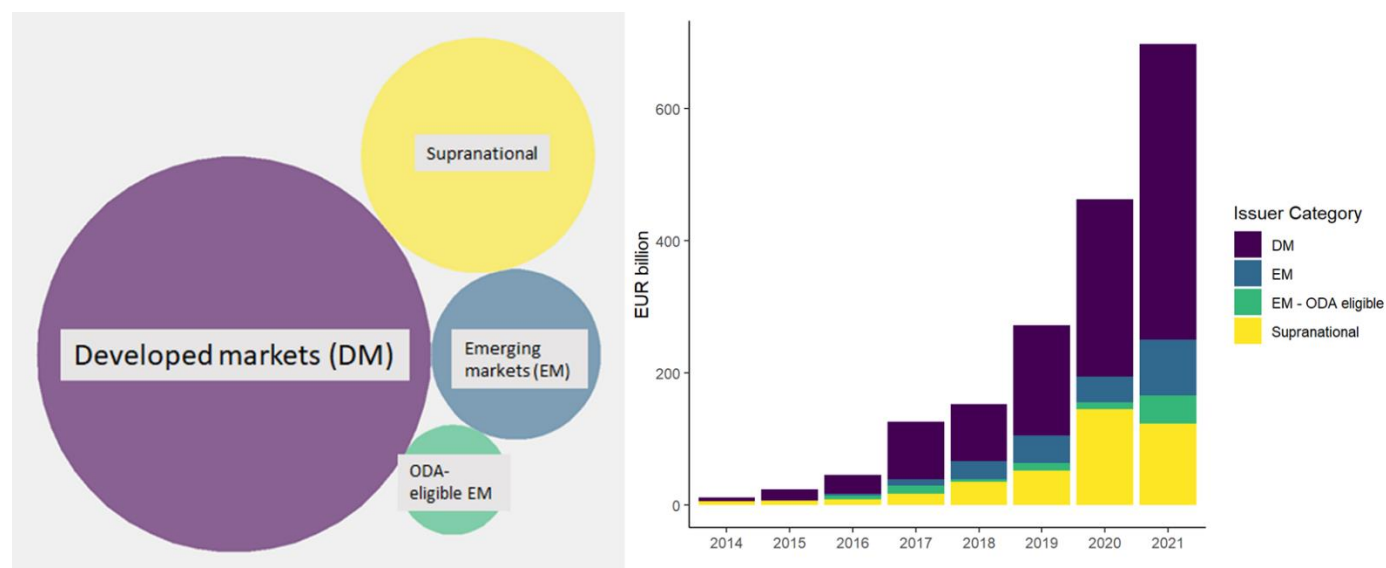
Source: Authors' calculations based on LGX Datahub (2021_[14]), BIS Debt Security Statistics (2021_[15]).

The development of the market has been uneven, with developed market issuers remaining predominant. However, more countries are entering the GSSS bond market. By the end of 2021, for example, entities in a total of 31 ODA-eligible countries have issued one or another form of GSSS bond. Only two years prior, in 2019, the number was 17.

However, the share that emerging market issuers take up as part of total issued amounts has increased little over time. In 2021, emerging market (EM) issuers accounted for 18% of total issued amounts. GSSS bonds from issuers in ODA-eligible countries represent only 6%.

Figure 2.2. Developed market issuances are predominant in the GSSS bonds market

Relative size of cumulative issuances per issuer category since 2012 (left side); yearly trends in GSSS bond issuances per issuer category since (right side)



Source: Authors' calculations based on LGX Datahub (2021^[14]).

2.2 Issuers in ODA-eligible countries seem to readily embrace novel and innovative instruments

Among GSSS bonds, green bonds dominate. They represent by far the greatest share, with 47.8% and 61.4% respectively in terms of amounts issued and number of issuances, in 2021. This is in large part because they are the most established and market practices alongside commonly agreed indicators are well developed. Often, large infrastructure projects and green buildings are well-suited to bond financing, while it is tougher to find bankable social projects. Increasing emphasis on achieving net-zero commitments is also driving the predominance of green over social and sustainability bonds.

Box 2.1. Overview of GSSS bond labels

Green bonds represent a source of funding for projects intended to deliver a positive environmental impact. Examples of project categories eligible for green bond issuance include: renewable energy, energy efficiency, clean transportation, green buildings, wastewater management and climate change adaptation.

Social bonds have become an increasingly popular fixed-income product in light of the COVID-19 pandemic and the resulting need for new funding avenues to address the unforeseen economic and social disruptions. Examples of project categories eligible for social bonds include: food security and sustainable food systems, socioeconomic advancement, affordable housing and access to essential services such as healthcare.

Sustainability bonds are bonds where the proceeds exclusively apply to finance or re-finance a combination of both green and social projects. They offer a wider range of potential opportunities as examples of project categories eligible for sustainability bonds typically include those in the green and social bonds categories.

Sustainability-linked bonds (SLBs) are instruments where financial and/or structural characteristics can vary depending on whether the issuer achieves predefined sustainability or environmental, social and governance (ESG) objectives. Unlike green, social and sustainability bonds, these bonds are not project-based instruments but present forms of balance sheet financing.

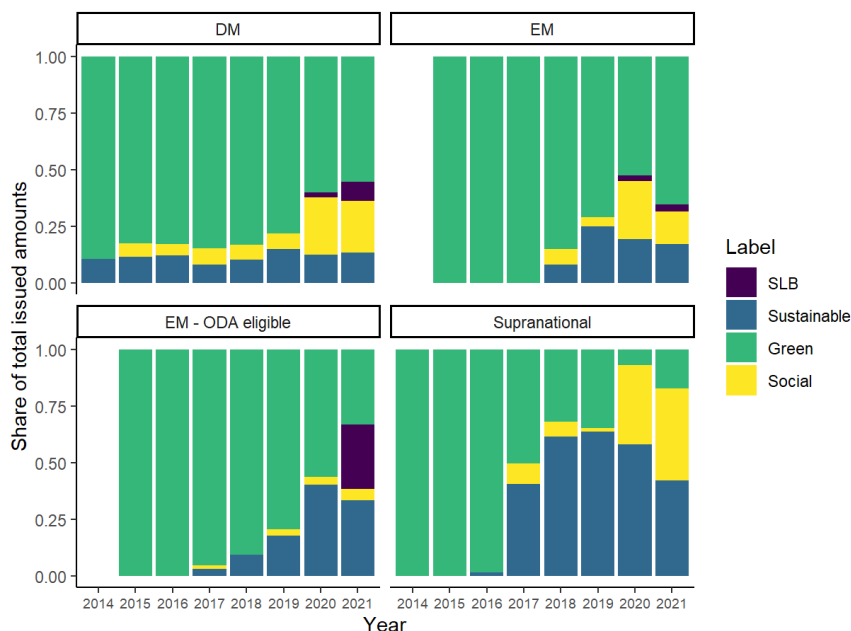
Source: (Dembele, Schwarz and Horrocks, 2021^[11])

Compared to green bonds, social bonds are often harder to define, sometimes requiring indicators that account for highly cultural and context-specific factors. This can cause some investor hesitance in embracing this type of bond. Social bonds accounted for 23.5% of amounts issued in the GSSS bond market and 12.8% of number of issuances in 2021.

Sustainability bonds, where proceeds are used for a combination of green and social projects, accounted for 21.4% of GSSS bond amounts issued and 18.3% of number of GSSS bond issuances in 2021. As in Figure 2.3, this type of bonds is especially popular among supranationals and issuers from ODA-eligible countries. This hints at the interlinkages between climate and development initiatives in developing countries. More analysis and research to explore these indicators can shed light on the types of combined indicators and projects that can be relevant for the issuance of GSSS bonds in these countries.

Figure 2.3. ODA-eligible EM issuers are more likely to use sustainability and sustainability-linked bonds

Yearly trends in shares of total amounts issued by category of issuer



Source: Authors' calculations based on LGX Datahub (2021_[14]).

Sustainability-linked bonds are the most novel type of instrument, accounting for 7.3% of GSSS bond amounts issued and 7.5% of number of issuances in 2021. In spite of being introduced only in 2020, they have increased rapidly. Interestingly, they represent a quarter of issuances by entities in ODA-eligible markets, suggesting that there is potential for this instrument to drive greater issuances in those countries. The value and validity of SLBs, however, is highly dependent on the quality and ambition of key performance indicators. More time is necessary to evaluate and test SLBs as to their impact in advancing development and climate objectives.

Box 2.2. Are SLBs the solution that will bring GSSS bond issuances to scale in developing countries?

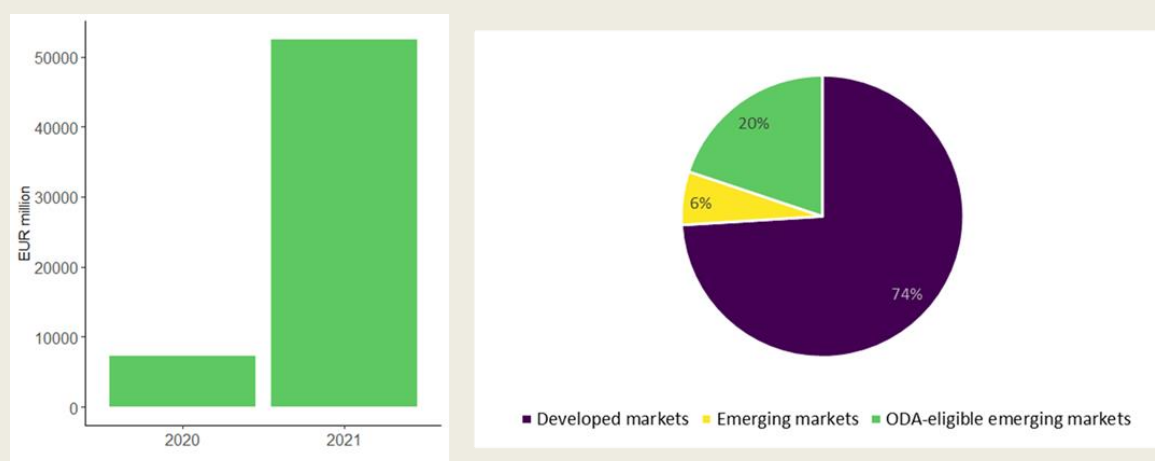
Only one year after being introduced to the market, SLBs have taken off. Annual issuances have increased to EUR 52.5 billion in 2021, more than seven times the 2020 volume of EUR 7.2 billion (Figure 2.4, left side).

While developed markets, especially corporate issuers, are most active in the SLB market segment, it is interesting that many ODA-eligible country issuers have embraced this instrument as well. Issuers from ODA-eligible countries account for 20% of total cumulative SLB issuances (Figure 2.4, right side).

With the ability to offer customised targets that reward relative performance based on the issuers' respective baseline indicators, SLBs may be especially suitable for developing country issuers who at face value may struggle to meet the same sustainability criteria as their developed market counterparts.

Figure 2.4. SLB issuances have rapidly increased including in developing countries

Annual SLB issuances in EUR million (left side); Breakdown of categories of countries of entities that issued SLBs in 2020 and 2021 (right side)



Source: Authors' calculations based on LGX Datahub (2021^[14]).

However, there are also concerns that the highly sophisticated nature of the instrument may be difficult to adopt to developing country issuers that have only limited experience with financial instruments. For example, most SLBs issued penalise issuers for not meeting the SLB targets by stepping up the bond's coupon rate (Figure 2.5, left side). For issuers with a lack of experience, it may be more difficult to manage the risk of higher interests or accept to pay them when the risk materialises.

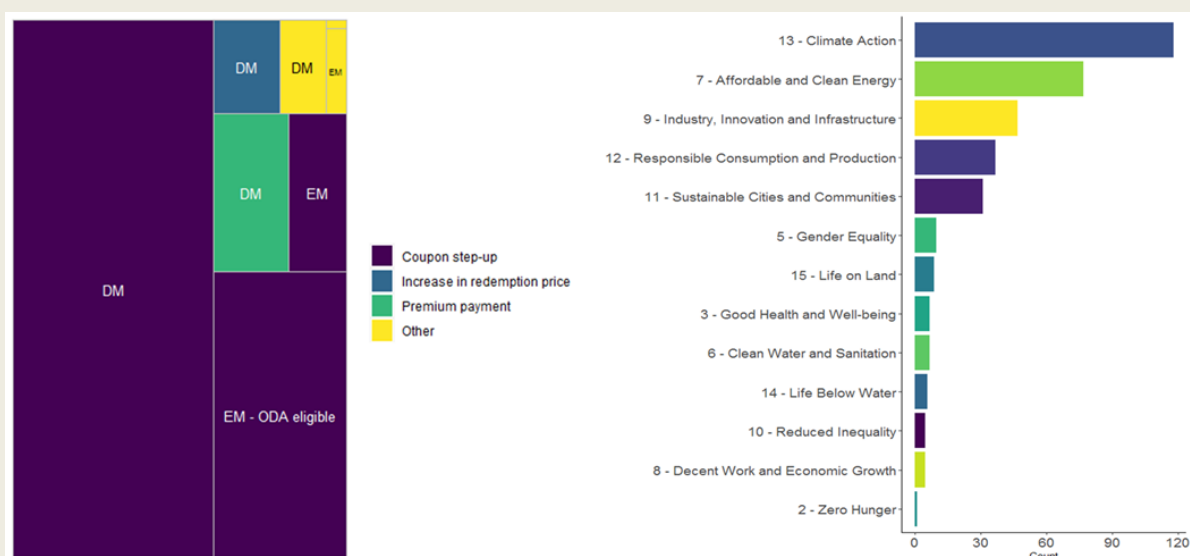
Green bonds were first used and tested by supranational issuers, who contributed to developing the market and introducing market discipline for several years. In comparison, SLBs are not yet mature and well understood, and there may be risks in encouraging their adoption among developing country issuers without further analysis and consideration.

Moreover, for now, SLBs are mainly focused on climate and energy-related targets, as seen in Figure 2.5 (right side). As pointed out above, some developing country issuers seem to have a natural propensity towards social and sustainability labels. If SLBs are to help channel finance to those

countries, there will be a need to develop indicators and methodologies to include social impacts in their design.

Figure 2.5. SLB targets mainly relate to climate objectives and failure to meet them trigger increases in the coupon rate

Distribution of cumulative SLB issuances by category of issuer country and type of penalty in case of failure to meet targets (left side); SDG related to SLB targets (right side)



Note: The right side graph includes double-counting since SLB targets can relate to multiple SDGs at the same time.

Source: Authors' calculations based on LGX Datahub (2021_[14]).

2.3 Increasing appetite for ESG investment opportunities drives demand for GSSS bonds

With environmental, social and governance (ESG) investing going mainstream, there is increasing appetite for GSSS bonds. Since they have similar financial characteristics and structure as conventional bonds, they present a relatively safe and easy entry point for traditional investors into the rapidly evolving world of sustainable finance. According to a survey of over 300 asset managers with more than USD 14 trillion in fiduciary capital, 56% of the respondents said they would invest in thematic or sustainable bonds in emerging markets in 2022 (top1000funds.com, 2021_[16]).

Impact investors with a mandate that specifically focuses on ESG investing are also increasing in number and volume of funds. Assets under management (AUM) of funds that are restricted to buying green bonds, for example, increased by 80% year-on-year to reach EUR 22 billion at the end of Q1 in 2021, while overall bond funds' AUM increased by only 4% (Fitch Ratings, 2021_[17]). A Climate Bonds Initiative survey found that the amount of green corporate bonds allocated to investors describing themselves as green or socially responsible increased from 56% in 2020 (Harrison, 2022_[18]) to 66% in the latter half of 2021 (Harrison, 2021_[19]).

The overall rise in demand for GSSS bonds is mirrored in their pricing performance. The Climate Bonds Initiative found that green bonds in both EUR and USD exhibited greater spread compression⁵ on average, than vanilla⁶ equivalents in 2021 (Climate Bonds Initiative, 2021_[20]). According to the Emerging Market

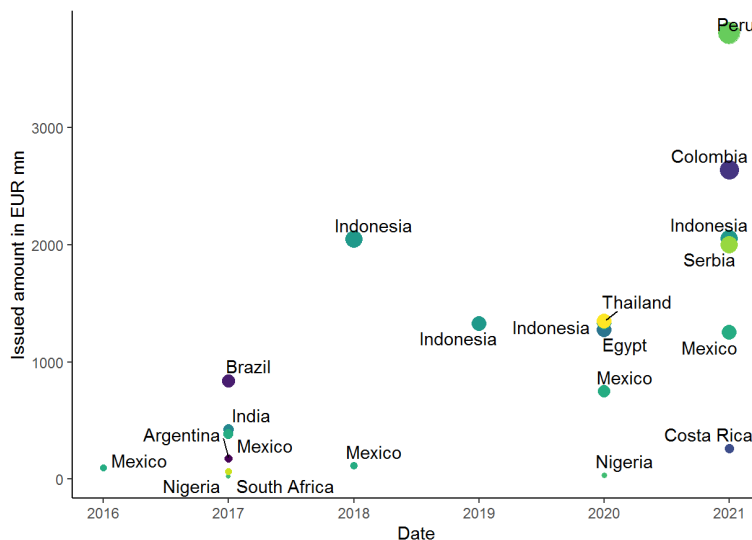
Green Bonds Report 2020 by IFC and Amundi, green bonds have outperformed the overall market. The average “greenium” in emerging market bonds stands at 3.4 basis points, or 3.5% of the average spread⁷ of comparable conventional bonds (Amundi Asset Management; International Finance Corporation, 2021^[21]).

2.4 The public sector has a special role to play as issuers in ODA-eligible emerging markets

Regardless of the level of development, the public sector is among the most important issuers. The OECD Stocktake report “Scaling up green, social, sustainable and sustainability-linked issuances in developing countries” (Demele, Schwarz and Horrocks, 2021^[1]) highlights that sovereign issuers more than any other issuer are well placed to promote the GSSS bond market, given the size of their budgets and their ability to provide benchmark instruments for local market development. More and more public sector issuers, at the sovereign, sub-sovereign and agency (SSA)⁸ level, are entering the GSSS bond market. Figure 2.6 illustrates that the number of government entities issuing GSSS bonds has increased especially rapidly in recent years following a rapid expansion of fiscal expenditure needs to fight the socioeconomic consequences of the pandemic. Moreover, the amount of financing raised through each bond has diversified, encompassing the variety of issuers and uses of the bonds.

Figure 2.6. More and more governments in ODA-eligible countries are tapping into the GSSS bond market

Volumes of GSSS bonds issued by public sector entities in ODA-eligible EM by year

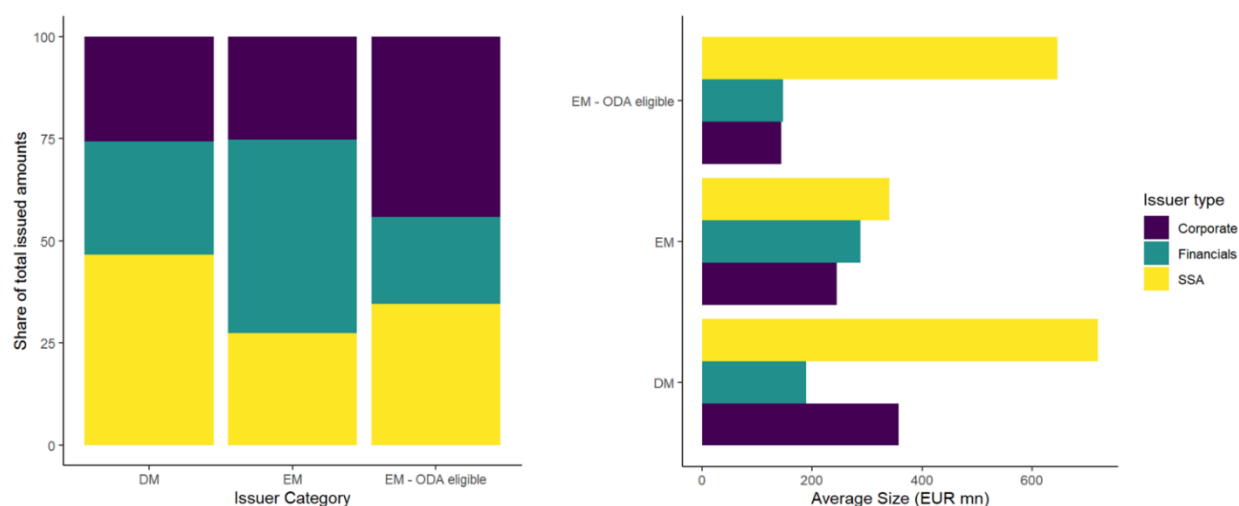


Source: Authors' calculations based on LGX Datahub (2021^[14]).

Public sector bonds including from SSA issuers represent the largest group in terms of volumes of bonds issued as of end-2021. In developed markets, the share stands at 50%, while in non-ODA-eligible EMs and ODA-eligible EMs, the shares are 35.3% and 52%, respectively. The role of public sector issuances is less prominent in more advanced EMs, where the most active issuers are financial sector institutions, notably banks.

Figure 2.7. In developed markets as well as in ODA-eligible emerging markets, the public sector is an important player, especially in terms of the average size of its issuances

Distribution of issuer types by amounts of GSSS Bonds issued in DM, EM and ODA-eligible EM since 2010 (left side); average size of cumulative GSSS bond issuances since 2010 by type of issuer and market category (right side)



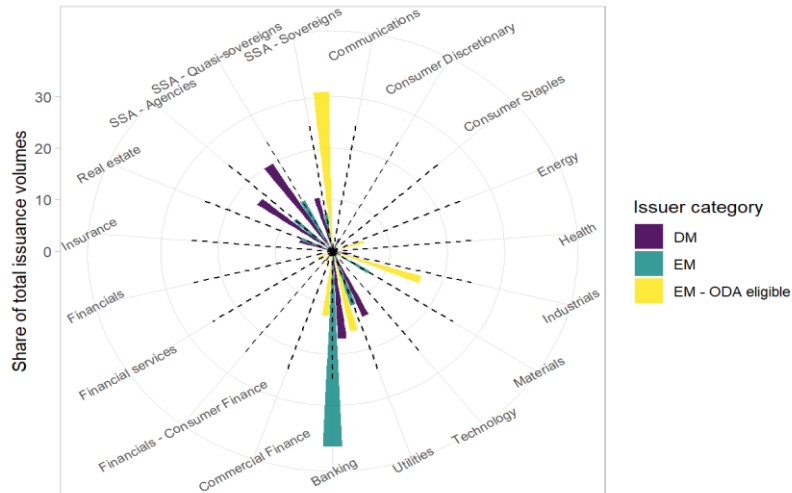
Source: Authors' calculations based on LGX Datahub (2021^[14]).

Most public sector issuances by entities in ODA-eligible countries are from the sovereign government, leaving ample room to scale up sub-sovereign and agency issuances. By comparison, in both developed markets and more advanced emerging markets, the bulk of public sector issuances comes from the sub-sovereign government or agencies such as state-owned enterprises (SOE). Since the size of projects owned by sub-sovereign and agency issuers are often smaller, the average size of issuances in the public sector, as shown in Figure 2.7, is smaller in emerging market countries that are non-ODA eligible. The difference in average size is relatively small between developed markets and ODA-eligible developing countries, because public sector issuances in developed markets are mostly sub-sovereign and agency bonds, whereas public sector issuances in ODA-eligible developing countries are sovereign bonds.

By contrast, sovereign governments are the dominant public issuers in ODA-eligible developing countries, where sub-sovereigns are not yet equipped to access capital markets. This indicates that sub-sovereign and SOE projects, especially in urban and energy infrastructure, present a growth area for GSSS bonds for those ODA-eligible countries with some level of fiscal decentralisation. To achieve a scaling up of GSSS bond issuances, donors could actively target this segment to provide support in capacity building as well as technical and financial assistance.

Figure 2.8. Public sector issuances in ODA-eligible markets are predominantly sovereign government bonds

Share of amounts issued between 2010 and 2021 by entities in DM, EM and ODA-eligible DM by sub-type of issuer

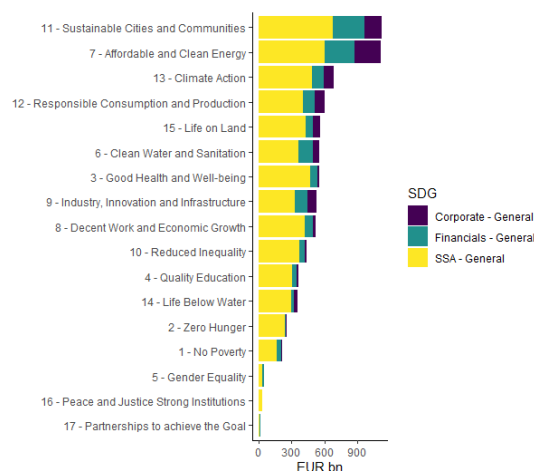


Source: Authors' calculations based on LGX Datahub (2021_[14]).

GSSS bonds from public sector issuers contribute to a wider range of SDGs than their private sector equivalents. In particular, bonds that target SDGs related to social purposes such as decent work, poverty and inequality reduction, education, health and well-being, are almost exclusively public sector bonds. Harnessing the potential of GSSS bonds for sustainable development in a holistic sense, therefore, depends on the ability to scale up public sector bond issuances, in particular.

Figure 2.9. Public sector issuers target more diverse SDGs with their GSSS bond issuances

Cumulative GSSS bond issuances with potential contribution towards SDGs (2014-2021)



Note: This is the sum of all issued amounts of bonds with a potential contribution towards multiple SDGs, as identified by the LGX DataHub. It includes double-counting of bonds that may contribute towards multiple SDGs.

Source: Authors' calculations based on LGX Datahub (2021_[14]).

3 Why promote public sector GSSS bond issuances?

As the custodians of national climate and development agendas, as well as guardians of their citizens' wellbeing, governments have the responsibility to raise the necessary financing including from the private sector and from capital markets. GSSS bonds are a suitable instrument for this endeavour. First, the maturities of GSSS bonds lend themselves well to the financing of the types of long-term investment projects that are crucial to achieving countries' development strategies. Second, and more importantly, GSSS bonds also offer the opportunity to transform the way public budgets are planned and executed, by building structures to identify and incentivise projects based on sustainability criteria. This facilitates the alignment of public sector financing with sustainable development objectives.

This chapter summarises the rationale for and the key benefits of GSSS bond issuances for public sector entities including sovereign and sub-sovereign governments and quasi-governmental entities.

3.1 GSSS bonds aptly suit the needs of developing country governments to finance national development and climate action

The ambitions set by global development and climate goals call for deep transformations of countries' financing approaches. At the UN Climate Change Conference in 2021, countries renewed their commitment to the Paris Agreement to keep the target of 1.5°C of global warming alive. Implementing the Paris Agreement will require collaborative near-term action to make the entire financial system consistent with low-emissions pathways and climate-resilient development (Art. 2.1).

Amidst massive job losses⁹ due to the COVID-19 pandemic, growing impetus is placed on the need for a just transition – a shift away from coal and other fossil fuels that also brings economic opportunities and supportive measures for vulnerable groups. The Intergovernmental Panel on Climate Change Sixth Assessment Report also highlights that emphasis on social justice has emerged (Chapters 1 and 18). The divergent pace of recovery from the crisis threatens to intensify asymmetries between developed and developing countries. Indeed, recent OECD analysis suggests that external private finance to developing countries (excluding China) has declined by 22%, amplifying the Sustainable Development Goals (SDG) financing gap (OECD, forthcoming^[22]). More than ever, development finance alone will not be enough and the mobilisation of private sources of finance is key to bridging the SDG financing gap.

Developing countries are more exposed and vulnerable to climate risks than others. Economic damages per capita are often higher as a fraction of income for developing countries (IPCC, 2022^[2]). This is partly due to their economies' high reliance on climate-sensitive sectors such as agriculture and fisheries. Moreover, many developing countries have a high concentration of poor and vulnerable groups living in disaster-prone zones of urban centres, while inadequate disaster risk reduction measures make them more vulnerable to natural disasters (IPCC, 2022^[2]). In general, developing countries lack the human, institutional, and financial resources to adequately anticipate and respond to the effects of climate change. Vulnerability to climate change tends to be especially high for least developed countries in tropical and

subtropical areas. The countries with the fewest resources are likely to bear the greatest economic burden as well as loss of life.

Mitigating and adapting to these risks can improve the financing prospects of countries. Due to their economic and fiscal consequences, climate risks can also affect sovereign credit ratings and drive up costs of capital. Two types of climate-related risks can affect the cost and availability of financing. Physical risks refer to the economic and financial losses caused by climate-related hazards. Transition risks refer to the risks of economic dislocation and financial losses associated with the transition to a low-carbon economy and can be induced by changes in policy, technology or market preferences. Research indicates that climate change is already reflected in some rating downgrades, and interest rates on vulnerable countries' government debt are already higher than they would otherwise be. An increase of 10 percentage points in climate change vulnerability is associated with an increase of over 150 basis points in long-term government bond spreads of emerging markets and developing economies (Cevik and Jalles, 2021^[23]).

Due to their long-term nature and their market size, bonds are aptly suited instruments to finance SDG and climate goals. With USD 6.7 trillion in annual issuance, the bond market is almost double the size of the equity market and holds ample resources. The long-term nature of bond investing is also well aligned to the longer-term horizons of sustainable investing approaches that could contribute to the SDGs (Dembele, Schwarz and Horrocks, 2021^[1]).

Bonds are especially popular with institutional investors such as insurance companies and pension funds that seek to match their typically long-term liabilities. With over USD 100 trillion in assets in 2019 in OECD countries alone, these investors potentially represent a major source of long-term financing to support sustainable growth in developing countries (OECD, 2021^[24]). However, there is a mismatch with SDG financing needs insofar as institutional investors have a low-risk appetite, typically favouring investment-grade fixed income assets with low liquidity requirements. Pension funds allocated a mere (estimated) 8% and insurance companies only 2% of their assets to developing countries in 2017-18 respectively (OECD, 2021^[24]).

GSSS bonds provide a means to introduce transformative change to the financial system. GSSS bonds can shape the way budgeting decisions are made across various actors involved in the realisation of the SDGs. Bonds are a financing mechanism that cuts across a broad set of actors including corporates, governments, municipalities or development banks. Chile's experience (Box 3.1) shows how the issuance of GSSS bonds can bring together different stakeholders and foster collaboration around sustainability objectives.

Box 3.1. Chile's GSSS bond issuances required extensive inter-ministerial consultations and capacity building

Chile was the first country in the Americas to issue green bonds in 2019. In order to develop the Green Bond Framework, the Ministry of Finance (MOF) began a one-year process of internal capacity building involving other ministries (such as the Ministry of Environment (MOE) and the Ministry of Transport (MOT)) and engagement with national and international institutions including the IDB and several investment banks. This was especially important to ensure buy in and understanding on the characteristics of green bonds across ministries. Significant coordination efforts were made between the MOF and the MOE to implement a successful project selection and reporting process for the green bond. In particular, engagement with the Second Party Opinion (SPO) provider, Vigeo Eiris, had a steep learning curve, whereby the MOF had to coordinate with other ministries raising important ESG questions that stimulated important discussions.

Source: (IDB, forthcoming^[25])

Issuing GSSS bonds equips governments and corporates with tools to mainstream sustainability considerations into their financing decisions. The issuance of GSSS bonds requires frameworks that guide the selection, as well as the implementation and monitoring of projects on the basis of clear sustainability criteria. In the case of Benin, for example, an SDG bond issuance involved an extensive process of SDG costing and of mapping and prioritising the most pressing investment needs.

Moreover, once actors are able to see demonstration effects (i.e. in the form of greater availability of financing from a more diversified investor base and/or at cheaper rates), they will have greater confidence in GSSS bonds, and their preferences may likely change in favour of sustainable project and business models that lend themselves to the issuance of GSSS bonds.

Box 3.2. Benin's inaugural SDG bond launch

In July 2021, the Republic of Benin became the first African country to issue an SDG bond. The government of Benin prepared a comprehensive SDG framework, with a second party opinion. Some of the notable features of the framework include:

- the identification of the most pressing SDG targets (49 identified) based on a costing analysis, in collaboration with the IMF, the UNDP, and GIZ
- a sophisticated process to evaluate project eligibility based on their contributions to the SDGs
- a commitment of Benin to the preservation and enhancement of its architectural and natural heritage treasures
- a comprehensive list of theme-based and sectoral exclusions with a particular focus on conservation of biodiversity
- a partnership with the United Nations Sustainable Development Solutions Network to monitor and evaluate the progress made in achieving the SDGs.

The EUR 500 million 12.5-year bond was sold at a coupon of 4.95%, approximately 20bp lower than Benin's yield curve. According to financial arrangers of the issuance, the favourable pricing was partly motivated by the safeguards and mechanisms to ensure transparency of the use of proceeds as well as the impact.

Source: (Caumes and Merle, 2021^[26]).

To reach the full potential of GSSS bonds in SDG and climate financing, the involvement of the public sector is crucial. In most countries, governments, national development banks and state-owned enterprises (SOEs) are responsible for financing large-scale infrastructure projects, which in turn are key to accelerating the transition toward low-carbon and climate-resilient economies, and which are of critical importance for environmental sustainability in general.

Entrusted with the primary responsibility for the national implementation of the Agenda 2030, governments need to ensure that public budgets are aligned with the SDGs while reflecting national development priorities. Many governments in developing countries, in particular, are collaborating with the UN to establish integrated national financing frameworks to strengthen the integration between long-term sustainable development aspirations and the policies that will mobilise the investments needed to achieve those aspirations. Developing countries in Asia such as Nepal, the Philippines and Indonesia were among the frontrunners in adopting climate change tagging to track climate-relevant public expenditures to align their budgets with climate change policy priorities. Similar initiatives are underway on gender-responsive budgeting (Kirchhofer, 2021^[27]). The effective and strategic use of financing instruments, among them GSSS bonds, is a key component to consider as part of such government-led initiatives.

There is room for more public sector involvement in GSSS bond issuance, especially in a developing country context. While in developed markets, public sector issuers including sovereign, sub-sovereign and agency (SSA) actors are leading in terms of the volume of issuances, in emerging markets including in ODA-eligible developing countries, they play a less prominent role. For ODA-eligible countries, in particular, despite the substantial size of government issuances, they remain scarce compared to corporate and financial sector issuances.

Despite variations between different geographies and development contexts, there is scope to increase issuances from the public sector, especially at the municipal or SOE level, which handle the bulk of urban infrastructure, construction, utilities, etc. that together contribute to high levels of emissions. With their

propensity for social expenditures in health and education, for example, governments can also benefit increasingly from recent growth in the social and sustainability segments of the GSSS bonds market.

Donors can support government and other public sector issuers to tap into the potential of the GSSS bonds market. A successful first-time issuance can help to establish the necessary political support and ecosystem for continued engagement. Out of 31 ODA-eligible countries where GSSS bonds have been issued, SSA bonds have been issued in only 15 (2021^[14]). Some of these are repeat issuers, including Indonesia, Mexico and Nigeria.

Donors can build on their existing engagement with developing country governments and other public sector actors to help build momentum that makes this possible. By providing technical assistance alongside concessional funds, donors can incentivise and build capacities and awareness around GSSS bond issuances. Chapter 5 of this report explores these and other options in greater detail.

3.2 GSSS bonds offer potential benefits to governments and other public sector issuers

GSSS bonds, notably green bonds, have the potential to reduce financing costs of the issuer. GSSS bonds can present lower yields than conventional bonds. For green bonds, in particular, this yield difference, also known as the “greenium”, has been observed in developed markets, with Germany’s twin bond structure being an often-quoted example, whereby comparable green and non-green bonds are issued at the same time. Across developing countries, Egypt, Thailand, Indonesia and Chile have also experienced a greenium (Climate Bonds Initiatives, 2021^[28]).

The underlying reason behind the existence of a greenium is growing demand from investors. Such growing investor appetite for bonds (and GSSS bonds, in particular, for long term responsible investors) has led to a situation where the demand far outstrips supply. Whether the issuance is placed in hard currencies and international markets as opposed to local currencies in local bond markets, can affect the existence and size of a greenium. The greenium may often be higher in the former case due to higher interest in SDG and ESG-related investment opportunities on the side of international investors.

Recently, there are signs that the greenium is fading away. The rapid increase in green bond supply especially in developed markets is said to have weakened the need to add a premium for investors (Webb, 2021^[29]). Higher yield instruments including emerging market bonds may still be sold at premiums, though, since supply in this market segment is still lagging behind developed markets.

For social, sustainability and sustainability-linked bonds, there is only limited data to prove the existence of a social premium. There is a lack of twin bond structures where each social bond is issued together with a conventional bond from the same issuer with the same financial characteristics, which could enable a comparison of the yield curves. Anecdotal evidence such as in Box 3.3 below, suggests that, with a convincing narrative, issuing GSSS bonds can help borrowers in developing countries achieve a significant reduction in capital costs.

Box 3.3. West African Development Bank (BOAD) sustainability bond

In January 2021, the West African Development Bank (BOAD) issued the first sustainability bond in Africa. The bond was issued to support governments to fund non-commercial SDG-related projects across the BOAD's eight member countries: Benin, Burkina, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo.

BOAD's preference for a sustainability bond over e.g. a green bond reflects the SDG needs and priorities in emerging and ODA-eligible markets (EMs), which are distinct from those of developed markets (DMs). Whereas demand for decarbonisation is high in DMs, many EMs are historically non-significant emitters of CO₂ and other greenhouse gas emissions, and must grapple with many more pressing social issues, such as food instability, rapid urbanisation, healthcare and social housing. Among others, the climate change adaptation needs addressed in the social projects underlying the bond qualify it as a sustainability bond, which combines green and social elements.

The issuance amounted to EUR 730 million with a 12-year maturity, and attracted over 260 investors (75% asset managers, 21% institutional investors). The inaugural transaction was significantly oversubscribed by a factor of six. European anchor investors predominated (80%), with a further 17% coming from the US.

Several factors are behind this success. First, BOAD went through an extensive consultative process to forge the narrative that would underlie the bond's framework. This involved building a robust theory of change and impact that was sought through the projects to be financed by the bond. Second, BOAD conducted a rigorous process to identify suitable projects that would fit this narrative. BOAD prepared a candidate pool of projects, the total value of which exceeded the bond issuance amount. This was to ensure that projects would no longer be eligible to be financed from the sustainability bond proceeds in the event that possible modifications and unforeseen changes would undermine their sustainability characteristics. Third, BOAD raised visibility with investors by leveraging the extensive network of their senior management in Europe and Asia.

Source: BOAD (2021_[30])

However, the benefits governments and other public sector issuers can harness from GSSS bonds extend well beyond pricing aspects. Issuing GSSS bonds can diversify and broaden the investor base, providing public sector issuers with more flexibility and leverage when exploring financing options. Appetite for the value proposition of ESG investments is increasing, with large potential demand for emerging market government debt. The issuance of GSSS bonds also provides reputational benefits and signalling effects to the market, raising the profile of EM bond issuers including in ODA-eligible countries in highly competitive international capital markets, as shown in the case of BOAD's successful issuance.

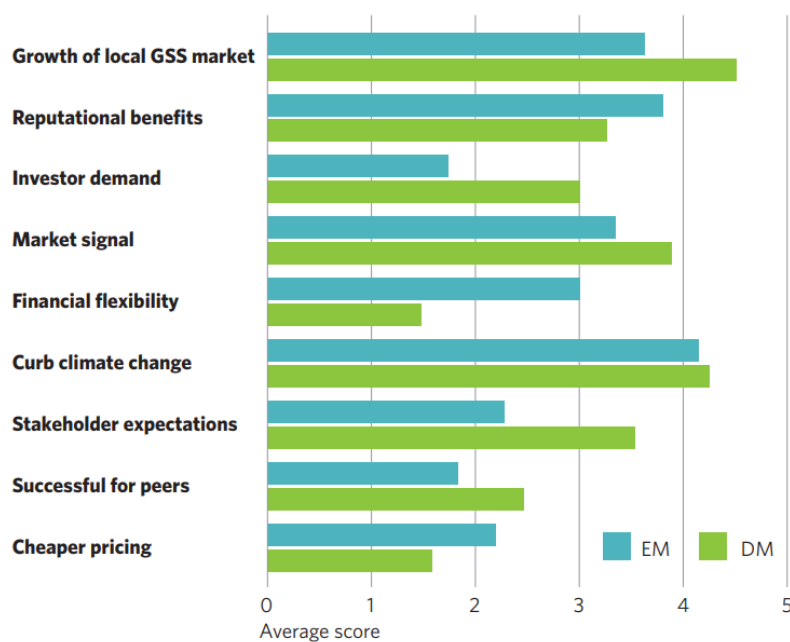
The possibility to promote local capital markets is another reason why governments decide to enter the GSSS bonds markets. By setting precedents, they can act as a role model to private sector issuers. The next guidance note, which will focus on corporate issues, will discuss this aspect in more detail, together with the need to promote local currency issuances.

A recent Climate Bonds Initiative Survey (2021_[28]) found favourable pricing to be but one of several factors that motivate public sector green, social and sustainability (GSS) bond issuances. The main motivation for sovereign issuers from both developed and emerging markets was to use GSS bonds to fulfil the greenhouse gas emission reduction objectives included in each country's Nationally Determined Contributions under the 2015 Paris Agreement.

Other important considerations were the potential to harness reputational benefits and promote local capital markets. Interestingly, for EM sovereign issuers including in ODA-eligible countries, the promise of enhanced financial flexibility was more appealing than to their DM counterparts. Instead, they felt less pressure from investors to provide sustainable finance products (Climate Bonds Initiatives, 2021^[28]).

Figure 3.1. A variety of potential benefits motivate sovereign GSS bond issuance

On a scale of 1-5 where 5 is most motivating, how motivating is each factor in a decision to issue a GSS bond”



Note: The survey covers 19 sovereign issuers out of 22 who have issued GSS bonds as of November 2020: eight from Developed Markets (DM), and 11 from Emerging Markets (EM).

Source: Climate Bonds Initiatives (2021^[28])

Box 3.4. Colombia issued a sovereign green bond with the aim to promote the domestic green bond market

In September 2021, Colombia issued its first sovereign green bond on the domestic market, making it the first country in the region to issue green bonds in local currency. Colombia Ministry of Finance and Public Credit led the effort, with technical support from the IDB and the World Bank.

The bonds were offered on the TES (domestic public debt securities) market as a twin issuance of conventional and green. The two successive issuances (in September and October) totalled COP 1.49 bn and were very successful in attracting a broad and diversified investor base, registering very high levels of demand (five times the amount at auction) and interest rates below those of conventional bonds (greenium).

It is the first time the twin issuance model – launched by Germany in 2020 – is used in an emerging market. The Colombian government's objective in using the model is to develop the local green bond market, offering domestic and international investors a high-quality and liquid investment instrument. Colombia is showing its commitment to not consider its green bond issuances as a one-off, very specific issuance but as a program to be built over time. By doing so, it uses its benchmarking power as a sovereign issuer, and provides liquidity that will help set prices in the local green bond market.

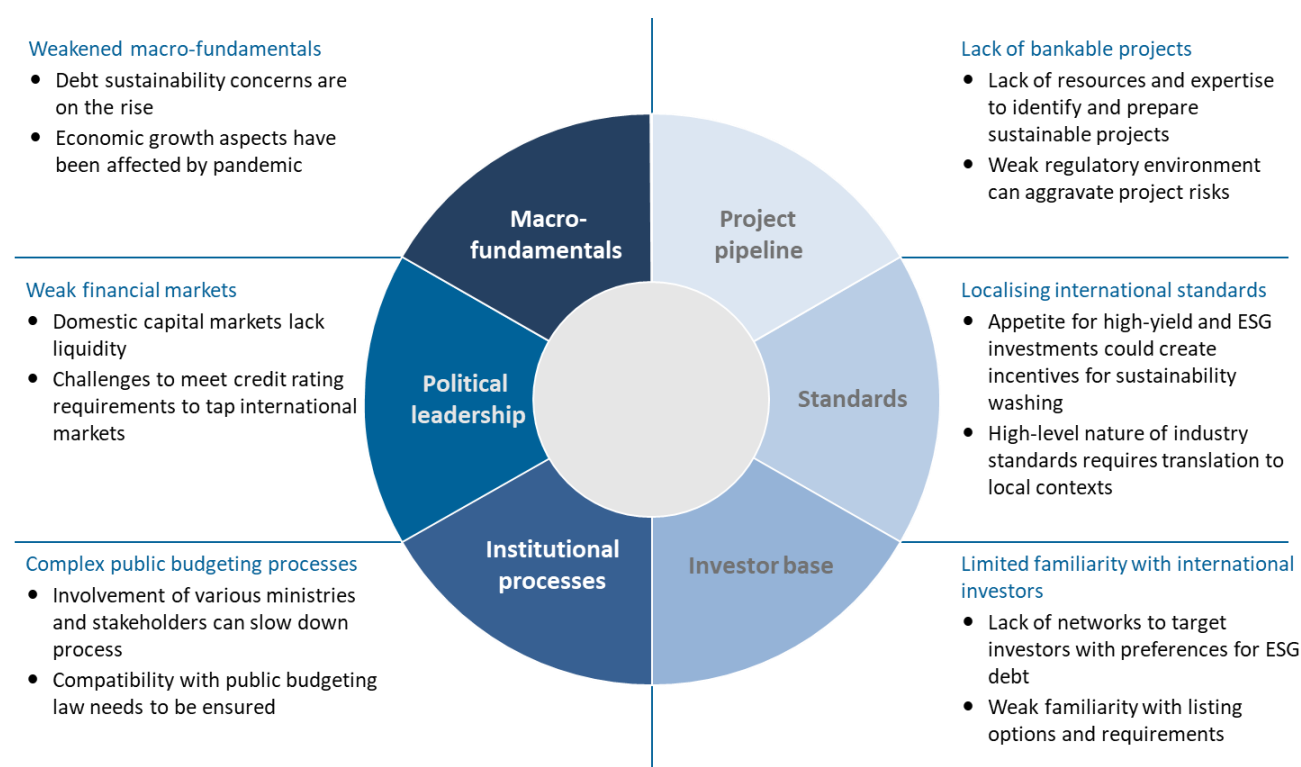
Source: IDB (2022_[31])

4 Where are the roadblocks to issuing GSSS bonds at scale?

Issuers in developing countries face a number of obstacles to issuing GSSS bonds, both use-of-proceeds green, social and sustainability as well as sustainability-linked bonds.

The obstacles can be of a purely technical nature at the project level but they can also occur at the more systemic and political levels. Figure 4.1 summarises the key challenges for the issuance of GSSS bonds in the public sector that were identified by the authors' desk research and stakeholder consultations. They are linked to the bankability and size of the underlying projects, the macroeconomic environment and market infrastructure as well as incompatible political institutional processes.

Figure 4.1. Key challenges to GSSS bond issuances run the gamut from technical to macroeconomic and political bottlenecks



Source: Authors' illustration

4.1 Lack of bankable projects

In many developing country contexts, there is a lack of bankable projects in general, let alone for 'sustainable' projects, which is among the key bottlenecks preventing the use-of-proceeds, or green, social and sustainability (GSS), bond market in developing countries from taking off. Large-scale infrastructure projects, in particular, have lengthy development periods and involve complex feasibility studies and costly transaction advice from legal and financial experts. Project development costs for infrastructure projects can be as high as 5-10% of the total project cost.

Governments and specific public agencies and institutions can develop project pipelines to highlight the scale and scope of investment opportunities and communicate the available tools and policies (OECD, 2018^[32]). In developing countries, especially at the sub-national level, governments often lack the resources and financial and technical expertise to identify and prepare projects compatible with the investment requirements of global instruments and investors (Akhtar, Qian and Rimaud, 2021^[33]). This includes the setting of strong eligibility criteria based on expectations about environmental and social returns and risks while ensuring economic viability, or bankability.

However, when broken down into its components, such as credit risk, legal liabilities, currency exposure, etc. the lack of bankability can be effectively addressed. Expert interviews reveal that dedicating enough of the project budget and resources to improve the design and structure of the project would often make it commercially viable.

Public and private sector collaboration, underpinned by effective financial and contractual structures, is key to ensuring bankability (APEC/OECD, 2019^[34]). When barriers to private sector investment are identified, structured, and managed, investments in local government projects can be highly attractive to commercial investors. In the renewable energy sector, for example, various risks including the risk of unstable subsidies and off-taker risk, as well as the lack of proper transmission infrastructure, can deter private investors from entering a developing country market. Through effective contractual arrangements between the private and public sector, it is possible to re-allocate and mitigate the different types of risks to build pipelines of sustainable projects (Hovy, 2015^[35]).

Local governments can benefit from working more closely with international and domestic public development banks in this process. Multilateral and international bilateral development banks are backed by strong credit ratings and can offer financing at attractive rates. They also bring knowledge and experience from different regions. In comparison, national development banks have strong connections to local markets and actors, and they provide long-term financing in local currency (OECD/The World Bank/UN Environment, 2018^[36]).

Often, green, social and sustainable projects in developing countries are too small to justify the costs of issuing bonds. For example, many green projects implemented in developing countries are often small in scale and do not meet the minimum size requirement by investors (Banga, 2019^[37]). This is also especially true for projects at the municipal level. Since institutional investors are typically interested in large ticket sizes, the small size of projects is a hurdle to tapping the GSS bond market. Furthermore, it may not justify the costs of hiring bankers and lawyers that are required to arrange issuance and place the bond.

By comparison, sustainability-linked bonds are not inherently project-linked. Yet, issuers are faced with a similar challenge to identify and create investment opportunities that generate sufficient economic returns while achieving development impact that moves issuers closer to meeting the sustainability targets and key performance indicators of their SLBs. This calls for efforts to link up public expenditure and investment plans with Nationally Determined Contributions (NDC) or sustainable development strategies, which trickle down into local and sectoral levels.

Public sector actors' efforts to tap into GSSS bonds should therefore build on and leverage efforts such as NDC Implementation Roadmaps and Integrated National Financing Frameworks (INFFs), which are

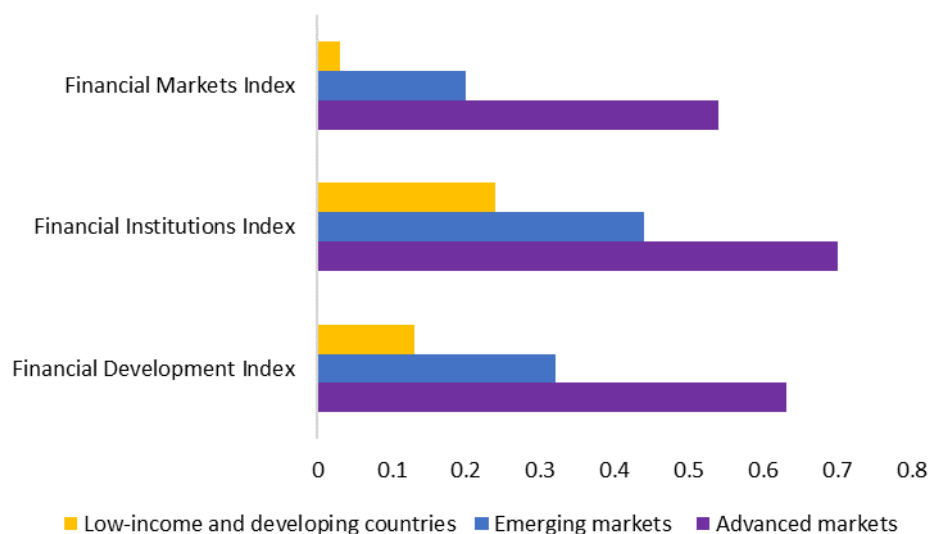
frameworks for building a more holistic, public and private, approach to financing sustainable development at the national level. Currently, more than 70 countries use INFFs and more than half of them have formalised or are formalising INFF Oversight Committees. Their success will hinge on countries' ability and political will to translate them into concrete investment plans and viable pipelines of projects (INFF, 2021^[38]).

4.2 Weak financial markets

In many emerging markets, especially ODA-eligible countries, domestic financial markets including public debt markets remain underdeveloped. The IMF's Financial Development Index, which measures the level of maturity of the financial sector in countries, is a composite index that combines indicators on financial institutions and financial markets. Figure 4.2 is based on the IMF Financial Development Index and illustrates that, on average, the difference between advanced markets on the one hand and emerging and developing country markets on the other hand are more pronounced for financial markets compared to financial institutions.

Capital markets in developing countries have low liquidity and depth, which makes them volatile and drives up the costs of raising capital including through bonds. Apart from pension funds, which have shown significant growth, institutional investors are usually lagging and retail investors' participation remains small.

Figure 4.2. Underdeveloped financial markets are a bottleneck to GSSS bond issuance



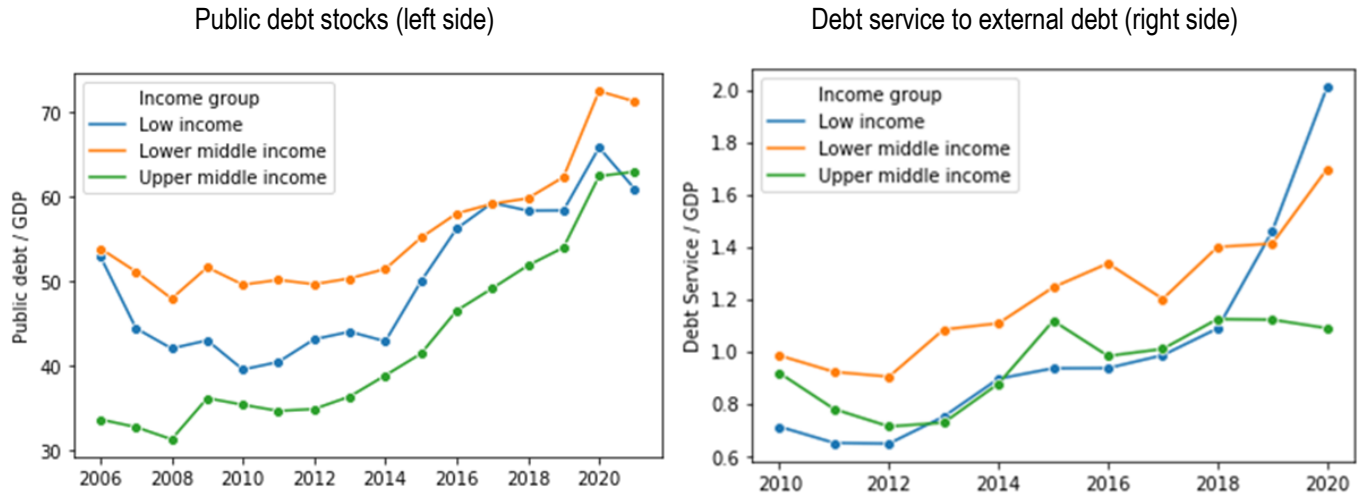
Source: IMF Financial Development Index database, <https://data.imf.org>

4.3 Debt sustainability concerns

Amidst intensifying concerns around debt sustainability, fiscal space to issue GSSS bonds can be limited. Public debt levels have increased in developing countries since 2013. Initially linked with increased investment levels and growth rates, the expansion in public debt became less sustainable as it translated less into growth and government revenues (OECD, forthcoming).

The levels of debt service increased as well, accounting for a growing part of GDP and government revenues. For low-income countries, debt service increased from about 0.7% to 0.9% from 2010 to 2016, but jumped to 1.4% even before the COVID-19 crisis hit. The recession of 2020 caused it to double in just two years (OECD, forthcoming).

Figure 4.3. Public debt trends in developing countries



Note: Based on World Bank International Debt Statistics (2021) and IMF World Economic Outlook
Source: OECD, forthcoming

Efforts are underway to release the debt burden of some countries to free up capital for sustainable investment projects. GSSS bonds can be an effective way to structure such arrangements. For countries with high levels of public debt that would prevent them from making important investments to advance on global climate and development goals, proposals have been made to swap projected debt payments against commitments for action on climate and biodiversity (Volz, 2021^[39]). Such transactions can be underpinned by the issuance of GSSS bonds, as shown in the recent example of the Belize debt-to-nature swap (see below).

There may be limitations to replicating these transactions at scale, though. The IMF postponed unveiling a debt-for-climate swap program with the World Bank at COP26 due to limited progress on a specific proposal. Debt swaps can have high transaction costs, and the interest from private creditors is not guaranteed (Landers and Lee, 2021^[40]).

Box 4.1. Belize Debt-for-Nature Swap

As part of its Blue Bonds for Ocean Conservation program, the Nature Conservancy (TNC) issued a USD 364 million blue bond in November 2021, passing on the proceeds to the Belize government in the form of a blue loan. The US Development Finance Corporation provided political risk insurance to enhance repayment prospects for the new debt, which helped enable an investment grade rating for the TNC blue bond.

The government, in turn, used the loan to repurchase, at 55 cent on the dollar, a portion of its USD 550 million eurobonds due to mature in 2034. This will help to reduce debt service costs and improve long-term debt sustainability.

A portion of the financing, USD 23.5 million, is placed into an endowment that sets aside funding for marine conservation accessible from 2041, contributing to the protection of Belize's marine ecosystems. The government will also establish a conservation fund that will be capitalized by the government of Belize through payments of approximately USD 4 million over 20 years. This fund will support marine and coastal conservation projects. In addition, TNC and Belize agreed to numerous conservation commitments and milestones.

Source: Credit Suisse (2021^[41])

4.4 Complex public budgeting processes

Political leadership has to drive GSSS bond issuances at the sovereign and sub-sovereign level.

The public budget decision-making is a complex process involving diverse ministries. Leaders have to champion the GSSS bonds to convince the different stakeholders to build alliances. This in turn hints at a key benefit of GSSS bond issuances in the public sector. Working together on a GSSS bond issuance can bring together different ministries aligning their priorities around sustainability objectives.

According to a Climate Bonds Initiative survey, sovereign issuers in emerging markets pointed at the Ministry of Finance as the most important contributor to the decision to issue GSSS bonds. Many of the survey respondents also established working groups dedicated to their bond issuance, with representation from different ministries and other bodies. Working groups were responsible for tasks such as identifying green expenditures and supporting the preparation of disclosure (Climate Bonds Initiatives, 2021^[28]).

According to the experts interviewed, ensuring that GSSS bond requirements are in line with national and local public budget laws is often a key consideration in both developed and developing countries. This includes the ability to maintain existing accountability mechanisms as well as the independence over budget decisions.

Developing a compelling narrative and robust framework is key to a successful issuance, but adds to the costs of financing. Unlike for corporates, government use-of-proceeds or GSS bonds often finance expenditures rather than projects, and these expenditures are usually existing ones. Interviews with successful developing country issuers confirm that, to convince and attract investors with an ESG focus, it is therefore important to ensure that the selection and exclusion criteria for expenditures are transparent, rigorous and based on a theory of change of how the financing raised through the bond contributes to sustainability objectives.

In the case of project-based GSS bonds, this involves mechanisms to continuously screen and monitor the projects to ensure that they reflect the most recent technological standards and guidelines on climate

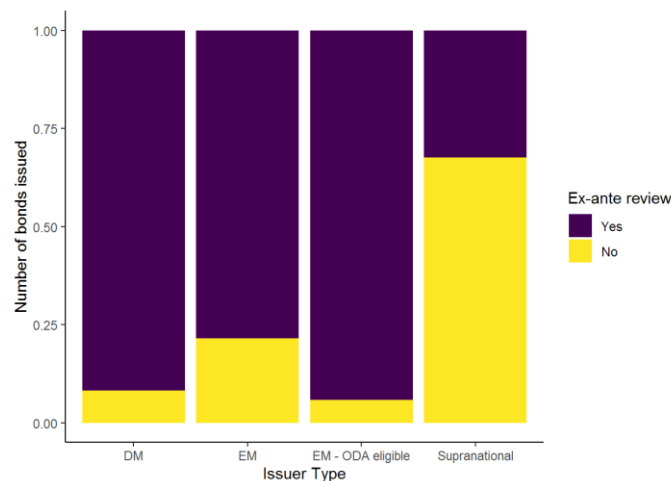
mitigation and adaptation. This requires a significant amount of human resources and technical expertise, which is often lacking in a developing country context.

Often, the bond framework, the document that discusses the internal processes of the issuer to ensure compliance with GSS bond standards, passes an external review, for example by second-party opinion or third-party assurance providers (such as accountancy firms and specialised research agencies). Based on the data of the LGX DataHub, 94% of issuers in ODA-eligible countries pass an ex-ante external review of their bond frameworks. This share is higher than for all other categories, i.e. 92% for developed markets, 78% for non-ODA eligible emerging markets and 32% for supranational issuers. This suggests that for GSSS bonds from ODA-eligible countries, issuers have more incentives to opt for external verification. External verification can signal credibility to investors and may increase the greenium (Simeth, 2022^[42]).

Obtaining such external verification involves additional costs ranging from USD 10 000 to USD 100 000, which in some cases can be a barrier, especially for issuers at the sub-sovereign level looking to issue smaller volumes.

Figure 4.4. Most GSSS bond have an external ex-ante review, indicating this to be a market imperative

Share of number of issuances with or without an ex-ante external review



Source: Authors' calculations based on LGX Datahub (2021^[14]).

4.5 Localising international standards

There is a tension between the need to make the market accessible to developing country issuers, while avoiding green or sustainability washing. There are risks that the high appetite for high-yield instruments and ESG investments will create incentives for both investors and issuers to make undue use of GSSS labels. Moreover, the high-level and voluntary nature of standards that have been guiding issuers may not be applicable to developing country contexts, where transparent market practices are relatively less established.

The Emerging Market Investor Alliance has developed “Enhanced Labelled Bond Principles” to provide more prescriptive guidance on the institutions, practices and processes necessary for a GSSS bond issuance. Among others, these principles require project and expenditure selection committees to have independent oversight and ask issuers to provide annual impact reporting on the projects financed and expenditures made. Enhancing market discipline will come at additional costs, though.

Box 4.2. The Emerging Markets Investors Alliance (EMIA) Enhanced Labelled Bond Guidance

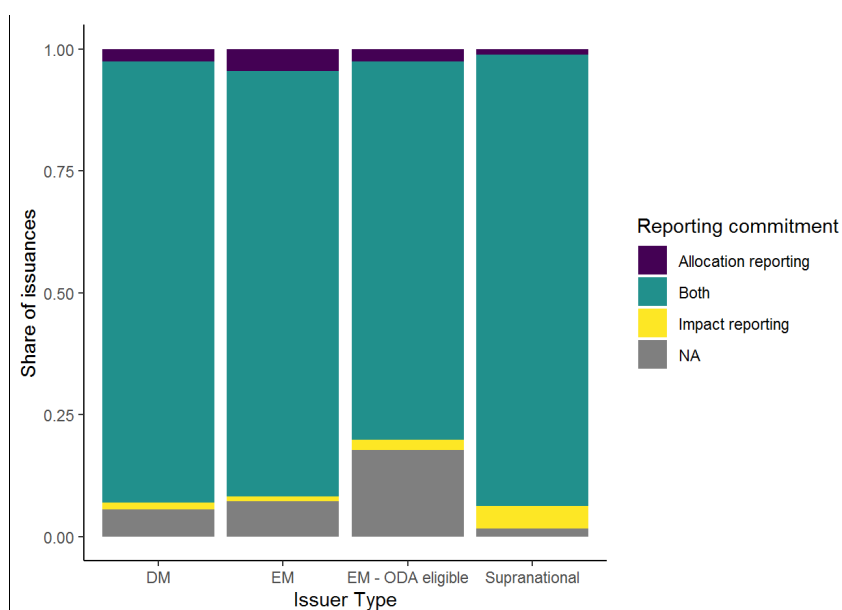
Following a robust consultative process with asset managers and other stakeholders in emerging market sustainability capital markets, EMIA developed enhanced standards for labelled bond issuance to diminish greenwashing, promote standardisation and transparency and contribute to the development of the labelled bond market, while serving sustainability efforts. EMIA will continue to identify challenges throughout the lifecycle of debt issuance and work to find ways to increase the quality of material E, S and G conditions in loan, bond and official sector structures.

Source: Emerging Markets Investors Alliance (2022^[43])

For example, ex-post reporting requirements to verify that the use of proceeds serve the stated purposes often present a burden to the capacity and resource-constrained issuers. Based on the LGX DataHub data, ODA-eligible EM issuers lag behind other issuers in terms of their ex-post reporting commitments. The share of issued amounts not covered by ex-post reporting is the highest among the groups, at 17.8%.

Figure 4.5. Ex-post reporting can be challenging to some issuers in ODA-eligible EM

Breakdown of the type of ex-post reporting commitments of GSSS bond issuance amounts



Source: Authors' calculations based on LGX Datahub (2021^[14])

For public sector actors, whose expenditures and investments are naturally geared towards social impacts, developing suitable indicators can be especially challenging. As mentioned in Chapter 2, developing country issuers have shown themselves quite open to embracing sustainability and sustainability-linked instruments. But these are often the instruments with the greatest needs for customisation to local contexts. Social indicators need to take into account the heterogeneity of the institutional, economic, political, cultural, and natural resources of communities (Le Roy, Offredi and Ottaviani, 2015^[44]). Social impact is particularly dependent on the norms and values of the societies they are grounded in, and there is less room for universally applicable measures.

According to the expert interviews conducted for this paper, ensuring integrity can be especially challenging for sustainability-linked bonds, highly sophisticated instruments that have been relatively less tested, even in advanced markets. There may be a need to observe how the key performance indicators and science-based targets that are currently being used stand the test of time, and how they influence the behaviour of issuers. A particular concern relates to the step-up features that would penalise issuers for not meeting their key performance indicator targets. In the case of developing country issuers, especially governments, investors may be hesitant to make use of this feature for fear of creating a reputation of asking for excessive yields.

At the same time, there is a concern that overly rigorous standards may become an insurmountable burden for issuers from ODA-eligible markets. In particular, the criteria currently in use to evaluate how green, social and sustainable an issuance is are not adapted to various local and development contexts, as they face resource constraints to comply with reporting standards. Expert interviews repeatedly pointed to the significant bottlenecks that remain in the form of weak data availability and reliability to inform baselines and indicators. For government bonds, different ministries and departments who are responsible for the relevant expenditures and projects financed with the bond will have to report on the use of proceeds, the impact of projects, or the achievement of sustainability targets. This can further complicate the process of data collection and management.

Moreover, developing country issuers may be faced with trade-offs between climate and development needs, but there is little agreement on how to account for these trade-offs. According to recent developing country issuers, investors and also external verifiers may have limited knowledge about local development contexts and, therefore, fail to recognise the full extent of a project's contribution towards development goals when applying criteria that have evolved around developed country market needs. The active involvement of local actors including governments, national development banks as well as local institutional investors is necessary to develop and flesh out GSSS bond standards in a way that fits local realities.

The 'green', 'social' and 'sustainable' in GSSS is highly contingent on context. Adapting to local contexts requires that evaluation criteria are formulated in relative terms, with a due regard for the baseline and industry averages. The CICERO Shades of Green evaluation methodology foresees different shades of green depending on their contribution to a low-carbon future. The assessment of the shade of green depends on the country context, such that what might be considered bad practice in one country may be acceptable in another. SPO providers consulted through interviews and webinars maintain that, while projects involving the use of fossil fuels are not normally considered green, for countries in which it is deemed unrealistic for fossil fuels to be completely phased out, significant emissions savings can qualify a project as green. This was the case for a sovereign green bond issued in Indonesia that was used to finance electric and fossil fuel public transportation. Moreover, different countries have different development priorities. Whereas DMs are increasingly placing emphasis on decarbonisation, this issue has less salience in lesser polluting EMs with highly pressing social challenges such as food security, conflict and access to energy.

There is a lack of evidence on the nature and extent of the contribution that projects in developing countries can make towards sustainability objectives. According to expert interviews, establishing an evidence base about how certain types of projects and expenditures help countries make progress towards climate and sustainability goals can help overcome the gap in understanding between local issuers and international investors. Green, social, sustainability and sustainability-linked qualifications are not mutually exclusive, and more evidence can shed light on the synergies between different labels. For instance, anecdotal evidence suggests that green bond issuances often require demonstrated social benefits and considerations to protect affected communities.

4.6 Limited familiarity with international investors

While the opportunity to broaden the investor base is among the key benefits of a GSSS bond issuance, developing country issuers can face difficulties in realising this potential. Listing the bond on an international stock exchange with a focus on green finance can help to access a broader and diverse investor base because it brings greater visibility and has reputational benefits. Sometimes, these stock exchanges require enhanced transparency requirements which can add to the reputation of the issuer. Moreover, listed instruments can be included in green bond and other sustainable finance indices. Admission to list at, for instance, the Luxembourg Stock Exchange and being displayed on its Luxembourg Green Exchange (LGX), a platform exclusively dedicated to sustainable securities, which provided the data for the analysis in Chapter 2, is often used in investor roadshows as proof of the ESG profile of a bond.

However, some developing country issuers are less familiar with the requirements and different options of listing their debt instruments on international stock exchanges. For example, in the case of the Luxembourg Stock Exchange and its green platform LGX, there are several listing options, depending on whether issuers seek access to trading, the currency of the issuance and implications for the clearance of the instruments. Furthermore, developing country issuers can face difficulties in targeting investors from international markets, for lack of networks and knowledge about their priorities and preferences.

Developing country issuers may also fail to meet international investors' credit rating requirements. Institutional investors such as insurance companies and pensions funds often have a rigid policy of limiting their bond investments solely to investment-grade issues. This excludes many developing country GSSS bonds including from sovereign and sub-sovereign issuers. Out of 155 sovereign issuers with internationally recognised credit ratings, 93 have a rating of less than BBB, which is considered investment grade (TradingEconomics, 2021^[45]). Even for those governments who were able to tap international bond markets in the past, credit conditions are likely to tighten in a post-pandemic environment.

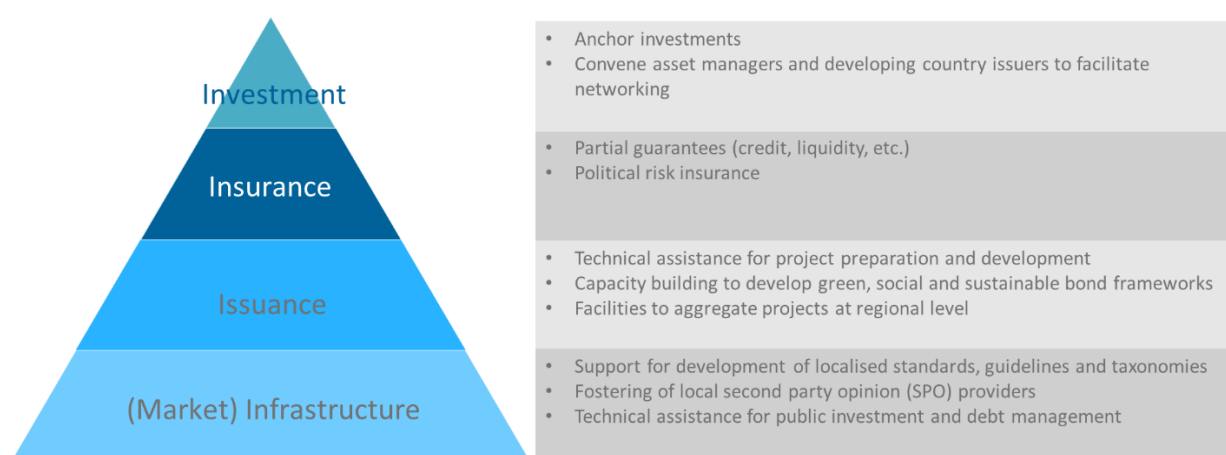
By comparison, the local investor base, which would naturally have a greater tolerance and understanding of country-specific risks, is still developing in most developing countries, and does not yet provide the deep and liquid pools of capital necessary to finance international climate and development goals.

5 What donors can do

Based on their broad-based experience in providing technical assistance and capacity building, as well as their varied country and development expertise, donors can intervene at multiple levels and points to promote public sector GSSS bond issuances in their partner countries. While they can support individual projects and single issuances to create demonstration effects and build momentum, they can also provide technical assistance and capacity building to improve the enabling environment.

The different types of support make up the 'four I's' of donor tools and levers: Improving market infrastructure, facilitating issuances, providing inurance and connecting with investors.

Figure 5.1. The four 'i's of donor tools and levers to scale up GSSS bonds



Source: Authors' illustration

To effect systemic change, all of the four 'i's need to come into play. Donors must partner among themselves as well as with other partners including local and private sector stakeholders, and build on their respective skills and comparative advantages to achieve this.

5.1 (Market) Infrastructure

For successful issuances to arise on a continued basis, the right set of market infrastructure and enabling environment are vital.

Donors can target the development of localised standards and guidelines to ensure market integrity that does not compromise developing concerns. Donors can support regional initiatives supporting the development of regional standards for GSSS bonds. These standards will be anchored in the more high-level international market standards such as the ICMA standards, but they would also provide more detailed and prescriptive guidance for issuers. At the 26th Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, the Association of Southeast

Asian Nations (ASEAN) released the ASEAN Taxonomy for Sustainable Finance to serve as a reference point to guide capital and funding towards activities that can help promote the systemic transformation needed for the region.

Moreover, **donors can fund training to local rating agencies and external verifiers**. Greater familiarity with investor requirements, GSSS bonds principles and best practices will equip these local stakeholders with the skills to develop criteria that meet international requirements and suit the local context.

Technical assistance and capacity building can also target the development of suitable indicators, as well as the collection and management of the data to measure and monitor progress along these indicators. For example, a joint World Bank-IMF project has recently developed a framework for designing and assessing Sovereign SLBs with payments linked to the performance of key climate and nature indicators. This framework provides criteria to judge the appropriateness of sovereign SLB indicators and targets and suggests candidate indicators built from already existing data sources (Flugge, Mok and Stewart, 2021^[46]). Donors could fund similar and further work around the development of such indicators in the form of research projects and country pilots.

Donors can also support efforts to strengthen and harmonise ex-post reporting on the impact of the projects financed through GSSS bonds. The IDB has established the Green Bond Transparency Platform (GBTP)¹⁰, a user-driven, free of charge database. Its objective is to promote the harmonization and standardization of green bond reporting, support investors making well-informed decisions based on non-financial data, and support regulatory decisions. The GBTP is currently focused on Latin America and the Caribbean but may be replicated in other active markets.

Donor support to promote GSSS bonds needs to be accompanied by continued technical assistance and capacity building for prudent debt management and efficient public investment. Caution should be exercised to ensure that the innovative nature and growing investor appetite for GSSS bonds does not give rise to an overenthusiasm without due consideration of the long-term consequences. A debt crisis involving GSSS bonds may put at risk the integrity of this market and the viability of GSSS bonds as tools to finance the Sustainable Development Goals (SDGs) and climate ambitions.

Donors need to build on existing efforts to strengthen public investment and debt management capacities of national and sub-national governments to support them to weigh out the benefits against the costs of GSSS bond issuance, with a view to overall public debt levels in the country.

Systemically including training on GSSS bond issuances in technical assistance programmes for debt and public investment management can create better awareness among policy-makers in developing countries on how to utilise these instruments as part of a fiscally responsible and sustainable financing strategy.

For GSSS bonds to reach scale in developing countries, they need to be embedded in well-functioning local financial markets systems. This requires deep and liquid local currency bond markets, with a broad and diversified local investor base.

The assets underlying the issuance of use-of-proceeds bonds are denominated in local currencies, which are often illiquid in emerging markets and expensive to hedge. Developing local currency bond markets that allow for the issuance and trading of GSSS bonds can alleviate the foreign currency debt burden in those countries while giving them access to sustainable finance opportunities.

Donors can support governments to put in place legal and policy infrastructure that is conducive to the development of diverse financial systems with well-functioning capital markets. This includes appropriate regulation and supervision of financial sector participants, the protection of creditor and debtor rights, the orderly dissolution and reorganisation of businesses, etc.

5.2 Issuances

Donors can help overcome the additional costs of GSSS bond issuance by providing technical assistance and/or covering the fees for external reviews. Targeted support for facilitating specific kinds of issuances can have demonstration effects and help issuers become familiar with the technicalities and requirements of GSSS bond issuances. For example, the Inter-American Development Bank (IDB) supported the Government of Ecuador in the preparation of the documentation and necessary certification for the issuance of a sovereign social bond in 2020.

Donors can also cover the costs of external verification. For example, Singapore's Green Bond Grant Scheme assists eligible issuers with 100% of the costs of an external review up to SGD 100 000, the equivalent of USD 73 000.

Box 5.1. Technical assistance programme by the Luxembourg Stock Exchange

The Luxembourg Stock Exchange is a leading listing venue for international debt securities. In 2016, LuxSE established the Luxembourg Green Exchange (LGX), the world's leading platform for sustainable securities, to help reorient capital flows towards sustainable investment and accelerate the sustainable finance agenda.

LGX has grown in scope, reach and impact over the past 6 years and now offers sustainable finance courses through the LGX Academy, access to structured sustainability data through the LGX DataHub and assistance services to help issuers navigate the pre- and post-issuance processes of sustainable bonds.

Referenced several times in this report, the LGX DataHub currently provides investors and asset managers with centralised, granular and structured data on 7,000+ green, social, sustainability and sustainability-linked bonds, covering close to the entire universe of the world's listed sustainable debt securities, enabling users to compare the environmental or social impact of different products, build sustainable investment strategies and report on these investments.

Donors can substantially expand existing mechanisms and modalities to help build project pipelines that underpin the issuance of GSSS bonds. Multilateral development banks and bilateral development finance institutions (DFIs) are well placed to assist in the preparation of bankable projects. Their support includes the sharing of best practices in project preparation, transaction advisory services, and support to build a project structure that addresses commercial, legal, regulatory, technical, and system operations issues.

There is a number of technical assistance facilities for the preparation of projects. For example, the ADB's ACGF with USD 1 billion of capital mobilised from various concessional sources provides a dedicated technical assistance programme to prepare and structure infrastructure projects in the ASEAN countries. These initiatives are demonstration deals, but they do not yet create the scaling effect necessary to respond to the urgency of the climate crisis.

One way to overcome the challenge of small-sized projects is to encourage the use of privately placed bonds that can be relatively small in size but customised to the needs of both issuers and investors. By giving hands-on support to first-time issuers with a lack of experience in raising funds from capital markets, donors can achieve educational and demonstration effects.

Individual project-based support, however, has limitations in creating the scaling effect necessary to respond to the urgency of the global development and climate needs.

Support to aggregate multiple projects can help to bring issuances to scale. Securitisation refers to the process of transforming a pool of illiquid assets (normally many thousands of separate assets) into tradable financial instruments (securities). The investors' returns on the securities are drawn from the cash flows of the underlying assets, such as loans, leases or receivables against other assets. Loans to small-scale projects can be aggregated and then securitised to reach an adequate deal size for bond markets. Aggregating a multitude of projects, across sub-sovereign governments in developing countries would help to reduce the investment risks of each individual project and borrowing entity (Akhtar, Qian and Rimaud, 2021^[33]).

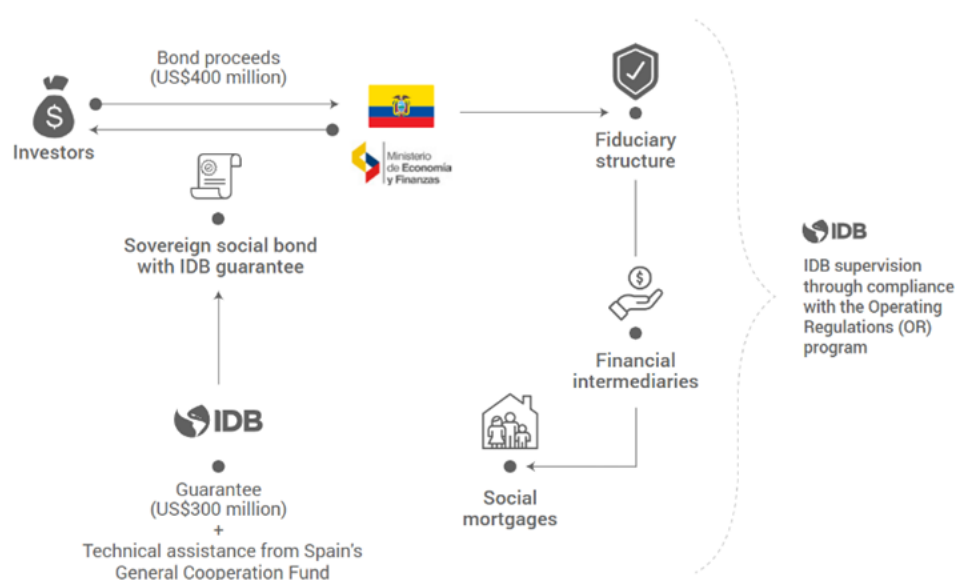
5.3 Insurance

A wide range of credit enhancement tools are available to donors to make the risk-return profile of GSSS bonds more appealing to private investors. Credit guarantees are a “legally binding agreement under which the guarantor agrees to pay part or all of an amount due on a loan, equity, or other instrument in the event of non-payment by the obligor (or loss of value, in the case of investment)” (Garbacz, Vilalta and Moller, 2021^[47]). The providers of guarantees lend their credit rating to the borrower, allowing them to raise debt at lower costs.

For example, the government of Ecuador benefited from a partial credit guarantee of the IDB when issuing the world's first social sovereign bond. Based on the AAA credit rating of the IDB, the guarantee of USD 300 million allowed Ecuador to attract international investors and significantly reduce financing costs. The bond proceeds of USD 400 million are used to develop the public program Casa para Todos, intended to provide access to decent, affordable housing to more than 24 000 families.

Figure 5.2. Ecuador's sovereign social bond issuance benefited from IDB's credit risk guarantee

Ecuador Sovereign Social Bond execution scheme



Source: IDB (2020^[48]).

Donors are increasingly seeking to extend guarantees that cover GSSS bond issuances. The Swedish International Development Cooperation Agency (SIDA) has provided a partial guarantee for a USD 177.5 million social bond that is backed by loans to companies in capital-scarce regions which

operate in the financial inclusion, healthcare and WASH (water, sanitation, hygiene) sectors. SIDA has also recently introduced a guarantee product for sovereign issuers of GSSS bonds.

Some donors and DFIs may face challenges in extending guarantees to sub-sovereign entities or state-owned enterprises (SOEs), because of internal requirements that limit guarantees to only sovereign counterparts. To scale up GSSS bond issuances in the public sector, however, donor support in the form of credit enhancement will be key. Donors can review the feasibility and options of guaranteeing debt issued by sub-sovereign and SOEs as well as the benefits and risks thereof.

Insurance can also be used to mitigate credit risks. Unlike guarantees, however, insurance often includes specific conditions that need to occur before payment takes place, e.g. occurrence of an event, types of damage and losses, etc. Political risk Insurance, in particular, covers private lenders and investors for certain risks of lending to sovereign or sub-sovereign borrowers. Some risks covered entail currency inconvertibility, political force majeure such as war, regulatory risk and fulfilment of government payment obligations.

In the case of the Belize debt swap, the US International Development Finance Corporation provided USD 610 million in political risk insurance to enhance repayment prospects and allowed the government to repurchase USD 553 million of its sovereign debt at a deep discount.

First loss protection in securitised transactions shield investors from a pre-defined amount of financial losses. The credit risk tranching of a portfolio of underlying outstanding loans allows investors to buy parts of the credit risk. If donors purchase the first loss or most subordinated tranches, they are exposed first to the risk of a financial loss, giving reassurance to more senior debt holders.

While these instruments are already in use by donors and DFIs, there is room for more targeted action to promote GSSS bonds. Existing suitable credit enhancement schemes can integrate a preference or special support programme for GSSS bond issuances. Donors could also pool resources for new credit enhancement facilities that provide exclusive support for GSSS bonds. For example, there has been a proposal to mandate the International Development Association (IDA) to extend policy-based guarantees (PBGs) to issue GSSS bonds.

Box 5.2. Proposal to set up IDA guarantee scheme for GSSS bond

According to a proposal released by the Center for Global Development, the World Bank could consider using its International Development Association's (IDA) PBGs, a partial risk guarantee mechanism for sovereign bonds or loans from commercial banks, to support the issuance of GSSS bonds.

IDA would work with the borrowing government to establish a list of projects or programs that the bond would finance over its lifetime. The type of bond could range from green to social or sustainability depending on the country's priorities.

The proposal suggests the use of IDA's non-concessional scale-up facility. This would ensure that the guarantee does not come out of a country's performance-based allocation envelope. Otherwise, each dollar assigned to a guarantee would reduce a country's overall IDA programme by 25 cents, which deterred some countries from applying for guarantees in the past.

In light of the high demand for GSSS bonds, such a scheme would present an efficient and catalytic use of IDA resources that enables risk sharing with the private sector by crowding in private investments towards programs with a social or environmental objective.

Based on past success with PBGs, it can be expected that this support would drive down a country's borrowing costs and/or lengthen maturities for the bonds. For instance, an IDA PBG covering 40% of a USD 1 billion Eurobond issuance helped Ghana achieve a 15-year tenor—the longest achieved in sub-Saharan Africa at the time, with the exception of South Africa—and reduced yields by 150-200 basis points.

Source: Laders (2020^[49]).

5.4 Investment

Donors can promote GSSS bonds by acting as anchor or cornerstone investors, signalling to investors the viability and ESG focus of the bond and enhance its perceived credibility. This helps the issuing company seeking funding to build investor confidence, catalysing investments from a wider pool of private actors.

IFC has pioneered the role as an anchor investor in developing country green bonds. In partnership with the European asset manager Amundi, IFC launched the world's largest green-bond investment vehicle focused on emerging markets: the Amundi Planet Emerging Green One fund. Over the first seven years of its operations, the fund is expected to deploy USD 2 billion into emerging-markets green bonds. IFC provided an anchor investment of USD 256 million, which helped mobilise roughly four times this amount or about 1 billion USD from private institutional investors.

Bilateral donors and DFIs are currently exploring ways to systematically use their balance sheets to purchase GSSS bonds from developing countries. Based on their expertise and track record as lenders in developing countries, DFIs have a comparative advantage in identifying profitable and viable bonds. In the case that existing DFI clients are the issuers of the bonds, DFIs can leverage established modes of collaboration and communication to help ensure that high market standards regarding impact as well as transparency and disclosure will be established.

However, current rules on ODA eligibility do not clearly define how a bond investment from a DFI would be treated and whether it would qualify as ODA. The ODA eligibility and accounting method of bond investments will need to be discussed and clarified at the OECD Development Assistance Committee

(DAC) Working Party on Development Finance Statistics, and may bring greater clarity and impetus for donor support.

Donors can also sponsor and organise initiatives to bring together developing country issuers with potential investors from the private sector. Donors often support international platforms and initiatives aimed at channelling private investments for the SDGs. Shifting the attention and agendas of these platforms towards greater integration of GSSS bonds as a tool to scale up financing for sustainable development can help to generate momentum.

For example, the Global Investors for Sustainable Development (GISD) Alliance is a UN-led effort consisting of 30 leaders of major financial institutions and corporations that has the mission to deliver concrete solutions to scale-up long-term finance and investment in sustainable development. In 2020, the GISD made a call to action encouraging companies, governments, and other entities to address the global COVID-19 pandemic and support a sustainable recovery through COVID-themed social bonds that are aligned with the SDGs (GISD, 2020_[50]).

By organising networking events to facilitate the relationship building between institutional investors and developing country issuers, donors can help to familiarise the different stakeholders with each other's needs and concerns, working towards common solutions including through the use of blended finance tools to enable concrete marketable transactions.

The OECD's Community of Practice on Private Finance for Sustainable Development can be used as one venue to convene private sector, developing country policy-makers and development professionals. As a platform for dialogue and a forum for discussion and information sharing among DAC members and between DAC members and the private sector and other key stakeholders on blended finance and impact, it can serve to identify and share best practices and exchange ideas and new models to better enable developing country issuers to tap into GSSS bond markets.

References

- Alayza, N. and M. Caldwell (2021), *Financing climate action and the Covid-19 pandemic; an analysis of 17 developing countries*, World Resources Institute, https://files.wri.org/d8/s3fs-public/2021-10/financing-climate-action-covid-19-pandemic.pdf?VersionId=TMOS7TyYBnE9FAhjVZWubqBGrc_k1ycm. [6]
- Amundi Asset Management; International Finance Corporation (2021), *Emerging Market Green Bonds Report 2020*, <https://www.ifc.org/wps/wcm/connect/Ofab2dcd-25c9-48cd-b9a8-d6cc4901066e/2021.04+-+Emerging+Market+Green+Bonds+Report+2020+-+EN.pdf?MOD=AJPERES&CVID=nBW.6AT>. [21]
- APEC/OECD (2019), *Financing Infrastructure in APEC Economies: APEC/OECD Report on Selected Effective Approaches*, <https://www.oecd.org/finance/private-pensions/Financing-infrastructure-in-APEC-economies-selected-effective-approaches-2019.pdf>. [34]
- Banga, J. (2019), “The green bond market: a potential source of climate finance for developing countries”, *Journal of Sustainable Finance and Investment*, Vol. 9/1, <https://doi.org/10.1080/20430795.2018.1498617>. [37]
- Bank of International Settlements (2021), *Debt securities statistics*, <https://www.bis.org/statistics/secstats.htm>. [15]
- BOAD (2021), “The West African Development Bank (BOAD) issues the first African sustainability bond”, <https://www.boad.org/en/the-west-african-development-bank-boad-issues-the-first-african-sustainability-bond/>. [30]
- Caumes, A. and C. Merle (2021), “Republic of Benin’s trailblazing €500m 12,5-Y inaugural issuance under its new SDG Bond Framework”, <https://gsh.cib.natixis.com/our-center-of-expertise/articles/republic-of-benin-s-trailblazing-500m-12-5-y-inaugural-issuance-under-its-new-sdg-bond-framework>. [26]
- CBI (2015), *Scaling up green bond markets for sustainable development*, https://www.climatebonds.net/files/files/GB-Public_Sector_Guide-Final-1A.pdf. [51]
- Cevik, S. and J. Jalles (2021), *Why Climate Change Vulnerability Is Bad for Sovereign Credit Ratings*, IMF Blog, <https://blogs.imf.org/2021/02/17/why-climate-change-vulnerability-is-bad-for-sovereign-credit-ratings/>. [23]
- Climate Bonds Initiative (2021), *Green Bond Pricing in the Primary Market H1 2021*, <https://www.climatebonds.net/resources/reports/green-bond-pricing-primary-market-h1-2021>. [20]

- Climate Bonds Initiative (2020), *Sustainable Debt: Global State of the Market*, [52]
https://www.climatebonds.net/files/reports/cbi_sd_sotm_2020_04d.pdf.
- Climate Bonds Initiatives (2021), *Sovereign Green, Social, and Sustainability Bond Survey*, [28]
<https://www.climatebonds.net/files/reports/cbi-sovereign-green-social-sustainability-bond-survey-jan2021.pdf>.
- Credit Suisse (2021), “Credit Suisse finances The Nature Conservancy’s Blue Bond for marine conservation for Belize”, [41]
<https://www.credit-suisse.com/about-us-news/en/articles/media-releases/credit-suisse-finances-the-nature-conservancys-blue-bond-for-marine-conservation-for-belize-202111.html>.
- Dembele, F., R. Schwarz and P. Horrocks (2021), *Scaling up Green, Social, Sustainability and Sustainability-linked Bond Issuances in Developing Countries*, OECD Publishing, Paris, [1]
<https://www.oecd.org/dac/financing-sustainable-development/blended-finance-principles/documents/scaling-up-green-social-sustainability-sustainability-linked-bond-issuances-developing-countries.pdf>.
- Emerging Markets Investors Alliance (2022), *Enhanced Labeled Bond Principles*, [43]
<https://www.emia.org/sites/default/files/2022-03/emia-enhanced-labeled-bond-principles-2022.pdf>.
- Fitch Ratings (2021), “Green Bond Fund AUM Up 80% yoy at End-1Q21; Credit Risk Rises”, [17]
<https://www.fitchratings.com/research/fund-asset-managers/green-bond-fund-aum-up-80-yoy-at-end-1q21-credit-risk-rises-27-05-2021>.
- Flugge, M., R. Mok and F. Stewart (2021), *Striking the Right Note: Key Performance Indicators for Sovereign Sustainability-Linked Bonds*, World Bank Group, [46]
<https://documents1.worldbank.org/curated/en/935681641463424672/pdf/Striking-the-Right-Note-Key-Performance-Indicators-for-Sovereign-Sustainability-Linked-Bonds.pdf>.
- G20 (ed.) (2021), *Subnational government infrastructure financing for carbon neutrality*, [33]
https://www.g20-insights.org/policy_briefs/subnational-government-infrastructure-financing-for-carbon-neutrality/.
- Garbacz, W., D. Vilalta and L. Moller (2021), *The role of guarantees in blended finance*, OECD Publishing, Paris, [47]
<https://doi.org/10.1787/730e1498-en>.
- GISD (2020), *Call to Action for COVID-19 Bond Issuance*, GISD, [50]
https://www.un.org/development/desa/financing/sites/www.un.org.development.desa.financing/files/2020-09/GISD%20Alliance_COVID-19%20bonds%20call%20to%20action_28%20Aug.pdf.
- Harrison, C. (2022), *Green Bond Pricing in the Primary Market H2 2021*, Climate Bonds Initiative, [18]
https://www.climatebonds.net/files/reports/cbi_pricing_h2_2021_02g.pdf (accessed on 3 August 2022).
- Harrison, C. (2021), *Green Bond Pricing in the Primary Market H2 2020*, Climate Bonds Initiative, [19]
https://www.climatebonds.net/files/reports/cbi_pricing_h2_2020_01e.pdf (accessed on 3 August 2022).
- Harrison, C., M. MacGeoch and C. Michetti (2022), *Sustainable Debt Global State of the Market 2021*, Climate Bonds Initiative. [13]

- Hovy, P. (2015), *Risk Allocation in Public-Private Partnerships: Maximizing value for money*, IISD, <https://www.iisd.org/system/files/publications/risk-allocation-ppp-maximizing-value-for-money-discussion-paper.pdf>. [35]
- IDB (2022), *Colombia Sovereign Case Study*. [31]
- IDB (2020), *5 Key Points of Ecuador's Sovereign Social Bonds*, https://publications.iadb.org/publications/english/document/5_Key_Points_of_Ecuador's_Sovereign_Social_Bonds_en.pdf. [48]
- IDB (forthcoming), *Reporting for Sovereign & Sub-Sovereign Green Bond Issuers*. [25]
- INFF (2021), *Integrated national financing frameworks country progress*, <https://inff.org/assets/resource/inffs-country-progress---update-from-inff-dashboard---april-2021-1625179255.pdf>. [38]
- IPCC (2022), *Climate Change 2022: Impacts, Adaptation and Vulnerability*, <https://www.ipcc.ch/report/ar6/wg2/>. [2]
- Kirchhofer, X. (2021), *Measure to manage: How countries identify climate-relevant expenditures in their budgets*, World Bank Group, Washington D.C., <https://blogs.worldbank.org/governance/measure-manage-how-countries-identify-climate-relevant-expenditures-their-budgets>. [27]
- Landers, C. (2020), *Addressing Private Sector Debt through Sustainable Bond Guarantees*, CGDev, <https://www.cgdev.org/blog/addressing-private-sector-debt-through-sustainable-bond-guarantees>. [49]
- Landers, C. and N. Lee (2021), *Belize's Big Blue Debt Deal: At Last, A Scalable Model?*, Center for Global Development, <https://www.cgdev.org/blog/belizes-big-blue-debt-deal-last-scalable-model>. [40]
- Le Roy, A., C. Offredi and F. Ottaviani (2015), "The Challenges of Participatory Construction of Social Indicators of Well-Being", *Social Indicators Research*, Vol. 120, pp. 689–700, <https://doi.org/10.1007/s11205-014-0622-x>. [44]
- LGX (2022), "LGX DataHub". [55]
- Luxembourg Stock Exchange (2021), *LGX Datahub*, <https://lgxhub-premium.bourse.lu>. [14]
- OECD (2022), *Amounts mobilised from the private sector for development*, <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/mobilisation.htm>. [8]
- OECD (2021), *COVID-19 spending helped to lift foreign aid to an all-time high in 2020*, OECD Publishing, Paris, <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data/ODA-2020-detailed-summary.pdf>. [7]
- OECD (2021), *Creditor Reporting System*, <https://stats.oecd.org/Index.aspx?DataSetCode=crs1>. [53]
- OECD (2021), *Global Outlook on Financing for Sustainable Development 2021: A New Way to Invest for People and Planet*, OECD Publishing, Paris, <https://doi.org/10.1787/e3c30a9a-en>. [12]

- OECD (2021), *Mobilising institutional investors for financing sustainable development in developing countries: Emerging evidence of opportunities and challenges*, OECD Publishing, Paris. [24]
- OECD (2021), *OECD Sovereign Borrowing Outlook 2021*, OECD Publishing, Paris, <https://doi.org/10.1787/48828791-en>. [11]
- OECD (2020), *Economic Outlook*, OECD, <https://doi.org/10.1787/39>. [3]
- OECD (ed.) (2020), *OECD Economic Outlook*, OECD Publishing, Paris, <https://doi.org/10.1787/39a88ab1-en>. [5]
- OECD (2020), *OECD Sovereign Borrowing Outlook 2020*, OECD Publishing, Paris, <https://doi.org/10.1787/dc0b6ada-en>. [10]
- OECD (2018), *Developing Robust Project Pipelines for Low-Carbon Infrastructure, Green Finance and Investment*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264307827-en>. [32]
- OECD (forthcoming), *COVID-19 and development finance flows*. [22]
- OECD/The World Bank/UN Environment (2018), *Financing Climate Futures: Rethinking Infrastructure*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264308114-en>. [36]
- SIFMA (2021), *Capital Markets Fact Book 2021*, <https://www.sifma.org/resources/research/fact-book/>. [9]
- Simeth, N. (2022), “The value of external reviews in the secondary green bond market”, *Finance Research Letters*, Vol. 46, <https://doi.org/10.1016/j.frl.2021.102306>. [42]
- top1000funds.com (2021), *Sustainability Digital*, top1000funds.com, <https://www.top1000funds.com/2021/03/how-can-bond-investors-impact-emerging-market-development/>. [16]
- TradingEconomics (2021), *Credit Rating*, <https://tradingeconomics.com/country-list/rating>. [45]
- United Nations / Framework Convention on Climate Change (2015), *Adoption of the Paris Agreement, 21st Conference of the Parties, Paris: United Nations*, https://unfccc.int/sites/default/files/english_paris_agreement.pdf. [54]
- Volz, U. (2021), *Debt Relief for a Green and Inclusive Recovery*, Berlin, London, and Boston, MA: Heinrich-Böll-Stiftung; SOAS, University of London; and Boston University. [39]
- Webb, D. (2021), “Will the waning ‘greenium’ kill the green bond market?”, *Responsible Investor*, <https://www.responsible-investor.com/will-the-waning-greenium-kill-the-green-bond-market/>. [29]
- World Bank (2022), *Global Economic Prospects*, <https://openknowledge.worldbank.org/bitstream/handle/10986/36519/9781464817601.pdf>. [4]

Notes

¹ These include portfolio investments, foreign direct investment and remittances.

² The figures are based on authors' calculations using data from the LGX DataHub.

³ Official development assistance (ODA) is defined by the OECD Development Assistance Committee as government aid that promotes and specifically targets the economic development and welfare of developing countries. The list of ODA-eligible countries can be found [here](#).

⁴ The figures are based on authors' calculations using data from the LGX DataHub and global bond market data from the International Capital Market Association (www.icmagroup.org/resources)

⁵ The spread, or difference between the yields on green bonds and the reference debt instrument (e.g. US Treasury) is smaller than the spread between other comparable bonds and the same reference debt instrument.

⁶ Vanilla bonds are the most basic type of bonds, having a fixed coupon payment at pre-determined fixed intervals with a pre-determined maturity.

⁷ A yield spread is the difference between yields on differing debt instruments of varying maturities, credit ratings, issuer, or risk level, calculated by deducting the yield of one instrument from the other. They are commonly quoted in terms of one yield versus that of U.S. Treasuries.

⁸ Sovereigns, supranationals and agencies (SSA) includes supranational agencies, sovereign governments, as well as government owned or guaranteed corporates, central banks, development banks, regions, provinces and local authorities.

⁹ Global unemployment increased by 33 million in 2020, with the unemployment rate rising by 1.1 percentage points to 6.5 per cent (ILO, https://www.ilo.org/global/about-the-ilo/newsroom/statements-and-speeches/WCMS_779101/lang--en/index.htm)

¹⁰ <https://www.greenbondtransparency.com>