



**WILL AFRICA BE PART OF THE 'GOLDEN
DECADE' OF SUSTAINABLE FINANCE?
INSIGHTS FROM GSSS BONDS**

Abel Gwaindepi and Krige Siebrits

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Abel Gwaindepi

Senior Researcher at DIIS, Affiliated with Lund University (Department of Economic History), Copenhagen University (Centre for African Studies) and Stellenbosch University (Economics Department)

abgw@diis.dk

Krige Siebrits

Senior Lecturer at Department of Economics, Stellenbosch University

krigesiebrits@sun.ac.za

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DIIS · Danish Institute for International Studies

Gl. Kalkbrænderi Vej 51A, DK-2100 Copenhagen, Denmark

Tel: +45 32 69 87 87

E-mail: diis@diis.dk

www.diis.dk

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ABSTRACT

The inadequacy of public financing mechanisms for sustainable development and climate action is increasingly evident. The focus has shifted towards private sector financing mechanisms to bridge these financing gaps. This study analyses the Green, Social, Sustainability and Sustainability-linked (GSSS) bonds, considered as the quintessential private sector financing instruments and projected to lead the 2020s' sustainable finance 'golden decade'. While evidence shows their explosive growth in developed markets, their impact on unlocking private-sector finance for Africa remains underexplored. We examine general trends in Africa's GSSS markets relative to other regions and gather data on 54 individual GSSS bonds issued, analysing tenors, issuer types, deal sizes, coupon rates and use of proceeds.

Our findings reveal that African GSSS bond issuances account for less than 1% of the global volume and value. The realised amounts remain minuscule compared to the financing needs of USD 213.4 billion annually for climate action and USD 1.3 trillion for sustainable development. The GSSS bond market in Africa is unevenly distributed, with South Africa dominating over half its market value. Among GSSS categories, green-labelled bonds are the most popular, and the energy sector attracts the largest share of the limited funds. Financial corporations, especially commercial banks, primarily drive the GSSS bond markets, although through small deals that rarely exceed the current benchmark deal size of USD 500 million necessary for large-scale and impactful projects. We argue that since the quintessential private sector instruments show these disappointing results for Africa, the current actions and efforts to escort private sector finance need to be increased exponentially. It thus remains crucial not to overlook both private and public alternative financing methods. Currently, there seems to be no feasible framework to ensure the success of GSSS instruments at the required scale. Their suitability for Africa needs constant scrutiny compared to other private mechanisms such as blended finance. Ultimately, the need to innovate in the field of financial instruments cannot supersede the necessary groundwork, especially on project pipelines which involve costs at pre-feasibility stages, but will likely determine the best financing instruments for African countries.

INTRODUCTION

Article 2.1c of the Paris Agreement mandates aligning all forms of finance with sustainable, low-carbon, and climate-friendly development pathways. For the African continent, the annual financing gap estimates for the period leading up to 2030 are at \$213.4 billion for climate change and \$1.3 trillion for other sustainable development needs (African Development Bank, 2023: 61). All forms of finance – domestic, international, public, and private – must align with climate-resilient and sustainable development requirements to meet these unprecedented financing needs. This decade is the make-or-break period for required shifts (Songwe, Stern and Bhattacharya, 2022). As innovative ways to finance climate change mitigation and adaptation are being developed, some argue that the 2020s will likely become a ‘golden decade’ for private finance for sustainable development (Dembele et al., 2021; Curtis et al., 2023; OECD, 2016). This study focuses on what it will take for this to be realised in Africa, including an examination of which private financing instruments and mechanisms are suitable for the African context.

For African countries, the optimism for uptake and scaling-up of green investments is often met with lists of binding constraints and conditions that should be met as prerequisites. The solutions given for such constraints are usually neither connected to current realities nor the aspirations of African countries. This study comprehensively explores Green, Social, Sustainability and Sustainability-linked (GSSS) bond markets by analysing the recent trends in issuances by both public and private issuers. The purpose is to document various aspects of the issuance of GSSS bonds, including the size of such markets in Africa relative to those in other regions, patterns of issuances, issuer types, and deal sizes. The focus on Africa is pertinent: the continent lacks the resources to deal with losses and damages, and it is currently seen as a hot spot for major negative outcomes of climate change (IPCC, 2023). With respect to GSSS bonds, the continent’s participation is often only mentioned in the margins and footnotes of major reports. Given estimates suggesting that half of the industries that will emit greenhouse gases in Africa by 2050 are yet to be established, it is particularly important to understand if and how GSSS bonds can unlock projects that enable shifts to low-carbon development pathways. The study explores whether the efforts to harness private capital using GSSS bonds have yielded progress and the resulting implications for the continent’s climate and sustainable development ambitions.

This study finds that African issuances of GSSS bonds represent less than 1% of the global total in terms of volume and account for roughly 0.2% of the worldwide GSSS bond market value. It also shows that Africa’s burgeoning GSSS bond market is highly unequally distributed, with South Africa commanding more than half its market value. Green-labelled bonds are the most popular of the GSSS categories, and energy sectors are absorbing the largest share of the still small pool of funds. Sovereign and sub-sovereign issuances of GSSS bonds remain relatively rare. GSSS bond markets are driven mainly by financial corporations (especially commercial banks) focusing on small deals that rarely exceed the current benchmark deal size of \$500 million. This implies significant scalability challenges

for African countries. While repeated issuances of green bonds have been observed, issuances of social, sustainability, and sustainability-linked bonds – the ‘SSS’ categories of GSSS bonds – remain infrequent. The relative popularity of green bonds threatens to overshadow usage of the other categories, which, although less focused on purely green projects, are also crucial for addressing Africa’s urgent socioeconomic challenges.

In addition, the African GSSS bond market shows very high costs (reflected in high coupon rates) and shorter times to maturity (tenors), worsening debt vulnerabilities. In addition, shorter tenors and high costs imply that the large-scale investments necessary for decarbonisation and other sustainable projects may not attract adequate funding if solely these labelled private finance instruments are relied upon. Prospects of scaling up issuances remain low, and there is no feasible framework to ensure the success of GSSS instruments in reaching the required scale in Africa. We argue that if the quintessential private sector instruments show these disappointing results for Africa, the current efforts must increase exponentially. There is a need for constant scrutiny regarding which item in the toolkit of private sector financing constitutes a more suitable instrument for Africa. Current enthusiasm around GSSS bonds should not overshadow alternative private and public ways of financing sustainable development and climate change efforts in Africa. In the interim, traditional funding approaches such as bilateral assistance and concessional finance remain vital in providing direct assistance and, crucially, in catalysing private sector finance.

Section 2 defines GSSS bonds, presents a theoretical framework and discusses data challenges. Section 3 provides an overview of GSSS markets that cover the issuers of GSSS bonds and deal sizes; it also relates patterns in these markets to those in other world markets. This section also discusses the potential of sovereign GSSS bonds, given the current high incidence of sovereign debt distress. Section 4 discusses policy implications for African countries and international players. Section 5 contains the conclusion.

DEFINITIONS, AND THEORETICAL FRAMEWORK AND DATA

What are GSSS bonds, and what is their role in sustainable finance?

Green, Social, Sustainability and Sustainability-linked (GSSS) bonds are fixed-income financing instruments for projects with beneficial impacts on the environment and sustainable development (OECD, 2022: 16). Green, social and sustainability bonds (the ‘GSS’ in ‘GSSS bonds’) are use of proceeds instruments; hence, the funds raised by issuing these types of bonds must be used to finance green, social and sustainability projects. Sustainability-linked bonds (the last ‘S’ in ‘GSSS bonds’), on the other hand, are not use of proceeds instruments (see below). National and local governments, development finance institutions and corporations may issue such bonds. Brief explanations of the four types of GSSS bonds follow.

- *Green bonds* can be issued as funding sources for projects with environmental benefits (Dembele et al. 2022: 16). The projects usually focus on renewable energy, energy efficiency, clean transportation, green buildings, wastewater management, and other issues related to climate change adaptation and mitigation.
- *Social bonds* are issued to finance social projects, sometimes with linked environmental benefits. Relevant examples include projects focused on food security and sustainable food systems, socioeconomic advancement, affordable housing, access to healthcare, and other essential services (Dembele et al., 2022: 16).
- *Sustainability bonds* are used for combinations of green and social projects such as those in the categories listed above.
- *Sustainability-linked bonds* are performance-based instruments with a forward-looking focus. The issuers of such bonds are not required to use the proceeds for environmental projects but explicitly commit themselves to attaining better sustainability outcomes within preset periods, using selected key performance indicators (KPIs). Property developers, for example, may use the proceeds of such bonds to enhance energy efficiency and the use of eco-friendly materials in urban houses.

GSSS bonds are a mechanism to unlock private sector finance in the grand scheme of climate and sustainable finance. Public finance remains dominant: in 2019/20, the shares of public and private climate finance were 85.7% and 14.1%, respectively (Climate Policy Initiative, 2022). Public finance mechanisms are currently dominant but are ultimately capped and subject to several factors, such as donor preferences and constraints. Hence, much hope has been placed in unlocking or harnessing trillions in the private sector to plug widening gaps in climate action and sustainable development (OECD, 2022). Initiatives such as the World Bank's 'Billions to Trillions' agenda¹, the recent 'Mobilizing Finance for Development' (M4D) frameworks² and the recent 'Wall Street Consensus'³ are all reflective of such hopes to harness significantly more private sector finance. As one of the main tools to unlock private sector finance, GSSS bonds warrant close and continual scrutiny to shed light on the extent of market growth, issuances, issuers and thus their viability for the African continent.

¹ The report can be found here: <https://thedocs.worldbank.org/en/doc/622841485963735448-0270022017/original/DC20150002EFinancingforDevelopment.pdf>

² The report can be found here: https://www.usaid.gov/sites/default/files/2022-05/MFD_Comprehensive_Introduction.pdf

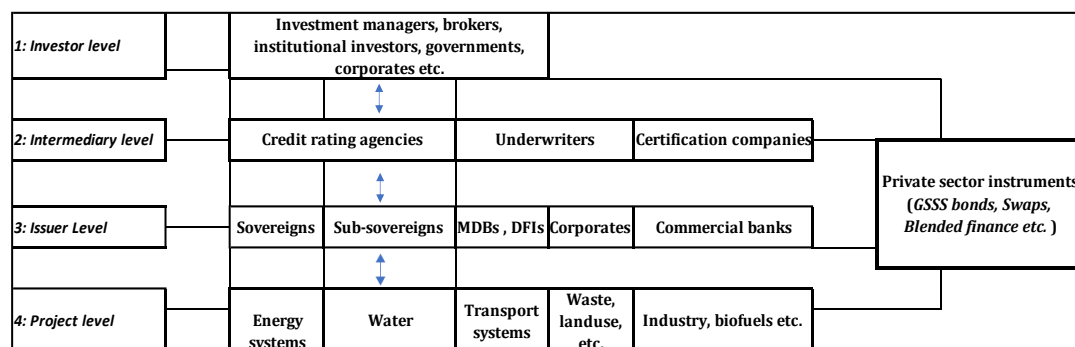
³ See Gabor (2021).

Theoretical framework

Economic theory suggests that market outcomes are efficient in allocative terms under certain conditions. These conditions include perfect competition, full information and full internalisation by the transacting parties of the social costs and benefits of their actions. If these conditions do not hold, market failures arise, resulting in allocative inefficiency. Stiglitz (1994), among others, has argued that market failures are rife in financial markets. In principle, therefore, the size of GSSS bond markets in African countries could be explained in two ways: it could be the efficient outcome of a well-functioning market or the outcome of a market characterised by market failures that disrupt the allocation of resources and give rise to allocative inefficiency. To assess the validity of these two conflicting explanations, it is necessary to delve into the characteristics of GSSS bond markets in Africa. It is useful to structure an examination of the characteristics of such markets around the notions of demand, supply and the incentives of the various market participants identified in Figure 1, based on a system-thinking approach to understanding the complexities inherent to GSSS markets. Information asymmetries also feature prominently in the following exposition of the conceptual framework, reflecting Stiglitz’s (1994: 23) statement that financial markets are ‘essentially concerned with the production, processing, dissemination and utilisation of information’.

The framework is parsimonious but useful in capturing all the levels necessary to understand the GSSS markets in Africa. The demand side of the market for GSSS bonds issued on the continent (that is, the investor level) is populated by various kinds of investors, including institutional investors, corporations and sovereigns. An important issue affecting the demand side of GSSS bond markets in Africa is whether the information available to potential investors enables them to accurately assess returns and risks. If the information is imperfect or costly, potential investors may shun markets or adopt a ‘wait and see’ attitude towards participation. Excessively high actual or perceived transaction costs may have similar effects (Stiglitz, 1994: 28).

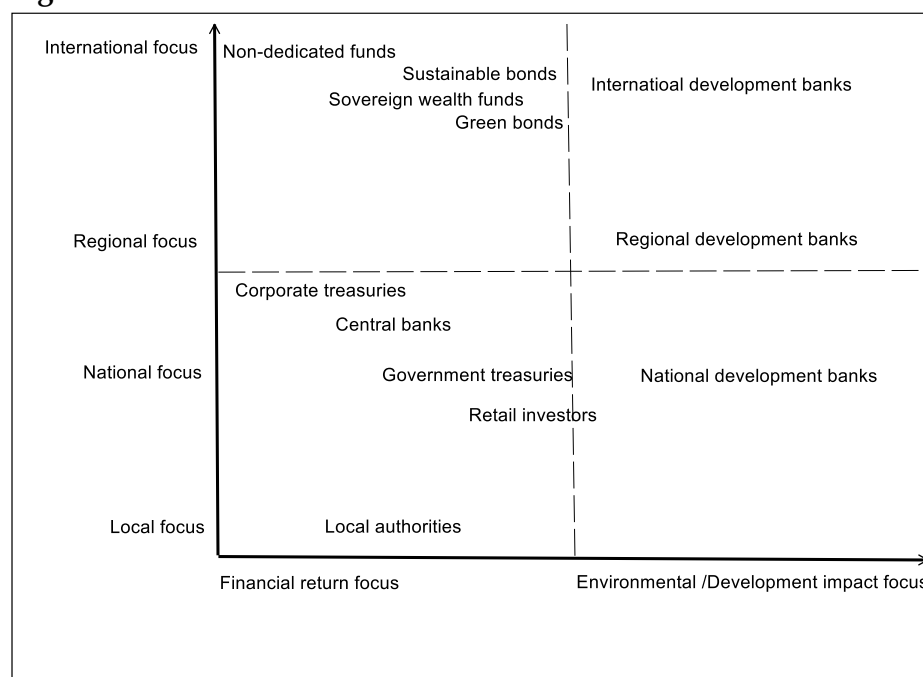
Figure 1. A system-thinking framework of the GSSS bond markets



Source: Authors’ illustration.

Due to the information asymmetry, markets have tended to fail to deliver development finance. For this reason, impact investments have traditionally been the domain of national, regional and international development banks, as demonstrated in Figure 2. below. The y-axis represents the range of investors, spanning from local to international. Meanwhile, the x-axis depicts the investment focus, including developmental impacts, which often encompass longer timeframes and financial aspects.

Figure 2. Investor constellation and focus



Source: Adapted from Williams et al. (2017: 6).

Multilateral development banks (MDBs) are prominent in the environmental and developmental impact quadrants. Unlike commercial banks, which prioritise short-term goals and financial returns, MDBs primarily function as long-term holders of assets and liabilities that consistently undertake impact investments with longer tenors. The current hopes are that private sector players may innovate and reorient towards impact investments with long tenors rather than only financial returns.

Turning to the second level (the intermediary level), the role of intermediaries, especially credit rating agencies, has become pivotal. Without these agencies, it is well known that such a complex market with interdependent decision-making can give rise to coordination failures that prevent the emergence of markets or restrict their size (Hoff, 2001). Hence, any effort to understand the functioning of GSSS bond markets in African countries also requires examining the rating agencies' motives and efficacy in eliciting, processing and disseminating information required by bond issuers and investors. The current debates on how risks have been systematically misunderstood for several reasons, including market inefficiency, are necessary since ratings affect investor sentiments even if they are flawed. Perceived risk carries more weight than actual risk in Africa (African Development Bank, 2023). At the same time, the rating agencies must

continuously adjust their approach to climate financing instruments. For example, debt-for-nature swaps often bring discounts that signal distress for the agencies, resulting in poor ratings of these nations and causing long-term reputational problems.

Level 3 (the issuer level) comprises issuers of GSSS bonds, such as national and lower levels of government, international financial and development finance institutions, corporations and commercial banks. Various factors influence the supply side of markets for such bonds. The goals and priorities of development financing institutions and the governments of developing countries, shaped by domestic and international political economy considerations, loom large among them. For sovereigns in developing regions, the political economy of trade-offs between green investments and other national development plans matters. The benefits and costs of issuing dedicated green bonds (rather than conventional ones) for environmental projects usually determine the recurrence of issuance and, hence, the supply of these instruments. Transaction cost-related issues such as the certification, reporting standards and use-of-proceeds requirements of GSSS bonds matter significantly for such choices. Currency mismatches are also critical for these issuances since hard currencies (mostly the Euro and US dollar) dominate the international markets.

The fourth level (the project level) is the most important. Instruments cannot supersede the projects they fund. Because GSSS bonds are project-financing instruments, the demand for such bonds is derived from the demand for projects. Ensuring the adequate availability of projects of sufficient scale will likely imply coordinated behaviour by the domestic public and private sectors and cooperating partners from abroad. It is becoming clear that preparing bankable green projects is a global public good, especially when it comes to mitigation projects. In principle, governments could play important catalytic roles offering positive external benefits by establishing regulatory frameworks, disseminating relevant information and issuing benchmark bonds. Good projects can face high capital costs in poorly rated sovereign jurisdictions. The real challenge becomes structuring projects that fit existing borrowing costs. For example, based on the S&P rating, the rate of return expectations in Solar PV-based power generation projects is 7% in Germany but reaches 38% per cent in a country such as Zambia (Songwe, Stern and Bhattacharya, 2022: 50).

GSSS data sources and challenges

GSSS bond markets continue to evolve, with record-keeping steadily taking form in standardised data formats. Data accuracy and coverage remain problematic, as is often the case with data and record-keeping in Africa and other developing nations (Jerven, 2017). On the other hand, GSSS bonds also have unique challenges, such as a lack of systematic impact-tracking frameworks (Bhandary et al., 2021). GSSS bond issuers, especially those in the private sector, generally lack the mandate to make data readily available. This is exacerbated by the absence of concrete definitions, classifications and methodologies (Climate Finance Initiative, 2021; OECD, 2020). The nomenclature is still developing, and 'green bonds' is

often used as a generic catchall term. The markets are also expanding to accommodate several new labels. For instance, the recent Covid-19 pandemic necessitated Covid-19 bonds⁴. Consequently, the available data are primarily disclosed voluntarily. This study leverages data from two primary sources dedicated to GSSS issuances: the Climate Bond Initiative (CBI) and the Luxembourg Stock Exchange (LSE).

The Climate Bond Initiative (CBI) is a global organisation committed to climate finance. It offers market intelligence, reporting on GSSS issuances, market sizing, and details about project infrastructure pipelines. In addition, it sets standards by providing certifications following established climate bond taxonomies. The CBI's interactive data platform, which offers extensive coverage of green, social and sustainability bond issuances across all regions, was used in this study. The data include market type (developed and emerging), region (global, Europe, Asia-Pacific, Latin America, North America, Africa, etc.), issuer type, uses of proceeds, issuance currency, and deal sizes.

The Luxembourg Stock Exchange (LSE) is the second data source used. Its Green Exchange (LGX) market focuses on sustainable securities (mainly GSSS bonds) and, like the CBI, provides information on GSSS dimensions such as regions, markets, issuers and uses of proceeds. The two sources complement each other, varying mostly in the area of bond details. The LGX has an edge regarding broader coverage and bond issuance details. In addition, the LGX includes sustainability-linked bonds (SLBs), which are not systematically reported in the CBI database. The LGX's broad coverage extends to issuer and deal-level specifics. Using the LGX data, individual issuances in Africa were analysed to shed light on the varying classes of GSSS bonds issued by different countries and private and public institutions, along with deal sizes, times to maturity (tenor) and coupon rates, among other things. The third source comprises publicly available data in databases and reports from national and international organisations focusing on broader debt issues and climate finance. The information presented in this study reflects the availability of data at the time of this study's conclusion in September 2023. The patterns are likely to change as more GSSS bonds are issued.

AN ANALYSIS OF GSSS BONDS ISSUANCES IN AFRICA

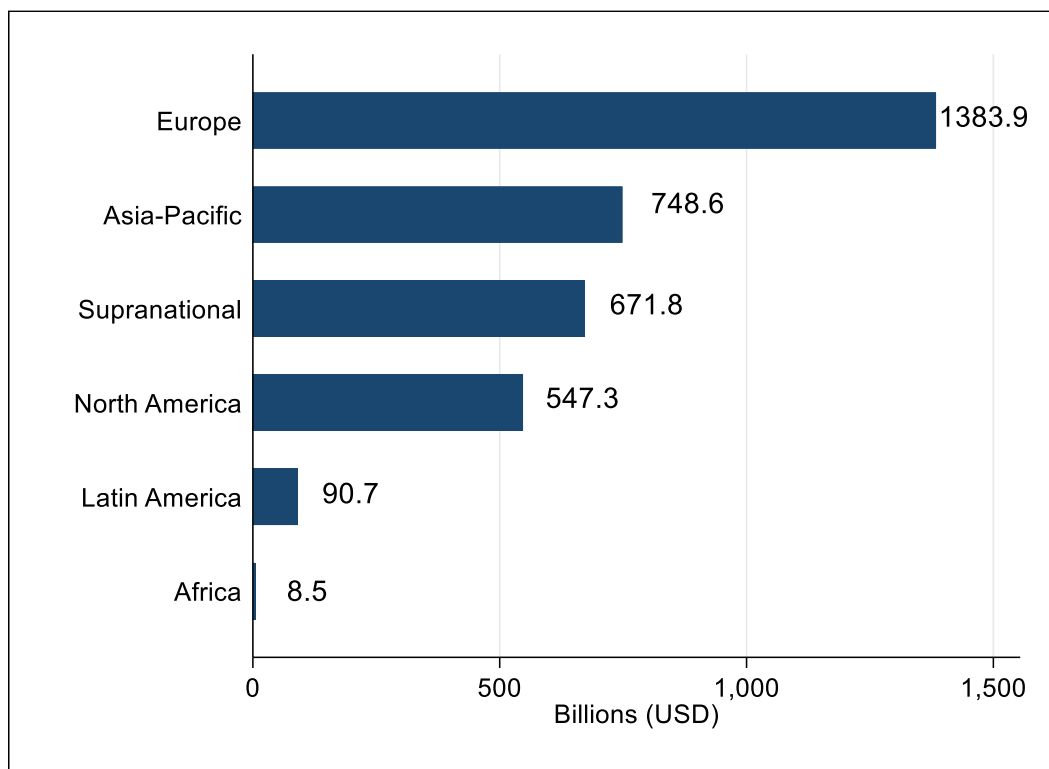
Characteristics of the GSSS bond market

Figure 3 illustrates the distribution of the GSSS bond markets. Figure 3A contains a global overview of the GSSS bond markets that highlights some regional patterns, while Figure 3B presents the shares of each class of GSSS bond. Europe currently holds the leading position in issuing GSSS bonds, establishing itself as

⁴ This also implies that standardisation has yet to be achieved as many instruments are unique. For instance, the recent Gabon blue bond was regarded as an 'orphan' because it suits a unique context with no obvious replication elsewhere.

the market leader in GSSS bond markets. The Asia-Pacific region is the second biggest player, partly due to the recent rise of the Chinese bond markets (OECD, 2023).

Figure 3A. The GSSS bond markets by cumulative value since 2014

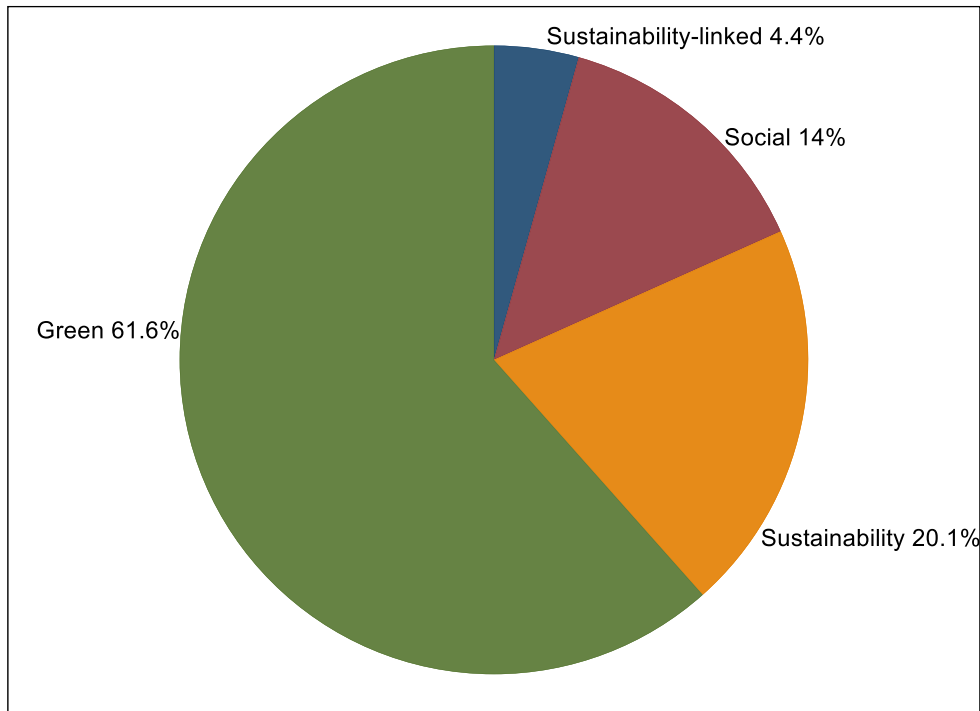


Source: Data from Climate Bond Initiative and the Luxembourg Stock Exchange (2023).

The third biggest issuer is Supranational (mostly multilateral development banks), and the fourth is North America. Latin America and Africa have had significantly lower GSSS issuances of approximately \$90 billion and \$8.5 billion, respectively. The gap between Africa and the other regions is notably wide, with the cumulative value of issuances in Latin America (the region closest to Africa in terms of this indicator) exceeding that in Africa more than tenfold. The availability of better fundable projects in Latin America cannot plausibly explain this difference.

Figure 3B provides insights into the global distribution of GSSS bond categories. Among these categories, the green theme is the largest at 61.6%. The sustainability theme follows at 20.1%, while social bonds account for 14% of issuances. The smallest category is that of sustainability-linked bonds, representing only 4.4% of the overall market.

Figure 3B. GSSS categories



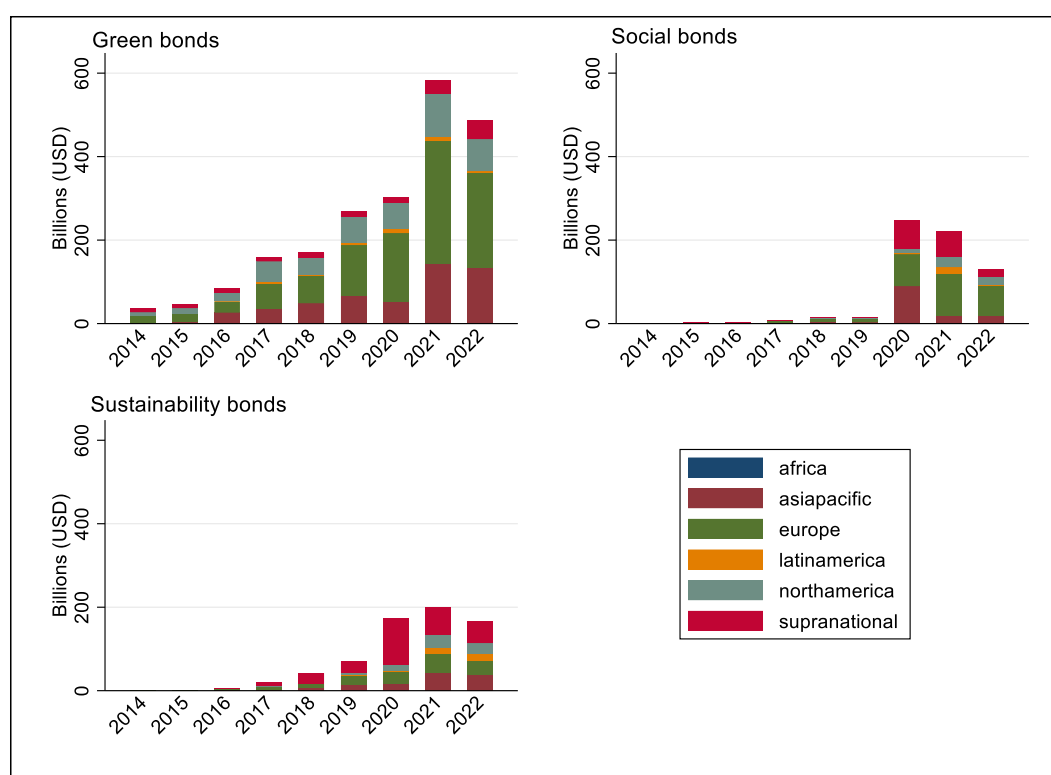
Source: Data from Climate Bond Initiative and the Luxembourg Stock Exchange (2023).

The green theme issuances have grown rapidly in recent years as sustainability-minded investors increasingly seek to align their investments with issuers who commit to transparency regarding the use of the proceeds. It is possible that the term 'green' naturally tends to dominate in the complex landscape of sustainable investing due to its attractiveness to asset managers and investors in various contexts. 'Green bonds' are considered the quintessential climate finance instrument. For example, one bond syndicate reportedly stated: 'A green bond is, of course, a loudspeaker; it is the best way for me to communicate directly to the market about my sustainability' (Harrison et al., 2020: 70). Firms can issue conventional bonds for green projects, but making the issuance green implies some perceived monetary and non-monetary benefits (Lau et al., 2022; Schmittmann and Chua, 2021: 22). This aspect makes GSSS bonds potentially innovative because green credentials offer pecuniary and planetary gains for investors. The greatest added value of GSSS bonds, in the absence of greenwashing, is a shift to low-carbon investments, ultimately pushing green growth.

Nevertheless, concerns about 'greenwashing' are growing since investors do not necessarily seem to match the desire for green credentials with a willingness to pay additional costs associated with green debt instruments (Lau et al., 2022; Pucker and King, 2022). In addition, the willingness to pay for impact is driven by positive emotions and less by calculative valuation (Heeb et al., 2023). This is a problem when there are no adequate impact-tracking frameworks. Equally problematic is the blurring of the lines between sustainable and non-sustainable projects as coal and oil companies incorporate green credentials and ESG ratings.

Figure 4 shows both temporal and regional patterns. It illustrates that all regions have issued GSSS bonds since 2014. SLBs (Sustainability-linked bonds) are not included in Figure 4 because of the limited availability of data and because issuances of such bonds have represented only 4% of the total GSSS bond markets. The green theme has been dominant each year. Green bond issuances peaked in 2021 when the market size was 15 times that in 2014. Issuances of social and sustainability bonds have also increased significantly since 2020. The sudden surge in social bonds between 2019 and 2020 aligned with the general growth in borrowing to stimulate economies during the COVID-19 pandemic. In the EU, government-backed entities were leading issuers of social bonds. At the same time, Africa and other emerging markets could not issue these social bonds for stimulus packages or vaccine procurement.

Figure 4. Annual GSSS issuances, 2014-2022



Source: Data from Climate Bond Initiative (2023).

Europe has maintained dominance across all classes and years, while the Asia-Pacific region has experienced substantial growth and became the second-largest market in 2022. In contrast, African issuances are barely noticeable, with a combined value of only \$8.5 billion spread across all GSSS categories. Table 1 below clearly illustrates the minuscule size of the African GSSS markets. For instance, Africa has accounted for a mere 0.7% of all GSSS bonds, has had 1.4% of all issuers, and represents only 0.2% of the market's total value in billions of US dollars.

Table 1. Africa relative to other regions

Region	Number of Bonds	%	Issuers	%	USD(Billions)	%
Europe	3936	40.3	968	38.1	1433.8	41.0
Asia Pacific	3471	35.5	1024	40.3	770	22.0
North America	957	9.8	394	15.5	568	16.2
Supranational	1142	11.7	27	1.1	619.1	17.7
Latin America	188	1.9	90	3.5	98	2.8
Africa	83	0.7	36	1.4	8.5	0.2
Totals	9777	100	2539	100	3497,4	100

Source: Data from Climate Bond Initiative (2023) and Luxembourg Stock Exchange (2023).

The prospect of Africa gaining a significant proportion of the GSSS markets remains uncertain, as it is unclear whether market mechanisms and the demand for sustainable investment opportunities will facilitate substantial growth in African markets. In the upcoming section, we delve deeper into African trends within the broader context of global GSSS bond market developments.

African participation in GSSS bond markets

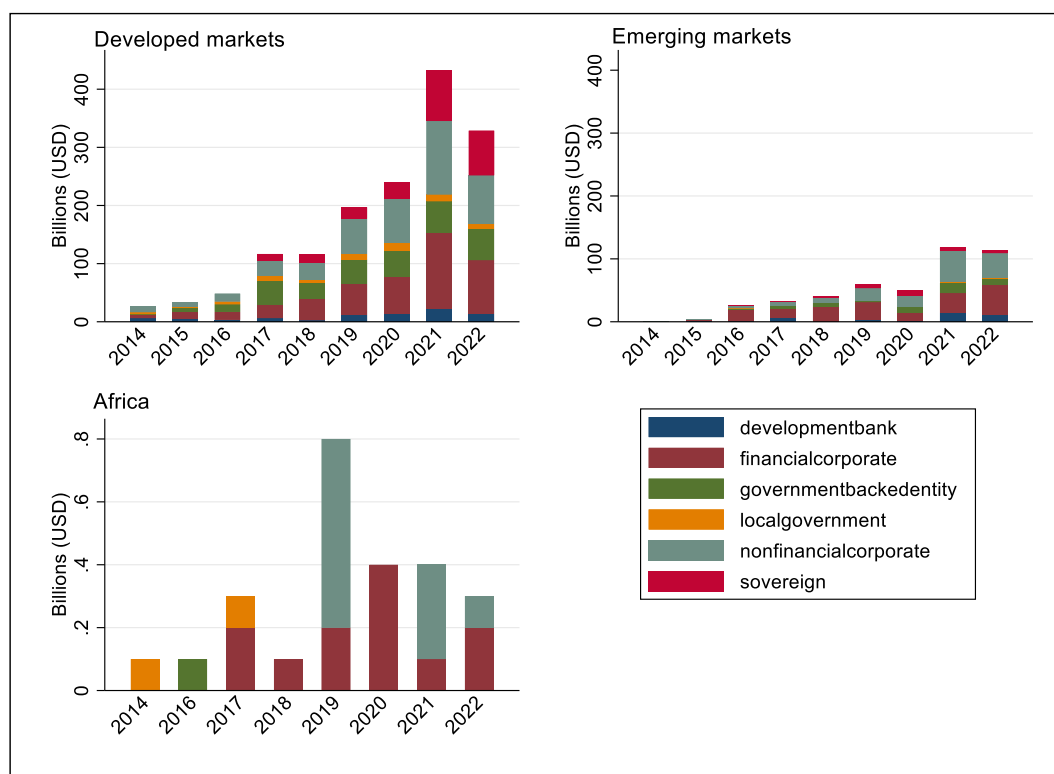
It is necessary to examine issuer patterns comprehensively to comprehend where the potential for GSSS bond issuances lies. The demand side involving investors matters, but we focus on issuers and the rates they get, partly reflecting investor sentiments on risk and return profiles in Africa. While recognising that investable funds reside mainly within the private sector, ongoing discussions continue to emphasise the role of public sector actors, including sovereign entities and other international actors, especially given that escorting private capital to development and impact investments is proving to be very difficult (Bernards, 2023).

We start by illustrating recent trends in green bonds, the most dominant class of GSSS bonds, specifically focusing on Africa. In Figure 5 below, we track the recent history of issuers' dominance in Africa. Due to the minuscule nature of the African markets, their figures cannot be displayed at a similar scale to the other markets because they will be entirely invisible.

Sovereign issuances are growing systematically in developed markets. In contrast, sovereign issuers have been present in emerging markets since 2016, but their growth is still slow. Within Africa, sovereign issuances are largely absent in the green theme. While other sovereigns in developed markets and Latin America develop best practices, establish track records and accrue knowledge that proves beneficial for scaling up issuances, such progress is not evident in Africa. Remarkably, financial corporates, largely banks, have remained consistently active

in Africa, representing 100% of issuers in 2018. While this trend is promising, it is important to note that banks primarily operate with profit motives and short-term liquidity needs, which can cause them to refrain from engaging in long-term, large-scale projects. Nevertheless, their accrued experience and market knowledge can be leveraged, especially on maturity transformations, so that short-term liabilities can be restructured into long-term net present value investments.

Figure 5. Green bond issuers in Africa relative to other markets

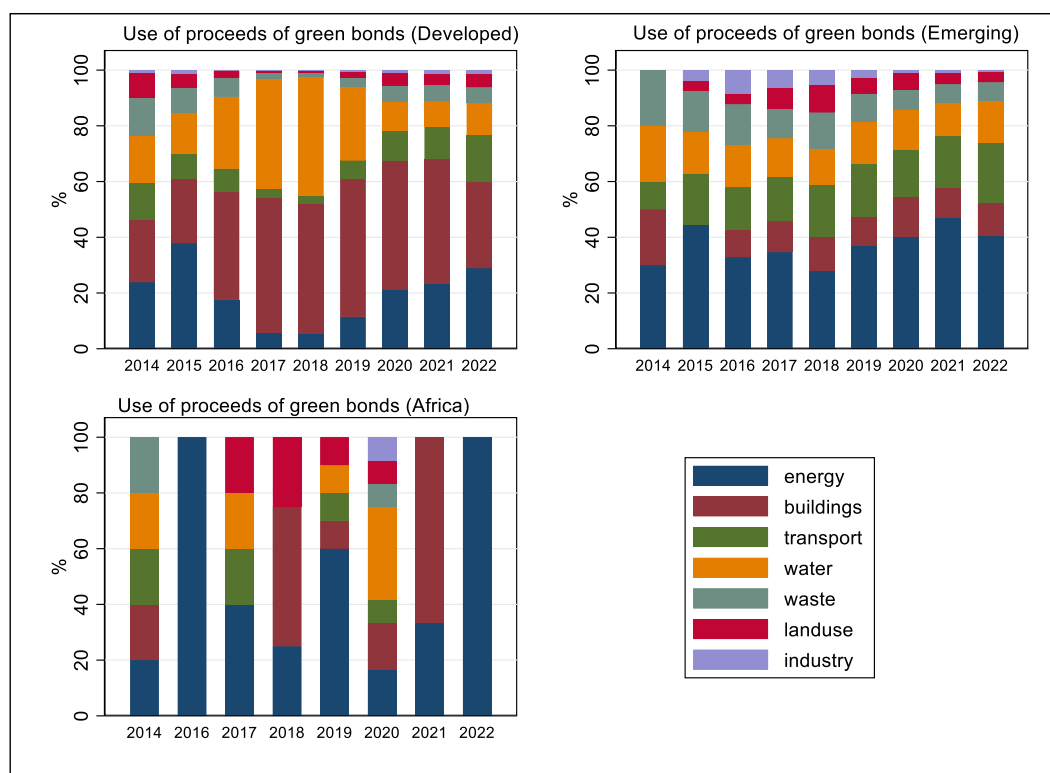


Source: Data from Climate Bond Initiative (2023).

The use-of-proceeds bond issuances are central to distinguishing between the Use-of-Proceeds (UoPs) and traditional vanilla bonds. Figure 6, presented below, illustrates some of the principal uses of green bond proceeds in Africa alongside the patterns in developed and emerging markets. In each year, we trace the percentage distribution among different investment priorities. The underlying message is that investments in renewables are very low, but the energy focus dominates in the overall totals. The sustainable development agenda is largely an energy agenda, but this also reflects the potential for cashflows and profit in the sector. The energy sector is a major focus for green bonds, particularly in emerging markets and Africa, where in certain years (2016 and 2022), all proceeds were directed towards this sector. In Africa, electricity remains inaccessible for 43% of the population (Attwell, 2023: 2). As such, developing and upgrading national grids, coupled with decarbonising entire national energy sectors, is critical for numerous African nations. Clean energy is prioritised given that the power sector can accelerate decarbonisation in other sectors, including industry, transport, and buildings, moving households away from using wood and charcoal to meet their energy needs. The percentages in Figure 6 are shares of what ultimately remain

very low absolute amounts. A recent World Bank report states: ‘Despite accounting for two-thirds of the world’s population, Low-Income Countries (LICs) and Middle-Income Countries (MICs) receive only one-fifth of global investment in clean energy’ (World Bank, 2023: 5).

Figure 6. Use of proceeds in green bonds, 2014-2022



Source: Data from Climate Bond Initiative (2023).

Use of proceeds for projects in the water, buildings, and transportation sectors feature consistently, in varying proportions, in both developed and emerging markets. The buildings sector, in particular, has been a primary focal point in developed economies. In contrast, Africa’s use of proceeds in water, transport, and buildings remains sporadic, showing no consistent patterns making it possible to ascertain whether issuances are expanding. For the continent, fundamental ‘hard’ infrastructure forms the bedrock of economic development and is instrumental in shaping investments in greener initiatives. When national grids are dysfunctional, they can hardly support or spur green energy investments on a large scale. General infrastructure deficiencies prevalent in Africa also dictate the nations’ priority areas.

Despite the percentage distribution shown above regarding the use of proceeds, the size of deals remains an equally significant factor, given that large-scale initiatives, such as decarbonisation projects, require substantial financing. Compared to smaller undertakings, long-term projects usually exhibit higher risk profiles, particularly in fragile nations, rendering their feasibility challenging to determine. Consequently, this uncertainty induces reluctance among potential investors, especially when sovereign issuers lack established track records and robust economic fundamentals. Table 2 presents the distribution of deal sizes for

green bond issuances in Africa compared to other markets. The table categorises deals into four ranges: up to 100 million (0-100m), 100-500 million (100m-500m), 500 million to a billion (500m-1b), and over a billion (1b+). The figures show the number of deals within each size category from 2004 to 2022 in US dollars.

Table 2. Number of bond issuances in each deal size (USD)

Developed markets	0-100m	100m-500m	500m-1b	1b+
2014	270	34	8	7
2015	810	36	25	4
2016	1081	61	27	7
2017	2394	99	53	13
2018	2096	83	47	18
2019	2589	197	98	31
2020	2882	212	103	46
2021	3416	317	206	82
2022	2446	247	149	77
Emerging markets	0-100m	100m-500m	500m-1b	1b+
2014	0	4	0	0
2015	7	4	4	0
2016	42	23	11	6
2017	144	49	17	5
2018	174	68	15	4
2019	254	80	28	10
2020	175	105	23	4
2021	285	216	56	13
2022	243	200	33	21
African markets	0-100m	100m-500m	500m-1b	1b+
2014	0	1	0	0
2016	1	1	0	0
2017	2	1	0	0

2018	6	0	0	0
2019	9	0	1	0
2020	1	2	1	0
2021	2	1	0	0
2022	5	0	0	0

Source: Data from Climate Bond Initiative (2023).

While developed and developing markets increasingly engage in deals within the \$500 million-plus category, Africa has seldom issued deals surpassing this threshold, except in 2019 and 2020. Such deals have become the international benchmark, accounting for 70% of all deal values in 2021 (Climate Finance Initiative, 2023). The global average deal size has grown from \$170 million to \$250 million. However, this trend does not hold for Africa, which displays inconsistencies in issuances, even within the small deal category (\$0-100 million). Small deals are still important for creating room for bigger deals because the data shows that a proliferation of smaller deals often correlates with an increasing number of larger deals later.

Nonetheless, if deals persistently remain small over extended periods, this could give rise to a catch-22 situation: investors, upon reviewing the market history and discovering only small, infrequent deals, may become hesitant with regard to investing in larger, long-term deals. In developed markets, the billion-plus (b+) deals have grown by an average of 44%. In comparison, this figure stands at 57% in emerging markets, led by the growth of the Chinese Yuan-denominated bond issuances.

One approach to effectively tracking ongoing trends is to use ratios of Africa's figures compared to other regions and markets. This method allows us to observe temporal trends and ascertain whether Africa is gradually catching up with the issuance levels of GSSS bonds across regions and markets. The underlying assumption is that any potential for Africa to get a substantial share of the booming GSSS bond markets can be observed through analysing current trends. We calculate the annual ratios of Africa's percentage shares of the issuances in other regions and markets using the following formula:

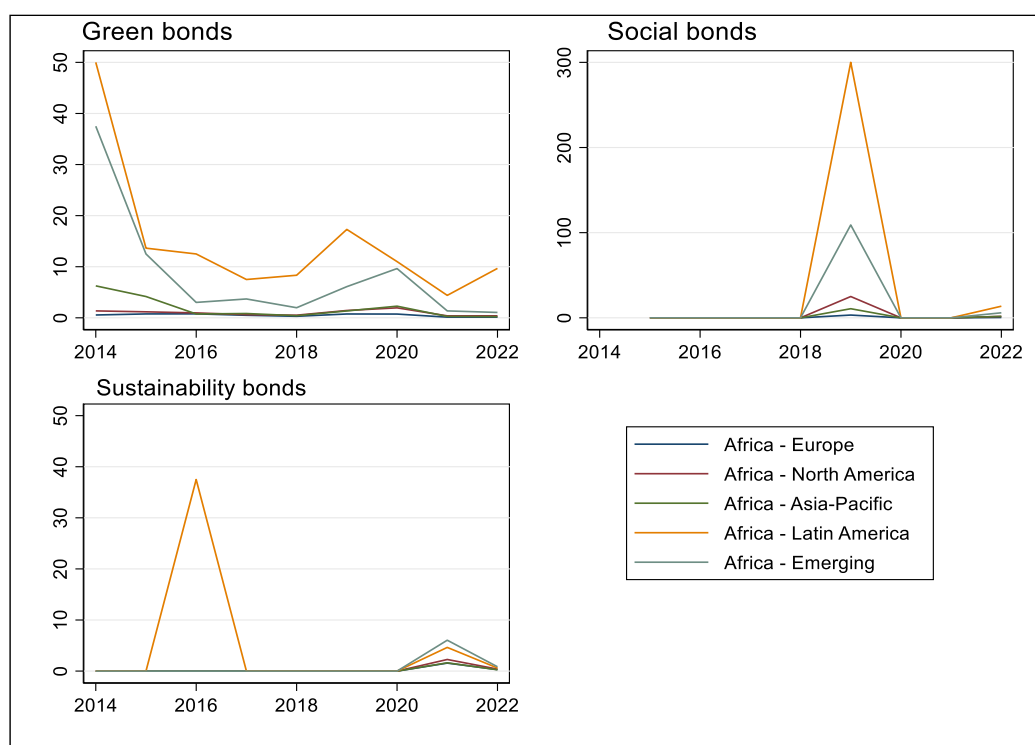
$$\text{African share} = \frac{\text{African issuance}_t}{\text{Region or Market}_t} * 100$$
, where i and t represent region (or market) and time, respectively.

Figure 7 below illustrates the calculated ratios. This calculation includes, for instance, the ratio of Africa-to-Emerging, which traces the proportion of issuances in Africa relative to the levels of issuances in emerging markets. If Africa's share is 100%, this implies that Africa is issuing bonds at a rate similar to other regions. However, a trend towards 0% suggests that Africa is not keeping pace with issuances in each class of the GSSS assets. The growth rate of African issuances compared to that in other regions can have important implications. If African

issuances expand at a rate proportionate to other regions, we anticipate that the African ratio will remain steady. Alternatively, a faster growth rate would result in an upward trend. Interestingly, African issuances have diverged from other regions in the green bond markets. This divergence indicates that while other regions are increasing their issuance of green bonds, Africa's issuances appear to stagnate.

In 2014, the issuance of African bonds accounted for 50% of those in Latin America, 40% of those in emerging markets and 8% of those in the Asia-Pacific market. The observable trend indicates that Africa has issued fewer green bonds over time than other regions' scaled-up issuances in the green theme. In the context of social and sustainability bonds, Africa's contribution is meagre, ranging between 0 to 1% of the total issuances in other regions. Interestingly, there has been a noticeable surge in social bonds, as shown by a spike in the ratio in 2019, showing that Africa issued more social bonds than Latin America and emerging market averages in 2019. The volume of investable projects is also expected to correlate with GDP and the environmental assets available.

Figure 7. Africa's shares of GSSS issuances



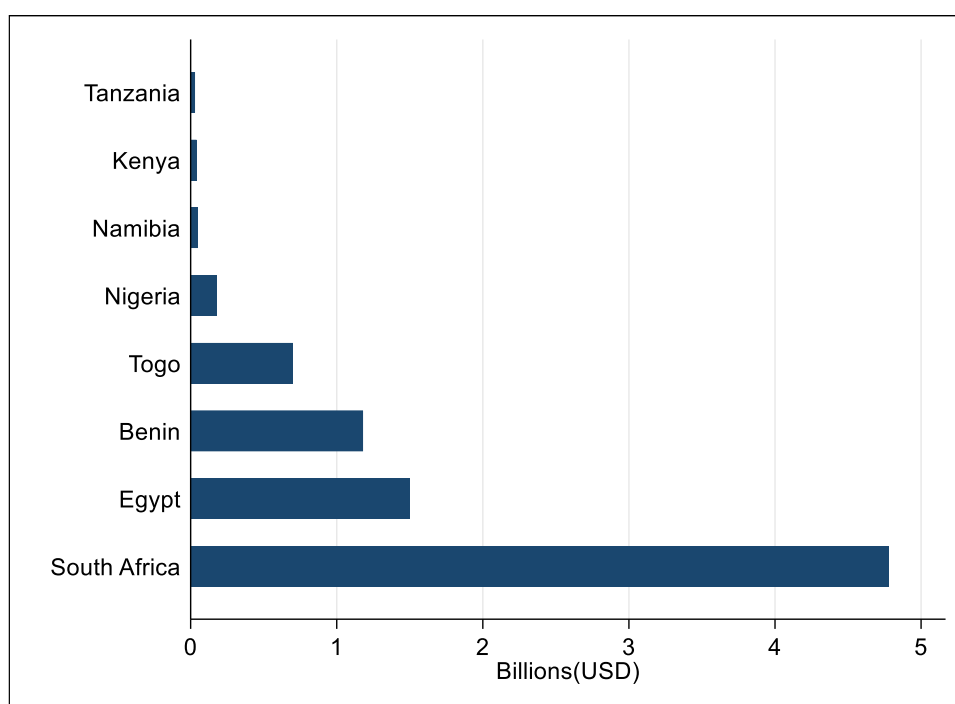
Source: Data from Climate Bond Initiative (2023).

Referring to 'Africa' masks the unevenness of the GSSS bond market on the continent. Figure 8 illustrates the breakdown for the African countries' USD 8.5 billion GSSS bond markets. The data changes as new deals are finalised, but Figure 8 shows the coverage of countries and the GSSS markets. South Africa leads the African continent in the GSSS markets. Out of the \$8.5 billion GSSS market on the continent, South Africa commands over 50%. Only Benin and Egypt have surpassed the \$1 billion threshold thus far. The patterns align with general

climate finance for the continent so far, where ten countries absorb more than half of all investments (Climate Finance Initiative, 2022). Underpinning its continental leadership, South Africa remains the only African nation to have introduced a Green Finance Taxonomy that is partly based on the EU taxonomy. This move shows that the policymakers are serious about this, given that the country is the largest carbon emitter in Sub-Saharan Africa (World Bank, 2023). Beyond South Africa, 13 African nations have instituted policies and frameworks to incentivise and guide sustainable investments (Atwell, 2023, p. 6).

The figures presented in Figure 8 denote the size of the GSSS markets in each nation. However, to gain an insightful perspective, it is important to analyse, at a granular level, the identity of issuers within each country, alongside the significant characteristics of each issuance. Table 3 illustrates these details. The table confirms that South Africa is the only nation to issue bonds across all GSSS categories, with the green theme dominating. Social bonds have been issued exclusively in South Africa and Tanzania, in both instances by commercial banks. The second overarching pattern is that Nigeria, Benin, and Egypt are the only nations with sovereign issuances. South Africa has issued two sub-sovereign issuances at the city and local government levels. The remainder are private sector issuances, primarily by commercial banks. Commercial banks also have other debt products that cannot be completely replaced by green debt instruments (Dembele et al., 2021). Despite the ambitions for this turn to the private sector for development finance, the small deal sizes and short tenors of these private banks are hardly scratching the surface of the magnitude of the required amounts, especially when using the US\$ 213.4 billion determined through estimates in Africa’s NDCs (African Development Bank, 2023).

Figure 8. Cumulative issuances of GSSS bonds in Africa since 2014



Source: Data from Luxembourg Stock Exchange (2023).

Regarding specific trends in Table 3, South Africa warrants further investigation as it issues bonds across all GSSS categories. The country has a minimum of 12 issuers, with 6 of these being commercial banks and two being sub-sovereigns. The country also demonstrates recurring issuances, a crucial aspect for potential scaling-up. The main repeated issuers of green bonds in South Africa are Redefine Properties (a real estate firm) and Nedbank (a commercial bank). While desirable, it remains relatively uncommon for each issuer to issue across all GSSS categories. Table 3 reveals that only Redefine Properties and the Bank of Windhoek have carried out issuances in more than one GSSS category.

Table 3. GSSS bonds in Africa at issuer and deal level

Country and issuers	Green	Social	Sustainability	Sustainability -linked
South Africa				
City of Cape Town South Africa	1	.	.	.
City of Johannesburg South Africa	1	.	.	.
Investec Bank LTD	2	.	.	.
Growthpoint Properties LTD	3	.	.	.
Standard Bank Group LTD	3	.	.	.
ABSA Bank LTD	4	.	.	.
Nedbank LTD	5	.	.	.
Redefine Properties LTD	6	.	.	1
Firststrand Bank LTD	.	.	4	.
Fortress REIT LTD	.	.	.	2
Rand Water	.	.	.	2
The Standard Bank of South Africa LTD	.	2	.	.
Namibia				
Bank Windhoek LTD	1	.	1	.
First National Bank of Namibia LTD	1	.	.	.
Standard Bank Namibia LTD	2	.	.	.
Nigeria				
North South Power Company	1	.	.	.
Access Bank PLC	2	.	.	.
Nigeria Government Bond	2	.	.	.
Benin				
Benin Government International Bond	.	.	2	.
Togo				
Ecobank Transnational Inc	.	.	2	.
Egypt				
Egypt Government Bond	2	.	.	.
Tanzania				
NMB Bank PLC	.	1	.	.
Kenya				
Acorn Project Two LLP	1	.	.	.

Source: Data from the Luxembourg Stock Exchange (2023)⁵.

⁵ While it is not clear which projects commercial banks finance, the name of the companies potentially points to what these bonds are used for. For instance, entities such as Redefine Properties may invest in green buildings and Rand Water's sustainability-linked projects are in its water projects.

Beyond the green category, there has been little activity in the other GSSS categories: Social, Sustainability, and Sustainability-Linked Bonds (SLB). Such investments significantly reduce poverty, a key priority for numerous developing countries. For instance, in a recent World Bank survey involving 43 low-income nations, 'less than six per cent of respondents listed climate as one of their country's top development priorities' (Kenny, Ramachandran and Kankaria, 2023). Unsurprisingly, most countries prioritised education, rural development, healthcare, social housing and food security (OECD, 2021). If international investors are averse to national priorities and planning (Murbuah et al., 2022), they may not receive full cooperation when they try to influence policy towards green investments, forestalling progress in planetary investments.

In the face of growing ESG and mitigation focus, critics have argued that the relegation of poverty and other urgent development challenges is becoming a concern for Africa and other developing countries. The GSSS bonds show this mismatch, especially since most issuers are commercial banks whose business models cannot easily translate towards combating poverty and many other SDG challenges. The concern is that poverty is deprioritised as the focus shifts to climate challenges, for which most low-income countries contributed the least. The dominance of the green theme has also been linked to concerns about 'Green colonialism' –the situations where the pressure to *go green* in advanced economies leads to increased extraction of natural resources (cobalt, lithium, and copper) in low-income countries. This can mirror the extractivism that occurred during the early colonial era in Africa, but with a new green logic (Easton and Gwaindepi, 2021, Gwaindepi, 2022a). At times, other 'green' projects lead to the displacement of indigenous people as a consequence of conservation priorities dominating, depriving them of their usual source of livelihoods.

The green theme is more popular and mostly driven by commercial banks. These bank issuers cannot sacrifice profitability and other important aspects of their business models to address poverty and many other Sustainable Development Goal (SDG) challenges. They may have programmes speaking to these themes, but their credit extension regimes still limit scaling-up, especially in many low-income countries where many small firms cannot access credit cheaply. The ultimate issue is whether GSSS instruments can fund large-impact investments, especially on poverty and other sustainable development goals.

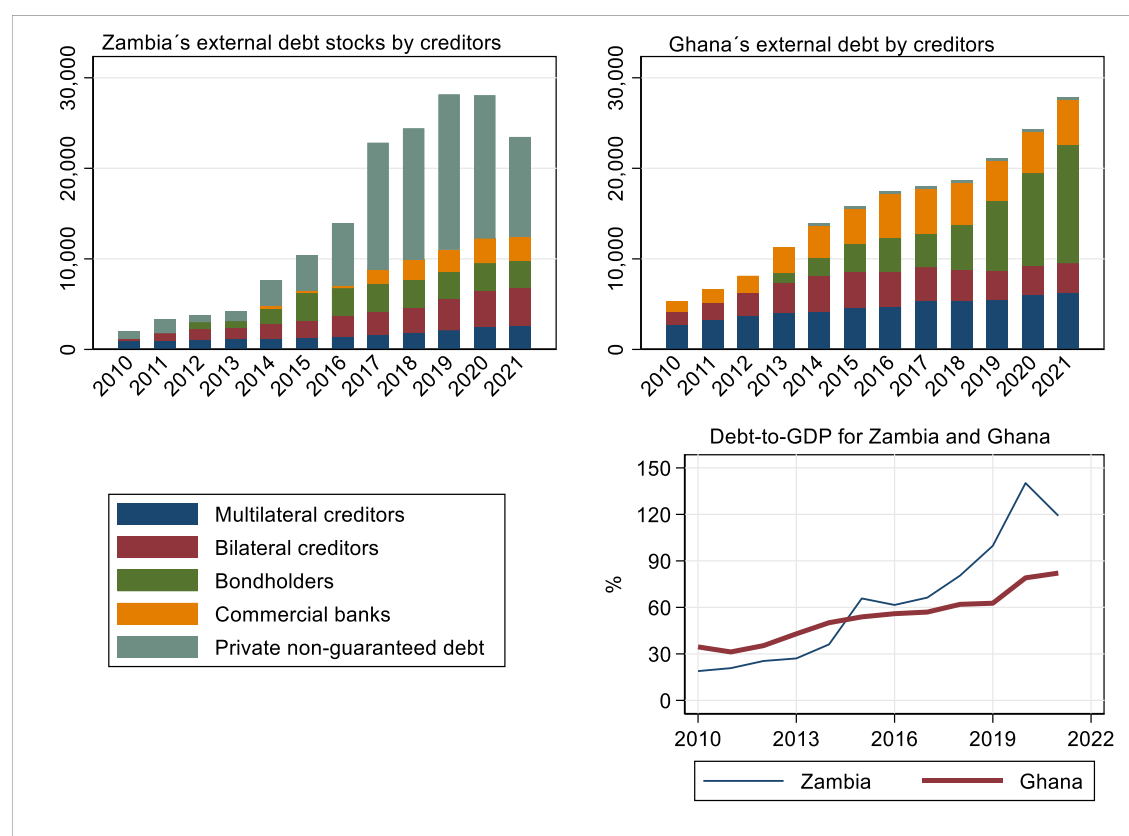
GSSS bonds in the context of high and rising debt in Africa

As previously established, Green, Social, and Sustainability and Sustainability-linked (GSSS) bonds use funding mechanisms that are similar to traditional vanilla bonds, except for the requirement on the use of proceeds. This similarity in funding approaches implies that issuing GSSS bonds does not change the fact that these are inherently debt instruments. Investors often resist green initiatives if they involve additional administrative complexities and uncertain risk profiles that may lead to potential financial losses.

Before the COVID-19 pandemic, African countries grappled with limited fiscal resources, making it challenging to service their growing debt. The IDA countries

have particularly seen a growth in private debt, from \$13 billion in 2010 to about \$133 billion in 2021 (Diwan et al. 2023). Such private credit growth undermines the work of IDA and other concessional lenders in that liquidity provided by IDA may potentially be diverted to service private debt. Consequently, borrowing through GSSS or conventional debt has become more difficult and costly. In 2020, low-and-middle-income countries disbursed USD 372 billion for debt repayments, whereas climate financial flows only reached USD 83.3 billion. Of the 38 African countries under the Debt Sustainability Framework (LIC-DSF), 25 face a high risk of or are already experiencing debt distress. The remaining countries fall under moderate risk (The World Bank, 2023). The risk levels vary among countries and are determined by the mix in their debt portfolios and maturity dates, among other non-financial features. The recent experiences of Zambia and Ghana are particularly illustrative (Figure 9), especially when considering the potential pitfalls of GSSS bonds, which, at the sovereign level, follow each sovereign’s general rating.

Figure 9. Recent debt stocks for countries in recent defaults - Zambia and Ghana



Source: Data from the World Bank (2023).

Zambia’s road to default was marked by overborrowing in hard currencies. The country is reported to have initially planned to issue USD 500 million worth of Eurobonds, but good yield prospects led to oversubscription and the amount being doubled. This has been called the ‘too much debt’ puzzle, where lenders give credit beyond the borrower’s ability to pay (Bolton et al., 2022). Conversely, Ghana, which seemed less likely to default than Zambia (as per Figure 9), found

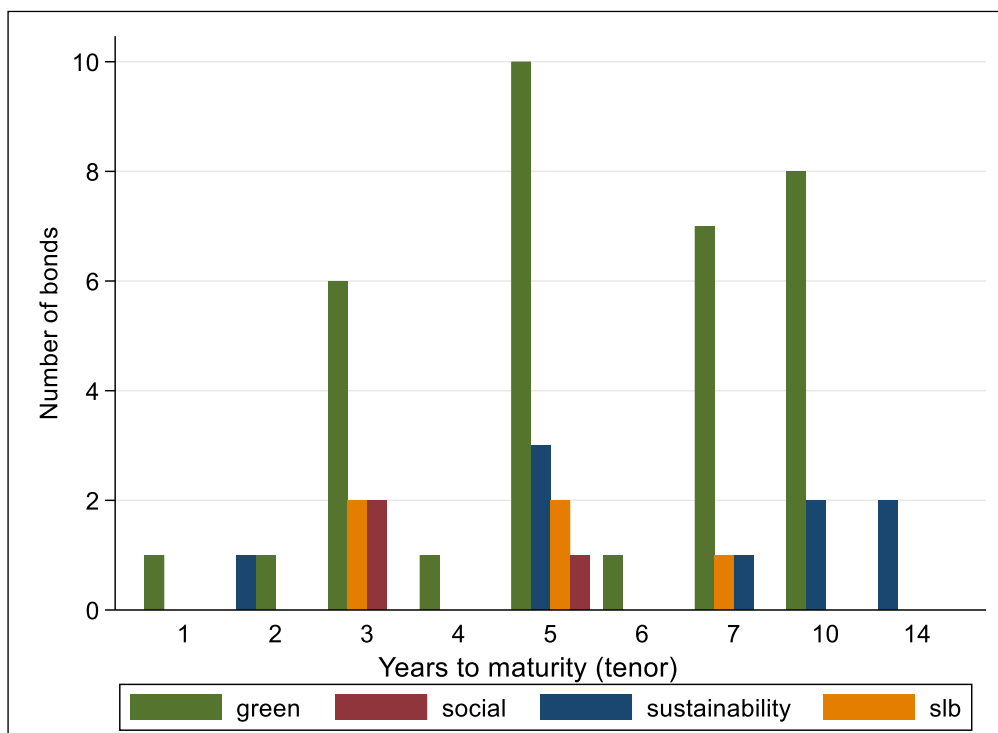
itself in default partially due to the large outstanding bond services to its Eurobonds (shown by the larger sharp rise of bondholders from 2013). For Ghana, Figure 9 makes it clear that sovereign bonds have grown in recent years, becoming the largest debt instrument in the country and thus putting pressure on debt servicing. Eurobonds accounted for almost 46% of the external debt in Ghana, compounding liquidity problems. The country failed to meet the grace period for a USD 40.6 million coupon payment on a 2026 Eurobond, and between 70% and 100% of Ghana's public revenue was diverted towards debt servicing (Akorlie and Inveen, 2022). This situation has led to a debt overhang that hinders the issuance of GSSS bonds. Therefore, in such scenarios, concessional loans or other arrangements, such as debt-for-nature swaps, often emerge as the most feasible solution (Karaki and Bilal, 2023).

The Ghanaian situation illustrates the challenges faced by many low-income countries with regard to achieving external debt sustainability within the currently volatile and tighter global monetary-financial system (International Monetary Fund, 2023). Sovereigns are forced to borrow in hard currencies because they cannot borrow internationally in local currencies. However, when domestic revenue mobilisation is weak, as has been the case for most of African countries due to poor economic performance and other fiscal capacity challenges (Gwaindepi, 2021, Gwaindepi, 2022b), servicing the debt in hard currencies becomes costly and near impossible. Over 40% of Africa's debt obligations are estimated to be denominated in predominantly hard foreign currencies (The World Bank, 2023). This circumstance presents complications as repayments for both interest and principal bond amounts are made in often volatile local currencies. Currently, most developing countries pay more in debt servicing than they invest in education and health (United Nations, 2023). Therefore, issuing GSSS bonds in local currencies is important because it increases the chances of scaling up green projects with relatively low pressure on government revenues.

In addition to the currency in which bonds are issued, the structure of these bonds, and in particular their maturity dates, constitutes a crucial element. The maturity year is significant because loan servicing often commences before revenue generation. Figures 10A and 10B below provide tenor profiles for African GSSS bonds, indicating that nearly 90% of issuances do not exceed ten years in maturity dates. Most of these issuances have a maturity of five years or less. Short maturities and a lack of concessionality make bond issuances costly for many low-income countries. Figure 10B highlights this issue, showing that while developed nations such as Denmark, Sweden and Norway issue GSSS bonds at coupon rates under 3%, African countries see rates ranging from 5% to over 12%. Nigeria's highest coupon rate is 15.8%, yet the rates are usually near zero per cent in the developed economies. Longer tenors have the potential to ignite the interest of institutional investors such as insurance companies and pension funds seeking long-term cash flows from green projects (Dembele et al., 2021). Most of Africa's infrastructure projects, the usual cause for high debt levels, take considerable time to generate revenue. While the potential for social and economic benefits is often present, these advantages typically do not bring revenue soon enough before defaults occur. In addition to long tenors, safety nets such as disaster clauses are

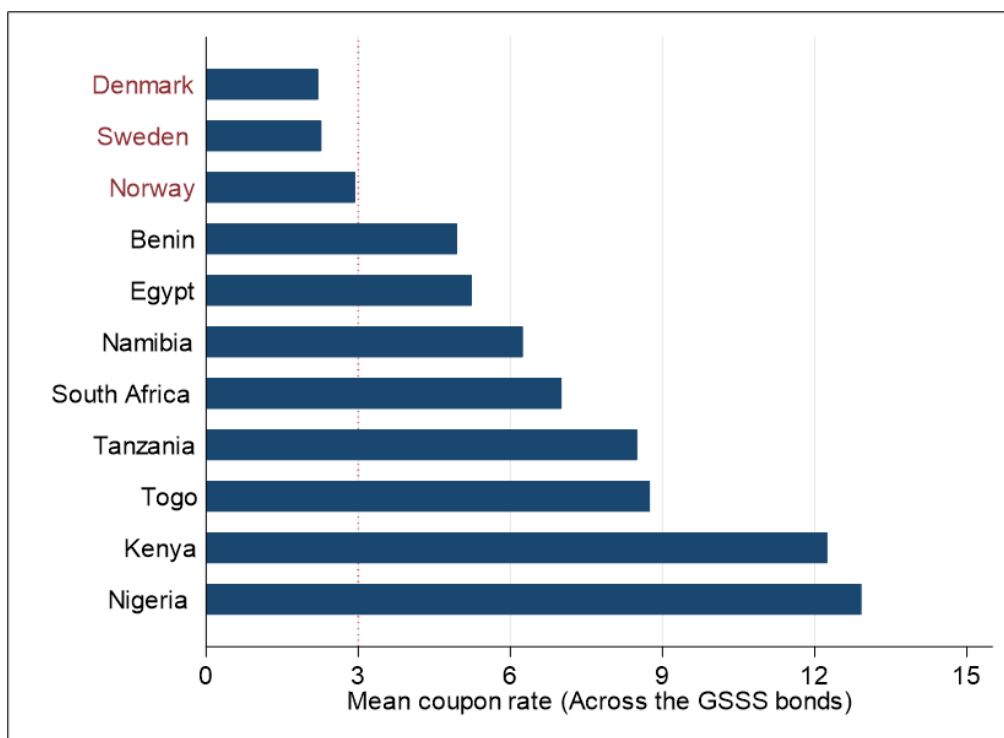
becoming popular to cushion more vulnerable countries such as the small island developing states.

Figure 10A. Time to maturity of the GSSS bonds in Africa at issuance



Source: Data from Luxembourg Stock Exchange (2023).

Figure 10B. Average coupon rate in Africa, relative to the advanced economies



Source: The Luxembourg Stock Exchange (2023).

Besides debt, multiple constraints reduce Africa's competitiveness in GSSS capital markets. While investors are attracted to instances where profit-making overlaps with environmental imperatives, the sluggish growth of adaptation and mitigation investments in many African countries suggests that these instances are infrequent. Impact investment remains heavily dependent on business viability, and market-based voluntary solutions will likely not supplant the need for radical interventions (Parker and Kind, 2022). In a world defined by shareholder primacy (Friedman, 1970), 'sustainability' and 'green' risk become buzzwords, occasionally validated by anecdotal instances where profit-making and planetary impact align, further delaying overdue systemic solutions.

Financial markets are equally important for enabling the GSSS markets to flourish, especially for local currency instruments. For instance, South Africa leads the continent in the issuance of green-labelled bonds in hard and local currencies due to its relatively sophisticated financial systems. The financial development index, an aggregate measure encompassing financial institutions, market depth, and other financial market factors, indicates that Africa ranks low even by emerging market standards. A significant challenge in this regard is that eligible green projects take time to curate and package convincingly in weak financial markets. In Africa, 80% of infrastructure projects fail to progress beyond the feasibility and early planning phase (Attwell, 2023: 4). Despite the availability of investable funds, Africa is criticised for its inadequate preparation of bankable projects, a stance seemingly at odds with climate justice, especially given that Africa and other developing nations are least responsible for causing climate change but worst affected by it. The expectation that Africa needs to prepare a pipeline of profitable projects is one pressing 'free lunch' problem in the GSSS and other capital markets. Creating the necessary conditions and project pipelines should be a collective effort of local, international, private, and public players.

POLICY IMPLICATIONS

The first part of this section presents policy implications and recommendations for African nations. It touches on strategies for countries and also highlights the role of regional integration and cooperation in Africa. These strategies have the potential to facilitate collective learning, foster the integration of GSSS markets, strengthen market access and amplify the voices of African nations on international platforms. The second part of the section discusses the role that various parties in the international community can play in paving the way for developing GSSS markets in Africa.

African countries

Article 4.6 of the Paris Agreement on climate change emphasises the necessity for Low-Income Countries (LICs) and Middle-Income Countries (MICs) to develop and communicate strategies that reflect their unique circumstances. If these countries are unprepared, there is a risk that development partners will impose

their standards and promote their own interests. Examples of such positive efforts can be seen in countries like Chile, where a year-long inter-ministerial consultation process that involved the Ministries of Finance, Environment, and Transport yielded significant results (OECD, 2022: 25). Similarly, in 2021, Colombia issued a sovereign green bond with the primary aim of promoting the development of the green bond market (OECD, 2022: 30). In Africa, Seychelles developed its Blue Economy Roadmap, which includes a portfolio of pipeline projects (Harrison and Muething, 2021: 10). Kenya has made progress in fostering proactive inter-organisational collaboration between the Kenyan Bankers Association, the Nairobi Securities Exchange (NSE), the Climate Bonds Initiative and other international players that have formed a strong multistakeholder partnership (Oyoo, 2022; Ngwenya et al., 2020). South Africa has established a green bond segment in the Johannesburg Stock Exchange to promote the integrity and transparency of local green bond markets (Ngwenya et al., 2020). The following aspects of context-sensitive strategies for African countries deserve attention:

- *Establishment of GSSS taxonomies and frameworks.* As of 2022, only about 13 African nations had access to international capital markets (OECD, 2022). There is an immediate need to strengthen existing frameworks or taxonomies within ministries. Dedicated departments should be established where such capacities do not exist since the need for sustainable and green growth strategies has become apparent. These can be the first crucial steps to make African states control their green destinies rather than being reduced to derisking roles by the entrenched power of international finance (Gabor and Braun, 2023). This step fosters credible commitments and transparency in GSSS bond markets, reducing exit risks for investors. Building elite bargains at the inter-ministerial level can pave the way for essential political support and ownership.
- *Fostering public-private partnerships and collaboration.* Financial corporations, notably commercial banks, are issuing more GSSS bonds, but the amounts remain meagre. This points towards a clear need for greater collaboration between these entities and sovereign players. Strengthening such alliances holds great potential for mutual benefits. Commercial viability signalled by private issuances can be bolstered, and sovereign and sub-sovereign players can capitalise on and further drive the momentum seen in the private sectors. Such collaboration promotes joint learning by fostering an exchange of ideas. Sovereign entities, in particular, can play a crucial role in enabling financial corporations to serve as intermediaries for economy-wide GSSS projects carried out by small to medium-sized enterprises. They can do this by offering tax or other incentives to projects that strongly align with GSSS principles (Azhgaliyeva and Kapsalyamova, 2021). This will enhance the implementation and impact of GSSS initiatives across economies.
- *Prioritising sovereign issuances.* The third point pertains to the low issuances of social, sustainability, and sustainability-linked bonds (the 'SSS' elements of GSSS bonds). Sovereign and sub-sovereign entities can play a crucial

role in issuing these three bond categories, as the private sector is already ahead regarding the green theme. These bonds often address social issues and wider SDG priorities that governments are already tackling, making them more attractive and easier to advocate for than purely green bonds. A transition from conventional bonds towards social, sustainable, and sustainability-linked bonds seems feasible. This is due to their inherent appeal, as they can align with urgent policy matters such as poverty, education, and healthcare and be consistent with national development plans. This route has been taken by Latin American countries (especially Chile), which witnessed a 338% increase in sovereign-issued sustainability bonds (Climate Bonds Initiative, 2023).

- *Addressing governance issues.* As was pointed out earlier, African countries must confront issues such as corruption and the mismanagement of fiscal resources and public debt. Such issues can affect credit ratings markedly: as of 2023, only two (Botswana and Mauritius) of the 32 African countries that have received credit ratings obtained investment grade ones (OECD, 2023). A survey showed that Ghana's asset managers and financial analysts regarded credit ratings as the most important factor for successfully issuing green bonds (Mankata et al., 2020). Investment funds are fungible, and pledges to allocate proceeds to green projects lack credibility when there is evident mismanagement in other economic sectors. Mere labelling of debt instruments will not translate to robust business practices or the transparency GSSS markets require.
- *Strengthening African market integration.* Reference was made earlier to the limited participation of African countries in GSSS bond markets. There is a compelling argument for integrating African GSSS bond markets to facilitate large-scale issuances in local or major African currencies. Pooling resources at the continental or regional block level is also essential for gaining traction with GSSS bonds, including coordination on taxonomies. A prime example is the role played by the African Development Bank through technical support and other initiatives, such as the African Green Bank Initiative launched at Cop 27. Another case in point is the West African Development Bank (BOAD) in the West African Economic and Monetary Union (WEAMU), which issued a 12-year sustainability bond valued at €750 million in 2021. It attracted more than 250 investors and generated an oversubscribed total demand of €4.4 billion.

The role of advanced economies, MDBs and donors

- *Fostering collaboration and engagement.* Building on the initial point in subsection 4.1, international players should actively maintain collaborative relationships with ministries, national and regional development banks, and other key African stakeholders. This includes genuine attention to national development priorities, which may not necessarily be green. This engagement is crucial before any bankable GSSS projects come to fruition, as considerable preparatory work and other groundwork must be done.

International participants can collaborate and invest time in understanding and potentially contributing to taxonomies and national strategies.

Absorbing costs is vital to this collaboration in order to transform the project pipeline into reality. Creating avenues for donor countries to feasibly invest in bankable green projects is a shared responsibility. As the earlier discussion of the 'free lunch' problem suggested, African countries cannot prepare profitable GSSS projects for the global community. MDBs can assist in securing pre-feasibility investments for project preparation.

- *Mitigating investment risks.* The study revealed a clear pattern in African countries' comparatively high borrowing costs. Several strategies can assist in alleviating this constraint. First, the international community can help by anchoring investments for African nations, thus improving their risk profiles and derisking GSSS issuances (OECD, 2023). Insurance mechanisms and guarantees can also contribute to lower spreads and initial coupons on issuances. Implementing strategies to extend tenors is crucial to provide projects with grace periods in which to generate initial revenue streams.
- *Fostering capacity development at the technical level.* Approximately 78% of global climate science funding is allocated to European and North American institutions (Vuong, 2021). This denies the world a vast indigenous knowledge pool on adaptation and resilience. Donor funds can be leveraged to attract institutional investors to developing countries on a larger scale through partial guarantees and pre-issuance work (OECD, 2022: 40; Dembele et al., 2021). A prime example of this is Seychelles' sovereign Blue Bond, which received a partial guarantee of \$5 million from the World Bank (IBRD), along with a \$5 million concessional loan from the Global Environment Facility (GEF) to partially cover interest payments for the bond (Dembele et al., 2021: 32).
- *Honouring pledges.* One effective way to catalyse progress in Africa's GSSS markets is for international players to fulfil their pledges. The resources from these pledges can stimulate local market development and enhance the effectiveness of other funding mechanisms. The unfulfilled pledge of \$100 billion by developed nations, as outlined in the 2015 Paris Agreement, has sparked policy debates and undermined the credibility of future pledges such as those on losses and damages. These pledges can support low-lying, low-income states such as the Small Island Developing States (SIDs). If these pledges are not met, these countries may have to divert their limited resources towards climate disasters or risk spiralling into further debt through what has been called the debt-as-insurance problem, where countries exposed to climate disasters borrow and accumulate debt liabilities at the same time losing their natural assets (Songwe, Stern and Bhattacharya, 2022: 37).
- *Stewarding creditor relationships.* One challenge inhibiting the growth of GSSS bonds at the sovereign level is the complexity of debt markets, which

have expanded beyond the Paris Club to include numerous private participants. Greater efforts are required to consolidate and responsibly manage creditor relationships, which become crucial in the event of a country's default. This task is becoming more challenging as multilateralism faces numerous threats amid global political instability. Fragmented initiatives by lenders could inadvertently result in zero-sum consequences, where private creditors drain the resources that concessional lenders provide, leaving countries in similar precarious situations. Certain aspects, such as disaster clauses in all instruments (as seen with climate clauses for Grenada and Barbados), need to be considered, along with coalitions of bilateral, official, and private creditors (OECD, 2023).

CONCLUSION

The Green, Social, Sustainability, and Sustainability-linked (GSSS) bond markets have grown globally, but Africa's share barely reaches 1%. This implies that as these instruments are already unlocking private sector finance elsewhere, the progress in Africa is still locked only in potential and hopes. If the 2020s truly become a 'golden decade' of sustainable finance, current patterns show that Africa will not be part of this development unless radical changes and interventions occur. Substantial concerted efforts by all domestic and international players remain necessary, especially at the pre-feasibility and project pipeline development stages.

Despite the global enthusiasm for these instruments, existing evidence paints a bleak picture for Africa. The prominence of the GSSS bonds in climate finance does not yet translate into significant action on the continent. Numerous factors hinder GSSS bond expansion in Africa, stemming from specific continental, national, and the configuration of the international financial system. Poorer economies are shunned during unstable times, like in the current tight international monetary system, and there is need for continual discussions on whether instruments and taxonomies developed for advanced economies are fit-for-purpose in lower income country contexts. Sovereign and sub-sovereign issuances of GSSS bonds have been particularly slow, influenced by pre-existing challenges such as high debt distress and other socio-political risks. In addition, from a political economy perspective, policymakers face real trade-offs between a focus on pressing challenges such as poverty and infrastructure deficiencies, often enshrined in their national development plans, which now compete with climate actions, thus determining the progress in the uptake of these green instruments.

Innovation at the instrument level cannot supersede the development of eligible African projects, and the latter, being a global public good, requires collective efforts by African and international players. In addition, Africa requires instruments aligned with its socioeconomic environment, with constant scrutiny regarding which item in the toolkit of private sector financing may be a more

suitable instrument for Africa. Current enthusiasm around GSSS bonds should not overshadow alternative private and public ways of financing sustainable development and climate change initiatives in Africa. In the interim, traditional funding approaches such as bilateral assistance and concessional finance remain vital, both in direct assistance and, crucially, in catalysing and unlocking private sector finance.

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