

Retail sovereign debt: a silent revolution in public finance

Pathways for scaling retail
sovereign finance

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About the authors

Arend Kulenkampff

Innovative and Sovereign Finance Lead

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Contents

Executive summary	6
Introduction	7
01 Basics of retail financing	11
What is retail sovereign finance?	11
Historical development	14
Why now?	16
02 The state of retail financing	18
Why Africa?	20
03 Retail bond mechanics and operating models	23
Retail bond characteristics	23
Operating models	24
Direct-to-Investor model	26
Bank-led model	28
Exchange-led model	30
Mobile money model	33
Unit trust model	37
04 Assessing the opportunities	40
Public financial management	40
Financial inclusion	44
Capital market development	45
Sustainability link	50
05 Barriers to scale	56
Demand-side constraints	56
Supply-side constraints	61
06 Recommended pathways to scale	63
07 Conclusion	67
Appendix: Lexicon of key concepts	68
References	70

List of figures

Figure 1. Stylised retail investor “personas”	12
Figure 2. US retail savings bonds program, 1935–2023, not inflation adjusted	15
Figure 3. Retail savings holdings in select sovereigns	18
Figure 4. Share of retail financing in select sovereigns, 1935–2025	19
Figure 5. Domestic financing by region	20
Figure 6. Retail readiness segmentation, sub-Saharan African sovereigns	21
Figure 7. Retail readiness groupings	22
Figure 8. South Africa’s retail savings bonds program	26
Figure 9. The Philippines retail bond program	29
Figure 10. Nigeria’s exchange-led retail operating model	31
Figure 11. Two digital payment channels	33
Figure 12. M-Akiba mobile money model	34
Figure 13. Rwanda’s unit-trust model	38
Figure 14. Hungary’s retail financing program	42
Figure 15. Screenshot of Diia KYC and city themed bond selection	43
Figure 16. Financial account penetration	44
Figure 17. Stylised digital bond platform architecture	47
Figure 18. Liberty prototype green impact reporting	49
Figure 19. BRD sustainability-linked bond structure	51
Figure 20. Sample sustainability performance targets and payoffs	54
Figure 21. Reasons for having no account (% age 15+, 2021)	56
Figure 22. Capital mobilisation potential	57
Figure 23. Japan’s retail social media campaign	60
Figure 24. Survey Responses to the question: ‘how did you hear about m-Akiba?’	64

List of boxes

Box 1. United States savings bonds	15
Box 2. Bond market building blocks	25
Box 3. Select digital bond projects	48
Box 4. Lessons from Kenya’s M-Akiba	58

Abbreviations

CBDC	Central Bank Digital Currencies
CDD	Customer Due Diligence
CSD	Central Securities Depositories
DFI	Development Finance Institutions
DLT	Distributed Ledger Technology
DMO	Debt Management Office
DPI	Digital Public Infrastructure
EMDE	Emerging Markets and Developing Economies
ESG	Environmental, Social and Governance
FD	Financial Development Index
FMIS	Financial Management Information Systems
G2P	Government-to-person payments
GSSS+	Green, Social, Sustainability and Sustainability-linked debt instruments
GTMI	GovTech Maturity Index
ICMA	International Capital Market Association
KPI	Key Performance Indicators
KYC	Know-your-customer
MDB	Multilateral Development Bank
MNO	Mobile Network Operator
ODA	Official Development Assistance
P2G	Person-to-government payments
PFM	Public Financial Management
RSF	Retail Sovereign Finance
SDG	Sustainable Development Goals
SLB	Sustainability-Linked Bond
SSA	Sub-Saharan African
UI	User Interface
UX	User Experience

Executive summary

Retail sovereign financing, which involves government debt securities like bonds or treasury bills offered in small denominations to individual investors, is undergoing a silent revolution in public finance. Historically, these instruments have served as a vital funding source of last resort during national emergencies, including wars and pandemics, by mobilising domestic capital when foreign sources become unavailable. In the modern context, especially for Emerging Markets and Developing Economies (EMDEs), retail financing offers a strategic pathway to increase sovereign financing flexibility, lower borrowing costs and reduce dependence on volatile external capital.

The report identifies several interlocking objectives for scaling these programs: advancing financial inclusion, deepening domestic capital markets and mobilising funds for Sustainable Development Goals (SDGs). By providing safe, interest-bearing savings vehicles, retail bonds can reach unbanked or underserved populations, often forcing traditional banks to offer more competitive deposit rates. Furthermore, the retail space serves as a fertile testing ground for innovative sustainable finance instruments, which can align the financial interests of citizens with local environmental and social outcomes.

Various operating models exist to facilitate this distribution, ranging from direct-to-investor systems managed by the government to bank-led or exchange-led models that leverage existing financial infrastructure. Recent technological advancements, such as mobile money, digital IDs and Distributed Ledger Technology (DLT), have significantly lowered transaction costs and expanded access to a "digital-first" investor base. However, successful scaling requires navigating significant barriers, including weak underlying digital public infrastructure and potential resistance from incumbent financial institutions that view retail bonds as competition for deposits.

To unlock the full potential of retail financing, the report recommends that governments prioritise superior user experience/interface design (UX/UI) and tailored marketing strategies that combine traditional and digital media. In sub-Saharan Africa specifically, governments should leverage the region's innovative spirit to experiment with digital bonds and mobile money models while doubling down on existing digital public infrastructure. Ultimately, the international development community must elevate retail financing in global policy discussions, providing the technical assistance and funding necessary to pilot these programs as a core component of prudent debt management and resilience strategies.

Introduction

The history of public finance has shown time and again how citizens have rallied during national emergencies to act as the funding source of last resort for their governments, be it wars, pandemics, or financial and sovereign debt crises. Given its long track record of mobilising domestic capital during times of fiscal stress, retail sovereign finance (RSF) has a critical role to play in tackling the profound fiscal challenges confronting governments of our current moment.

It will not supplant wholesale or external finance, yet it can meaningfully lessen the dependence on both at a time when they are increasingly scarce and dear. For those reasons alone, policymakers and development practitioners should add it to the crisis management toolkit alongside other mechanisms such as blended finance and debt-for-development swaps.

There are numerous other advantages and co-benefits of RSF besides budget financing. This report will showcase examples from across the world and throughout history to show how it has helped catalyse financial inclusion and financial sector development. It will also explore options for incorporating innovations in digital distribution, distributed ledger technology and sustainability. While still nascent, these have the potential to supercharge RSF in terms of scale, speed to market and development impact.

The aim of this report is to survey the global RSF landscape and examine its practical opportunities and challenges. In this regard, the report addresses a gap in the sovereign and development finance literature and policy agendas, in which retail financing has been largely absent.

We argue that RSF should feature more prominently because of its proven potential to achieve four interlocking objectives: i) increase sovereign financing flexibility and lower borrowing costs; ii) to advance financial inclusion; iii) to deepen domestic capital markets; and iv) to mobilise funding for critical SDGs.

The report draws on five lessons about how to unlock this potential:

1. **There is no one-size-fits-all approach.** A variety of tried and tested models provide illustrative case studies, but success of a retail program in each context ultimately depends on the strength of the infrastructure and institutional pillars underpinning it. Building on weak foundations can undermine success, and therefore the starting point of the program design should be a critical assessment of readiness

Accordingly, the report provides a first-cut segmentation of sub-Saharan African (SSA) sovereigns based on measures of RSF readiness. At the same time, even where conditions are not ideal, a retail program can be an opportunity to shake up ossified capital market structures and upgrade public financial management systems.

2. **The state of the art in digital distribution is in flux, and opportunities to boost uptake will arise as new enabling technology matures and evolves.** Programs that are flexible by design allow issuers to pivot when products fail to gain traction and to incorporate new enabling technology when it becomes available, especially mobile money and “bonds in a box.” Those that do not can become locked into outmoded systems and marketing strategies that fail to attract a growing “digital first” investor base. As is best practice for retail technology products more broadly, a spirit of experimentation and agile development is effective in finding “product-market fit” and sustaining it amid constantly shifting consumer preferences.
3. **Retail finance allows for more experimentation with non-standard bond structures than wholesale sovereign finance.** Market conventions and regulatory strictures are arguably less of a constraint on innovation in terms of product features and incentives, provided that robust investor protections are in place. The diversity of retail programs testifies to the investors’ openness to unconventional designs. In particular, the retail space offers a fertile testing ground for embedding sustainability objectives, which have the potential to generate buy-in and support for climate and nature initiatives.
4. **While the demand side may be more receptive to innovation, the supply side is often a blocker.** Competition for scarce savings can generate resistance from incumbent deposit-taking institutions. Navigating political economy dynamics requires a mix of carrots such as revenue sharing arrangements and sticks such as the deployment of new distribution modalities that bypass established providers and channels. Again, digital bonds and sustainability features can be effective in this regard.

5. **RSF presents significant opportunities for enhancing fiscal and monetary policy effectiveness and advancing SDGs.** Aside from increasing financing flexibility and supporting debt sustainability by mitigating currency and refinancing risks, retail bonds can also mobilise funding for specific outlays such as green infrastructure or public housing. Meanwhile, the creation of an attractive interest-bearing savings vehicle can put pressure on incumbent banks to improve their offerings and align deposits, thereby strengthening monetary policy transmission. The embedding of sustainability factors can align investors' financial interests with sustainability outcomes, fostering popular buy-in and strengthening public accountability.

Based on these conclusions, the report makes general recommendations for the global development finance community, including national governments in sub-Saharan Africa (SSA) and four practical lessons learned for retail finance providers to advance progress in the development of retail sovereign finance markets across Africa.

Policy recommendations for the global development finance community and SSA sovereigns:

1. **The international sovereign debt community and development practitioners should elevate retail financing in relevant policy fora.** Supporting novel wholesale and cross-border solutions is necessary but not sufficient to solve the climate and the SDG financing problem. More international financial support, technical assistance, research and development should be dedicated towards exploring and realising the potential of retail finance.
2. **National governments, in partnership with central banks and relevant financial authorities, and supported by the international community, should invest in digital public infrastructure (DPI) as a foundational enabler of both retail finance programs and financial inclusion strategies.** Shared DPI covering digital identity, payments and data exchange can align policy objectives and support seamless, real-time, secure and ubiquitous service delivery.
3. **SSA sovereigns should leverage the region's innovative spirit and entrepreneurial dynamism to double down on existing initiatives.** The region has already made big strides in developing digital public infrastructure and advancing financial inclusion, as well as launching promising retail programs in several jurisdictions. Fresh funding, technical assistance and knowledge exchange can ensure that SSA sovereigns can serve as a testing ground for cutting-edge digital and sustainability financing solutions that will benefit their peers further afield.
4. **SSA sovereigns should leverage RSF solutions as a tried-and-tested instrument to counter the unfolding fiscal crises in their region, build resilience against future climate shocks and pursue SDGs.** Especially for countries under fiscal strain, when appropriate, retail financing should be prioritised in crisis management and prevention approaches, in addition to becoming an integral part of prudent debt management strategy more broadly.

Practical recommendations for retail finance providers – four lessons learned from good practice:

1. Develop superior user interface and user experience design (UX/UI).

In the current mobile and digital-first culture, this means user-friendly websites and mobile applications that follow state of the art in human-centred design and digital innovation.

2. Develop a marketing strategy that mixes both traditional and digital media.

Aside from efforts to broaden the coverage and promote usage of digital financial services more broadly, retail bonds will require a separate marketing push and tailored messaging.

3. Offer superior financial returns and/or incentives to drive uptake subject to market conditions. There is some scope to experiment with different structures and features to improve “product-market fit”.

4. Embed sustainability features to leverage the impact potential of retail finance. Sustainability objectives can be an effective draw to attract new buyers, while retail instruments can help to strengthen the value proposition of sustainable finance instruments and support the country to achieve its SDGs.

The report is organised as follows. The first chapter provides an overview of the basic definitions and rationale of RSF. It also briefly charts the history of the instrument and explains why the current moment is conducive for a scaling up of retail programs in sub-Saharan Africa. Chapter 2 surveys the current retail landscape in key sovereign debt markets. Chapter 3 then looks at the mechanics and archetypes of retail operating models, with case studies from select sovereigns. Chapter 4 assesses the opportunities from retail financing in terms of improving public financial management, advancing financial inclusion, deepening domestic capital markets and achieving sustainability outcomes. Chapter 5 then lays out the main barriers to scaling retail programs, while Chapter 6 and 7 provide recommendations for how they may be overcome and the Conclusion.

CHAPTER 1

Basics of retail financing

What is retail sovereign finance?

Retail sovereign finance (RSF) refers to the raising of government funds directly from individuals and other non-institutional investors through small-denomination public debt instruments, such as retail bonds or treasury bills. These instruments are designed to be accessible to ordinary citizens and are tailored to local income levels, market depth and financial inclusion conditions.

For the purposes of this report, "sovereign" generally refers to the central government borrowing, although many of the retail solutions discussed below may also work at the sub-sovereign municipal and state levels of administration. Other public sector borrowers such as state-owned banks are included in this analysis only if they act as the fiscal agent for the government.

Retail financing can refer either to a type of instrument or to a type of investor. From an instrument perspective, retail bonds or treasury bills are government debt securities with small denominations or low minimum subscriptions. Bonds are longer-dated securities, typically above one year, while bills tend to have shorter tenors.

The definition of "small" depends on country-specific market structures, which in turn are influenced by factors such as levels of disposable income and purchasing power, the depth and breadth of local capital markets, or degree of digital penetration and financial literacy. Furthermore, retail is sometimes understood to refer to the distribution channel for the instruments, with the government providing the securities directly to the public rather than intermediating the offering via banks, investment funds, etc. However, retail securities can also be "marketable" i.e. acquired and traded in secondary markets.

Who constitutes a retail investor is similarly country and context specific. Broadly, retail encompasses every investor that is not "institutional", which in most jurisdictions is explicitly defined by securities market regulation. Some jurisdictions qualify organisations as individuals for purposes of retail investment, such as informal savings groups in South Africa (known as stokvels), while others consider individuals as "institutions" if they exceed certain income thresholds, for example natural persons in the US with total assets of at least US\$ 50 million. Furthermore, some issuers cap the number of purchases and/or maximum investment amount, often with the aim of preventing arbitrage by institutional investors looking to take advantage of price differentials or financial incentives.

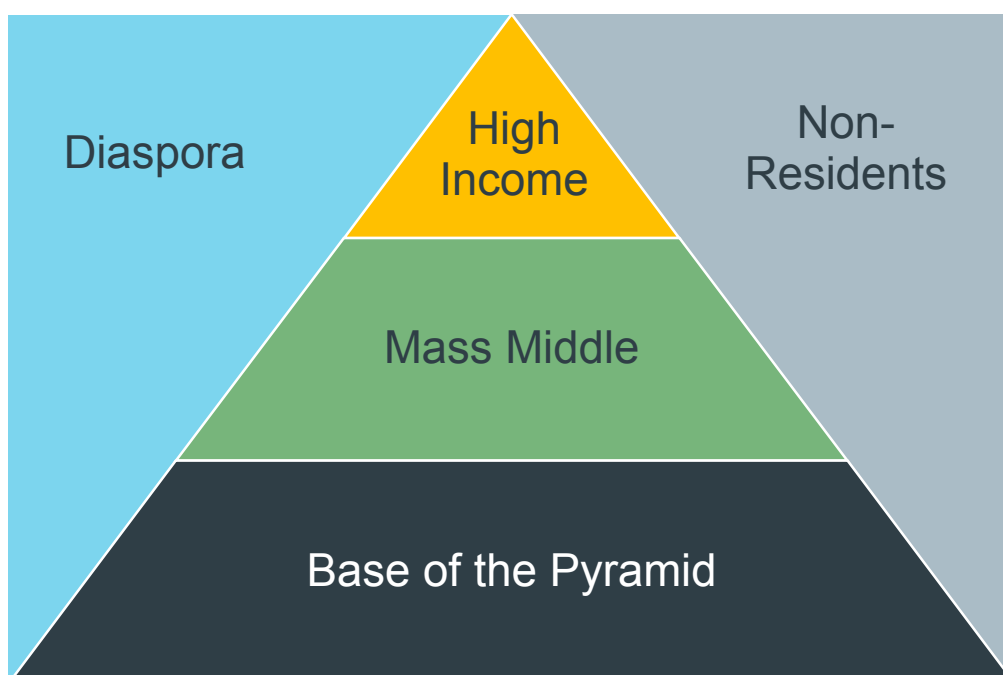
Figure 1 provides a rough segmentation of the retail investor base. At the top of the pyramid are high net worth investors who can be assumed to be relatively sophisticated in their investment strategies and have access to a wide array of formal savings products. They may resort to retail sovereign bonds for minor needs such as short-term liquidity management, collateral or as gifts, but they are unlikely to use them as long-term stores of value or for capital accumulation.

By contrast, the “mass middle” has less wealth but sufficient disposable income, access to formal banking services and knowledge of investment products to view retail bonds as an attractive savings vehicle and store of value. For illustration, the pioneering M-Akiba mobile money bond in Kenya (Case Study 4) was purchased overwhelmingly by investors who were educated (59%), formally employed (61%), urban (51%) and earning regular income (71%) (FSDA 2018).

In Mexico, accountants, academics and economists make up nearly a quarter of holders by invested balance (Acosta-Arellano and Álvarez-Toca 2014). Similarly, the middle-income brackets make up the majority of Hungary’s retail investor base, with the lowest and highest brackets holding only 10% and 2% respectively (ÁKK 2023). This market segment may also be driven by precautionary motives; for instance, demand for M-Akiba surged at the onset of the COVID-19 pandemic in March 2020 amid flights to safety and on the back of fiscal relief measures for salaried employees (Central Bank of Kenya 2021).

FIGURE 1

Stylised retail investor “personas”



Source: Author

The base of the pyramid comprises mostly unbanked or underserved segments of the population with minimal savings. They tend to rely on informal and higher-risk financial services such as “savings clubs” (also known as rotating savings and credit associations or ROSCAs) to generate investment income. Some jurisdictions cater to illiterate demographics; for instance, Nigeria’s FGN Savings bonds allow illiterate persons to apply using only a thumb print on a form that is completed with the assistance of a registered stockbroker (Debt Management Office Nigeria 2017).

Cross-cutting market segments include diaspora or non-residents. The former is especially salient for countries with large expatriate populations, for whom retail bonds offer a route to channel savings back home. Israel pioneered the use of diaspora bonds in the early 1950s by registering the Development Corporation for Israel (DCI) with the US Securities and Exchange Commission (SEC) so that retail securities could be sold in US capital markets (Chijioke Kennedy Oji 2015).

More recently, Nigeria issued a US\$ 300 million diaspora bond in 2017, albeit at relatively large minimum denominations of US\$ 2,000. Filipinos residing overseas can invest in US dollar-denominated retail bonds via the Bureau of the Treasury’s Bonds.Ph or the state-owned Overseas Filipino Bank mobile app. Non-resident Pakistanis can purchase sharia-compliant Naya Pakistan Certificates denominated in rupees, US dollars, euros or pounds sterling via Roshan Digital Accounts.

Although most jurisdictions restrict purchases to citizens and residents, there have been a few instances of “solidarity” bonds that are issued in a foreign jurisdiction with the proceeds remitted overseas for specific purposes. In late 2022, the Government of Canada issued a 500 million Canadian dollars (CAD) “Ukraine Sovereignty Bond” in denominations as low as CAD 100, with the proceeds flowing to Ukraine via a budget support loan from the International Monetary Fund (IMF) (Department of Finance Canada 2022).

In terms of demographic and investment profile, the picture is equally mixed and influenced by local circumstances. In South Africa, for instance, most holders are 60 years and older, whereas in Mexico and Brazil they are 35 years and younger (Tesouro Nacional 2024; Cetesdirecto 2025). This disparity reflects different marketing strategies: South Africa relies on traditional “brick-and-mortar” channels and manual settlement procedures, whereas in Mexico distribution is overwhelmingly via digital platforms and web forms. Age can also be an eligibility criterion; for example, Mauritius’s ‘Silver Savings Bonds’ are only available to Mauritian residents aged 65 and older.

Historical development

RSF is as old as bonds themselves. For example, municipalities of northern France in the 13th century issued rentes that paid individual holders of the securities perpetual interest backed by specific income streams (e.g., the town of Troyes issued securities on the back of Champagne fairs that it hosted on a regular basis). Individual investors played a critical role in financing government budgets in the early modern period (1400s–1800s) since banking sectors and corporate treasury management functions were relatively undeveloped.

Like many other innovations, war provided a major impetus to the development of retail instruments, not least because of the massive widening of government deficits and the breakdown in cross-border sovereign finance. For instance, individual investors financed significant portions of Britain's war effort during the Napoleonic campaigns and World Wars, with some bonds only being redeemed as recently as 2014 (e.g., "4% Consols" issued in 1927 by then Chancellor Winston Churchill to refinance war debts) (Moore 2014).

In the United States, small-denomination "war savings certificates" were targeted at working-class investors during World War I and made up around one-fifth of the "Liberty Bonds" issued between 1917 and 1918. More recently, Ukraine started issuing retail "peace bonds" that raised US\$ 1.5 billion from the Ukrainian diaspora, in addition to US\$ 3.1 billion in domestic "military bonds" on which the subscription amounts were lowered to Ukrainian hryvnia UAH 1,000 (US\$ 34) (Nardelli 2022, Ramnarayan and Rocha 2022).

Wartime experience shows how sharp capital market dislocations and urgent funding needs can push governments to borrow from their citizens. This lesson is increasingly relevant as climate change and geoeconomic fragmentation put public finances under strain. Citizens are often the lenders of last resort in extreme situations, and retail instruments can serve as an effective mechanism for governments to harness the financial resources of the populace. As this report argues, it can also be deployed to counter the threat of climate change and nature loss.

BOX 1

United States savings bonds

The US Savings Bonds program was launched by President Franklin D. Roosevelt in 1935. The first series issued in March 1935 were called “Baby Bonds” because of their low face value of US\$ 25 and they were issued to help alleviate unemployment during the Great Depression. Retail participation in US public financing peaked during World War II at 13% in 1942 with the issuance of “Defense Bonds” (also known as series “E” bonds or “War Bonds”), which had denominations as low as 10 cents and became the “world’s most widely held security” (US Treasury, n.d.).

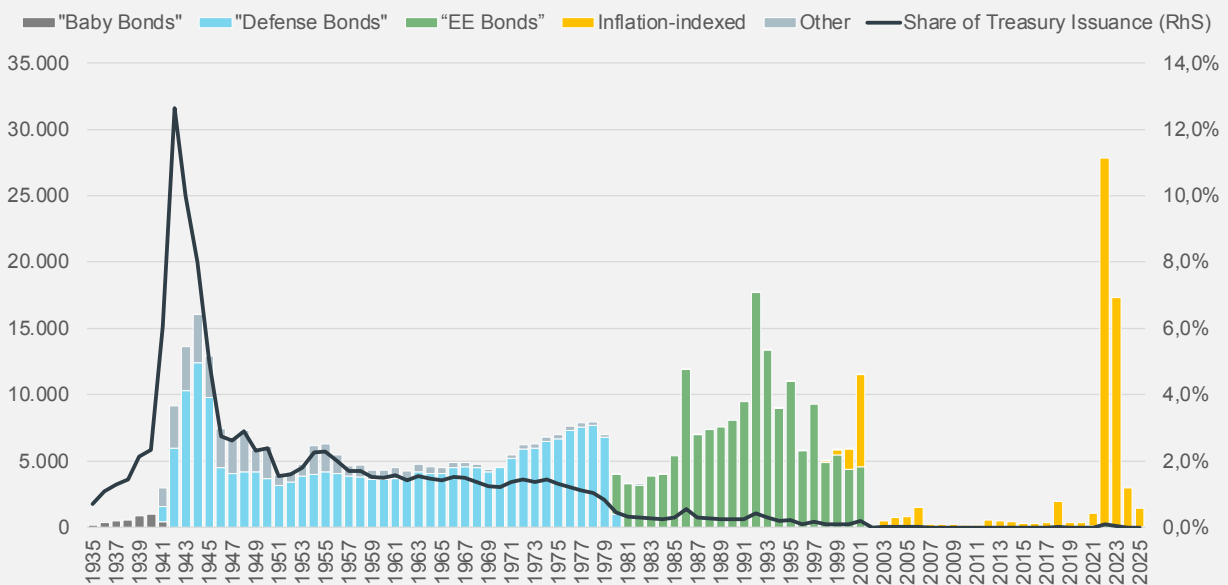
Demand for this instrument was sustained through initiatives such as the Payroll Savings Plan, whereby workers would automatically invest a portion of their paycheck. In 1980, the US Treasury introduced the ‘EE-series’ that were sold at a steeper discount (50% rather than 75% for ‘E-series’), while inflation-indexed I-bonds debuted in 1998 and earned holders a fixed interest rate plus a variable component that adjusts based on inflation.

A surge in demand for I-bonds between 2021 and 2023, when the US Treasury sold a total of US\$ 153 billion amid a spike in inflation, led to the highest levels of retail Treasury sales since the 1950s on an inflation-adjusted basis. This coincided with the launch of a new mobile application by TreasuryDirect, which created a more streamlined acquisition process. Still, the share of retail financing has remained less than 1% of total financing since 1979.

FIGURE 2

US retail savings bonds program, 1935–2023, not inflation adjusted

Left axis; savings bond sales (US\$ million, nominal) right axis: share of total issuance (%)



Source: US Treasury

Why now?

Several factors and trends make the current moment propitious for scaling RSF and indeed urgent. Above all, major advances in critical enabling technologies such as mobile phones, mobile money and digital ID have significantly lowered transaction costs for financial services in general, and retail products targeted at low-income populations in particular. The diffusion of simplified and streamlined customer due diligence (CDD) processes (e.g., tiered regulation and electronic know-your-customer solutions), whether for mobile wallets or “traditional” accounts at deposit-taking institutions or securities depositories have greatly expanded access to previously marginalised market segments.

Securities issuance and trading have also experienced significant innovation in recent years. Distributed ledger technologies (DLT) such as blockchain have demonstrated their capacity to supercharge transaction clearing and settlement, bypassing traditional intermediaries such as central securities depositories (CSD) and clearinghouses. At the issuers’ end, financial technology (fintech) solutions have automated compliance and reporting processes, greatly speeding up “time-to-market”. At the sovereign level, upgrades to financial management information systems (FMIS) used in public financial management (PFM) and treasury operations have enabled integration of electronic government (e-government) solutions, such as digital government-to-person (G2P) and person- to-government (P2G) payments that can serve as channels to distribute and service retail bonds.

Regulatory and policy frameworks have also shifted decisively towards embracing digitalisation of the financial sector and government. Many central banks and other financial authorities have incorporated financial inclusion into their mandates, and some, such as the Central Bank of the Bahamas have even launched retail central bank digital currencies (CBDCs) to foster financial deepening and savings culture (Central Bank of The Bahamas, n.d.).

Ministries of finance are also playing their part as champions of government technology (govtech), which the World Bank defines as “a whole-of-government approach to public sector modernization that promotes simple, efficient and transparent government with citizens at the center of reforms” (World Bank 2020a). Retail sovereign bonds are both a use case and a catalyst for govtech, since they can serve as an on-ramp for investors to other digital public services (e.g., e-tax filing) and provide a rationale for treasury departments to lay down digital payment rails directly to citizens.

Advances in the digital transformation of financial systems and government are taking place against the backdrop of a global retreat in cross-border capital flows to sovereigns in emerging markets and developing economies (EMDEs). After rising substantially during the 2010s on the back of loose global monetary policy and plentiful credit in search of yield, net capital flows to EMDEs fell sharply in the aftermath of the COVID-19 pandemic amid a rapid tightening of global credit conditions (Harcourt and McNair 2024).

With EMDE sovereigns collectively having accumulated historic levels of public debt during the pandemic, the ensuing loss of capital market access and blowout of debt service bills pushed several sovereigns into debt distress and a subset (e.g., Chad, Zambia, Ghana, Sri Lanka) into outright default (World Bank 2023). Meanwhile, official development assistance (ODA) and concessional financing from multilateral development banks (MDBs) and bilateral development finance institutions (DFIs) experienced a historic decline in 2025, falling by 23% in real terms, marking the largest annual drop on record (OECD 2026).

To cover shortfalls in external financing amid recent exogenous shocks, many sovereigns aggressively tapped domestic capital markets, including their retail investor base. A recent survey of 14 members of the Organisation for Economic Co-operation and Development (OECD) found that the average share of total gross borrowing financed by retail doubled from 6% to 13% between 2021 and 2023 (Foxall and Policino 2025).

The government of Indonesia, for instance, significantly increased its local currency domestic debt issuance to make up for sharp reductions in both external borrowing and non-resident holdings during the pandemic, including by raising the retail share of tradable securities from 3% at end-2019 to 8% in 2023 (IMF 2023). Nigeria launched the FGN savings bond in 2017, shortly after the 2014-2016 oil price collapse and was targeted at small savers and retail investors. The oil price collapse heavily impacted the Nigerian government income.

Looking ahead, it is plausible that the external financing environment will remain challenging for EMDEs in the context of heavy debt overhangs and escalating impacts of climate change and nature loss on sovereign creditworthiness. A higher-for-longer interest rate environment coupled with dislocations in global capital markets due to geoeconomic fragmentation may further curtail cross-border capital flows over the medium to long term. Faced with a scenario of prolonged global credit tightening, sovereigns would need to redouble their efforts to mobilise domestic capital to supplement scarce external and wholesale financing. RSF both have a solid track record in this regard, and the potential to play a more prominent role in funding the SDGs going forward.

CHAPTER 2

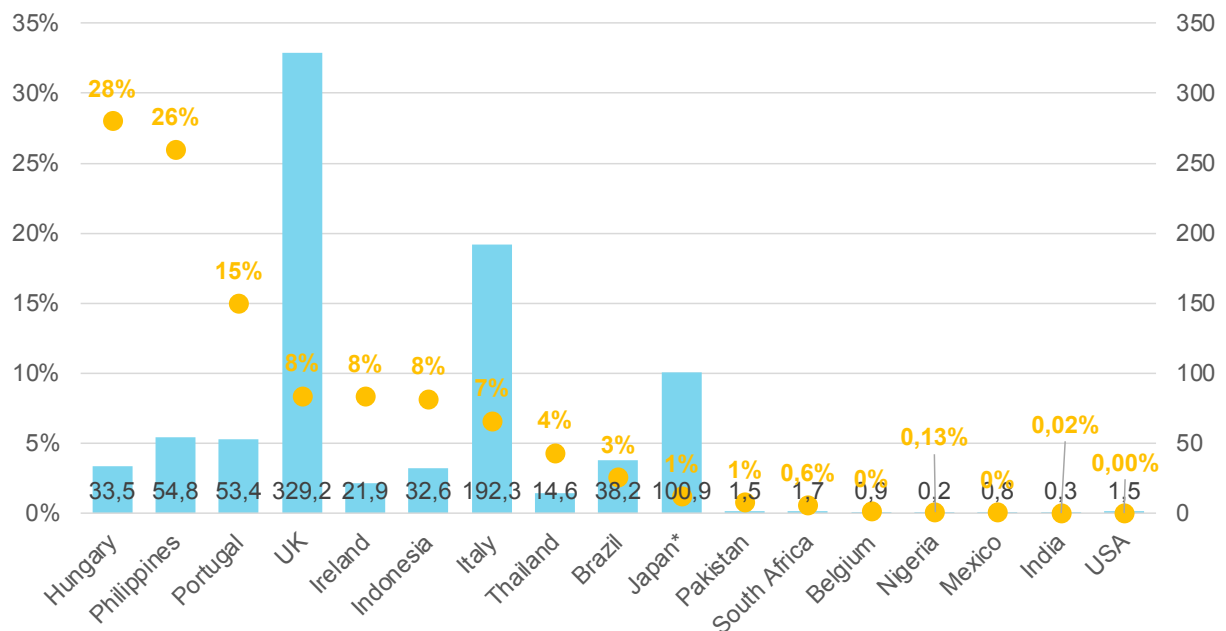
The state of retail financing

The landscape of RSF is highly uneven. Across a set of select sovereigns, the share of retail financing as a percentage of domestic financing in 2025 ranges from 28% in Hungary to less than 1% in the United States and Japan (Figure 3). Portugal, Ireland and Hungary have been particularly prolific retail issuers, while the United Kingdom and Italy stand out in terms of absolute volumes. Along with the Philippines, other South-East Asian sovereigns including Indonesia, Malaysia and Thailand have had relatively large and long-standing retail programs. By contrast, Latin American and sub-Saharan African issuers have lagged behind their regional peers, having launched initiatives later and at a limited scale.

FIGURE 3

Retail savings holdings in select sovereigns

Left axis dots: % share of domestic stock of debt; right axis columns: retail stock of debt, US\$ billion

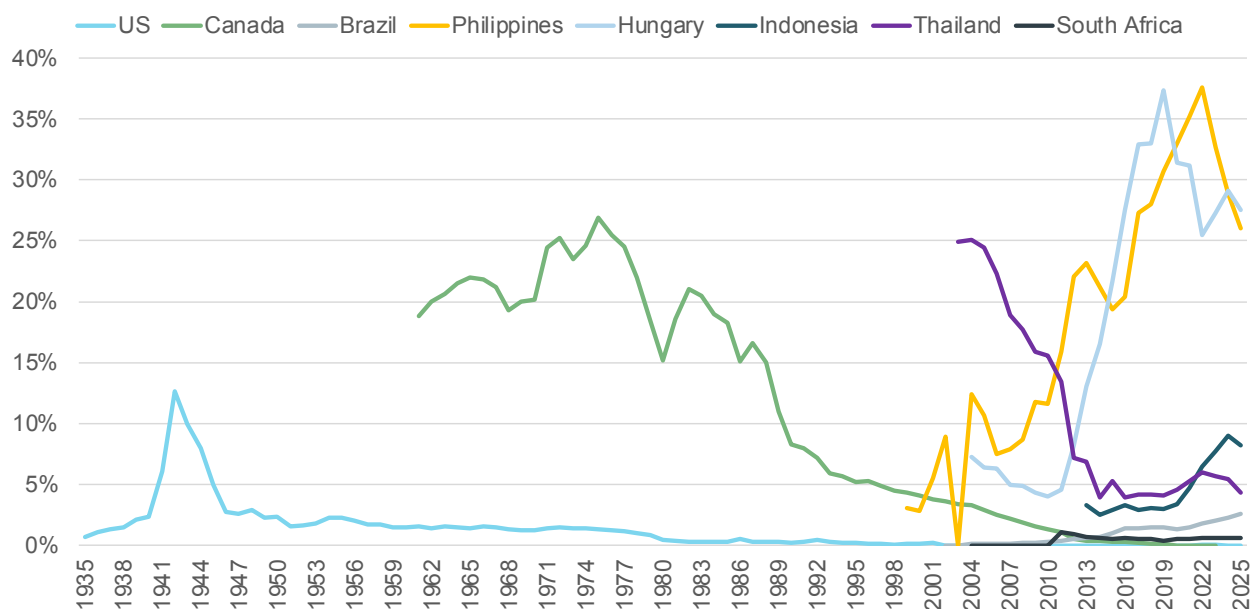


*Latest 2025. Source: National Statistics

The RSF landscape has changed significantly over the past century, reflecting broader structural transformations of sovereign debt markets. Three major trends stand out in terms of the size and distribution of retail programs worldwide (Figure 4): a retreat from retail in advanced economies (e.g., US and Canada), the rise of digital pioneers leveraging innovative distribution channels (e.g., the Philippines, India), and the consolidation of gains by sovereigns that developed retail programs in response to sovereign debt crises (e.g., Hungary, Indonesia).

FIGURE 4
Share of retail financing in select sovereigns, 1935-2025

(% share of domestic stock of debt)



Source: National Statistics

War and sovereign debt crises were major drivers of change in the retail financing landscape, which testifies to its role as a funding source of last resort. For instance, the World Wars drastically reduced the flow of capital across borders, forcing sovereigns to turn inwards, while financial globalisation and capital account liberalisation from the 1980s onwards led to a surfeit of external funding during the 1990s, lessening the attractiveness of scarce domestic financing. The 1997-1998 Asian Financial Crisis and the 2008-2009 global financial crisis partially reversed that dynamic, with the hardest-hit sovereigns (e.g., Thailand, Indonesia, Hungary, Portugal and Ireland) turning to retail amid a sudden stop in foreign capital inflows.

In sub-Saharan Africa, the RSF picture mirrors the development path of wholesale finance - it is highly uneven and moving at different speeds. The countries with the deepest local capital markets and highest domestic savings rates were also the first to launch retail programs. Those countries at lower stages of capital market development are generally also at the earliest stages of developing retail programs.

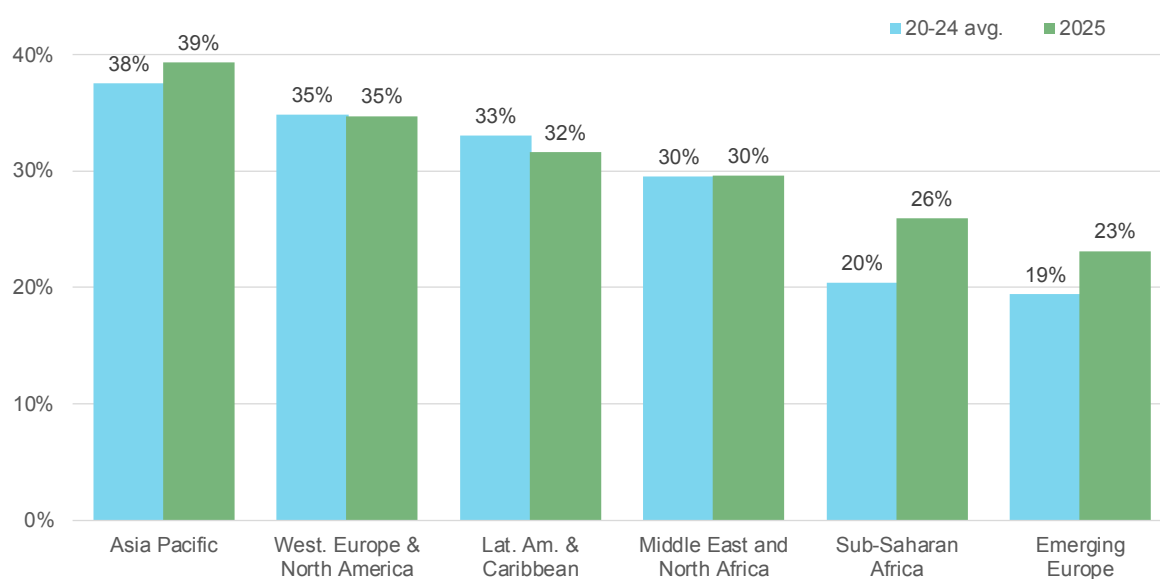
At the same time, digital public and financial infrastructure have created leapfrogging opportunities for countries such as Kenya and Uganda with relatively high levels of digital penetration and financial inclusion. As will be explained below, these countries can conceivably accelerate the pace of developing retail programs and therefore should be distinguished from countries that still need to ready their digital public infrastructure.

Why Africa?

Sub-Saharan Africa is the region with the highest number of countries either at high risk of debt distress or already in debt distress, while simultaneously remaining the region most reliant on international markets for substantial sovereign financing. Sub-Saharan African (SSA) sovereigns are especially vulnerable to a “stranded sovereigns” scenario where foreign capital remains scarce or prohibitively expensive for a protracted period. They rely more on external financing than their regional peers (Figure 5), and they have smaller external buffers and less fiscal space to absorb exogenous shocks. These factors weigh on their sovereign risk metrics and ratings, which in turn raises the cost of borrowing for governments.

FIGURE 5
Domestic financing by region

General government domestic debt*, median, % share of total



* Portion of total general government debt that has been issued in that country's domestic capital market.

Source: Fitch Ratings, June Sovereign Data Comparator

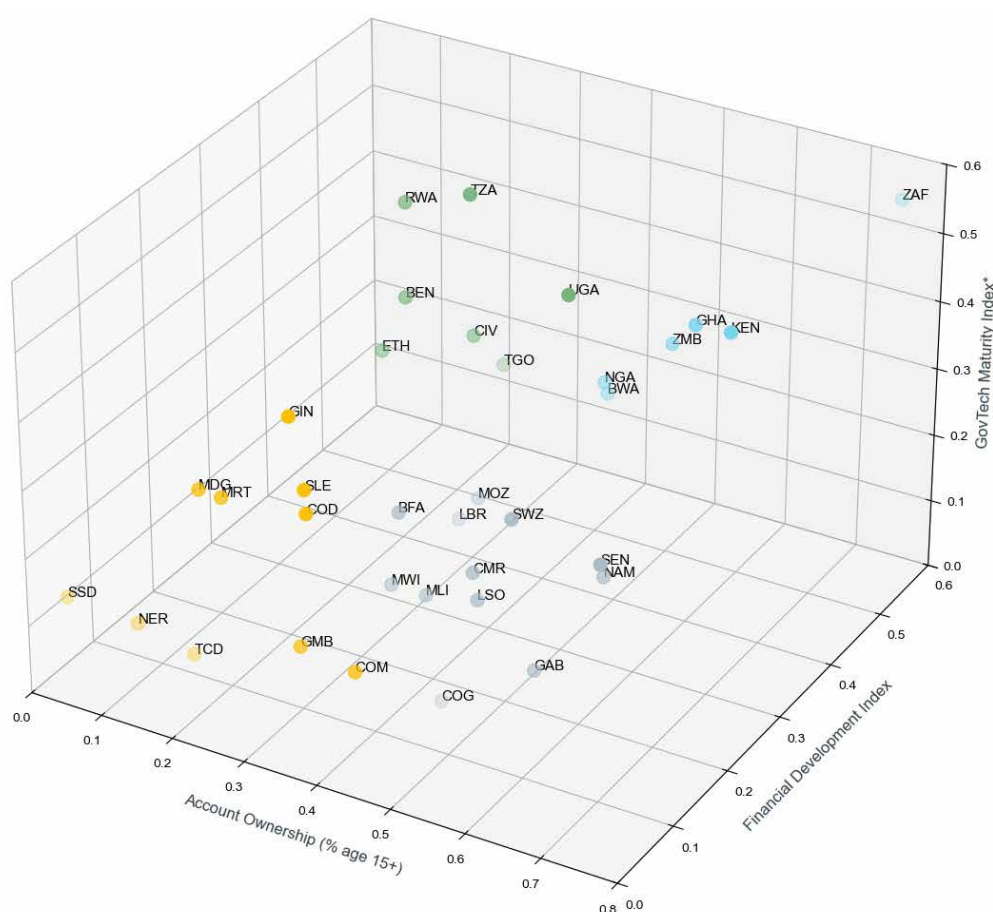
As explained below, deepening domestic sovereign debt markets via retail financing mechanisms can strengthen financial flexibility and shock absorption capacity, which in the longer term should also provide uplift to the sovereign rating. For these reasons, SSA sovereigns arguably have most to gain from deepening domestic sovereign debt markets, and they would be well advised to consider retail instruments in their funding programs.

However, SSA governments vary greatly in terms of readiness to adopt and scale up retail instruments, especially those that are distributed through digital channels. This heterogeneity can be captured across three key dimensions: technological infrastructure, financial inclusion and financial market development.

The first refers to the readiness of government systems to run a digitally enabled retail program, which can be measured using the World Bank's GovTech Maturity Index (GTMI). Financial inclusion can be proxied using World Bank's Financial Inclusion Index (Findex), while the IMF's Financial Development Index (FD) includes a sub-component that captures the size of domestic financial markets (IMF, n.d.). Combining data along these dimensions in a three-dimensional scatterplot and applying a k-means clustering algorithm produces a rough segmentation of SSA sovereigns, as displayed in Figure 6.

FIGURE 6

Retail readiness segmentation, sub-Saharan African sovereigns



Note: The GovTech Maturity Index measures four dimensions of government technology: core government systems, public service delivery, digital citizen engagement and GovTech enablers.

Source: World Bank Global Findex, calculations by author

FIGURE 7

Retail readiness groupings

Low	Medium	High	Very high
Chad, Comoros, DRC, The Gambia, Guinea, Madagascar, Mauritania, Niger, Sierra Leone, South Sudan	Burkina Faso, Cameroon, Congo, Eswatini, Gabon, Lesotho, Liberia, Malawi, Mali, Mozambique, Namibia, Senegal	Benin, Côte d'Ivoire, Ethiopia, Rwanda, Tanzania, Togo, Uganda	Botswana, Ghana, Kenya, Nigeria, South Africa, Zambia

According to this analysis, SSA sovereigns can be grouped into four buckets in terms of “retail readiness” (Figure 7). South Africa stands apart for its large and deep financial markets, as well as having the oldest retail programs on the continent starting in 2004. Likewise, most of those in the ‘high’ category also have active programs or projects in advanced stages of development (Ethiopia, Rwanda, Tanzania, Uganda), which can be attributed in part to the greater breadth and depth of their financial sectors compared to their peers.

The different levels of readiness may call for different strategies to pursue retail financing. The chapters below consider the major barriers and pathways to scale based on learnings from retail programs worldwide. It then applies these insights to the country segmentation presented above. To get there, the next sections first layout the global landscape of retail financing and then explain the mechanics and distribution modalities of retail programs.

CHAPTER 3

Retail bond mechanics and operating models

Retail bond characteristics

The common characteristics of retail bonds are their small ticket size and target investor base – individuals or small and medium-sized enterprises. Beyond that, their features vary greatly from country to country and often mirror products available on wholesale markets for institutional investors. Before examining different operating model archetypes in a few key countries, this section briefly outlines the core features and functionalities of retail bonds.

Issuance size	There is no fixed threshold for what constitutes a retail issuance, which can range from micro denominations as low as one currency unit (e.g., Thailand's "1-Baht Bond", Portugal's EUR 1 "F-series" savings certificates) to regular wholesale ticket sizes. However, most issuers set an upper bound for individual purchases, in part to prevent institutional investors from exploiting arbitrage opportunities.
Interest	Interest rates can be set on a discount basis (i.e., investors purchase bonds at a discount of face value), with a fixed coupon rate, or with a variable coupon rate. The variable component can be linked to the holding period (e.g., Thailand's "Happy Savings" bonds step up at regular intervals the longer they are held) or other indicators/indices (e.g., sustainability metrics).
Maturity	Retail bonds can have any "tenor" (i.e., the term between issuance and repayment of the bond). Some bonds such as British "consols" are perpetual – they never mature unless the issuer redeems ("calls") them. Other bonds have fixed maturities typically in the 1-3 year range, although some countries also offer longer-term bonds (i.e., 10+ years). Early redemption is often possible by selling ("putting") the bond to the issuer, albeit typically with a penalty fee.
Denomination	Retail bonds are overwhelmingly denominated in local currency, but some issuers have also issued foreign currency bonds (e.g., "onshore USD bonds" in the Philippines, Naya Pakistan Certificates). Digital bonds are also available in central bank digital currency (CBDC) in certain jurisdictions (e.g., Hong Kong Monetary Authority's "Project Genesis", see Box 3) and even gold (e.g., Reserve Bank of India's previously issued 'Sovereign Gold Bonds').

Financial incentives	Special financial inducements for retail investors include high “teaser” interest rates, low or no commissions, tax exemptions or coupon ratchets. They may also take the form of gamified features such as lotteries that pay cash or non-cash prizes (e.g., the Philippines’s Premyo bonds included a raffle for cars).
Other incentives	Non-pecuniary inducements include appeals to civic virtue or religious duties, such as wartime patriotism or sharia-compliant Islamic retail bonds. As stores of value, retail bonds can serve as gifts or collateral in lending transactions, as well as mechanisms to save for long-term funding needs such as education, retirement and medical care. Performance-based features such as sustainability-linked key performance indicators can act as accountability mechanisms to hold issuers to their commitments.
Use of proceeds	Although most retail programs are used for general budgetary purposes, some contain earmarking provisions that stipulate how funds must be utilised. These can include specific current outlays such as defence spending or capital expenditures such as infrastructure and public housing.

Operating models

Retail finance operating models, or the end-to-end life cycle from origination by the issuer to the purchase by the end investor, vary greatly from country to country. Their structures reflect idiosyncratic institutional arrangements and historical path dependencies that lock in design choices. Legacy back-office systems, administrative bureaucracies and regulations are particularly difficult to change once they have become entrenched. The level of capital market development can also be a critical determinant of how retail programs take shape, as some modalities necessitate the involvement of critical financial market intermediaries and fiduciaries.

Operating models comprise the building blocks described in Box 2, which can be arranged in multiple configurations. Aside from needing to conform with local institutional realities, the choice of model entails trade-offs between complexity, coverage, cost and control. For example, the direct-to-investor model optimises for more control and less complexity since it involves fewer intermediaries, yet at the expense of being relatively costly and limited in coverage. The next section dissects five real world examples.

BOX 2

Bond market building blocks

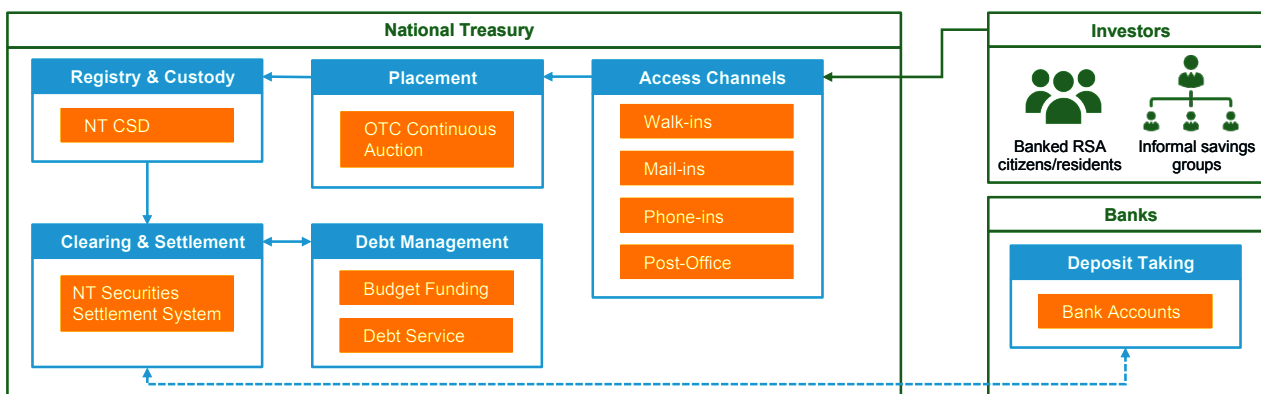
- **Access channels** are the interface through which retail investors subscribe to (i.e., acquire) the bonds, manage their holdings, receive payments of interest and principal, and redeem (i.e., cash out) their bonds. These can be distinguished between “traditional” channels, which include brick and mortar branches as well as mail-ins and dials-ins, and “digital-first” channels such as smart phone applications, web forms and text messaging.
- **Registry** refers to record-keeping of beneficial ownership in the debt securities, while custody refers to the safe keeping in a securities depository. These functions are typically performed by specialised financial institutions, central banks or trust companies such as the US Depository Trust Company (DTC).
- **Clearing** refers to the process of communicating and reconciling security transfer and payment instruments, while post-trade settlement is the actual process of exchanging funds for securities and vice versa. Clearinghouses, settlement banks and central banks are the main actors involved in these activities.
- The actual issuance of the bond, whereby the sovereign incurs debt by creating a financial obligation, is conducted by the ministry of finance or treasury function, typically the debt management office (DMO). Central banks will often act as the fiscal agent facilitating the placement and servicing of bonds.
- **Placement** can occur via primary market dealers, whereby an approved roster of market making financial institutions buy the bonds and resell to institutional and retail investors, or auctions intermediated by brokers and directly subscribed to by the investors. Where the securities are marketable, investors can sell their bonds in secondary markets. This can be done in the open market via securities exchanges, or over the counter via broker dealers. In other jurisdictions, investors can sell their securities back to the issuer.

In addition to these operational building blocks, capital markets need to be properly regulated and supervised by competent financial authorities to function smoothly and fairly. This includes long lists of rules and guidelines on disclosure, market manipulation, mis-selling of securities, protection against fraud and more.

Direct-to-Investor model

In a direct-to-investor model, the treasury unit of the government is responsible for most of all core front, middle and back-office functions, although investors will still need to hold settlement accounts with public or private-sector banks. This model precludes secondary trading, but it does allow for other entities to market and distribute the bonds, such as post offices and mass retail shops. This is the model that was adopted by South Africa's National Treasury when it launched the Retail Savings Bonds program in 2004 (Figure 8 and Case Study 1).

FIGURE 8
South Africa's retail savings bonds program



Source: Author

The advantages include the potential for efficiency savings from running all operations in-house and avoiding arms-length contracts that introduce added transaction costs, procurement and outsourcing complexities, and competition concerns. On the other hand, the heavy administrative burden and high customer acquisition costs can put direct-to-investor programs out of reach for capacity and budget constrained sovereigns, especially if digital access channels and customer support staff are needed to achieve adequate levels of coverage and retention.

CASE STUDY 1

South Africa retail savings bonds

The National Treasury of South Africa launched its Retail Saving Program in 2004 with the aim of diversifying the government's long-term funding sources and promoting a culture of household savings (National Treasury 2022). The program experienced steady growth from inception until the beginning of the 2010s on the back of rising interest rates, partnerships with mass retailers such as Pick n Pay, and the introduction of an inflation-indexed offering in 2007.

However, since then the share of retail savings bonds in domestic financing and the number of investors has trended downward from 1.1% and 44,163 in 2012, respectively, to 0.6% and 27,000 in 2023 (National Treasury 2012, National Treasury 2023). This coincided with falling interest rates but also underinvestment in distribution channels, including the lapse in the Pick 'n Pay partnership in 2017 and the lack of a digital onboarding option. The launch of a "Top-Up" bond in 2022, which allows investors to make additional deposits on active investments, coupled with a jump in interest rates helped to reverse the downtrend in 2022 and 2023.

The demographics of the investor base also point to scaling challenges. It has skewed heavily towards 50+ age cohorts, who consistently make up more than 70% of holdings. This may be attributable to the allowance for penalty-free monthly withdrawals, but it is also likely due to younger generations' preferences for digital and streamlined user experiences.

PROGRAM DETAILS

Size	R1,000 – R1,000,000 (~ US\$ 55 - 55,000 at 2023 average FX rate)
Tenor	2, 3, 5, 10 years Early redemption with a penalty fee
Products	Fixed rate Inflation-indexed (introduced 2007) Top-up bond (introduced 2022)
Interest Rate	Paid semi-annually or monthly (only fixed rate for holders 60+ years) Determined monthly based on prevailing yield curve
Requirements	Only South African citizens and permanent residents with valid bank account and ID
Charges	None
Taxation	Interest is taxable

Bank-led model

A bank-led model leverages existing bank networks to distribute the retail bonds. The retail instruments are an additional product that designated selling agent banks offer their customers, while the back end relies on the established interbank clearing and settlement systems. The retail programs of the Philippines and Mexico can be described as bank-led, although they also incorporate elements of other models.

The advantage of the bank-led model is that it can leverage the existing branch networks and banking infrastructure. The drawbacks include the limited coverage of banks in many EMDEs, as well as misaligned incentives for banks to market government bonds that compete directly with their savings products and sight deposits. Since banks tend to pay negligible or no interest on deposits in EMDEs, retail bonds may also put unwanted competitive pressure on banks to offer more competitive returns (Feyen and Zuccardi 2020).

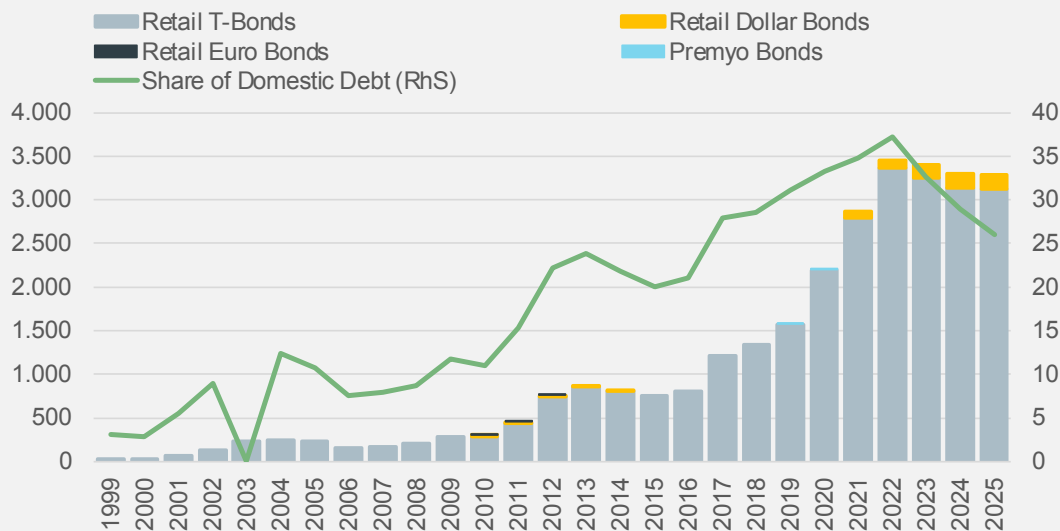
To counter banks' resistance, sovereigns have resorted to a combination of inducements, regulation, directives for state-owned banks and even issuance by central banks. For example, the Hungarian Debt Management Office (ÁKK) pays banks a commission per sale, whereas in France banks are required by regulation to offer them. The Philippines, United Kingdom, Pakistan and Mexican programs rely heavily on state-owned banks to market and distribute their bonds (see Case Study 2), while in India it is the preserve of the Reserve Bank of India (RBI).

CASE STUDY 2

The Philippines bank-led retail program

The Philippines has had a long track record of issuing and innovating in retail bonds. Small denomination bonds have been available since 1999, but the market took off in earnest after 2010 with the introduction of the multi-currency retail treasury bond program, as well as upgrades to the settlement system facilitating trading. Since then, the Bureau of the Treasury (BTr) has added longer-dated securities and Premyo bonds that offer cash and non-cash raffle prizes, as well as marketing efforts including community “roadshows” and financial literacy drives (BTr 2022). In February 2024, the BTr raised a record PHP 585 billion (US\$ 10.5 billion), or nearly a quarter of the annual borrowing plan for 2024 (Lopez 2024).

FIGURE 9

The Philippines retail bond program

Source: Bureau of the Treasury of the Philippines

The Philippines' retail bond program stands out for successful deployment of digital distribution channels intermediated by state-owned banks “issuer managers” and private sector “selling agent banks.” In addition to conventional over the counter sales, the retail bonds are offered via multiple digital channels:

- The Online Ordering Facility for deposit holders at the state-owned Landbank of the Philippines (LBP) and Development Bank of the Philippines (DBP), as well as China Banking Corporation and First Metro Securities;
- The state-owned Landbank's mobile banking app;
- The state-owned Overseas Filipino Bank's (OFB) mobile banking app;
- The BTr mobile app Bonds.ph.

State-owned LBP, DBP and OFB are a critical link in the distribution chain, acting as primary dealers as well as selling agents in their own right. The selling agent banks receive a commission for their sales, but they are not obligated to participate.

PROGRAM DETAILS

Size	PHP 5,000 for Retail Treasury Bonds (~US\$ 100 at 2023 average FX rate) PHP 500 for Premyo Bonds (~US\$ 10 at 2023 average FX rate)
Tenor	1, 3, 4, 5, 7, 10, 15, 20, 25 years
Products	Retail Treasury Bonds (RTB) Retail Dollar Bonds Premyo Bonds (cash and non-cash raffle prizes)
Interest Rate	Quarterly payment
Requirements	Settlement accounts at selling agent
Charges	Selling agency fees
Taxation	Interest income subject to 20% final withholding tax except for exempt institutions
Trading	Bonds are marketable and can be purchased at prevailing market yields via banks or brokers Investors are subject to market risk

Exchange-led model

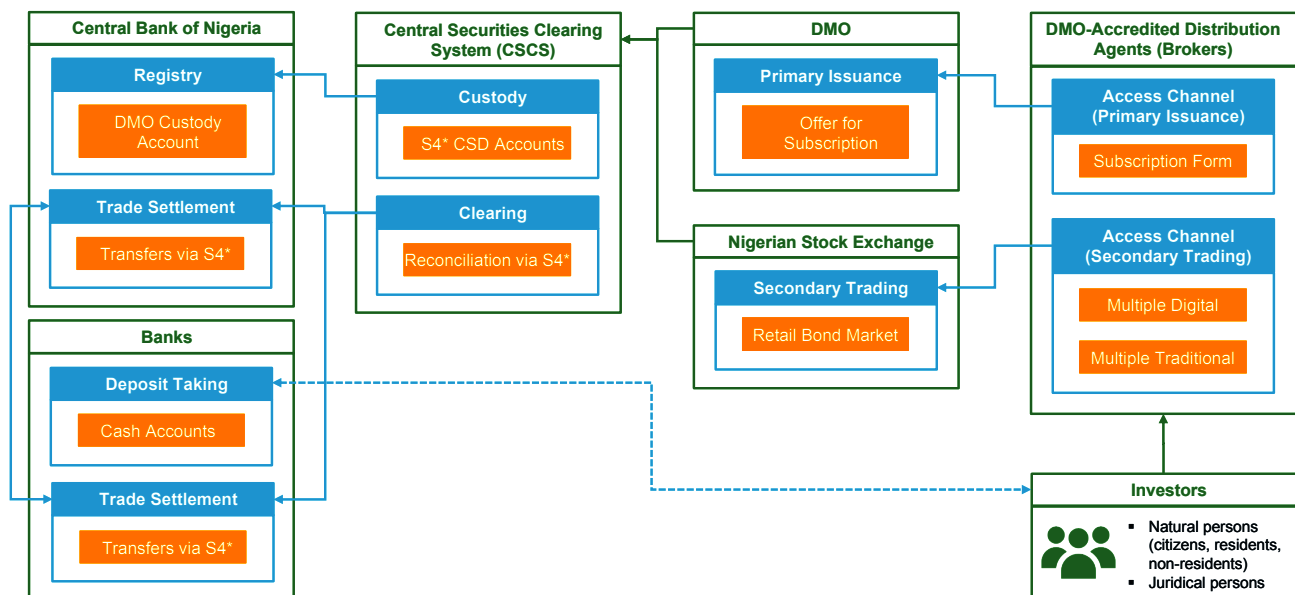
The exchange-led model most closely resembles the traditional wholesale sovereign financing model, which relies on financial institutions to market and distribute the bonds – either via primary dealers or brokers and other market makers – and allows for secondary trading on securities exchanges. In this arrangement, retail bonds share many of the characteristics of conventional wholesale bonds purchased by institutional investors, except for their smaller ticket sizes and special sweeteners such as tax exemptions or the option to redeem at par. Examples of countries operating under such a model include Brazil and Nigeria (Figure 10 and Case Study 3).

An exchange-led model has the advantage of leveraging existing capital markets infrastructure and actors, which can speed up time to market. However, it presupposes that these are already in place and that they can accommodate an influx of new investors who need special incentives, instruction and safeguards to induct them into the local investor community. This is especially important where secondary trading exposes holders to capital losses if they sell the bonds at a discount before maturity. To mitigate market risk, some jurisdictions require that primary dealers act as market makers in retail bonds to boost liquidity. Reliance on brokers and other intermediaries also necessitates strong investor protection regulation and supervision to guard against mis-selling and fraud.

At the same time, the potential for retail bonds to serve as an on-ramp for new investors, who may eventually graduate to more sophisticated investment products and strategies, creates an opportunity for the securities industry to expand their customer base. This makes them natural allies and champions for retail bonds, which can help to counter possible resistance from vested interests who fear competition for savings deposits. When eligible as collateral for lending transactions, as is the case in Nigeria, retail bonds can also help to boost access to credit in countries where real pledgeable assets are scarce.

FIGURE 10

Nigeria's exchange-led retail operating model



Source: Author

CASE STUDY 3

Federal Government of Nigeria (FGN) savings bonds

Nigeria's FGN Savings Bonds program was launched in March 2017 with the aim of deepening the national savings culture, promoting financial inclusion and retail participation in domestic capital markets, and diversifying the Federal Government's funding sources (NSE 2017). Despite a fivefold increase in volume between 2017 and 2025, uptake as a share of domestic borrowing has been limited, hovering below 1%. This mirrors Nigeria's relatively low stock market capitalisation, underscoring the shallowness of financial markets (World Bank n.d.).

The Debt Management Office (DMO) relies on the same bond market infrastructure for retail as for the other FGN domestic debt instruments (Figure 10) albeit with some adjustments. Primary dealers are not involved in distribution, for instance, instead some 130 DMO-accredited Stockbroking Firms are the main interface for retail investors (Nigerian Exchange Group, 2021). Clearing and custody are handled by the Central Securities Clearing System (CSCS), while the Central Bank of Nigeria settles trade via its Scripless Securities Settlement System (S4).

PROGRAM DETAILS

Size	NGN 5,000 – N50,000,000 (~US\$ 8 - 80,000 at 2023 average FX rate) Multiples of N1,000
Tenor	2, 3 years
Products	Savings Bond
Interest Rate	Fixed rate based on competitive secondary market yields (rather than similar FGN bonds) Paid quarterly
Issuance	Monthly offer for subscription, open for five days
Charges	CSCS fees Stockbroker commission Liquidity providers spread
Taxation	Exempt

Mobile money model

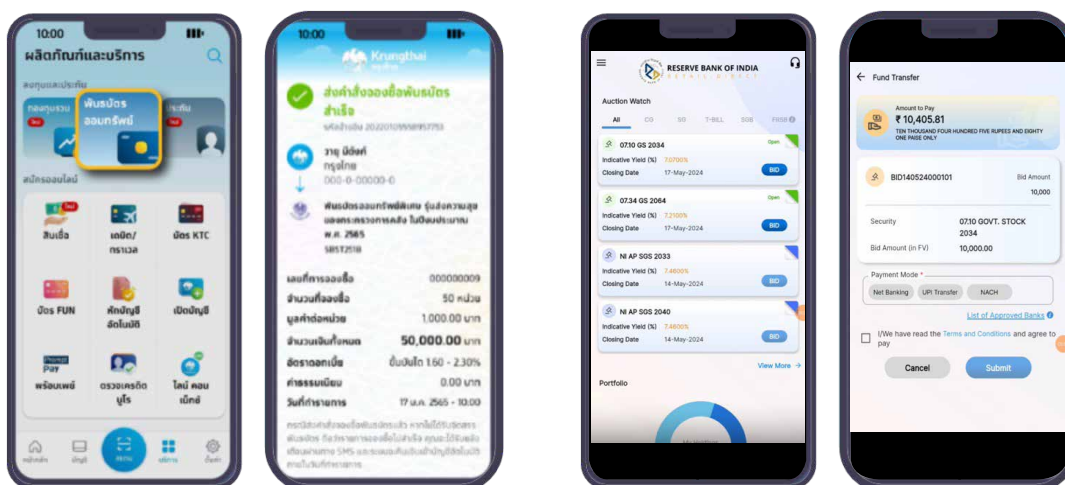
Mobile money models use digital payment platforms as the main interface for the investor to acquire retail bonds and manage their investments. The distribution channels can be integrated as an embedded feature within an existing mobile e-wallet or third-party app, or as an embedded payment option within the issuer website or standalone app.

An example of the former is the ‘Pao Tang’ mobile “super app” by Krungthai Bank in Thailand, which enables seamless mobile payment for the government’s “1-Baht Bonds” alongside corporate bonds and gold trading (International Business Magazine 2022). By contrast, the Reserve Bank of India (RBI) has developed a standalone mobile app for its Retail Direct Scheme that embeds a gateway to the Unified Payments Interface (UPI), India’s instant mobile payments system, as well as know-your-customer (KYC) feature using the Aadhaar digital ID.

FIGURE 11
Two digital payment channels

Krungthai Bank “Pao Tang” app

RBI’s Retail Direct App

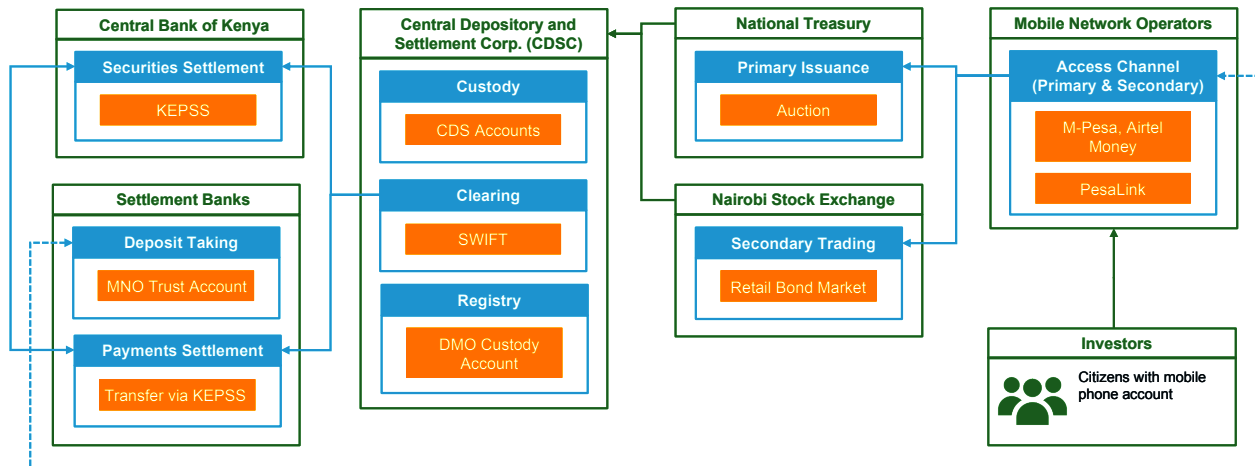


Sources: Krungthai Bank; Reserve Bank of India

Digital settlement, in turn, has many modalities including mobile wallets operated by mobile network operators (MNOs), cryptocurrencies hosted on third-party wallets, or retail central bank digital currencies (CBDCs). To date, only the first has been deployed to settle sovereign retail bonds - Kenya’s M-Akiba, see Case Study 4 - although tokenised bonds settled on cryptocurrency or CBDC are being explored by a variety of issuers.

For instance, the Hong Kong Monetary Authority (HKMA) prototyped a retail digital bond settled in CBDC (see “Project Genesis”, Box 3). Similarly, after becoming the first country to accept Bitcoin as legal tender in 2021, El Salvador’s government issued each citizen with a crypto wallet (“Chivo”) preloaded with US \$30 of Bitcoin. In December 2023, the government obtained regulatory approval to issue the first sovereign Bitcoin Bond targeted at retail investors (McDonald 2021, CNAD 2023).

FIGURE 12

M-Akiba mobile money model

Source: Author

These models have the major advantage of significantly expanding access and coverage of the program thanks to the growing ubiquity and ease of digital payments. Streamlining and automating more steps in the bond life cycle can meaningfully lower program operating costs, rendering such models especially relevant for budget constrained sovereigns. Furthermore, the prospect of clearing and settling transactions on the blockchain has the potential to “leapfrog” the development of centralised securities depositories, clearinghouses and domestic bond exchanges, which have long timeframes and complex interdependencies to develop.

At the same time, as with the exchange-led model, the mobile money model presupposes the existence of robust and accessible digital payments infrastructure. The level of digital penetration is uneven across geographies and within countries, and the pace of digital financial inclusion has been halting in many jurisdictions. Blockchain-based models introduce additional complexity and risks; for instance, El Salvador’s Chivo wallet has been the victim to several reported cybersecurity breaches (Partz 2024).

CASE STUDY 4

Kenya's M-Akiba Program

Kenya pioneered the mobile-money bond concept in 2017 with the piloting of the M-Akiba program, which lasted until 2019. The Kenya National Treasury partnered with Safaricom's M-Pesa and Airtel Money – two leading mobile network and mobile money operators – to enable securities account opening, bond purchases and debt service into their respective mobile digital money wallets. These could be accessed via a smart phone app or SMS/USSD gateway, in addition to bank transfers via PesaLink, the real-time push payments platform.

Despite a successful pilot, the official launch in June 2017 raised only about a quarter of the Kenyan shillings (KSH) 1 billion target (~US\$ 10 million at the exchange rate prevailing then), and only 7% of registered accounts purchased the debut paper. The uptake was higher at three subsequent re-openings in 2019, yet still well short of the subscription target.

Overall, the program raised only KSH 1 billion (~US\$ 8 million), and central depository and settlement (CSD) accounts peaked at just under 600,000, or 2% of registered mobile money accounts at the time. Despite efforts to revive the instrument, the program was finally terminated in March 2024 (Omondi 2023). Individuals can still purchase conventional government bonds, yet the minimum investment of KSH 50,000 (~US\$ 380) puts them beyond reach for most Kenyans.

M-Akiba Issuance (KSH Million)

	Raised	Target	Subscription Rate
Pilot (Mar. 2017)	150	150	100%
Debut (Jun. 2017)	247	1,000	25%
Re-open 1 (Feb. 2019)	197	250	79%
Re-open 2 (May 2019)	187	250	75%
Re-open 3 (Aug. 2019)	264	500	53%
Total	1,045	2,150	49%

Source: CDSC

The original M-Akiba program resembled the exchange-led model on the back end. Investors opened M-Akiba CDS securities accounts at the Central Depository and Settlement Corporation (CDSC) by linking their M-Pesa and Airtel Money mobile money wallets. The CDSC was also assigned to be registrar and paying agent for the National Treasury, rather than the Central Bank of Kenya (CBK) as is the case with wholesale bonds. The bonds were listed on the Nairobi Securities Exchange (NSE) alongside conventional Treasury bonds, allowing holders to exit their positions before maturity.

M-Akiba account holders could also purchase and sell bonds on the secondary market, with members of the Kenya Association of Stockbrokers and Investment Banks (KASIB) acting as brokers and the Commercial Bank of Africa as market maker in the background. Notwithstanding the presence of liquidity providers, investors could still realise capital losses on their sales, especially after paying relatively high trading commissions. These were estimated to be nearly ten times those of conventional bonds, even before payment charges were applied (Anyanzwa 2021).

A survey conducted by Financial Sector Deepening Africa (FSDA) about the 2017 issuance identified poor understanding by investors of the market risks inherent in secondary trading as one of the major barriers to scaling the program, along with marketing challenges and customer service lapses (FSDA 2018). The lessons from the first iteration of M-Akiba have led the National Treasury to re-engineer the program to make up for the previous shortcomings and is likely to be launched in 2026. The new program will leverage a new digital trading platform for government securities hosted by CBK (“DhowCSD”), which was launched in July 2023 (Anyanzwa 2021).

PROGRAM DETAILS

Size	KSH 3,000 – KSH 140,000 (US\$ 30 – 1,400), multiples of KSH (~US\$ 1)
Tenor	3 years Bonds can be sold before maturity via secondary market trading
Products	Pilot (March 2017), Debut (June 2017) Re-open #1 (February 2019), Re-open #2 (May 2019)
Interest Rate	Fixed 10% Semi-annual
Requirements	M-Pesa
Charges	Mobile network operator charges Bank transfer fees (for PesaLink) Commissions for purchase/sales on secondary markets
Taxation	Exempt

Unit trust model

Unit trusts are a type of investment vehicle that pools the funds of individuals and invests them into assets such as government securities. The beneficiaries purchase “units”, which represent rights to the holdings in the trust fund and entitles them to a proportionate share of the earnings on the invested assets.

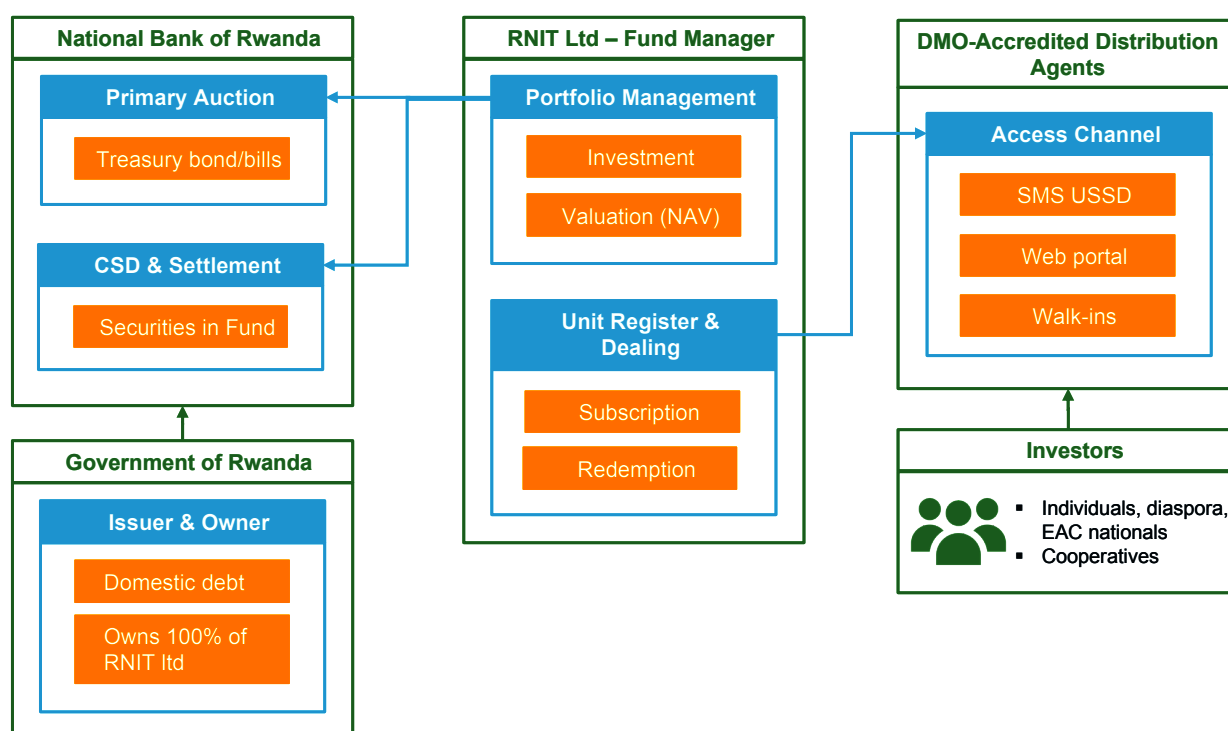
The trust fund acquires or sells securities to match contributions and withdrawals by unit holders, respectively. The structure is analogous to open-ended mutual funds in which units can be redeemed on demand at the net asset value (NAV), with the distinction that the funds are allocated mostly or entirely to sovereign debt, and the trust is owned and sponsored by the government rather than a private entity. Distribution of the units can be handled by brokers, banks, or mobile money providers, as in the distribution models presented above.

State-sponsored unit trust models are still relatively recent and rare in the sovereign finance space. Mexico’s government bond fund BONDDIA was first launched in 2010 alongside its Cetes Directo program. The fund offers retail investors greater daily liquidity and compounding in addition to serving as a sweep account for the program (i.e., funds are automatically invested in BONDDIA until individual fixed-term CETES purchases are made, and the proceeds of maturing CETES are automatically deposited into the fund).

Both are operated by the state development bank Nacional Financiera (Nafin) and therefore combine elements of both unit-trust and bank-led models (Cetesdirecto 2026). By contrast, Rwanda established a state-owned asset management company in 2013 to administer Rwanda’s National Investment Trust’s (RNIT) Iterambere Fund, which uses the central bank as the custodian and a combination of mobile money operators, partner commercial banks, and direct sales to distribute the units (see Case Study 5) (RNIT 2026).

Uganda is piloting a similar state-sponsored scheme, albeit with private financial institutions serving as custodian (KCB Bank) and asset managers (ICEA Lion and Old Mutual). Launched in 2025 by the Uganda’s Ministry of Finance (MoFPED) and Bank of Uganda, the pilot offers a money market unit trust via mobile money, initially distributing units to 200 Airtel Money and MTN Mobile Money subscribers through an SMS/USSD gateway (Atingi-Ego, 2025).

FIGURE 13

Rwanda's unit-trust model

Source: Author

A key advantage of the unit trust model is that the government can issue ordinary bonds of ordinary terms and ticket sizes while a separate platform fractionalises the instruments so that retail investors can take small positions. The funds can also hold assets besides government securities, such as equities or bank term deposits, thereby providing diversification benefits. Professional asset managers are responsible for managing the fund's liquidity so that unit holders can cash out ahead of maturity.

However, this does not necessarily shield investors from market risk since the NAV can fall below par if the underlying bonds are trading at a discount from their face value, for instance, when interest rates rise. "Marking to market" to compute the NAV can be a challenge for the unit trust model because realising capital losses can erode trust if the risks are not well understood or assets are mispriced. Restricting fund allocations to transparent and liquid assets can mitigate this risk; for example, Mexico's BONDDIA fund invests mainly in floating rate notes whose coupon rate resets daily to keep the market price close to par (Operadora de Fondos Nafinsa 2026). Another drawback is the fund management fees, which on top of broker and mobile money charges, can reduce the return on investment to below the interest on the underlying investments.

CASE STUDY 5

Rwanda National Investment Trust's (RNIT) Iterambere Fund

The Government of Rwanda established the RNIT in 2013 with the aim of fostering a savings culture through financial education, and to establish and manage collective investment and pension schemes that extend beyond sovereign instruments. The Iterambere Fund was set up in 2016 with a mandate to invest in a mix of asset classes – up to 100% government bonds and 30% equities – with the majority government bonds, yet an exact breakdown of allocations is not available.

The Fund has achieved meaningful growth over the past decade of operation: from RWF 1 billion of assets under management (AUM) at the initial public offering (IPO) in 2016 to RWF 86 billion, and from 920 IPO applications to ~90,000 accounts (CMA 2026). The Fund has delivered a consistent 11% return over this period and has never posted a negative year.

PROGRAM DETAILS

Size	Minimum RWF 2,000 (~US\$1.4), 20 units at RWF 100 launch price, no maximum
Tenor	Perpetual with separate legal status The trust portfolio holds instruments with different tenors Units have no fixed-term maturities
Products	Open-ended balanced perpetual unit trust
Interest Rate	NAV computed daily
Requirements	Open to individuals, institutions, savings groups and cooperatives Mobile money account, bank account
Charges	No entry or exit fees 2.0% annual management fee 1.18% MTN service charge for SMS USSD transfers
Taxation	Fully exempt from income and capital gains tax

CHAPTER 4

Assessing the opportunities

Retail sovereign financing can unlock gains across several policy areas. This section covers opportunities for retail bond programs to improve public financial management, advance financial inclusion, develop capital markets and support sustainability initiatives.

Public financial management

The goal of public debt management is to obtain financing to cover budgetary needs at the lowest cost and risk profile. In addition, many DMOs are tasked with developing domestic capital markets and mobilising funding for specific public goods or projects, especially those with sustainability objectives. Retail sovereign financing can be an effective instrument to fulfil their mandate.

Retail financing is typically denominated in local currency and held by residents. Historically, this form of funding has been considered safer since governments can always tax their subjects or print their own currency to service their debts. However, recent empirical research has challenged this assumption, while the convergence of local and foreign currency sovereign credit ratings in recent years shows that markets increasingly treat them as equivalent – defaults in local currency financing happen through inflation or restructurings (Reinhart and Rogoff 2009, Amstad et al. 2018).

Indeed, local currency financing is often more expensive for issuers than external offerings owing to the relative scarcity of domestic capital and despite increased holdings of certain local currency bonds by non-resident investors in recent decades. For retail bonds, borrowing rates tend to be even higher than wholesale finance since they include teaser rates and other incentives that push up the all-in cost of funding for sovereigns.

Nevertheless, retail financing offers clear advantages over foreign-currency and wholesale financing from a risk management standpoint, especially at the portfolio level. Local currency debt shields the issuer from exchange rate depreciation, which raises the debt carrying and servicing burdens in local currency terms. It also lessens the drain on hard currency reserves during moments of tight FX liquidity. A high proportion of resident holdings can insulate sovereigns from sharp shifts in credit cycles, such as hikes in global interest rates, which can precipitate sudden outflows by flighty non-resident investors.

This raises refinancing risks, forcing vulnerable sovereigns to lift interest rates to roll over debts coming due. Domestic funding tends to be “stickier” i.e. less likely to run for the exits during times of financial market turmoil. Accordingly, the share of local currency funding is a variable in sovereign risk models and scorecards, directly penalising countries that rely heavily on foreign currency with higher credit spreads, and vice versa. A premium teaser rate on retail bonds can therefore lower overall borrowing costs by reducing credit risk premia. This strategy was pursued by Hungary’s debt management agency in its aggressive expansion of retail borrowing (IMF 2019, Case Study 6).

CASE STUDY 6

Hungary’s retail strategy to the global financial crisis

Hungary stands out as a country with one of the highest shares of retail financing as a share of domestic financing – nearly 30% in 2025. This is up from around 5% in 2011, when the country faced acute debt distress in the context of the Eurozone Sovereign Debt Crisis. At the time, the country’s debt-to-GDP ratio reached 81% of GDP, of which 50% was denominated in foreign currency, while 37% of forint-denominated debt was held by non-residents. The precarious financial position was aggravated by sharp currency depreciation and a flight of non-resident holders.

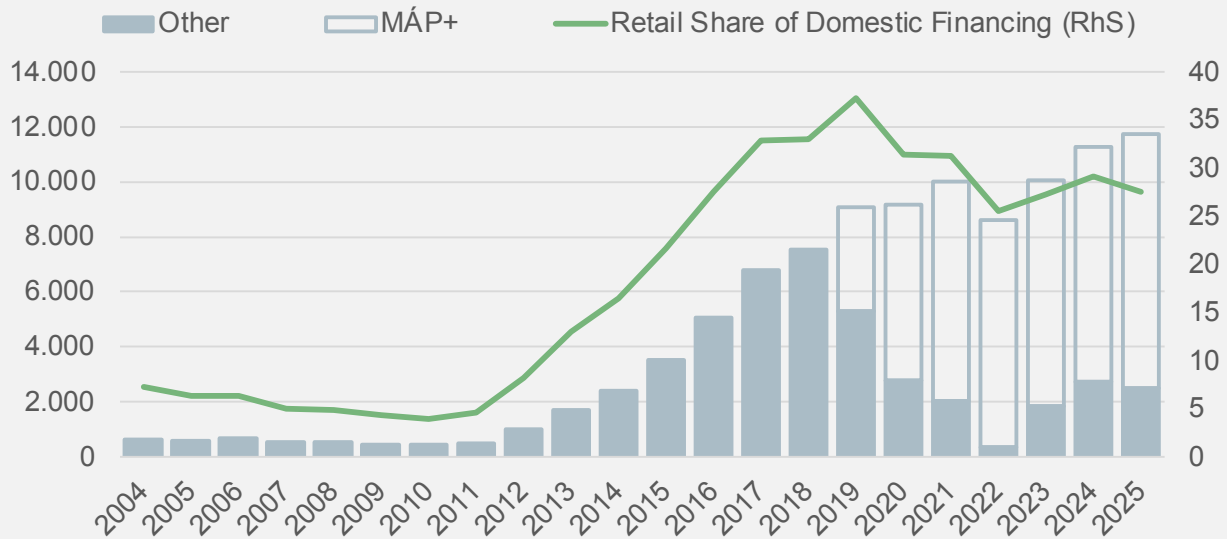
In response to the crisis, the Government Debt Management Office (ÁKK) set about reducing its external vulnerabilities, especially its high non-resident participation. To that end, the ÁKK revamped its retail financing program by developing special securities tailored to household needs, paying banks a commission on sales to encourage their marketing, offering higher interest rates and exempting interest income from taxation. The share of retail in the domestic funding mix reached 30% in 2017, before plateauing at that level.

To boost participation even further, ÁKK launched a plan in early 2019 to nearly double the stock of retail debt by 2023 (IMF 2019). It introduced MÁP+, a five-year bond that had a high initial yield (3.5% on the inaugural issuance, compared to the prevailing 1% wholesale funding rate) and incorporated a fixed step-up feature (50 basis points (bps) per year up to 6%). The bond succeeded in boosting retail participation momentarily to 37% before retreating to below 30% since (Figure 14).

FIGURE 14

Hungary retail financing program

(Left axis: HUF billion; right axis: % share of domestic financing)



Source: Government Debt Management Agency of Hungary (ÁKK)

Beyond debt management, retail financing can be a mechanism to achieve other public financial management and fiscal policy objectives. Sovereigns can raise funding from constituencies for specific public goods that impact them directly. This is perhaps most apparent during war time, as the examples of US “Liberty Bonds” in World War I, or Ukraine’s “Peace Bonds” more recently show. But it can also work in peacetime for social and capital spending. For example, the Ethiopian government issued retail bonds in denominations as low as ETB 50 (US \$0.90) for residents and the diaspora to help finance the Grand Ethiopian Renaissance Dam (Davison 2015).

Governments can also use retail bonds to promote retirement savings and other long-term spending needs. For instance, the government of Canada launched the Payroll Savings Plan in 1946 whereby participating employers could purchase the Canada Savings Bond (CSBs) on behalf of their employees or dependents (CSBs were discontinued in 2017) (Bank of Canada 2026). Similarly, the US Education Savings Bond Program permits qualified taxpayers to exclude income earned on eligible Savings Bonds if the holder is enrolled in higher education (Treasury Direct, n.d).

Retail sovereign financing can also support government digital transformation efforts by establishing an “on ramp” to electronic government (e-government) services such as registering a business or sharing personal documents, as well as laying down payment rails that can be used for other purposes besides financing such as collecting tax receipts or disbursing social welfare payments or disaster relief (Case Study 7 for examples from Ukraine’s Diia platform). Digitalisation, in turn, can have positive benefits for treasury and cash management by facilitating monitoring of fiscal inflows and transfers, preventing “leakages” from waste and corruption, and improving targeting and tailoring of programs (Dalberg 2016).

CASE STUDY 7

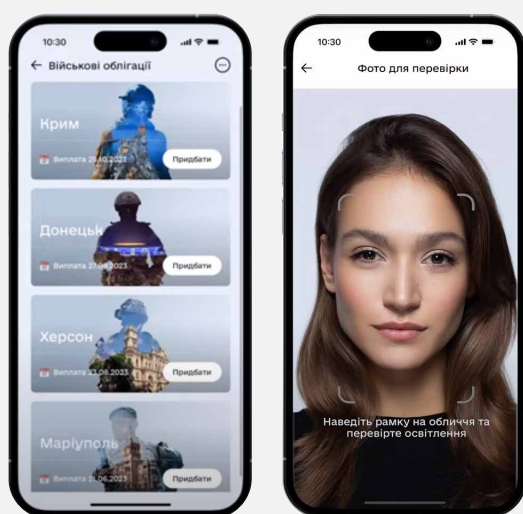
Ukraine’s Diia platform

Ukraine’s Debt Management Office (DMO) stands out for its effective use of advanced govtech solutions and digital payments channels to optimise its retail financing program. The conflict with Russia provided the impetus for major upgrades to the distribution platform, which as of 2022 is integrated with the e-government platform Diia. It is a single service window for public services available via a standalone mobile app and web interface. The platform hosts over 100 government services and allows Ukrainians to access digital documents including the world’s first digital passport.

Ukrainians and non-residents can purchase domestic “military bonds” through a seamless web interface and user-friendly workflow. Although placement still occurs via primary dealers and brokers on the back end, the investor can complete the entire end-to-end process in the app, including identity verification, setting up and managing a securities account, and receiving debt service into a linked e-wallet.

FIGURE 15

Screenshot of Diia KYC and city themed bond selection



Source: Diia, Government of Ukraine

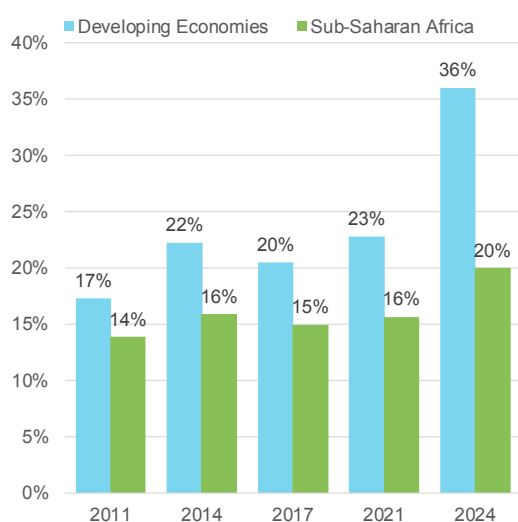
Financial inclusion

Financial inclusion and deepening are key enablers of economic development (Sahay et al. 2015). For instance, increased access to savings instruments helps households to smooth consumption in case of unforeseen shocks, while at the macro level they increase the availability of loanable funds for productivity enhancing investments. Digital financial services (DFS) such as mobile money, fintech credit and digital assets are catalysts of financial inclusion since they dramatically reduce transaction and distribution costs for providers, which can render them more affordable for low-income and marginalised populations (Khera et al. 2021). “Inclusive fintech” providers have been one of the major drivers behind the near doubling of account ownership in developing economies, and a near tripling in sub-Saharan Africa (Figure 16).

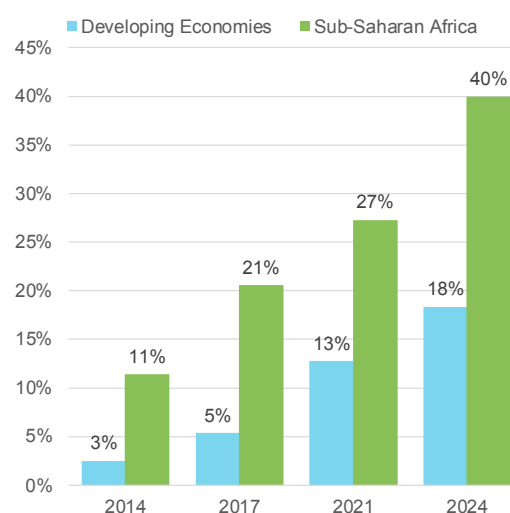
FIGURE 16

Financial account penetration

Saved at a financial institution (% age 15+)



Mobile money accounts (% age 15+)



Source: World Bank Global Findex Database

The proportion of individuals who saved at a financial institution remained broadly flat between 2011 and 2021, according to the World Bank's Findex, before jumping in 2024. This divergence can be attributed in part to the widespread practice by "traditional" providers of savings accounts to charge high fees and offer low or no interest on deposits (Figure 16).

Meanwhile, high acquisition and servicing costs coupled with low income from small accounts has meant that many incumbent financial institutions in EMDEs long eschewed "the bottom of the pyramid," although this is gradually changing as digitalisation has improved the unit economics of inclusive offerings. Effectively shut out from formal finance, the unbanked populations have few safe alternative stores of value in the informal sector. "Savings clubs", a popular community-based informal savings vehicle, are ubiquitous but highly susceptible to fraud and failure (Demirguc-Kunt et al. 2017). Insecurity lowers the propensity to save and prevents the efficient channelling of financial resources throughout the economy.

Retail sovereign financing vehicles can play a key role in advancing financial inclusion and DFS penetration, especially when packaged as digital and mobile-enabled savings products. Retail government securities give savers a positive and frequently tax-free return on their holdings. Since financial institutions in EMDEs tend to invest substantial portions of their assets in local sovereign debt – up to 30% according to IMF estimates (Deghi et al. 2022) – retail government securities effectively enable consumers to "disintermediate" the banks and gain direct exposure to the country's "risk-free" asset – an important consideration where deposit insurance schemes are absent or inadequate. To the extent that this competition impels deposit-taking institutions to improve their offering to unserved or underserved market segments, it can serve as an indirect pathway to achieve financial inclusion objectives.

Capital market development

Beyond financial inclusion, retail sovereign financing can promote financial deepening at the "wholesale" level as well. Deep and efficient domestic and local currency capital markets are critical enablers of sovereign financing, helping to mitigate funding, "rollover", and exchange rate risks. Those countries with the deepest capital markets, such as the US, Eurozone members, Japan and Switzerland, generally enjoy "reserve currency status", for which they receive significant uplift in their sovereign credit ratings.

Furthermore, deep capital markets promote broader economic development by improving financial market efficiency, lubricating the flow of funds throughout the economy, strengthening monetary policy transmission and bolstering resilience to shocks from international financial markets, among other economic benefits (Silva and Velandia-Rubiano 2010, World Bank 2019).

However, building domestic capital markets is a complex, time-consuming and path-dependent process that requires multiple and interdependent policy actions (Hashimoto et al. 2021). Empirical studies point to a range of macroeconomic, institutional and financial market preconditions that need to be in place for capital market deepening to take off (Carvajal and Bebczuk 2019). The literature also indicates that development tends to follow a sequential path starting from financial systems where simple, safe and short-tenor retail contracts predominate. These markets gradually evolve into a complex web of interlocking wholesale markets and institutional actors such as central security depositories (CSD), clearinghouses, primary dealers, market makers, investors and others (World Bank 2019). This path is paved by trust between market participants, which can take considerable time and enabling conditions to crystallise (Carvajal and Bebczuk 2019).

Retail sovereign debt can play a catalytic role in this development process by furnishing wary savers with a safe, simple, bilateral financial contract that can serve as the foundation for building trust in financial intermediation. On the demand side, individuals who become familiar and comfortable with investing in debt instruments via retail bonds may graduate to more sophisticated investment products and delegated asset management. At later stages of development, a new retail program can inject new pools of liquidity that were previously held in the informal sector or offshore, which then spill over into other financial markets, for instance, by collateralising other debt instruments.

Even in mature capital markets, retail instruments can help to improve the functioning of capital markets and their role in monetary policy transmission. For example, Belgium raised a record amount through a retail State Notes offering in 2023 in a funding drive that was aimed at pressuring banks to raise deposit rates (Bahceli 2023), following a similar move by the UK's National Savings and Investments (NS&I), the agency responsible for issuing retail bonds (Uddin 2023).

At the same time, a "direct-to-investor" retail program hosted on a digital platform could allow the government to "leapfrog" certain stages of the standard capital market development process. The advent of distributed ledger technology (DLT) such as blockchain coupled with tokenised assets theoretically allows issuers to bypass agents, clearinghouses and CSDs. A "digital bond" on the blockchain records ownership and transfers on decentralised ledgers that are linked together using cryptography, as opposed to the traditional databases managed by a CSD.

Most steps in the bond's life cycle including clearing, settlement and debt service are mostly automated and near instantaneous. Furthermore, "fractionalisation" allows bonds to be readily split into smaller and smaller ticket sizes, while embedding "smart contracts" in the bonds can automate certain transactions and enable feature sustainability-linking or gamification. Finally, digital bond platforms can be integrated with digital payments and identification systems so that the end-to-end process from know-your-customer (KYC) checks to debt service can be fully or largely executed "on chain."

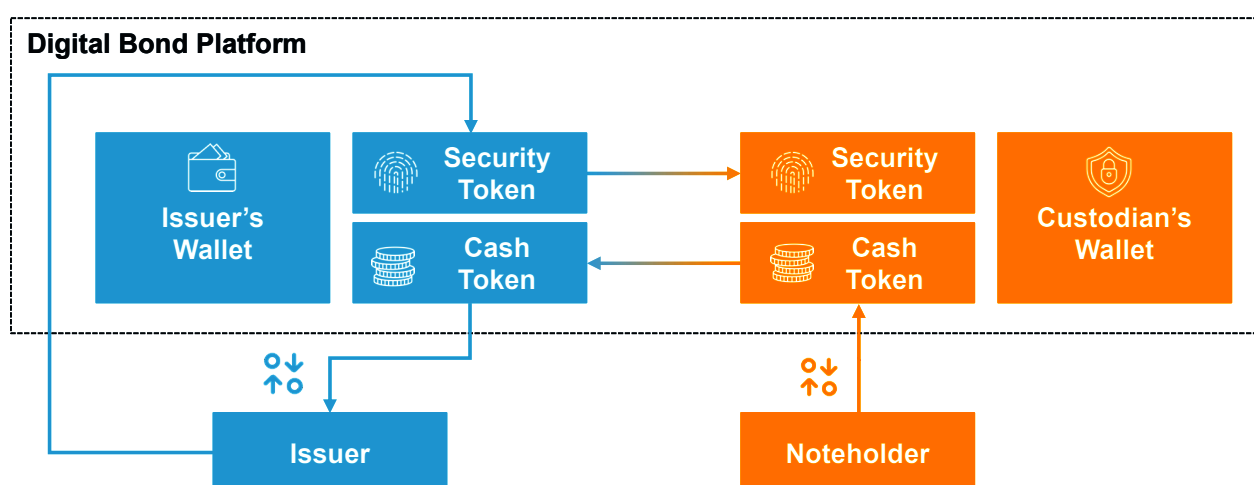
The growing list of digital bond pilots around the world has proven the digital bond concept and set the stage for their integration into the international and domestic financial architecture. The first digital bond was issued by the World Bank (World Bank 2018). Since then, there have been more than 20 issuances worldwide, with ten alone in the first half of 2023 (Gusdorf et al. 2023).

These have been offered by the full range of issuers, from development banks (the European Investment Bank, Kreditanstalt für Wiederaufbau), sovereigns (e.g., Thailand, Philippines), sub-sovereigns (e.g., the Swiss cities of Lugano, Basel and Zurich), financial institutions (e.g., UBS) and corporates (e.g., Siemens). There have also been experiments with retail, use-of-proceeds, and sustainability-linked bonds (Box 3).

These unique features and functionalities of digital bonds arguably make them ideal for retail issuance. The transparency, speed and immutability of DLT foster trust among network participants. At the same time, a frictionless user experience and fractionalisation make digital bonds more accessible and affordable than traditional offerings. Automation reduces scope for errors or fraud that can destroy confidence among retail investors.

For budget and capacity constrained issuers, the notion of a “bond in a box” that can be deployed in short order, without major investments or preconditions for bond market infrastructure, has obvious advantages. Finally, the potential of smart contracts to embed programmable rewards and penalties such as performance-based coupon step-ups and step-downs makes them well suited for KPI-linked structures.

FIGURE 17
Stylised digital bond platform architecture



Source: Moody's

Despite this promise and recent successful pilots, the digital bond market is still in its infancy and there are significant obstacles to deploying them at scale in developing economies. The lack of a tokenised vehicle currency in many jurisdictions, which enables issuers and investors to transact entirely on chain and therefore, reap the full efficiency gains from disintermediation, is a barrier to scale. Central bank digital currencies serve this function but remain confined to a few mature financial systems. Third-party providers of stablecoins can also play this role but introduce separate credit risks and points of failure.

More generally, the technology platform introduces additional operational risks, including cybersecurity and uptime resiliency, the possibility of bugs in the smart contract code, and legal and regulatory risks surrounding tokenisation and investor protection. On the investor side, the trust architecture underpinning digital bonds is neither simple nor failsafe, and it may therefore not add much to the value proposition for consumers with low financial or technological literacy. Despite these challenges, the state of the art in digital bonds and payments is rapidly advancing, and the prospects of their going mainstream and reaching retail investors in the foreseeable future are good. The “bond in a box” has the potential to be transformative and catalytic in contexts where “traditional” capital market development is exceedingly slow or shallow.

BOX 3

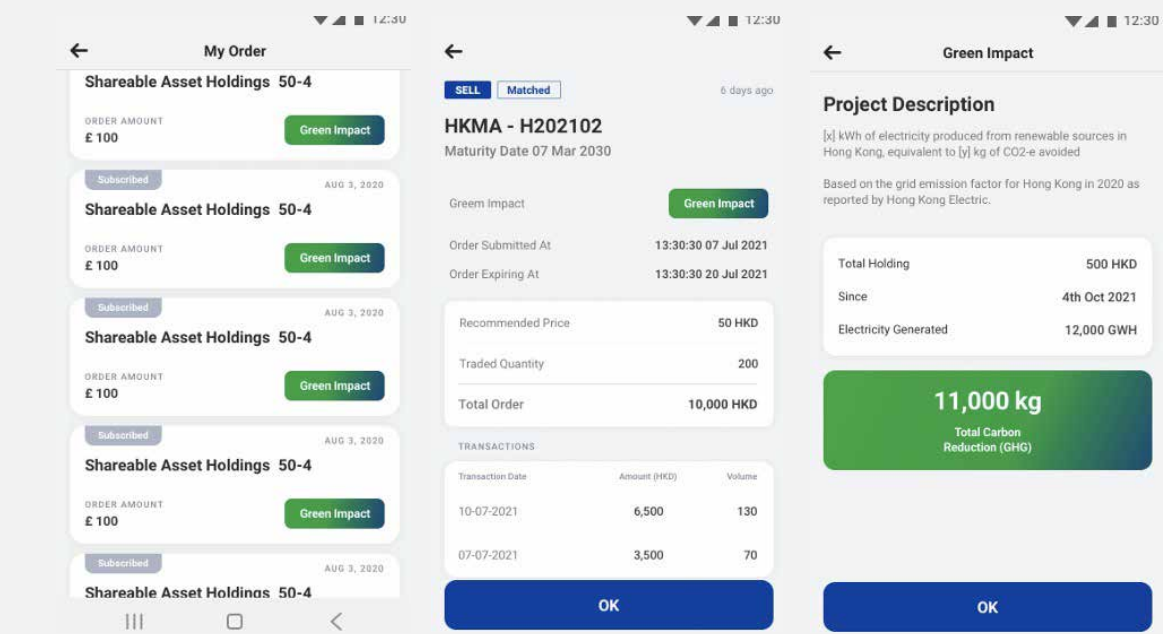
Select digital bond projects

Bank of Thailand (BOT) DLT scripless retail sovereign bond project: In September 2020, the Government of Thailand’s Public Debt Management Office (PDMO) successfully issued US\$ 1.6 billion of the world’s first blockchain-based government savings bonds (BOT 2020). The platform is based on an open source Hyperledger Fabric blockchain framework hosted on the IBM Cloud and operated by the Bank of Thailand, with domestic selling-agent banks acting as distributors and the Thailand Securities Depository as the registrar and paying agent. The project aimed to speed up retail placement, which previously took fifteen days but was reduced to two, as well as reduce operational complexity and the overall cost of issuing bonds (IBM 2020).

Philippine Tokenized Treasury Bond (TTB): In November 2023, the Bureau of the Treasury (BTr) in the Philippines raised PHP 15 billion (US\$ 270 million) via a debut blockchain bond issued on the in-house Distributed Ledger Technology Registry (Lopez 2023). Although the TTB was offered only to institutional investors, the BTR has stated its aim of developing offerings for retail buyers over time as part of a broader agenda of “democratising investment through digital technology, significantly reducing settlement risk and friction costs, ultimately leading to a financially inclusive local bond market” (BTR 2023).

BIS-HKMA Project Genesis Digital Retail Green Bond: The Bank for International Settlements (BIS) in partnership with the Hong Kong Monetary Authority (HKMA), and Liberty Consortium* in 2021 developed a prototype of a digital retail green bond. The aim was to digitise and streamline the end-to-end bond lifecycle, from the mobile user interface to the automated Know Your Customer (KYC) and onboarding to blockchain-based middleware to the CBDC payments system (BIS 2021). Furthermore, the prototype integrated a green data feed about the "green impact" of the underlying assets (Figure 18). Although the prototype did not ultimately go live as a retail product, the Government of the Hong Kong Special Administrative Region (HKSAR) did eventually issue a wholesale digital green bond in February 2024 (HKMA 2024).

FIGURE 18
Liberty prototype green impact reporting



Source: Bank for International Settlements (BIS)

DB-STACS Project Benja Digital Sustainability-linked Bond (SLB): Deutsche Bank and the Singaporean fintech company STACS in 2021 developed a "Proof-of-Commercialization" blockchain-based SLB. The bond incorporated smart contracts to automate real-time impact reporting, direct the use of proceeds, and embed coupon ratchets linked to key performance indicators (Deutsche Bank 2021).

* The Liberty Consortium comprised Standard Chartered Bank, SC Ventures and Shareable Asset.

Sustainability link

Recent years have witnessed a flurry of innovation in the sovereign and corporate bond space around incorporating sustainability features into bond markets. The emergence of green, social, sustainability and sustainability-linked (GSSS+) debt instruments has created a new asset class for investors with environmental, social and governance (ESG) objectives, as well as a mechanism to mobilise financing for the SDGs. Another recent crop of outcome-based instruments has embedded conservation projects and carbon credits.

With a few notable exceptions at the corporate and sovereign levels (see Case Study 8 on Rwanda's SLB), sustainable bonds have not yet penetrated the retail space. This is partly due to the shallowness of retail finance more broadly and the relative infancy of GSSS+ in general. The asymmetry between the scale of financing needs, especially for large-scale climate adaptation and mitigation projects, and the pool of available domestic savings is another factor. On the demand side, it may also reflect the layer of complexity that sustainability adds on top of products that are already arcane and inaccessible to the average individual. This line of reasoning would argue against introducing sustainability features until the program or the market have achieved a sufficient level of maturity.

A counterargument holds that retail finance presents more fertile ground for sustainability-related innovation than wholesale finance because it is subject to fewer institutional strictures and market conventions that put a premium on product standardisation and simplicity. Investors' fear of "greenwashing" (i.e., issuers or investment managers presenting themselves as more sustainable than they truly are) often begets "greenhushing" (i.e. issuers refraining from ESG initiatives altogether) or "greenlashing" (e.g., investors launching legal challenges to ESG regulation or policies).

From the issuers' perspective, ministries of finance worry about GSSS+ fragmenting the investor base and/or distorting the benchmark yield curve, complicating the task of furnishing the domestic capital market with accurate risk-free reference rates. In other words, GSSS+ instruments may crowd out conventional forms of funding that are necessary to fulfil DMO mandates on capital market development.

Retail investors by contrast tend to be the end beneficiaries and do not have fiduciary obligations towards others, which should make greenwashing concerns less of a demand-side constraint. Likewise, market fragmentation is a lesser concern for issuers since retail products do not compete directly with wholesale funding. Indeed, customer segmentation and product tailoring have been a deliberate marketing strategy of existing retail programs. Issuers can cater directly to individuals for whom sustainability is a high priority, rather than having to appeal to fund managers who must pool preferences and balance ESG objectives with return requirements.

Furthermore, the act of pooling by itself dilutes individual preferences and by extension appetite for ESG investments, whereas a direct appeal to an individual can more effectively harness popular passion for sustainability. Individual investors are also not as beholden to rigid market conventions and standards as professional investment managers, and therefore arguably more open to unconventional structures and experimentation. Given these considerations, debt managers may have more latitude to test out and tweak different structures at the retail level than in their wholesale programs.

CASE STUDY 8

Rwanda Development Bank sustainability-linked bond

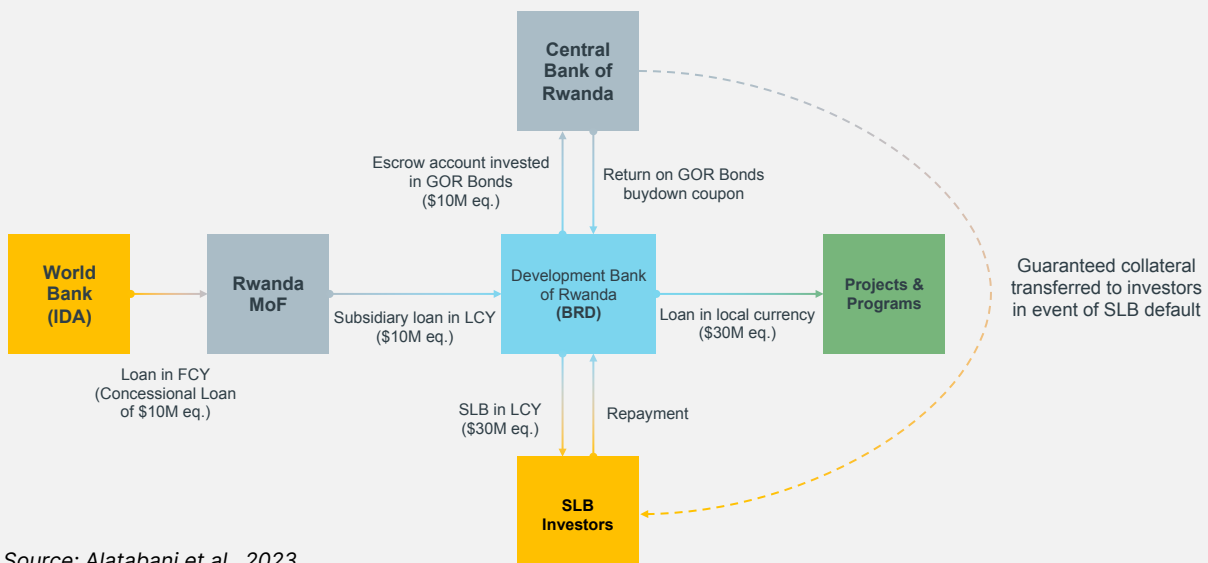
The Development Bank of Rwanda (Banque Rwandaise de Développement, BRD) issued a Rwandan francs (RWD) 33 billion (US\$ 30 million) sustainability-linked bond (SLB) in late 2023. The World Bank provided first-loss credit enhancement in the form of cash collateral (Figure 19), which reduced the interest rate on the offering. The bond has three targets:

1. Increase in the number of Participating Financial Institutions (PFIs) accounting for environmental and social risks in projects;
2. Increase the number of loans for women-led small and medium-sized enterprises (SMEs) as a percentage of total SME loans;
3. Cumulative number of affordable housing loans extended or refinanced by participating PFIs.

The bond pays investors a higher coupon rate if these targets are met during the life of the bond: +20 basis points if two targets are achieved, and +40 basis points if all three are achieved. There is no penalty for missing targets.

FIGURE 19

BRD sustainability-linked bond structure



Source: Alatabani et al., 2023.

Although it was not specifically designed as a retail bond, individual investors made up more than three quarters of the investor base (albeit only 3.5% of funds raised) (BRD 2023). The minimum subscription amount of RWF 100,000 (~US\$ 70) put it within reach of middling income segments. It may therefore be considered the first retail SLB, in addition to the first SLB issued by a national development bank globally, and the first SLB in sub-Saharan Africa.

PROGRAM DETAILS

Size	RWF 100,000 (~US\$ 70) minimum subscription
Tenor	7 years
Products	Sustainability-linked bond with credit enhancement
Interest Rate	12.85%, semi-annual
Requirements	Rwandan citizens with CSD accounts
Charges	Trading commissions
Taxation	Withholding tax

The BRD SLB gives credence to the hypothesis that sustainability can serve as an effective marketing strategy, although additional pilots are needed to validate it properly. With few real-world examples to draw on, the following section sketches a few proposals of retail GSSS+ that could achieve sustainability outcomes alongside benefits for public financial management, financial inclusion, and capital market development.

Retail use-of-proceed bonds: These thematic bonds earmark the funds raised for pre-specified projects and programs pursuant to environment (“green”), social and governance (ESG) outcomes. Activities eligible for UoP financing are typically defined in green taxonomies, while the bond structure is generally aligned with market-based guidelines such as the International Capital Market Association (ICMA) “Green Bond Principles.”

Retail UoP bonds remain uncommon, and in the few retail examples where funding has been designated for specific purposes, the use of proceeds have not explicitly adhered to ICMA guidelines on project selection, fund management and reporting. Still, there are several proof points that this structure can work at the retail level. These include the UK’s National Savings and Investments (NS&I) Green Savings Bonds, Ethiopia’s Grand Ethiopian Renaissance Dam, Indonesia’s green sukuk, Kenya’s 2022 M-Akiba retail infrastructure bond, and post-disaster recovery from Hurricanes Katrina, Rita and Wilma in the US (‘Gulf Coast Recovery Bonds’ 2006-2007).

Incorporating ESG projects and programs more systematically at the retail level presents several opportunities. The public goods being financed can be closely tied to local investors' interests and needs, such as the construction of a neighbourhood hospital or school, which should raise popular buy-in for the project and uptake of the bonds. In other words, investors can be beneficiaries of both the financial returns of the financing, as well as the use of proceeds.

Retail sustainability-linked bonds (SLBs): Unlike UoP bonds, SLBs do not prescribe how the funds shall be used. Rather, they incorporate key performance indicators (KPI) that track progress against self-selected sustainability targets, which can align with the sovereign's international commitments (e.g., emission reduction targets as set out in the Paris Agreement), national policy priorities (e.g., just energy transition strategies), or sub-national and sectoral initiatives (e.g., financial inclusion). They also embed robust reporting frameworks that ideally conform with industry best practices (e.g., ICMA SLB Principles), along with financial incentives such as "coupon ratchets". These work by adjusting interest rates either up if targets are missed, and/or down if they are achieved.

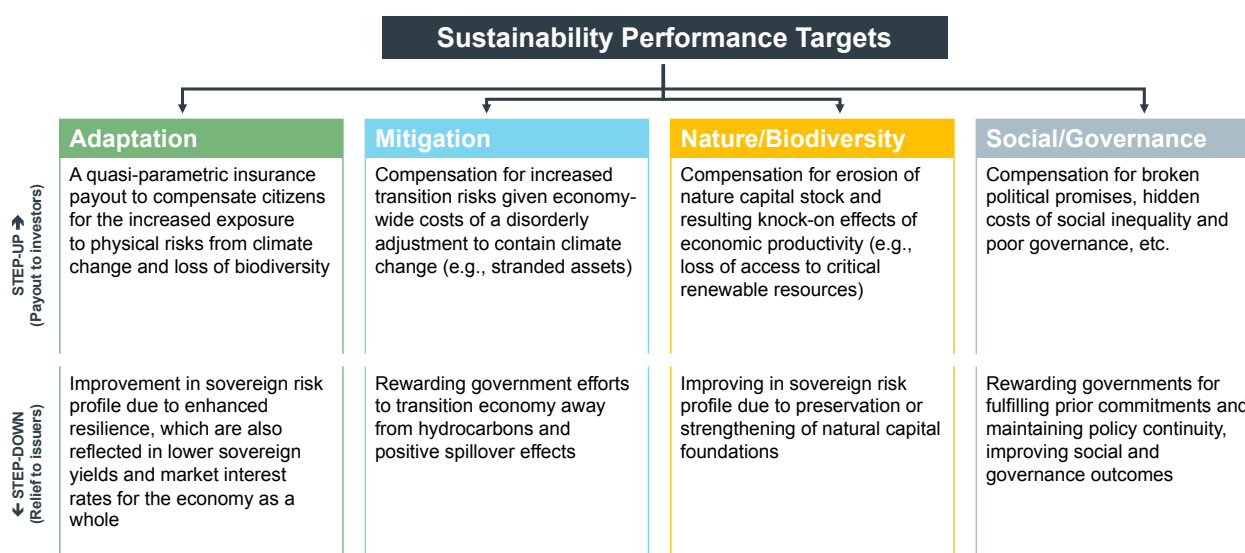
Also, unlike UoP bonds, SLBs have failed to gain traction in sovereign debt markets. Only three sovereigns have issued SLBs so far (Chile, Uruguay and Thailand), and the BRD is the sole exception at the sub-sovereign level. The reasons for the slow uptake are many (Kulenkampff et al, 2023), but two stand out:

- First, institutional investors complain that coupon step-downs contravene their fiduciary duty to achieve the highest risk-adjusted returns for their investee clients.
- Second, coupon step-ups carry reputational risk for investors of being perceived to benefit from the misfortune of countries that fail to achieve their targets.

Retail SLBs can address these issues. On the first point, individuals are generally not fiduciaries, at least not formally or legally, and therefore a step-down may be more palatable for retail than for institutional investors. On the second point, reputational risks are attenuated by the fact that the beneficiaries of the step-up are the same constituency that will suffer the consequences of missing targets, even if they are not necessarily the same individuals. In other words, the penalty can be construed as compensation to citizens for underperformance on their commitments.

Figure 20 presents a few examples of how this logic might play out under different sustainability performance targets. All else being equal, the closer the correspondence between holders of the bonds and beneficiaries of the targets, the more this logic will hold true.

FIGURE 20

Sample sustainability performance targets and payoffs

Source: Author

Retail outcome bonds: Unlike with performance-based financing such as SLBs, where bond investors receive a “reward” (i.e., coupon step-up) if the issuer fails to achieve the desired results and vice versa, outcome-based bonds pay a reward (i.e., the coupon) only if the underlying project is successful. The principal is protected either because the issuer is highly rated (e.g., a multilateral development bank) or because it has guaranteed the issuance by a lower-rated issuer. In the sustainable finance space, two examples of outcome bonds are “conservation bonds” and “credit-linked” bonds.

Investors in the former forgo a portion or all the ordinary coupon payments, which instead are invested in conservation activities. If these yield certain results as measured by predetermined KPIs, then investors receive a “success payment.” This structure first debuted in 2022 as the “Rhino Bond”, which was issued by the World Bank but used funds from the Global Environment Facility to pay a deferred coupon if the population of black rhino in two South African reserves increases by a certain rate (World Bank 2022). The World Bank also pioneered the first credit-linked bonds a year later, which pays out the cash equivalent of carbon credits generated by a water purification project in Vietnam (World Bank 2023b).

Although these bonds were issued by multilateral development banks, a sovereign retail version that borrows key features of conservation and credit-linked bonds is conceivable. The “pay for performance” can be adapted to reward retail holders for undertaking certain demonstrable conservation actions. For instance, suppose a community shares its living space with a keystone species, such as a bat colony inhabiting trees across many towns and villages.

Members of the community could be furnished with mobile money-enabled retail bonds with bonus payments linked to habitat intactness. The cost of measurement, reporting and verification of the conservation outcomes, as well as the reward itself, could be covered by philanthropic funding. The advantage of this structure over alternative conservation finance is that the community is enlisted to act as stewards of the natural ecosystem. The retail bond establishes a link between the financial and environmental health of the community, in addition to serving as the payment rails for delivering the conservation payments and possibly as a funding source for the project.

A credit-linked retail bond would conceivably pay for the outcomes of projects that generate credits, which can be carbon, pollution, biodiversity or others. These can be sold to off-takers with the proceeds passed through as a cash-equivalent reward to bondholders on top of ordinary debt service.

The credits ideally correspond to public goods that directly benefit the communities of bondholders. The retail bond is the mechanism whereby the average citizen gains a financial interest in the project, such that greener infrastructure translates into higher financial returns for bondholders – in addition to the co-benefits of higher quality of life. The issuer benefits not only by raising funding, but also from raising awareness about its retail program and tapping into the growing class of sustainability-oriented investors.

CHAPTER 5

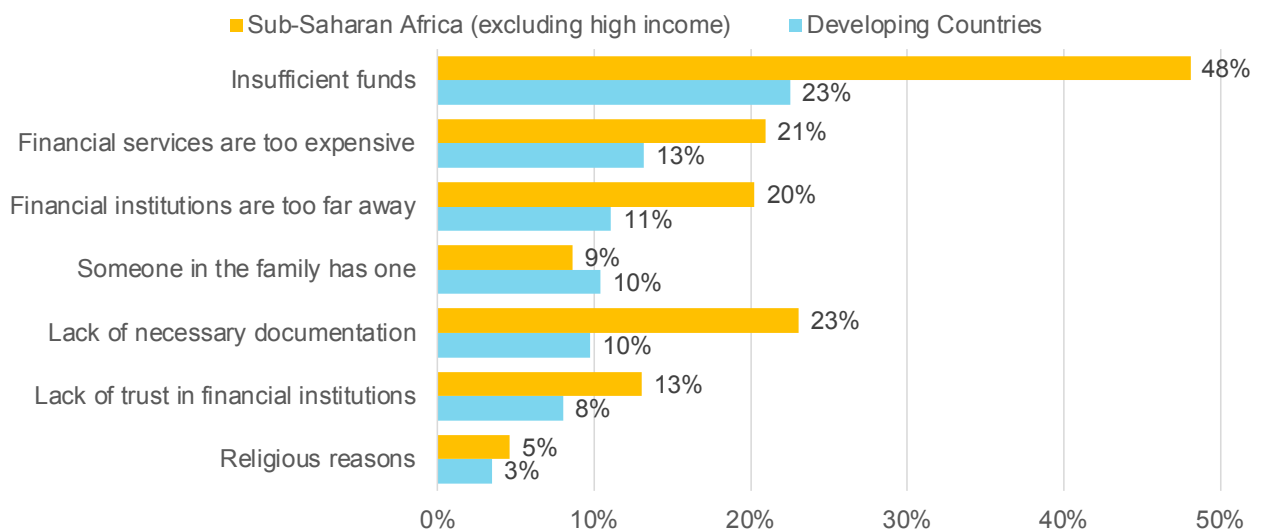
Barriers to scale

Despite the long track record of retail financing, advantages for investors and issuers alike, and new opportunities arising from digital innovation, significant scaling of the instrument faces numerous headwinds. On the demand side, these include lack of savings, awareness, literacy and trust, in addition to inadequate returns or excessive risk, and poor product design and marketing. This section examines each of these in turn before covering supply-side issues, which include capacity constraints, retail market infrastructure and regulatory gaps, and opposition from vested interests.

Demand-side constraints

The Global Findex survey on financial inclusion prepared by the World Bank provides an adequate proxy to understand why individuals may refrain from purchasing retail bonds. Although the survey does not specifically ask about investment products, the survey does gather nationally representative data on savings accounts. Figure 21 outlines the main reasons respondents cited for having no account at a bank or similar financial institution.

FIGURE 21

Reasons for having no account (% age 15+, 2021)

Source: World Bank Global Findex Database

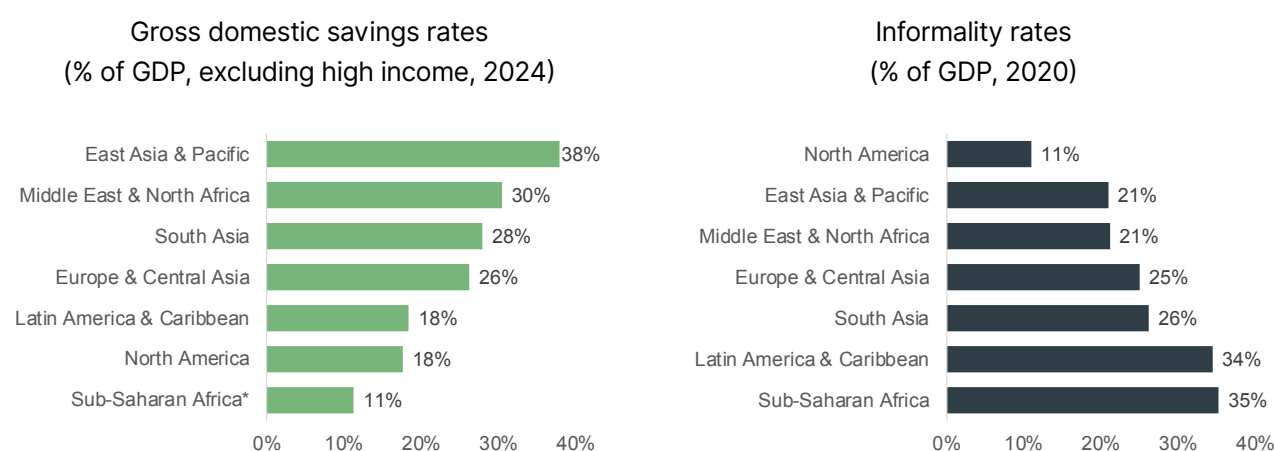
A dearth of investible funds stands out as the main barrier to financial inclusion, especially in sub-Saharan Africa. It reflects the low national savings rates across EMDEs, as depicted in Figure 22, and raises the question of whether scarce domestic capital can cover governments' financing needs to a meaningful extent. The answer for most countries is that it will likely only comprise a minority share of the funding mix. Even so, it can diminish the reliance on riskier funding sources and put the sovereign on stronger footing when negotiating terms with wholesale creditors.

Furthermore, official statistics likely understate the true size of the savings pool since high rates of informality across EMDEs hide a significant amount of capital accumulation among lower income segments (Figure 22). Some empirical studies indicate greater risk and uncertainty of informal employment leads to higher propensity for precautionary saving. For instance, Granda and Hamann (2015) estimate that individual savings rates in the informal sector are more than double those in the formal sector based on Colombian survey data.

De Soto (1989) also showed how informality hampers access to finance, in large part because they lack the necessary documentation to open accounts – the second main reason cited in Findex for sub-Saharan Africa. With rates of informality in the region well above those elsewhere in the developing world, it may be argued that the retail mobilisation potential is substantially higher than official statistics suggest. However, it also reinforces the point that the retail finance and financial inclusion agendas are inextricably intertwined, and that facilitating access and reducing transaction costs – the next major items down the list of reasons – must be an integral part of a retail strategy. These are discussed in greater detail under supply-side constraints.

FIGURE 22

Capital mobilisation potential



*2023 data

Source: World Bank

Lower down the list but no less important is trust. As the World Bank notes: “trust stands as the single most decisive force governing the kind of intermediaries and contracts to be found in financial markets” (Carvajal and Bebczuk 2019). Building confidence between counterparties in a debt contract is a function of complex socio-political dynamics, norms and institutions. The challenge is complicated by widespread distrust of the government in its capacity as a fiduciary of citizens’ personal savings – a common refrain heard from user interviews during our research.

This is especially salient in countries with polarised political atmospheres. In Kenya, for instance, some respondents to the survey about the M-Akiba pilot in 2017 said that political allegiances dissuaded them from buying the bonds (FSDA 2018). Similarly, distrust of other market intermediaries such as brokers can sap enthusiasm.

Trust means little if savers are not aware of the program or fail to understand it. This may be due simply to inadequate supply or ineffective marketing, but it also reflects the prevailing savings culture – a concept that denotes a willingness to be patient and disciplined in pursuit of investment goals. A survey of investors in the 2017 pilot of the mobile money bond M-Akiba in Kenya found that those who registered for the program but did not purchase the bond had a low understanding of the product and investment process (FSDA 2018, see Box 4).

BOX 4

Lessons from Kenya’s M-Akiba

The government of Kenya launched the M-Akiba pilot program, the first mobile-money retail treasury bond, in 2017 (Case Study 4). It had the twin aims of democratising access to government securities and advancing financial inclusion, leveraging the rapid advances in mobile money penetration in the country. The existing retail program had negligible participation (~10,000, or 2% of investors in government bonds) owing to high minimum subscriptions limits (KSh 50,000, or US\$ 490), and a cumbersome registration process that required physical presentation at the Central Bank of Kenya.

Despite strong prospects, the results of the pilot were mixed. It mobilised only 8% of the initial target amount of KSh 5 billion (US\$ 50 million), and only 7% of individuals who registered for accounts ultimately converted into investors. An ex-post study conducted by Financial Sector Deepening Africa (FSDA) and BFA Global drew several conclusions about why it came up short:

- **Poor timing:** changes to banking regulations preceding the launch forced banks to increase interest rates paid on savings from 0% to 7%, diminishing the relative attractiveness of the bond's 10% yield.
- **Poor understanding of the product:** post-issuance surveys showed many participants had poor knowledge of key details of the product and investment process.
- **Confusing purchase process:** while registration was simple, the second stage of the process was confusing and gave no clear, immediate instructions for how to complete the purchase.
- **Lack of prompts and reminders:** over 60% of individuals interviewed did not receive a single reminder message after registering.
- **Agents focused on registration:** agents were effective in increasing registrations of accounts but were less successful in encouraging individuals to invest.
- **Weak customer care:** the only helpline available to customers was a landline, which was difficult to access and confusing to use.
- **Concerns about the minimum investment:** some customers felt the KSh 3,000 minimum investment would be better allocated to savings groups or trading opportunities that could provide quick returns or access to credit.

*This box draws heavily from FSDA 2018

Besides awareness and literacy, product design and marketing can have a significant bearing on uptake. Underinvesting in user interfaces (UI) and user experience (UX) or miscalibrating messaging to target users can harm the appeal relative to alternatives. In the M-Akiba survey, of those who did purchase the bond, more than 85% of respondents had no experience with government bonds, and 42% had no experience with financial markets at all, suggesting that marketing can be effective in introducing new users (FSDA 2018).

For younger, “digital first” demographics, this entails developing social media campaigns. For example, Japan's Ministry of Finance created promotional cartoon characters and enlisted popular entertainers and “influencers” to disseminate online ads (MOF Japan 2024).

FIGURE 23

Japan's retail social media campaign

Source: Ministry of Finance, Japan (2024)

The importance of return on investment cannot be discounted either. Retail bonds generally offer the treasury rate, sometimes with a minor premium as a sweetener. In the record low-interest rate environment that prevailed for most of the 2000s and 2010s, many sovereigns struggled to compete with other higher-yielding saving products.

For instance, the government of Canada experienced a steady flight of investors from the Canada Savings Bond program post 2009 until the program was terminated in 2017, when interest rates on those securities hovered below 1% (Patel and Yang 2014) whereas the guaranteed investment certificate (GIC) – a fixed-income savings product offered by Canadian banks and credit unions – averaged approximately 2% over this period. The spread over treasury rates tends to be substantially higher in informal credit markets, which attract large shares of savings in developing countries (Batini et al. 2010).

The relatively low yield on government securities partly reflects commensurately lower credit risk, since they technically constitute an economy's "risk-free" asset. However, with many sovereigns at elevated risk of debt distress, default risk may deter retail investors from buying treasury paper. Although ordinary citizens may not employ sophisticated credit risk models to assess the sovereigns' willingness and ability to repay, citizens may still be broadly aware of the financial health of the government through local media, and they may even follow coverage of sovereign credit ratings (Cawley 2015, Nguyen et al. 2023).

In high-inflation environments or volatile macroeconomic conditions, they may eschew retail bonds in favour of hard currency holdings or investments. The high "dollarisation" rates observed in high inflation environments testify to this dynamic. Sovereigns can address these concerns to some degree by issuing inflation-indexed or foreign-currency denominated retail bonds, although that would negate some of the main advantages of retail bonds from a debt management standpoint.

Supply-side constraints

Supply-side barriers capture the infrastructure and institutional blockers or gaps that constrain the ability to issue and distribute retail bonds. On the distribution end, the availability of mobile access points and digital payment gateways are key in countries with underdeveloped financial markets. Although digital platforms are not a prerequisite for retail financing, as evidenced by the ubiquity of retail bonds well before the advent of financial digitalisation, they can be decisive in achieving the necessary coverage and economies of scale to make the program worthwhile.

A study in 2004 into the Canada Savings Bond (CSB) found that the program cost of CAD 1 billion between 1997 and 2003 was prohibitively expensive compared to wholesale financing, further reinforcing the decision to phase out the program (Patel and Yang 2014). It follows that a critical mass of active users may be needed for the program economics to add up, which in turn entails a certain level of operational efficiency of the digital infrastructure in addition to connectivity and interoperability. In this regard, a well-developed digital public infrastructure (DPI) such as the “India Stack” that encompasses digital identity, payments, and data/document exchange is a key enabler.

Technical capacity constraints cover everything from the DMO staffs’ knowledge of retail products and low value payments systems to their capability to manage platform technology risks or partnerships with third-party operators. Many DMOs operate with skeleton teams and simply lack the bandwidth to take on the additional workload. Their back-office systems may also require major buildouts or upgrades to manage additional workflows entailed by retail issuance, such as identity authentication, fraud detection or complaints handling.

Debt management strategies may also need to be amended. For instance, the demand for retail issuance may be harder to forecast than for wholesale issuance, which can complicate cash flow management and budgetary planning. New data collection and analytics may need to be adopted to enable accurate planning and risk management. Likewise, existing bond market infrastructure - registration, custody, clearing and settlement systems - may need some reengineering to accommodate large volume, small value transactions.

On the upstream regulatory and policy end, budget system laws and DMO mandates may need to be amended to permit retail financing or to authorise special provisions such as tax incentives. They may also need to institute special fiduciary safeguards to protect unsophisticated investors, or to ensure competition among service providers if commercial partnerships are part of the program. Where retail bonds are distributed via a single or subset of mobile wallet and payment providers, they may confer on them or reinforce a competitive advantage.

In Kenya, for example, Safaricom's M-Pesa controls more than 97% of the mobile wallet market, on top of two-thirds of mobile subscriptions (Communications Authority of Kenya 2023). M-Akiba (Case Study 4), at least as it was initially piloted, was accessible only via M-Pesa and Airtel Money, and would have reinforced Safaricom's dominance. At a minimum, careful vetting and due diligence are performed during the procurement process. Ideally, the governments can leverage open or interoperable retail payments systems such as Brazil's PIX or India's Unified Payments Interface (UPI), which are both operated by their respective central banks, to mitigate competition concerns.

Finally, local political economy dynamics can have a major bearing on the program's success to the degree that it threatens vested interests. This is most likely to arise from incumbent banking interests who may perceive retail bonds as competition for deposits. Where they are gatekeepers to mobile wallets and payments systems, they can throw up roadblocks to delay or derail the rollout of a retail program.

CHAPTER 6

Recommended pathways to scale

The barriers to scale outlined in the previous section are formidable but not insurmountable. The survey of existing retail programs provides some clear recommendations and lessons learned for sovereigns looking to launch or scale up their retail offering. In broad terms, a scalable retail program should optimise for accessibility, awareness and attractiveness, which means making them ubiquitous, user-friendly and financially rewarding. More concretely, the program should follow the following guidelines:

1. Develop superior user interface and user experience design (UX/UI).

In the current mobile and web-first culture, this means user-friendly websites and mobile applications that follow the state of the art in human-centred design and digital innovation. The bonds must compete with the most popular savings products in the market. Simplicity is key for investors with low financial literacy. In terms of critical features and functionalities, a study of the M-Akiba pilot by BFA Global makes the UI/UX recommendations (FSDA 2017):



User interface: Design extremely simple and streamlined workflows for onboarding and purchasing;



Click to pay: Facilitate immediate purchase after registration;



Payment instalments: Allow users to make contributions to build up to the minimum investment, mimicking savings group mechanisms;



Customer service: Create a mobile phone customer care line;



Reminder messages: Send additional messages to prompt purchase;



Top-up messages: Encourage users to invest more after they meet the minimum threshold;



Deadline messages: Utilise deadline pressure to encourage purchase.

Beyond the actual features, the development of retail products should follow the best practices of human-centred design and user research. DMOs need to craft products around their target investor base, which entails understanding their needs, pain points and perspectives. Building trust is critical, which can be fostered by transparency and stakeholder engagement, which in turn requires effective marketing.

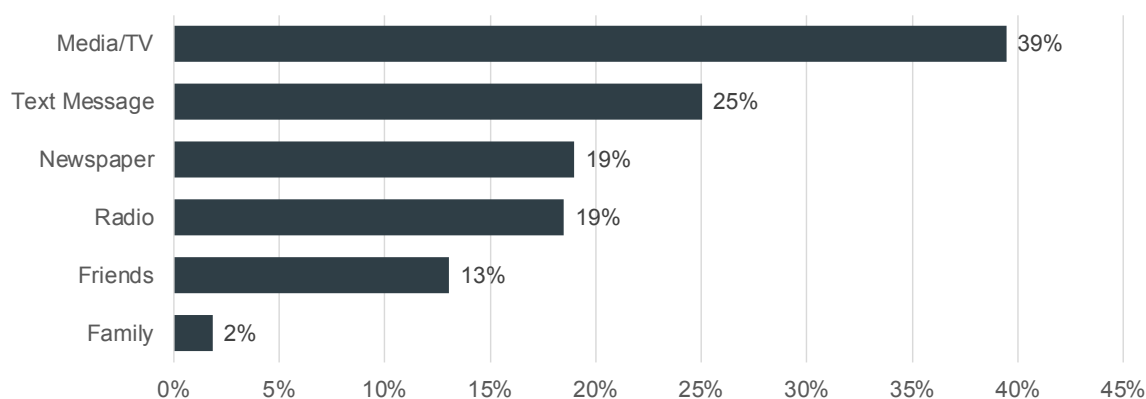
2. Develop a marketing strategy that mixes both traditional and digital media.

Aside from efforts to broaden the coverage and promote usage of digital financial services more broadly, retail bonds will require a separate marketing push and tailored messaging. The campaigns should be crafted using regular user surveys and focus groups, with due consideration given to local norms and sensibilities. For example, references to “brokers” in exchanges with participants in the m-Akiba pilot needlessly created distrust since the term has a negative connotation in Kenyan society and was misinterpreted to mean that an unlicensed “middleman” was party to the transaction (FSDA 2018).

“Roadshows,” a common marketing tactic used by investment banks in wholesale markets to showcase the issuer to prospective institutional investors, has also been deployed at the retail level. The Philippines Bureau of the Treasury regularly holds roadshows for its Retail Treasury Bonds targeted at “non-traditional” investors such as cooperatives, retirees and diaspora (BTr 2022). Similarly, the extensive networks of licensed “agents” who allow mobile money customers to cash in and out of their wallets at ubiquitous locations can be enlisted to “upsell” mobile bonds, although they will need to be properly incentivised.

Finally, traditional marketing approaches cannot be discounted. For example, most subscribers to the M-Akiba bond pilot in 2017 heard about it from television, newspapers and radio (Figure 24).

FIGURE 24
Survey Responses to the question: ‘how did you hear about m-Akiba?’



Source: FSDA 2018

In terms of messaging, appeals to patriotism, social responsibility or solidarity are a tried-and-true sales pitch. War bond campaigns have long taken advantage of the “rally around the flag” effect to boost uptake (Box 1). The Reserve Bank of India (RBI) markets its Retail Direct scheme as an instrument for “nation building” (Reserve Bank of India 2026). Canada’s Ukraine Sovereignty Bond issued in 2022 offered Canadian citizens subscriptions as low as CAD 100 to help fund “essential services to Ukrainians, such as pensions, the purchasing of fuel before winter, and restoring energy infrastructure (Department of Finance Canada 2022).

- 3. Build enabling digital infrastructure, ideally in coordination with financial inclusion efforts.** The aims of a retail finance program and financial inclusion agenda converge around the need for a robust digital public infrastructure (DPI) that can enable seamless, real-time, secure and ubiquitous service delivery. On the “back end”, that requires an integrated stack of payments, cybersecurity and ledger technology that can achieve the requisite reach and reliability.

Building on digital financial infrastructure such as India’s UPI, Kenya’s M-Pesa or Brazil’s PIX can be a catalyst to scale. Similarly, retail programs should support and build on the “embedded finance” and “open finance” movements to improve distribution and diminish friction. These make bonds available through non-financial marketplaces, such as Krungthai Bank’s super platform ‘Pao Tang,’ while also pushing for interoperability among payments service providers.

- 4. Offer superior financial returns and/or incentives to drive uptake but calibrate these strategies to the market and the moment in time.** As argued above, there is some scope to experiment with different structures and features to improve “product-market fit”, arguably more than at the wholesale level. Issuers have deployed an array of inducements to attract investors based on the investor profile, although more research is needed to understand what works and what doesn’t. The prevalence of tax incentives and lotteries suggests they work, as do other features such as inflation-indexing and redemption at par. The potential of non-pecuniary rewards such as prizes, gifts and gamification should be explored further, with appropriate user testing.

- 5. Embed sustainability features to leverage the impact potential of retail finance.** ESG objectives can be an effective draw to attract new buyers, while retail instruments can help to enhance the value proposition of GSSS+ instruments. The retail space arguably presents a fertile testing ground for sustainability and credit-linking, especially since market conventions are less binding, but so long as investor protections are in place and the products “fit” the market they are intended to serve. The securities can establish a financial interest in preserving nature or combating climate change, such that holders benefit financially as well as environmentally and socially from sustainability targets being achieved.

Scaling retail in sub-Saharan Africa

The preceding recommendations apply to retail programs universally. However, sub-Saharan Africa presents unique challenges for designing retail programs, and the heterogeneity of operating environments means governments need to pursue different scaling pathways. These should conform to countries' state of "retail readiness", which is largely a function of financial inclusion, financial market development and government technological maturity. On this basis, two more region-specific recommendations can be added to the list above:

1. SSA sovereigns should take advantage of solid digital and financial market fundamentals to double down on retail financing and accelerate rollout.

Returning to the segmentation analysis from Chapter 2 (Figure 6 and 7) most countries in the 'high' and 'very high' readiness categories already have well-established retail programs or projects under development. Their relative financial depth, breadth and technological maturity suggest conditions are conducive to growth if the requisite resources and appropriate strategies are deployed.

For the likes of South Africa and Kenya, that means consolidating gains achieved so far, reinvigorating stagnant programs with fresh funding and innovative distribution channels, and learning from the digital success stories in countries such as the Philippines and Indonesia. Their success will pave the way for less-ready peers, who can benefit from the demonstration effect and lessons learned from the regional pioneers.

2. SSA sovereigns should take advantage of retail financing as a tried-and-true instrument to counter the unfolding fiscal crises in SSA and build resilience against future climate shocks and advance sustainable development goals. Many of the countries in the 'high' readiness category are facing acute fiscal stress and vulnerability to exogenous shocks, which is exacerbated by a high reliance on external financing.

Especially for countries under fiscal strain such as Ethiopia, retail financing should be prioritised as an integral part of the fiscal crisis management and prevention toolkit, and of a prudent debt management strategy to diversify funding sources and mitigate currency and rollover risks. The international financial community can support this effort via technical assistance, credit enhancement (as in the case of Rwanda's SLB), and financial support for investments in technological and market infrastructure.

CHAPTER 7

Conclusion

The final recommendation in addition to the seven listed above is directed at the international sovereign debt community and development practitioners: retail finance deserves to be elevated in global discussion and policy fora alongside other innovative wholesale and cross-border financing solutions such as debt-for-development swaps.

This report has laid out the potential and track record of retail finance to address the critical fiscal and development challenges of our time. It therefore merits greater consideration across the financial inclusion, financial sector development, sovereign and SDG financing agendas. At a minimum, further research and analysis are needed to validate the propositions put forward above.

Beyond that, the multilateral development bank and development finance system should commit more funding for technical assistance, project pilots, and program development support. The scope for applying de-risking mechanisms, such as the credit enhancement applied to the Development Bank of Rwanda's SLB, needs to be studied further. With more support and coordination among national and international policymakers and practitioners, the pace of development and scale-up of retail finance can be accelerated, and a worsening of the unfolding sovereign debt, climate and nature crisis can be averted.

Retail finance deserves to be elevated in global discussion and policy fora alongside other innovative wholesale and cross-border financing solutions.

APPENDIX

Lexicon of key concepts

This lexicon summarises core terms used throughout the report and is intended as a quick reference for readers navigating the retail sovereign finance landscape.

Concept	Definition	Relevance in the report
Retail Sovereign Finance (RSF)	The raising of government funds directly from individuals and other non-institutional investors through small-denomination public debt instruments, such as retail bonds or treasury bills.	RSF is presented as a way to diversify sovereign funding, mobilise domestic savings, deepen capital markets, advance financial inclusion, and support SDG-related financing.
Retail Bonds	Government debt securities designed for individual investors, typically with low minimum subscriptions, accessible distribution channels, and features tailored to local income levels and savings behaviour.	Retail bonds are the main instrument through which RSF is implemented, with examples including savings bonds, retail treasury bonds, mobile-money bonds, diaspora bonds, and sustainability-linked bonds.
Retail Investor	An investor that is not institutional, usually an individual saver, household, diaspora member, small enterprise, informal savings group, or other non-professional investor depending on local regulation.	The report distinguishes between high-net-worth investors, the “mass middle,” base-of-the-pyramid savers, diaspora investors, and other market segments with different needs and constraints.
Operating Models	The end-to-end institutional and technological arrangements through which retail bonds are issued, distributed, purchased, serviced, redeemed, and, where applicable, traded.	Operating models determine the trade-offs among control, cost, complexity, coverage, investor protection, and scalability.
Direct-to-Investor Model	A model in which the government treasury or debt management office manages most front-, middle-, and back-office functions directly, while investors typically use bank accounts for settlement.	South Africa is highlighted as a leading example. The model offers issuer control but can be costly and administratively demanding.
Bank-Led Model	A model that uses commercial or state-owned banks as selling agents and distribution channels for retail government securities.	The Philippines and Mexico illustrate how bank networks can expand distribution, though banks may resist products that compete with deposits.
Exchange-Led Model	A model that relies on securities exchanges, brokers, market makers, and existing capital market infrastructure to distribute and trade retail bonds.	Nigeria and Brazil are examples. This model can leverage existing market infrastructure but requires investor education, liquidity, and strong safeguards against mis-selling and fraud.
Mobile Money Model	A model in which mobile wallets, mobile network operators, or mobile payment platforms serve as the primary interface for buying, holding, servicing, and redeeming retail bonds.	Kenya’s M-Akiba illustrates both the promise and challenges of mobile-money bonds, including wider access, lower transaction costs, but also UX, customer care, and investor education barriers.

Unit Trust Model	A pooled investment structure in which individuals buy units in a fund that invests primarily or entirely in sovereign securities.	The report presents this as an emerging model under consideration, including Rwanda National Investment Trust (RNIT), potentially combining mobile distribution with pooled sovereign bond exposure.
Digital Technologies	Technologies that reduce transaction costs, streamline onboarding, improve distribution, automate processes, and expand access to retail sovereign finance.	Key technologies include mobile money, digital identity, e-KYC, digital payments, DLT, tokenisation, smart contracts, and digital public infrastructure.
Digital Public Infrastructure (DPI)	Shared digital systems such as digital identity, interoperable payments, data exchange, and public service platforms that enable secure, real-time, low-cost service delivery.	DPI is treated as a foundational enabler for digital retail finance, financial inclusion, and broader GovTech transformation.
Distributed Ledger Technology (DLT)	A digital record-keeping system in which transactions and ownership records are maintained across distributed networks rather than a single central database.	DLT can support digital bonds by speeding issuance, clearing and settlement, increasing transparency, enabling automation, and potentially reducing reliance on traditional intermediaries.
Digital Bond	A bond issued, recorded, transferred, or serviced using digital ledger or tokenisation technology, often with automated settlement and lifecycle management.	The report presents digital bonds as a potential “bond in a box” solution for scaling retail access, especially where traditional capital market infrastructure is shallow.
Tokenisation	The representation of a financial asset, such as a bond, as a digital token that can be issued, held, transferred, and settled on a digital platform.	Tokenisation can enable fractional ownership, smaller denominations, faster settlement, and broader access for retail and diaspora investors.
Smart Contracts	Programmable code embedded in digital assets or platforms that can automatically execute pre-defined actions such as coupon payments, redemptions, reporting, or KPI-linked adjustments.	Smart contracts are relevant to digital and sustainability-linked retail bonds because they can automate payments, impact reporting, coupon ratchets, and other product features.
Financial Inclusion	The ability of individuals and businesses to access useful, affordable, and secure financial products and services, including savings, payments, credit, and investment tools.	Retail sovereign finance can support inclusion by providing safe, interest-bearing savings products and by acting as an on-ramp to formal financial services.
Capital Market Development	The process of building deeper, more liquid, more trusted domestic financial markets that can allocate savings efficiently and support government and private sector financing.	Retail bonds can familiarise households with securities, broaden the investor base, mobilise informal savings, and strengthen domestic local-currency markets.
Sustainability-Linked Bond (SLB)	A bond whose financial characteristics, such as coupon payments, are linked to the issuer’s achievement of predefined sustainability performance targets.	The report argues that retail SLBs may be especially promising because individuals can align financial returns with local environmental, social, or development outcomes.

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