

GHANA'S DAAKYE BOND BOND PROGRAM An African Securitization

Case Study

JOHN SCHELLHASE AND HARIS MOHSIN

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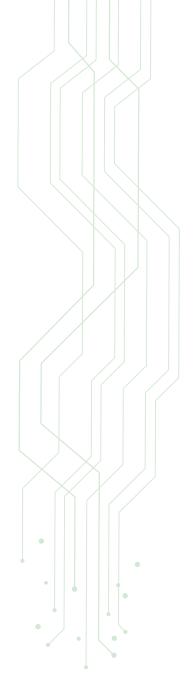
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INTRODUCTION

In Akan, the most widely spoken language in Ghana, *daakye* means *future*. It is an apt name, therefore, for the Daakye bond program, which invests in Ghana's future leaders through securitizing future government tax flows. Established in 2020 as part of a 10-year, GHS 9 billion (about US\$1.5 billion) funding strategy, the Daakye program has raised GHS 2.4 billion (about US\$390 million) for the national education system so far. Since it has done so without issuing traditional government debt—and without donor support—it offers an attractive model for other countries seeking to finance large-scale development projects that advance the Sustainable Development Goals (SDGs) without introducing new fiscal pressures.

This case study provides a deep dive into the Daakye structure and the lessons learned from this innovative financing approach.¹ The study is organized into six parts. First, the study presents an overview of the Daakye securitization's structure and issuances to date. Second, the study describes the steps the government undertook to establish the Daakye program and the key private-sector institutions involved. Third, the study examines the key features of the structure that attracted investors. Fourth, the study examines a prior government securitization, the Energy Sector Levy Act (ESLA) program, which served as a model for the Daakye bond program. Fifth, the study includes a discussion of the fiscal policy implications of securitizing future government tax flows. Finally, the report offers five lessons from Ghana's experience that could help inform other emerging-market governments seeking to develop similar funding mechanisms.

¹ The methodology for this case study included desk research, including the review of numerous primary documents, among them the Daakye bond prospectus; phone and video interviews with a number of key stakeholders involved in the structuring of the Daakye program, as well as regulators and investors; and an online workshop organized by the Milken Institute on September 9, 2021, titled, "Securitization Transaction Workshop: Ghana's Daakye Bond Program to Fund Education Priorities," which examined the program in detail.

THE DAAKYE PROGRAM: SECURITIZING TAX FLOWS TO FUND EDUCATION SPENDING

Funding demands for primary and secondary education in Ghana, as discussed in Box A below, have grown significantly in recent years. First, the government's new free high school policy, introduced in 2017, required an additional GHS 7.6 billion (about US\$1.2 billion) in government spending from 2017 to 2021. Beyond these expenditures, new investments in STEM education, a push to hire more qualified teachers, and the need to address a massive "classroom backlog" and other pressing challenges, left the government with a funding gap of approximately GHS 10 billion for its education-sector ambitions.

In this context, policymakers had to assess whether the substantial investments they wanted to make in the education system were affordable. The strategy they adopted was to securitize the flow of consumer taxes into the Ghana Education Trust Fund (GETFund), a government fund established to provide additional funding in support of educational initiatives. Ghana's innovative financing approach has allowed the government to refinance existing debts and meet its educational investment targets without increasing fiscal pressures.

Why Securitization?

From its inception in 2000, GETFund was designed to provide additional funding support for the Ministry of Education's policy goals, including by providing scholarships for needy students, establishing student loan programs, and supporting training initiatives for educators.² Starting in 2017, policymakers began to ask whether GETFund could play a broader role in meeting the long-term investment needs of the education system, including a massive build-out of new classrooms and the training and hiring of more qualified teachers.

An initial idea was to raise additional financing for GETFund through a syndicated loan facility from a consortium of commercial banks. Syndicated lending was attractive because it could potentially enable GETFund to raise sufficient capital quickly, with risk spread among a broad group of lenders. But this approach foundered because of several complications. Most importantly, as part of a regulatory crackdown on the banking industry in 2017, the Bank of Ghana put in place a number of banking-sector reforms, including making it more difficult to receive exemptions to single-obligor limits, and it was these limits that prevented many commercial banks from taking on further exposure to direct government debt. Another drawback of the syndicated loan structure was the low appetite of some banks for public-sector credit risk.

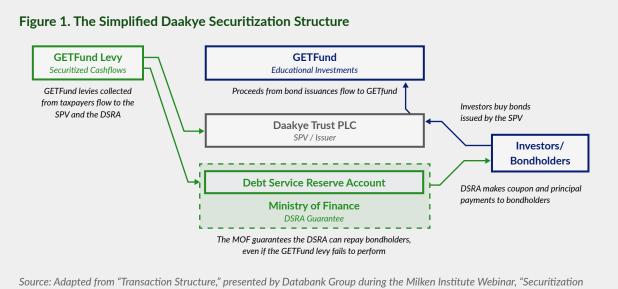
² Ghana Education Trust Fund Act, 2000: Act 581 (Republic of Ghana, August 25, 2000).

To address this roadblock, the Ministry of Finance (MOF) selected two local financial advisory firms, Databank Group's Databank Brokerage Limited and Temple Investments Limited, to design a capital market-based solution that would enable raising a sizeable amount of funds, with relatively competitive pricing. The advisors studied a previous government securitization—the ESLA bond program, which is described later in this study and which provided the government and other relevant parties in Ghana with experience in securitizing tax flows—as well as securitizations in other African markets, including the Nigerian government's securitization of fees for foreign resident permit cards.³ After their review of relevant options, the advisors proposed securitization as an attractive funding solution for GETFund and received MOF approval to pursue that approach.

The Daakye Securitization Structure

Securitizations have a standard structure in which a special purpose vehicle (SPV) is established as an independent legal entity. The originator—that is, the institution raising capital—then sells the rights to its cash flows, be they loan repayments or other kinds of future receivables, to the SPV, and the SPV issues a bond that is bought by investors. The capital raised by the bond is then put to use by the originator, whereas the underlying cash flows to the SPV are used to ensure that investors are repaid the principal and interest on the bond.

The Daakye bond issuance program follows this standard structure. The cash flows of the Daakye transaction structure begin when Ghanaian taxpayers pay the GETFund levy, a 2.5 percent consumer tax on purchases. GETFund, as the originator, has sold the rights to these cash flows to the Daakye Trust PLC, the SPV that sits at the center of the structure.



Transaction Workshop: Ghana's Daakye Bond Program to Fund Education Priorities" (September 9, 2021)

³ For more examples of securitization transactions across Africa, see Alison Harwood, "Accelerating Securitization in Africa to Finance the SDGs: Future Flow Securitizations" (Milken Institute, February 8, 2021): https://milkeninstitute.org/report/accelerating-securitization-africa-finance-sdgs-future-flow-securitizations. See also Alison Harwood, John Schellhase and Bayasa Rentsendorj, "Framing the Issues: Building Securitization Markets in Africa to Advance the SDGs" (Milken Institute, February 8, 2021): https://milkeninstitute.org/report/accelerating-securitization-africa-finance-sdgs-future-flow-securitizations. See also Alison Harwood, John Schellhase and Bayasa Rentsendorj, "Framing the Issues: Building Securitization Markets in Africa to Advance the SDGs" (Milken Institute, February 8, 2021): https://milkeninstitute.org/report/framing-issues-building-securitization-markets-africa-advance-sdgs.

Issuances to Date

To date, the SPV has issued two bonds, as summarized in Table 1, raising GHS 2.4 billion (about US\$390 million). Proceeds from these issuances have flowed back to GETFund, where they are being used to refinance previous debts and to contribute to the completion and construction of educational infrastructure across the country. The first issuance, a seven-year bond, was executed in October 2020, with a coupon rate of 20.9 percent. The second Daakye issuance, this time a 10-year bond, was issued in April 2021, with a coupon rate of 20.5 percent.⁴ Both Daakye bonds are listed on the Ghana Fixed Income Market of the Ghana Stock Exchange (GSE).

Table 1. Daakye's 7- and 10-Year Bond Issuances

| Issuance | Amount Issued | USD Equivalent | Maturity Date | Tenor | Coupon Rate |
|----------|---------------|----------------|---------------|---------|-------------|
| Daakye-1 | GHS 1.73B | US\$289M | Oct. 18, 2027 | 7-year | 20.90 |
| Daakye-2 | GHS 0.63B | US\$103M | Apr. 16, 2031 | 10-year | 20.50 |

Source: Databank presentation; Daakye Public Trust PLC press releases. Approximate USD conversions in current dollars (2021)

Credit Enhancement Features

To ensure that bondholders receive coupon payments on time, the GETFund tax levies paid by consumers are transferred directly by the Bank of Ghana into a collection account for the purpose of debt servicing for the Daakye issuances. From the collection account, designated amounts are channeled into the debt-service reserve accounts. These accounts are over-collateralized at a Debt Service Coverage Ratio (DSCR) of 1.25x of the upcoming bond payments. Forty-five days before all bond-repayment dates, the funds required to meet the bond repayment at the DSCR are transferred to the Debt Service Reserve Account (DSRA) held by the bond trustee.

Additionally, the Daakye structure benefits from an important external credit enhancement. If GETFund levy payments are ever insufficient to achieve the 1.25x DSCR, the MOF has committed to make available sufficient government funding to maintain the DSRA at 1.25x of the next bond repayment due for the first year of issuance and an amount equal to the next repayment for subsequent years. As discussed below, there are built-in assessment points at which the MOF must assess the performance of the underlying cash flows and then approve additional debt issuances. By ensuring that bondholders can be repaid without resorting to the use of an MOF guarantee, these assessments help limit the government's potential debt exposure.

⁴ By comparison, the government issued a 7-year treasury bond in 2020, with a coupon rate of 20.00 percent, and a 10-year treasury bond in 2021, with a coupon rate of 19.80 percent.

EDUCATIONAL POLICY AND CHALLENGES IN GHANA

In Ghana, recent governments of both political parties have recognized the centrality of education and human capital investment to economic development.⁵ From 2008 to 2018, government spending on education accounted for an average of 24 percent of total government expenditures, according to World Bank data.⁶

The government's focus on education appears to have had positive results. In recent years, the Ministry of Education has introduced a highly popular free high school policy, created a national Ghanaian curriculum, and strengthened requirements for teacher hiring.⁷ As a result, enrollment rates for eligible high school students rose from 70 percent to 89 percent, and there were major gains in math and science testing outcomes. Also, the student-teacher ratio for primary schools has fallen from 1:43 to 1:33.⁸

However, access to education remains elusive for a large number of Ghanaian children. The Ministry of Education's 2018 Education Sector Analysis (ESA) found, "Over 450,000 children are out of school, mostly from the poorest households."⁹ The report cited a national "shortage of classrooms" as a major factor contributing to this problem, and pointed to a "classroom backlog" of nearly 14,000 classrooms that were still needed for students from kindergarten to junior high school. For secondary education, the report found, "A contributing factor to pupils' ability to access SHS [senior high school] is the shortage of schools and classrooms," and noted that poor and rural students were "five to six times less likely to access SHS."¹⁰

Closing these gaps, the government recognized, would require additional expenditures. But further increasing spending on education was not an option, as wage pressures have accounted for nearly all government discretionary spending in recent years.¹¹ And, ironically, some of Ghana's successes have also increased budgetary strains on the education system. The rapid hiring of new junior high school teachers has exacerbated wage demands, and the introduction of the free high school policy has eliminated the fees that previously provided an important revenue stream.¹²

- 7 "Reforms Improve Teaching Standards and Access to Education in Ghana," Oxford Business Group, March 2020, <u>https://oxfordbusinessgroup.com/overview/making-grade-reforms-improve-teaching-standards-and-access-education</u>.
- 8 Duke Mensah Opoku, "NAPO Touts Education Sector Achievements to Parliament; Silent on Resumption of Schools," Citi Newsroom, August 11, 2020, <u>https://citinewsroom.com/2020/08/napo-silent-on-resumption-of-schools-touts-achievements-in-education-sector-to-parliament/</u>.
- 9 "Education Sector Analysis 2018" (Ghana Ministry of Education, 2018), <u>https://www.globalpartnership.org/sites/default/</u> <u>files/2019-05-ghana-education-sector-analysis.pdf</u>.

10 Ibid.

12 Ibid.

⁵ Ghana's development priorities in education are aligned with SDG Goal 4, "Ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all."

^{6 &}quot;Government Expenditure on Education, Total (% of government expenditure)" (World Bank, 2021), <u>https://data.worldbank.org/indicator/SE.XPD.TOTL.GB.ZS</u>. The World Bank defines this indicator as "government expenditure on education (current, capital, and transfers)... expressed as a percentage of total general government expenditure on all sectors (including health, education, social services, etc.). It includes expenditure funded by transfers from international sources to government." As the World Bank notes, "Countries with younger populations may spend more on education in relation to other sectors such as health or social security, and vice-versa."

^{11 &}quot;Education Strategic Plan 2018–2030" (Ghana Ministry of Education, 2018), <u>https://www.globalpartnership.org/sites/</u>default/files/2019-05-education-strategic-plan-2018-2030.pdf.

DEVELOPING DAAKYE: THE GOVERNMENT'S ROLE AND THE ECOSYSTEM OF KEY PLAYERS

Before the creation of the Daakye Trust PLC and the issuance of the first bond, policymakers had to set the stage for the new securitization program. This developmental process required legislation, ministerial action, and regulatory engagement. Additionally, the success of the securitization program required the arrangers to recruit a range of respected private-sector institutions to fulfill key roles. It is worth noting that the groundwork and the final execution of the Daakye bond program were completed entirely by Ghanaian institutions and the private sector, without donor funding or credit enhancements from development partners.

The Role of Government

First and fundamentally, the government had to establish, in law, the GETFund levy as a distinct cash flow, so that it could be securitized. This step was essential to ensure confidence that a change in elected government would not result in a change of policy for how the underlying cash flows were used, which would put the repayment of the bonds in jeopardy. Before 2018, the value-added tax (VAT) was legally one tax applied at point of sale at the rate of 17.5 percent, with 2.5 percent budgeted for GETFund and 2.5 percent budgeted for the National Health Insurance Scheme (NHIS). An act of Parliament divided this single tax into three separate taxes—the GETFund levy (2.5 percent), the NHIS levy (2.5 percent), and the VAT (12.5 percent)—which maintained a total 17.5 percent consumption tax composed of those three streams. This legal change established the levy that the Daakye program securitizes.

Second, at the ministerial level, the MOF granted a "no objection" approval to GETFund to establish a multibillion cedi bond program.¹³ As alluded to earlier, the MOF also identified a staging process whereby the SPV could first issue GHS 3.3 billion, then would require approval to issue up to GHS 5.5 billion in bonds, based on the performance of the underlying cash flows, and a final approval to issue up to GHS 9 billion in Daakye bonds. And, as also noted, the MOF established a guarantee mechanism that ensured bondholders would receive payments due, even in the case of a severe underperformance of the GETFund levy.

Finally, Ghana's Securities and Exchange Commission (SEC), in line with its marketdevelopment mandate, played a pivotal role in laying the groundwork for the Daakye securitization program. Prior to its first issuance, the securitization's arrangers

¹³ The GETFund issuance program also obtained final sign-off from the presidential cabinet.

received SEC and Ghana Stock Exchange (GSE) approvals for the listing of multiple issuances of the Daakye bonds on the Ghana Fixed Income Market. The SEC also endorsed partial fee waivers for the SPV, for both regulatory and GSE issuance fees. Next, again with support from the SEC, the National Pensions Regulatory Authority and National Insurance Commission relaxed investment caps for corporate bonds so that fund managers and life insurers could invest meaningfully in issuances under the Daakye bond program.

Key Players Involved in the Daakye Bond Program

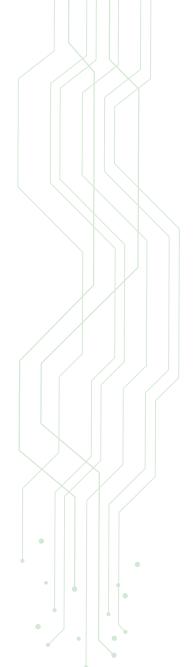
A complex transaction, particularly one using public funds, requires a transparent structure of robust interparty agreements, with respected institutions playing key roles. In the case of the Daakye bond program, two local financial advisory and brokerage firms, Databank and Temple Investments, were appointed as joint managers and acted as the arrangers and key advisors on the structuring of the securitization. Then, in May 2020, the GETFund board of trustees approved the establishment of the Daakye Trust PLC to act as the SPV. KPMG was appointed as corporate manager of the SPV, responsible for day-to-day operations and investor relations. Table 2 summarizes the other institutions involved and the roles they played.¹⁴

| Role | Institution | Description | | |
|---|-----------------------------|--|--|--|
| Sponsor/Originator | GETFund | Originates the cash flows and sells them to the SPV; then receives the capital raised through the bond issuance | | |
| Issuer/SPV | Daakye Trust PLC | Set up as a third-party securitization vehicle to purchase receivables from the originator, to hold and protect the pooled assets from the originator, and to issue securities backed by those assets | | |
| Joint Lead Managers/Databank and TempleArrangersInvestments | | Act as arrangers to structure the securitization and ensure participation of other institutions | | |
| Corporate Manager | KPMG Ghana | Ensures the effective day-to-day operations of the SPV and manages investor relations | | |
| Bond Trustee | Fidelity Bank | Acts as a representative of investors to ensure the SPV fulfills its fiduciary duty to bondholders | | |
| Joint Debt-Service Buffer Account Banks | ABSA Bank Ghana/ CalBank | Provide banking services to the SPV for the collection and proper distribution of the cash flows generated by the GETFund levy | | |

Table 2. Key Parties Involved in the Daakye Issuance

Source: Prospectus, Daakye Trust PLC (August 28, 2020)

¹⁴ Additional actors include the Central Securities Depository, which acts as the calculation agent and registrar; PwC, which acts as the reporting accountant; and the Bentsi-Enchill Letsa & Ankomah law firm, which serves as the Daakye legal advisor.



INVESTOR VIEWS

The Daakye bond issuances have attracted a high level of investor interest, particularly among commercial banks. In the first two issuances, commercial banks represented about 58 percent of bondholders, with pensions funds holding about 33 percent of bonds.¹⁵ Other institutional investors, including insurance companies and mutual funds, and individual investors comprised the remainder. Virtually all investments have come from the domestic investor base.

In addition to an opportunity to diversify the kinds of securities in their portfolios, four major features of the Daakye program have helped attract investors.¹⁶ First, a prior securitization, with a similar structure (see the next section), built awareness among investors of how these kinds of transactions worked and showed how well a properly designed securitization can perform. Second, the structure itself was transparent, with clear visibility into where cash flows originated, how they were ring-fenced from other uses by government, and how they flowed into specified accounts and, eventually, to bondholders via coupon payments. Third, the active engagement of government bodies in the development of the transaction contributed to investor confidence—in particular, the SEC's engagement and the MOF's reserve account guarantee, as well as its assessment and approval process for additional issuances. Finally, investors have emphasized the legislative approval of the underlying cash flows for the securitization as essential to their confidence that election cycles and changes in the presidential government would not jeopardize the transaction structure.

An additional point to highlight is that the Daakye bonds, unlike a typical securitization, have not been rated by a rating agency. Because of the general confidence among domestic investors, as described, the arrangers saw no need to expend resources on securing a rating from a regional or international ratings agency. Since the Daakye bonds have a government originator, government taxes as their underlying cash flows, and an MOF guarantee, investors have effectively viewed the Daakye bonds, which are technically corporate bonds, as government securities.

^{15 &}quot;Issuance Track Record," from Databank Group presentation during the Milken Institute Webinar, "Securitization Transaction Workshop: Ghana's Daakye Bond Program to Fund Education Priorities" (September 9, 2021): https://milkeninstitute.org/video/ghana-daakye-bond-program

¹⁶ The information here reflects phone interviews with institutional investors in Ghana as well as comments shared during the Milken Institute workshop on the Daakye bond program in September 2021.

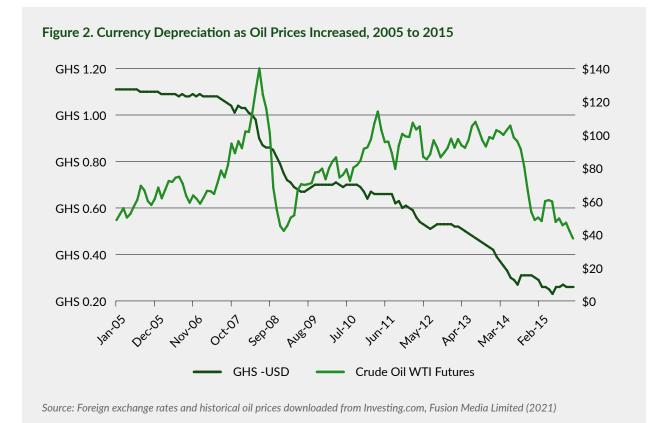
THE MODEL FOR DAAKYE: GHANA'S ESLA SECURITIZATION PROGRAM

The Daakye program is not Ghana's first government securitization, but builds on a previous model: the ESLA securitization program. Established in 2017, the ESLA PLC has acted as an SPV for the issuance of up to GHS 10 billion (about US\$1.6 billion) in bonds securitized by a particular set of gasoline taxes mandated by the 2015 Energy Sector Levy Act (ESLA) to help pay off energy sector debts. To date, about GHS 9.7 billion of ESLA bonds have been issued.

Origins of the ESLA Securitization

In the mid-2010s, the government of Ghana determined that a securitization issuance program was needed to refinance legacy debts owed to commercial banks by state-owned enterprises in the energy sector. As shown in Figure 2, around 2007, the Ghanaian cedi began a precipitous decline relative to the dollar, falling eventually by about 75 percent as, simultaneously, global energy costs were rising.¹⁷ As a result, servicing energy sector debts owed to the banking sector began to become unsustainable, threatening a credit crunch that could have undermined private-sector lending and growth. In response, Parliament passed the ESLA legislation, first, to establish a consumer tax on petroleum products that would be paid at the pump and, second, to securitize those anticipated cash flows to pay down and refinance obligations to the banking sector—while avoiding taking on additional government debt or creating fiscal stress.

¹⁷ It is likely that these trends were linked, with the change in oil prices having a depreciatory effect on the cedi.



ESLA's Structure and Credit Enhancements

The structure of the ESLA securitization begins with the consumer, who pays the levy on petroleum products when buying gasoline at the pump. These payments have proved to be steady over time, with more than GHS 2 billion (roughly US\$330 million) in Energy Debt Recovery Levy (EDRL) flows having been collected in 2020.¹⁸ Securitizing the aggregated future flows of the EDRL, the ESLA PLC has issued several bonds (see Table 3), and the proceeds of these bonds have been used to refinance and pay down existing energy-sector debts.¹⁹

As with the subsequent Daakye program, investors are protected by several credit enhancements that ensure the ESLA PLC's DSRA is continually over-collateralized to cover 1.25x the coupon owed to investors. Additionally, similar to the Daakye program, though not as robust, the MOF itself is required to provide a capped cash commitment to cover up to GHS 600 million (about US\$100 million) of a DSRA shortfall, in the unlikely case of a severe underperformance of the EDRL.

^{18 &}quot;2020 Annual Report on the Management of the Energy Sector Levies and Accounts" (Ministry of Finance, March 2021), https://mofep.gov.gh/sites/default/files/news/2020_ESLA_Report_v3.pdf.

¹⁹ For the ESLA program, Standard Chartered and Fidelity Bank served as joint arrangers to prepare the issuance, among other roles. Temple Investments and GCB Bank acted as comanagers of the SPV. The government also engaged several international accounting firms to play key roles. KPMG was appointed as the corporate administrator of the SPV, Ernst & Young as the reporting accountant, and Deloitte as an independent auditor. Fidelity Bank, Ecobank, and GCB served as levy collection banks for the gas companies.

How the ESLA Program Anticipated the Daakye Securitization

Though the ESLA securitization program has raised some concerns about debt sustainability, as discussed below, it is widely seen as a success. For the Daakye program, the ESLA securitization provided a model for the securitization of government tax flows and the use of certain kinds of credit enhancements, thereby building confidence in the structure across the domestic investor base. Additionally, the ESLA issuances helped identify an ecosystem of service providers that could execute the transaction, many of which would be engaged again for the Daakye program. Finally, to increase transparency and liquidity, all ESLA issuances have been listed on the GSE, a precedent that the Daakye program has also followed.

| Issuance | Amount Issued | USD Equivalent | Maturity Date | Tenor | Coupon Rate |
|---------------|---------------|----------------|---------------|---------|-------------|
| ESLA-1 | GHS 2.26B | US\$374M | Oct. 23, 2024 | 7-year | 19.00 |
| ESLA-2 | GHS 2.74B | US\$453M | Oct. 27, 2027 | 10-year | 19.50 |
| ESLA-3 | GHS 1.00B | US\$165M | June 15, 2029 | 10-year | 19.85 |
| ESLA-4 | GHS 1.63B | US\$270M | Dec. 31, 2029 | 12-year | 20.50 |
| ESLA-5 | GHS 2.05B | US\$338M | Sept. 9, 2033 | 12-year | 20.00 |
| Total to date | GHS 9.72B | US\$1.60M | | | |

Table 3. ESLA Securitization Issuances through July 2021

Note: Approximate USD conversions in current dollars.

Source: Ghana Fixed Income Market, GSE (2021)

THE FISCAL POLICY IMPLICATIONS OF GOVERNMENT-ISSUED SECURITIZATIONS

Over the last decade, Ghana's government debt-to-GDP ratio has risen rapidly, from 31 percent in 2010 to 78 percent in 2020. In this environment, some international observers, particularly the International Monetary Fund (IMF), have questioned whether the use of securitization as an alternative to traditional debt issuance actually masks the credit exposure of the government, especially in light of the MOF's guarantees to backstop the reserve account and ensure that bondholders receive payments.

In this context, to capture the extent of the government's exposure more accurately, the IMF recommended the following in its most recent Article IV consultation: "Expanding the coverage of government debt statistics would provide a better understanding of debt vulnerabilities."²⁰ IMF staff continued, "The government's headline measure excludes liabilities that pertain to the central government, including ESLA debt, education (GETFund/Daakye) and extrabudgetary funds such as Sinohydro. ... Given Ghana's debt vulnerabilities, fiscal policy should be guided by a more comprehensive coverage of government debt."

Advocates of the ESLA and Daakye programs, on the other hand, argue that the actual fiscal exposure of the government is minimized, first, by the structure of the programs and, second, by mandated assessments of the cash flows before further issuances can be done. To the first point, the Daakye structure mitigates default risk through over-collateralization of the reserve accounts at the 1.25x level. To the second point, the Daakye issuance program has certain step-up protocols in which the performance and reliability of the underlying cash flows to finance the bonds must be thoroughly assessed before new debt is issued. So far, the MOF has not had to provide any external guarantee funding for the reserve accounts of either the Daakye or the ESLA securitizations.

A separate but critical point that advocates of the Daakye securitization program highlight is that the funding demands for the education system are urgent and that the fiscal commitment they represent is far less than it would be were the government to raise debt traditionally—that is, through direct borrowing via a government bond issue—to fund the same programs.

^{20 &}quot;Ghana: 2021 Article IV Consultation" (IMF-Africa Department, July 23, 2021), <u>https://www.elibrary.imf.</u> org/view/journals/002/2021/165/article-A001-en.xml.

LESSONS FROM GHANA'S APPROACH

Through the Daakye bond program, the government of Ghana has advanced one of its most important long-term economic-development priorities: improving educational opportunity and outcomes for Ghanaian students. And it has done so in a way that minimizes government debt exposure and attracts large amounts of private capital. It is an example of how securitization can enable raising funds at scale to support sustainable development.

What factors have made the Daakye program a success? For other jurisdictions that are considering a similar securitization of government tax flows, there are at least five key lessons from Ghana's experience.

1. MINISTERIAL AND REGULATORY LEADERSHIP IS CRUCIAL.

Both the MOF and the SEC played important roles in laying the groundwork for the program. This work included the MOF establishing a clear staging protocol to minimize government debt exposure by assessing cash-flow performances at critical benchmarks and the SEC actively engaging with other regulators to ensure that investors could participate in Daakye issuances.

2. A STRONG ARRANGER IS NEEDED TO BRING KEY PARTIES TOGETHER.

The arranger plays a critical role in aligning the activities of public actors and private-sector market participants, as well as designing the details of the securitization structure itself and consulting with investors about their needs before the structure is finalized. The firm that takes on this role must have a depth of expertise and a strong reputation in the market.

3. BOTH THE FUNDING STRUCTURE AND THE CASH FLOWS THEMSELVES NEED TO BE WALLED OFF FROM POLITICAL INTERFERENCE, IN ADDITION TO OTHER PRESSURES.

Investors emphasized the importance of establishing the cash flows in law so that a change in executive government would not jeopardize the stability of the issuance program. Additionally, the structure of the securitization had to ringfence the designated cash flows clearly to ensure they were paid into the debtservicing accounts and were not redirected to other expenditures.

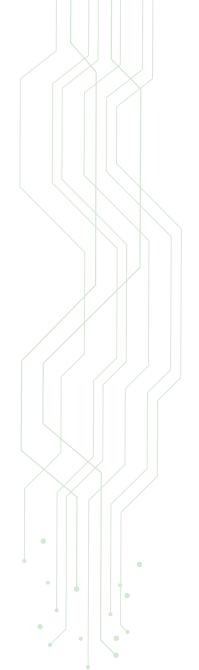
4. INVESTOR AND PUBLIC CONFIDENCE DEPENDS ON BOTH THE STRUCTURE AND THE QUALITY OF SERVICE PROVIDERS.

The structure of the securitization should have reasonable credit enhancements in place to protect bondholders from default and to ensure public confidence in the transaction. That, in turn, requires first fully understanding the flows and their expected performance. Additionally, investor and public confidence requires a transparent structure of robust interparty agreements with respected institutions playing key roles across the structure.

5. THE POSSIBLE NEGATIVE IMPLICATIONS FOR DEBT SUSTAINABILITY MUST BE FULLY UNDERSTOOD AND MINIMIZED.

In the Ghanaian government securitizations, the MOF has provided a last-resort guarantee that puts the government funds on the line if the underlying cash flows fall short. The MOF purposefully sought to minimize its exposure by ensuring the over-collateralization of debt-servicing accounts and through insisting on assessment checkpoints at certain levels before additional debt is raised through these programs.

Ghana's ability to execute on these aspects of the Daakye securitization program has opened a new line of funding to invest in the national education system, without issuing sovereign debt or relying on donor funding. Clearly, it is a model worth studying. Many countries are exploring ways of raising finance at scale from private institutional capital to support sustainable development. Securitization markets offer a potential pathway to do so effectively. As the Daakye experience shows so far, Ghana has been able to capitalize on that potential.



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ABOUT THE AUTHORS

John Schellhase is a director at the Milken Institute Center for Financial Markets, where he manages projects and conducts research focused on developing financial markets in frontier and emerging markets. This work has included projects in Rwanda, Nepal, Ethiopia, the Philippines, and other countries.

Haris Mohsin is a deputy director at the Securities and Exchange Commission of Pakistan. He is an IFC-Milken Institute scholar and an alumnus of the IFC-Milken Institute Capital Markets Program. His areas of expertise include securities regulation, capital market development, and financial reporting.



