



ECA POLICY BRIEF

African countries pay more to borrow

The current structure of sovereign debt in many African countries is a matter of increasing concern. Although traditional lenders and multilateral institutions hold a sizeable proportion of the foreign debt of those countries, private borrowing on less concessional terms accounts for an increasing share of it. Since the mid-2000s, private market debt has increasingly become a contributor to the rising level of external debt on the continent. The per-country average share of public and publicly guaranteed long-term debt held by private creditors rose from 10.1 per cent in 2005 to 18.0 per cent in 2020. The increase was largely driven by a surge in borrowing through the issuance of sovereign bonds on the international markets from the mid-2000s onward. A large proportion of current debt is denominated in foreign currencies, which exposes many African States to foreign exchange risk. Moreover, with private loans, greater debt burdens and increased risks of default translate to higher interest rates.

Against this backdrop, the purpose of the present policy brief is to demonstrate the debt vulnerabilities of African countries and evidence that they pay relatively higher premiums on their sovereign Eurobonds.¹ In particular, the brief contains an examination of the role of credit ratings in determining bond spreads and their impact on the premiums in Africa.

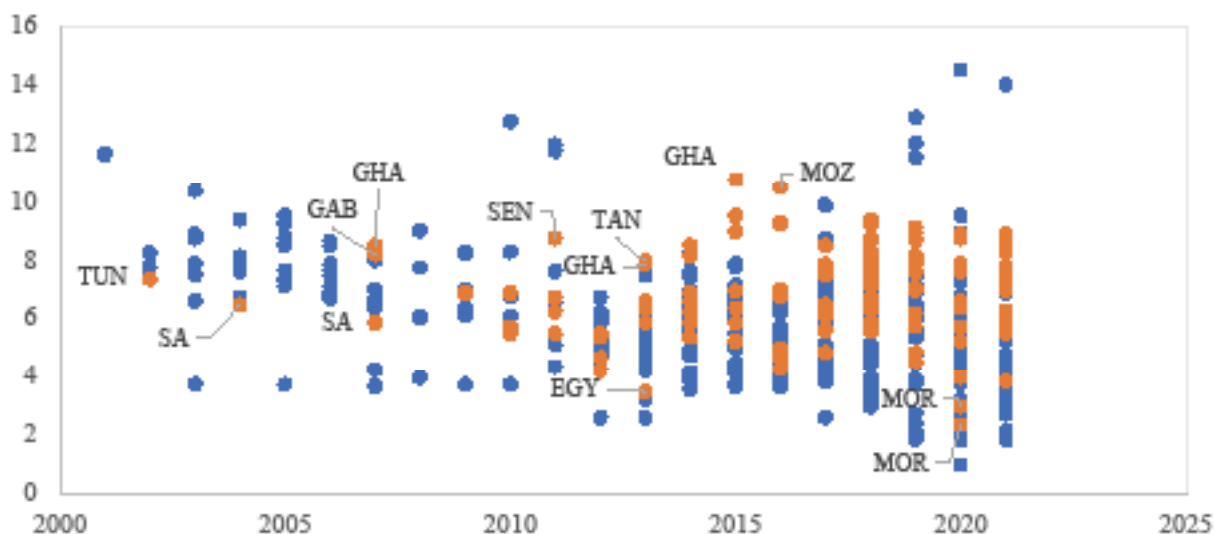
¹ Unlike conventional bonds, Eurobonds are issued in a different country (usually the United States of America or the United Kingdom of Great Britain and Northern Ireland) and a different currency (often the United States dollar) than those of the issuer.

1. Issuance of African sovereign bonds with relatively high coupon rates

Since the mid-2000s, the number of African States issuing sovereign bonds on the international markets has increased, as has the number of those bonds. The number of issuances on the international bond markets by African States rose from 4 in 2011 to 11 in 2014. The continent's largest ever number of sovereign Eurobond issuances, totalling \$29.67 billion, was recorded in 2018. In general, the coupon rates paid by African States appear to be relatively higher than those of their non-African counterparts, especially when the latter's outliers are excluded (see figure).

Most African countries were, at the time of their first issuance of Eurobonds, among the continent's fastest-growing countries and were enjoying stable macroeconomic conditions. Hence, many were able to secure a B or BB rating (or their equivalents) from the largest credit rating agencies: Standard & Poor's, Fitch and Moody's. For instance, in the weeks preceding its first sovereign Eurobond issuance, in 2015, Angola was rated BB- by Fitch, Ba2 by Moody's and B+ by Standard & Poor's. Also, when Ethiopia first issued a Eurobond in 2014, it was rated B by Standard & Poor's and Fitch and given the equivalent rating by Moody's (Bloomberg, 2022). In recent years, however, several countries have been downgraded, owing to their economic difficulties, which have been further accentuated by the compounded crises caused by such shocks as the coronavirus disease (COVID-19) pandemic and the war in Ukraine. For instance, Tunisia was downgraded to Caa2 by Moody's in 2021 and to

Coupon rates on eurodollar bond issuances (2001–2021)



Notes: African States are represented by the red dots, other developing countries by the blue ones. For the purposes of comparability, the sample comprises bonds with simple coupon structures (fixed or floating rate, or flat). The other developing countries include 48 States in East Asia and the Pacific, Latin America and the Caribbean, the Middle East and South Asia.

Abbreviations: ANG, Angola; EGY, Egypt; GAB, Gabon; GHA, Ghana; MOZ, Mozambique; MOR, Morocco; SA, South Africa; SEN, Senegal; SEY, Seychelles; TUN, Tunisia.

Source: computed using data from Bloomberg Professional Services Data, available at www.bloomberg.com/professional/product/data/ (accessed in January and February 2022).

CCC by Fitch in 2022. Also, in 2022, all three agencies downgraded Ghana to varying degrees of C rating.

It is well known that the bond issuer's creditworthiness (risk of default) is determined by the credit rating conferred by these agencies, which ultimately affects the cost of borrowing of a country and, consequently, the future financial behaviour of its Government. Coupon rates are therefore influenced by both prevailing interest rates and the issuer's creditworthiness. Rating agencies thus have a major impact on the conditions and cost of borrowing of States and on their solvency.

In the international capital markets, credit ratings have served as an important means of bridging the information gap between investors and borrowers. To be specific, the credit ratings provided by agencies are intended to reduce market imperfections and ensure that bond yields reflect a price that is appropriate for both lenders and borrowers. These assessments of creditworthiness are mainly based on a combination of macroeconomic and institutional factors, such that a lower rating reflects a weaker repayment capacity and leads to a higher risk premium. A high revenue level, measured by per capita gross domestic product (GDP), indicates an economy's ability to generate enough resources for debt servicing, for instance through taxation, meaning that it represents a lower risk of default. Moreover,

the accumulation of foreign exchange reserves signals macroeconomic stability and is an indicator of liquidity and sustainability. Such reserves provide a foreign exchange liquidity buffer, which can be used to service debt, and represent an important instrument for domestic economic stabilization and currency support. Also, the indebtedness of a State is associated with its external solvency. High debt-to-GDP ratios, in particular in developing countries, signal unsustainability and macroeconomic risk, leading to wider sovereign bond spreads. Quality of institutions and good governance are also important in ensuring that sufficient resources for debt servicing are generated, through increases in productivity, economic growth and development (Fosu, 2013, 2017, 2022).

As previously mentioned, a high debt-to-GDP ratio indicates unsustainable spending and macroeconomic challenges. It is a red flag for investors and causes sovereign bond spreads to widen. In order to protect themselves, investors assess sovereign bond spreads, which reflect risk that a State will default. The two components of a sovereign bond spread are the expected loss from default and the risk premium, with the latter reflecting how investors value the risk of incurring unanticipated losses (Remolona, Scatigna and Wu, 2007). The risk premium frequently represents the majority of the spread. It is mainly influenced by the

market's perceptions of a Government's capacity to meet its debt obligations.

The Economic Commission for Africa conducted an empirical study² on unbalanced quarterly panel data from 82 countries (mostly emerging economies and developing countries) and 413 sovereign bonds, characterized by simple coupon structure (fixed or floating rate, or flat),³ using the coupon rates at issuance of dollar-denominated sovereign bonds issued on the international markets between 2002 and 2020. The study's results show that, overall, African countries pay higher interest rates on newly issued bonds than do their counterparts and that, in general, they have lower credit ratings and weaker macroeconomic fundamentals.

2. Extraordinary premium on African government bonds: empirical evidence

The estimates produced using the baseline model (see annex) – excluding credit rating and government effectiveness – show that African countries pay a premium of 4.4 percentage points, once controls for macroeconomic fundamentals, the timing of the sovereign bond and country-specific characteristics have been applied.⁴ This coefficient is partly explained by the relatively low credit ratings granted to African countries. However, the risk premium declines by 1.3 percentage points (to 3.1 percentage points) when controls for the effect of sovereign credit ratings are applied. Hence, the agencies' ratings are central to the explanation of the African premium on the global financial markets.

The inclusion of government effectiveness, capturing the quality of governance, leads to a further reduction in the African premium, from 3.1 to 2.2 percentage points, and to a lower level of significance. This finding suggests that nearly 1 percentage point in the African premium on sovereign risk is attributable to market perceptions of weak governance on the continent, at least as measured

²United Nations. Economic Commission for Africa; United Nations. Economic Commission for Africa (2023-06). Debt and Finance Profiles: Africa. Addis Ababa: © UN. ECA., <https://hdl.handle.net/10855/49738>"

³ Nearly 18 per cent of the issuances are from the 19 African countries included in the sample.

⁴ The equations estimated were further extended to account for other macroeconomic factors, such as trade surplus, current account balance (percentage of GDP) and inflation, as well as global factors, namely the consumer confidence index and the Chicago Board Options Exchange Volatility Index. The coefficients of these macroeconomic variables remained insignificant, however, in all the specifications, with or without credit rating. The Volatility Index is insignificant once quarter effects are taken into account, suggesting that the effects of global market volatility are well captured by the inclusion of time effects.

by government effectiveness. The impact of government effectiveness on bond spreads appears to be both direct and indirect, the latter coming from the credit rating, the impact of which is reduced when government effectiveness is added to the model.

With regard to macroeconomic fundamentals, the findings of the study indicate that, the lower the income level and foreign exchange reserves of a State, the higher its cost of borrowing on the international markets. It is notable that the coefficient for the debt-to-GDP ratio is insignificant, although positive. The coefficients for macroeconomic indicators, on the other hand, become statistically insignificant upon the inclusion of credit ratings. The effects on bond spreads of the macroeconomic performance of States, therefore, appear to be primarily derived from credit ratings, rather than direct. The indirect effect of macroeconomic performance and governance through credit ratings requires some further explanation: they are treated as endogenous to the macroeconomic variables and, as expected, the results clearly indicate that improved macroeconomic fundamentals and governance would result in higher credit ratings for sovereign debt. In addition, African countries seem to obtain "fair" risk ratings from agencies, based on their macroeconomic fundamentals and on the adequacy of government policies, as well as the timing of the rating and country-specific differences, regardless of the fact that they are located in the region. However, the major rating agencies' credit assessments of African countries are less responsive to improvements in the latter's macroeconomic fundamentals than those of other countries throughout the world.

Overall, this finding suggests that African countries pay an unexplained premium of 1.7 percentage points on sovereign bonds issued on the international markets, once due account has been taken of government effectiveness and macroeconomic variables. Although this estimate is clearly much smaller than the 3.0 percentage points estimated in previous studies (see, for example, Olabisi and Stein, 2015; Gueye and Sy, 2015), it remains high, making it prohibitively expensive for African countries to issue Eurobonds and rendering their debt burden unsustainable.

3. Conclusion and policy recommendation

The increasing participation by developing countries in the international bond markets, in particular the recent entry into those markets by many African States, has spurred research into explaining sovereign Eurobond issuance by

those States and the cost of borrowing they bear. It has been found that, on average, African States are likely to pay a premium on their Eurobond holdings, with coupon payments nearly 2.0 percentage points higher than those of developing countries in general. Higher coupon payments that cannot be explained by observable measures of risk can only be attributed to investor bias against African Governments.

African countries that have been recently downgraded by rating agencies owing to increased economic challenges in the wake of the COVID-19 pandemic, the war in Ukraine and other shocks will bear increased interest burdens, which will exert further stress on their fiscal space. Therefore, a strong recovery remains essential for lowering States' borrowing costs on the international markets. In the light of the results showing that government effectiveness affects borrowing costs, not only directly, but also indirectly through credit ratings, it is critical to ensure good governance and quality of institutions. For the continent, therefore, efforts in terms of policymaking and implementation to improve governance and macroeconomic performance are crucial.

A. Debt service relief and restructuring

In the wake of the COVID-19 pandemic and the war in Ukraine, debt restructuring initiatives for developing countries, such as the Debt Service Suspension Initiative and the Common Framework for Debt Treatments beyond the Debt Service Suspension Initiative, have helped to increase liquidity on the continent and can continue to do so. The extension of the Initiative for several additional years will ensure that countries have enough liquidity to respond and to kick-start their recoveries.

The emergence of Eurobond issuances on the continent has introduced additional complexity in sovereign external debt restructuring. Governments are now dealing with a wide range of creditors with different preferences and goals. Although the collective action clauses⁵ proposed by the International Monetary Fund (IMF) are intended to facilitate debt restructuring negotiations between Governments and their private creditors, such clauses have

⁵ The use of collective action clauses was proposed by IMF and introduced in August 2014. Collective action clauses are majority-restructuring provisions for payment terms, intended to limit holdout behaviour and reduce the cost of restructuring (Chung and Papaioannou, 2020). To be specific, majority bondholders are allowed to impose approved modalities of restructuring on minority holders of bonds with collective action clauses. According to IMF (Beaumont and Hakura, 2021), recent debt resolutions have, on average, been faster and pre-emptive, with shorter negotiation times and greater participation, thanks to the increasing use of collective action clauses in contractual frameworks.

not been included in all contractual agreements between African States and bondholders (IMF, 2020). Furthermore, the collateralized loans, such as resource-backed loans, or loans with complex guarantees contracted by some African countries also add to the challenge of restructuring external debt on the continent. Hence, the participation of private creditors in debt resolution would be critical for effective and adequate debt relief, in particular in countries with relatively large shares of external public debt to private creditors, such as Chad, Ghana, Guinea-Bissau, the Sudan and Zambia.

B. Fresh financing and liquidity

In the light of current country debt vulnerabilities and of the evidence that African countries pay a premium on their sovereign Eurobonds, it may be time to consider making relatively non-risky denominations, such as special drawing rights (SDRs), account for significant portions of the debt-finance portfolio, especially for low-income countries, while ensuring that a significant portion is geared towards productive infrastructure investment. SDRs have several advantages over other IMF lending facilities and lines of credit: benefits include the facts that borrowing countries take on no debt, the cost of borrowing is low, and the risk premium is reduced for highly indebted States. The adaptability, financial effects and lack of conditionality of SDRs can expand the policy space of emerging economies. In addition, SDRs can boost the foreign exchange reserves, external financial position and liquidity of weak economies, as well as the resources they can allocate to efforts to achieve the Sustainable Development Goals. African ministers have called for the issuance of a second round of SDRs, with changes to the allocation quota and frequency of allocation (Economic Commission for Africa, 2022).

As an alternative form of borrowing, debt-for-nature swaps may offer African States an opportunity to increase fiscal space to invest in sustainable human development and create much-needed economic growth and resilience, while addressing climate-related effects.

C. Credit rating methodology updates and transparency enhancements

Dependence on credit ratings affects not only individual national economies, but also the global economy. Market participants should supplement the credit ratings of international agencies with their own national credit assessments, conducted by regional or local agencies. This would ensure that African States were not subject to discriminatory risk premiums on loans and bonds. In addition, the credit rating agencies need to be reformed

alongside the rest of the global financial system, with a view to their performing a gatekeeper function and helping to avert future debt crises, rather than exacerbating existing ones. Despite numerous proposals made over the years, the structural flaws of credit rating agencies, the market distortions they cause, and their assessment errors have not been rectified.

D. Fiscal policy reforms

Fiscal reforms, debt management frameworks and domestic revenue mobilization are also sound policy choices to assist with issues surrounding development finance and debt. Leakages in revenue collection, a poor tax base, large-scale illicit financial flows and weak law enforcement contribute to low domestic resource mobilization by African States. Most developing countries, especially in Africa, lack fiscal openness, which fuels corruption and inefficiencies in the public finances. Therefore, improving fiscal governance is crucial. Fiscal transparency fosters openness, trustworthiness, accountability and integrity in public financial management and good economic

governance. It helps Governments to close legal and institutional loopholes, in order to prevent revenue losses, from corruption to tax evasion. In order to reduce illicit financial flows, a holistic approach and buy-in from the public, businesses and civil society at the national, regional and international levels are required. In some countries, it is necessary to prioritize certain areas of public spending over others; this may imply fiscal austerity and investment in growth-enhancing projects, in order to make future debt service easier.

E. Structural transformation

Last but not least, African economies need to accelerate diversification and structural transformation; that will enable them to profit from the technology-driven dynamism of globalization and increase their resilience to external shocks. In order to ensure sustainable debt levels, Africa needs a macroeconomic policy for structural transformation guided by a long-term development plan

to promote the transformation of economic and social structures, with the goal of creating a virtuous cycle in the investment-growth nexus and fostering equitable growth.

Annex

Model specification

In line with the conventional approach to modelling sovereign bond yields (Mpapalika and Malikane, 2019; Olabisi and Stein, 2015; Nair, 2020; Cevik and Jalles, 2022), the following simple baseline model has been produced:

$$\begin{aligned} \text{Bondsread}_{it} = & \alpha_1 + \alpha_2 \text{CreditRating}_{it} + \alpha_3 \log \text{GDPpercapita}_{it-1} + \\ & \alpha_4 \text{ReservesGDPratio}_{it-1} + \alpha_5 \text{DebtGDPratio}_{it-1} + \alpha_6 \text{Tenor}_{it} + \alpha_7 \text{dummy}_i + \mu_i + \epsilon_t \\ & + \epsilon_{it} \end{aligned}$$

The sovereign spread,⁶ Bondsread_{it} , of a country i at time t is explained by credit rating (CreditRating_{it}), macroeconomic fundamentals (debt-to-GDP ratio, log of GDP per capita and reserves-to-GDP ratio), bond tenor⁷ and dummy variables for African and heavily indebted poor country participants. The coefficients to be estimated are, α_j ($j=1,2,\dots,7$). The unobservable time effects, accounting for global trends or changes in global factors not captured in the model, are denoted by μ_i ; $\epsilon_t = 1$ the idiosyncratic error term assumed to be independently and identically distributed. The model also incorporates controls for unobservable country-specific heterogeneities,⁸ μ_i .

⁶ The spread is calculated as the difference between the coupon rate on sovereign eurodollar bonds and the United States Department of the Treasury bond yield.

⁷ The bond tenor is the difference between the year of issue and the year of maturity.

⁸ Controlling for country-fixed effects helps account for country-effects endogeneity biases in the coefficients of the African and heavily indebted poor country dummy variables, thus providing a better reflection of the premium paid by countries because they are located in the region.

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