



Strategy, Analysis
and Research Team

REDUCING THE COST OF FINANCE FOR AFRICA

The Role of Sovereign
Credit Ratings



Regional Bureau for Africa
April 2023

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“[i]t may appear from this admission from Moody’s about our strong and disciplined pre-Covid fiscal performance that we are being downgraded due to the efforts we made to recover from the negative impact of the pandemic.”

Ministry of Finance, Ghana (2022)

Abstract

This report presents a novel analysis of sovereign credit ratings across African economies. In contrast to the usual focus on bias or procyclicality, we demonstrate that mismatched sovereign debt ratings for African nations are primarily due to idiosyncrasies in the dominant approach of the Big Three credit rating agencies (S&P, Moody’s, and Fitch).

Additionally, the report critically reviews the link between credit ratings and the development process, highlights the role of multinational organizations in assisting African countries with their credit ratings initiation and review processes, compares domestic Africa-based credit rating agencies to the oligopolistic structure of the Big Three, and estimates new patterns in credit rating idiosyncrasies, opportunity costs, and interest savings due to underrating of sovereign debt for selected African countries.

Finally, the report develops policy recommendations for different stakeholders, including African countries, rating agencies, and multinational development groups.

1. The lead authors of this report were Jacob Assa (UNDP) and Aleksandr V. Gevorkyan (St. John’s University). All comments should be sent to Jacob Assa at: jacob.assa@undp.org. Bruno Avila (UNDP) and Celeste Scarpini (Institute of Development Studies) provided valuable support with data analysis. Useful comments and peer-reviews were provided by Osten Chulu, Pedro Conceicao, Rogers Dhiwayo, Vito Intini, Lars Jensen, Benson Kimani, Fatou Leigh, Christopher Lilyblad, Marcos Neto, Ayo Odusola, Weyinmi Omamuli, and Ben Slay.

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1. Introduction

In mid-2020, as the world was grappling with the devastating COVID-19 pandemic, the biggest multilateral lenders, including the International Monetary Fund (IMF), the World Bank (WB), the Group of 20 (G20), the African Development Bank (ADB), and the creditors of the Paris Club, announced a debt service relief arrangement for over 25 African countries. However, only four - Cameroon, Côte d'Ivoire, Ethiopia, and Senegal - applied for the program. Surprisingly, other sovereign borrowers chose not to participate, fearing that their country's sovereign credit rating would be downgraded if they did.

The Big Three credit rating agencies - Standard & Poor's (S&P), Moody's, and Fitch - did indeed question the macroeconomic and financial health of sovereign borrowers who applied for the multilateral debt relief program. This fear of sovereign rating downgrading leading to limited interest in the debt relief initiative was common across emerging market borrowers.¹ Renegotiation of borrowing terms would signal to the Big Three a sovereign default - an outcome that emerging market borrowers are determined to avoid due to the immediate consequences and a host of external and internal pressures.²

It took some time for researchers to realize that the severity of sovereign credit rating downgrades was not due to the pandemic's direct impact.³ Instead, the decisions on downward credit outlooks and rating revisions were largely driven by the Big Three's "business-as-usual" approach, with rating actions on a regular schedule rather than timed to the crisis and adequately reflecting individual governments' efforts in taming the healthcare, social, and macroeconomic impact of crises. In short, while the link between sovereign credit ratings and development efforts predates the most recent situation, what happened in

2020 indicates far greater consequences for sovereign developing borrowers today.

The problem of sovereign debt ratings, especially across developing and low-income economies, is more than just an accounting exercise in debt sustainability modeling. Instead, there is evidence that changes in a country's debt profile ratings lead to substantially more complex and consequential problems of unfunded (or de-funded) essential infrastructure projects, advancing concerns about the underdevelopment of structurally weaker economies.⁴ What may appear as a portfolio allocation question for a global investor diversifying into and across emerging markets is often a problem of survival and sustained funding for critically vital development projects in structurally weak borrowing developing economies.

Broadly defined, this report has two main goals: 1) to analyze the role of sovereign debt credit ratings in the macroeconomic development process, and 2) to empirically assess this impact for a group of African nations. The research indicates that African sovereign debt ratings may be influenced by methodological idiosyncrasies rather than shifts in macroeconomic and fiscal budget fundamentals. Downgrades in credit ratings are more common than upward adjustments, and regardless of the cause, one of the most significant issues is the conflict between the short-term focus of global capital markets and the longer-term horizon of development initiatives in emerging markets. Developing economies, which often lack financial depth and are under foreign exchange pressures, compete for the best borrowing rates and the limited funds available in capital markets. Therefore, having competitive and practical access to international capital is crucial for open developing economies, as it helps to balance one of the fundamental constraints on development - the foreign exchange constraint.⁵

Access to international capital remains a significant challenge in modern development, exemplified by the issue of dominant currency and foreign exchange constraints. Along with funds availability, access, and borrowing costs - all critical determinants of developing nations' macroeconomic survival - there has been a shift from multilateral (concessional) lending to bilateral and multiple-investor programs. This transition to a market-driven borrowing model has resulted in tighter competition for funds among developing nations and, reciprocally, demand from global investors (motivated by maximizing returns or "reaching for yield") to rely on a familiar set of sovereign debt ratings produced by the largest CRAs.

The first step in this report is to discuss the relevance of CRAs in international capital markets, Africa-based CRAs, multilateral agencies, and more recent perspectives on emerging market (and African) sovereign debt. The primary sources for this report include academic research, policy drafts from multinational groups, country statements, specialized media analysis, CRA position papers, and other sources. Additionally, this report proposes a new methodology for comparing sovereign credit ratings and estimating opportunity costs for national borrowers, which can be applied beyond Africa to other emerging and developing borrower economies.

2. Sovereign credit ratings and the development process

The sovereign credit ratings assigned by the Big Three CRAs play a critical role in enabling emerging and developing economies to secure sufficient funding to achieve their development goals within the Sustainable Development Goals (SDG) timeline. The CRAs have played a pivotal role in global finance since their establishment in the late nineteenth century by S&P, and in the early

The report is organized as follows. Section II provides an overview of the link between sovereign debt ratings and macroeconomic development across emerging markets and frontier economies. This section aims to establish a general economic development context and explain the role of external funding in covering financing gaps for critical developments in technology, energy, infrastructure, and other areas. Section III contextualizes our discussion with a review of the role of multinational organizations in assisting African nations with obtaining their initial credit ratings. This section also highlights some stylized facts on changing credit ratings since 2020 across Africa and other regions.

Section IV reviews the engagement between Africa-based credit rating agencies and the Big Three CRAs. Section V presents a novel methodology to estimate the idiosyncrasies in local-currency sovereign debt credit ratings and the opportunity cost of these idiosyncrasies in the sample of 53 sovereign borrowers, including results for rated African nations. Section VI discusses the impact of credit ratings idiosyncrasies on African nations' Eurobond market and their implications for development. Finally, Section VII derives some policy implications for three groups of stakeholders: African countries, CRAs, and development partners. Section VII concludes the paper with a summary. The Annex includes additional supporting data tables and country profiles.

twentieth century by Moody's and Fitch. In the aftermath of the 2008 Global Financial Crisis (GFC), developing countries have increasingly relied on the CRAs to raise financing, resulting in a sharp increase in the issuance of both domestic sovereign debt and Eurobonds.

The CRAs have an important role in providing information to investors about the

risks and opportunities associated with a sovereign borrower. They help to bridge the informational asymmetries inherent in the complexity of international markets, where borrowers are often assumed to have more knowledge about the risks they are facing in servicing debt to lenders.⁶ Obtaining a credit rating is crucial for a debt issuer, whether a corporate entity or a government, to become a fully-fledged participant in global capital markets. In most cases, institutional portfolio managers, such as mutual and pension funds, teachers' unions, and others, require an investment-grade credit rating to include a security in their holdings.

Moreover, a country's credit rating is an indirect signal to potential equity investors considering foreign direct investment (FDI), as also confirmed by Standard and Poor's in their review of African ratings.⁷ This becomes especially important in situations when an external investor is unfamiliar with a specific country's context, which is usually the case in emerging and developing markets. In that context, sovereign credit ratings also act as the highest benchmark for the country's corporate and lower-level

government (e.g., regional or municipal) entities' ratings.

Furthermore, credit ratings and a country's debt designation as "investment grade" or "non-investment grade / speculative" often determine the volume of capital and its cost (yield to maturity) that an economy can raise. Hence, CRAs have a significant impact on countries' ability to access and raise capital in international markets. In addition to the Big Three, there are several alternative credit rating scales available. Some are accessible at no cost, while others require paid subscriptions. For illustration, a credit rating mapping (Table A1.1) is provided in Annex I and will be referenced in the subsequent analysis in this report.

Therefore, the relevance of an informed and objective credit rating has risen in its importance since the GFC and most recently in the COVID-19 pandemic, as governments across all income and regional groups ramped up their borrowing. Figure I offers a high-level view of relative changes across regional groups in official debt accumulation in proportion to gross domestic product (GDP).

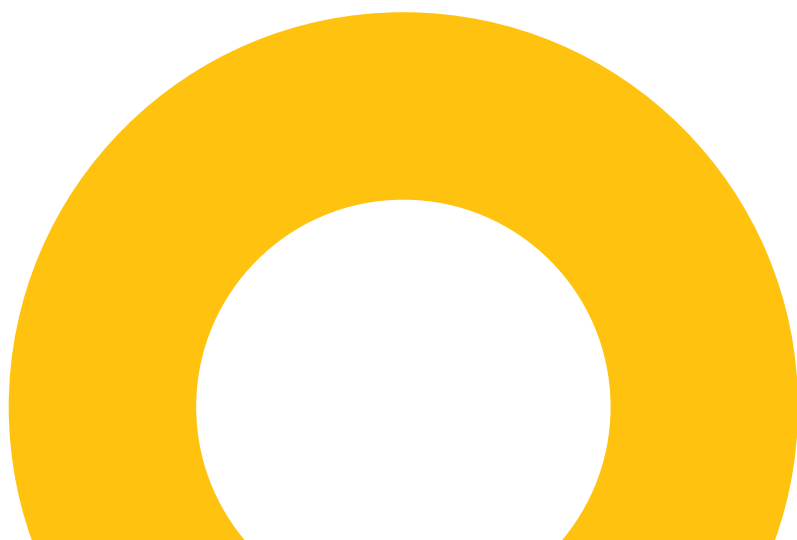
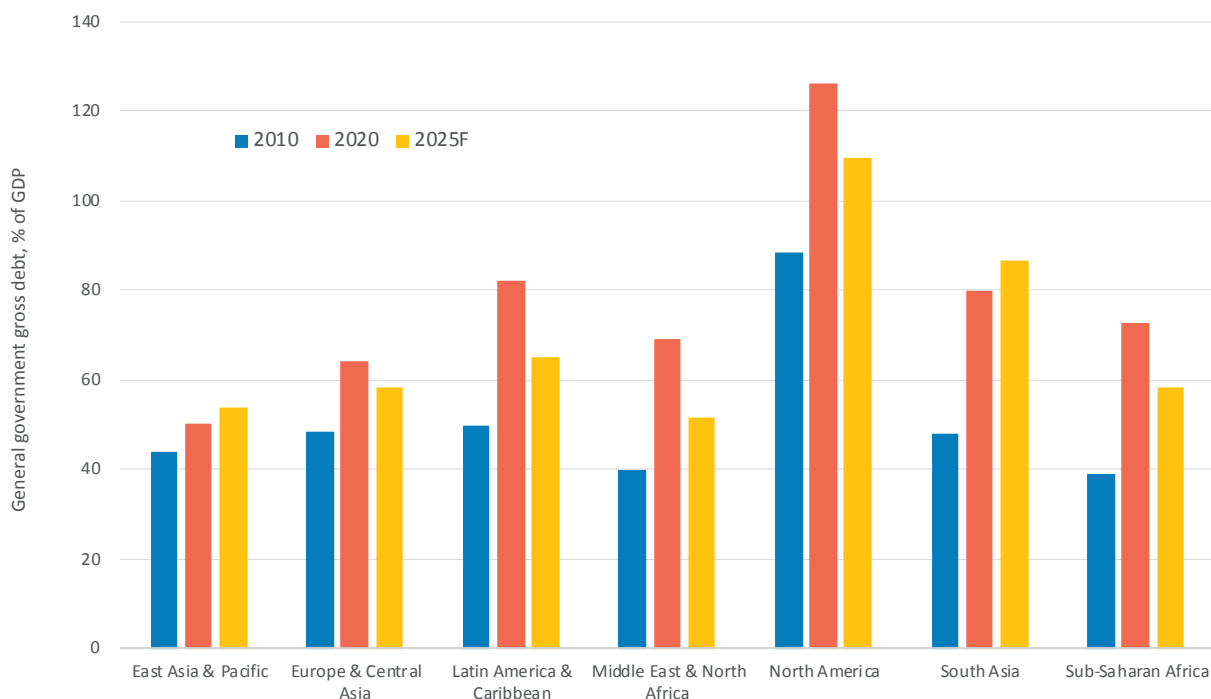


Figure I: General government gross debt by region, % of GDP



Source: based on data from IMF WEO (2022)

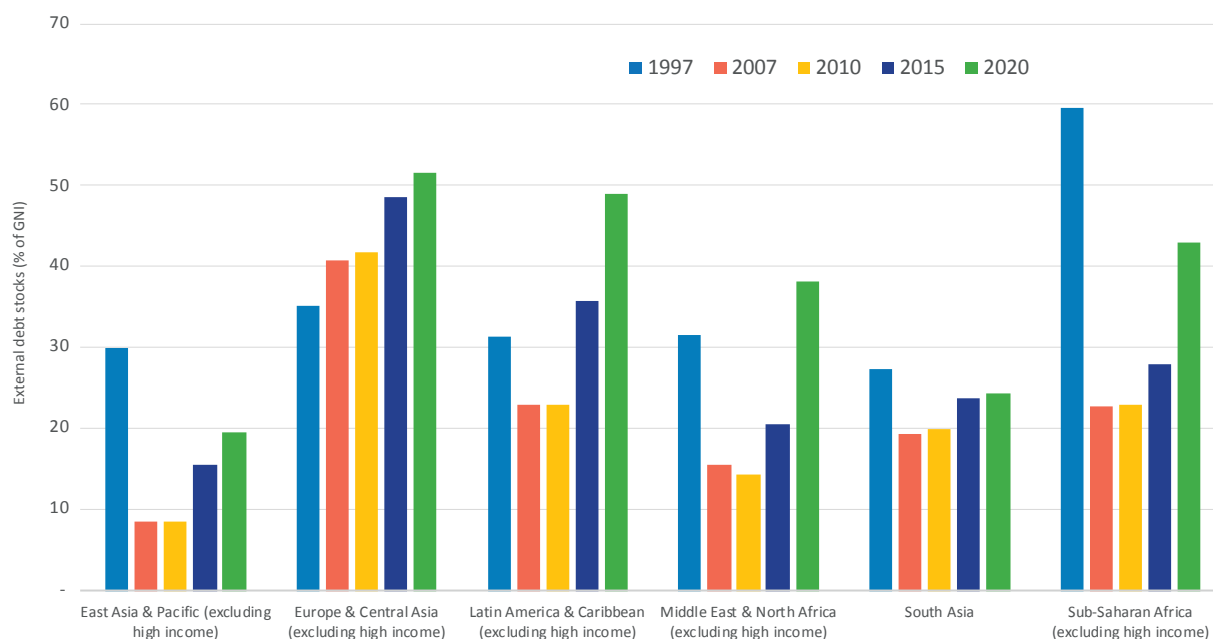
Note: the data shows regional averages of individual countries' all government liabilities as a share of GDP.

There has been a significant increase in official state liabilities accumulation across the board, with developing nations across regions seeing higher than proportionate increases. As shown in Figure I, between 2010 and 2020, the share of government debt in Sub-Saharan Africa almost doubled from 40 per cent to 72 per cent of GDP.⁸ Looking ahead, a 2025 forecast of 58 per cent of GDP, reflecting some expectation of fiscal prudence and balanced budget consistent with the debt of sustainability exercises of IMF, suggests gradual but not a complete return to immediate post-GFC levels. The pattern holds for all regions, indicating increasingly greater reliance on new borrowings by national governments in their pursuit of structural transformation, infrastructure and educational projects funding, social policy priorities, and other macroeconomic and development goals.

The trend is also reflected in the data on external debt (see Figure II). Across all regions, with the exception of South Asia,

external debt stocks have on average increased in proportion to countries' Gross National Income (GNI). For Sub-Saharan Africa, the level of external debt was at 42 per cent of GNI in 2020, which was below the 60 per cent mark in 1997, but it still represented a substantial rise compared to the 2015 average of just below 30 per cent of the region's GNI. Similarly, in the Middle East and North Africa region, the levels of external debt have risen and are currently exceeding the 1997 high of 31 per cent of GNI. The trend of modest or very low levels of external debt, as observed in East Asia and Pacific (denominated in foreign currency) during the larger portion of the first two decades of the 2000s, is quite noticeable. The recent reversal in the trend, with rising levels of debt, is largely driven by a combination of macroeconomic and social pressures in the context of the pandemic (a topic that deserves a separate study) and the increasing financialization of the global economy.⁹

Figure II: External debt stocks by region, % of GNI



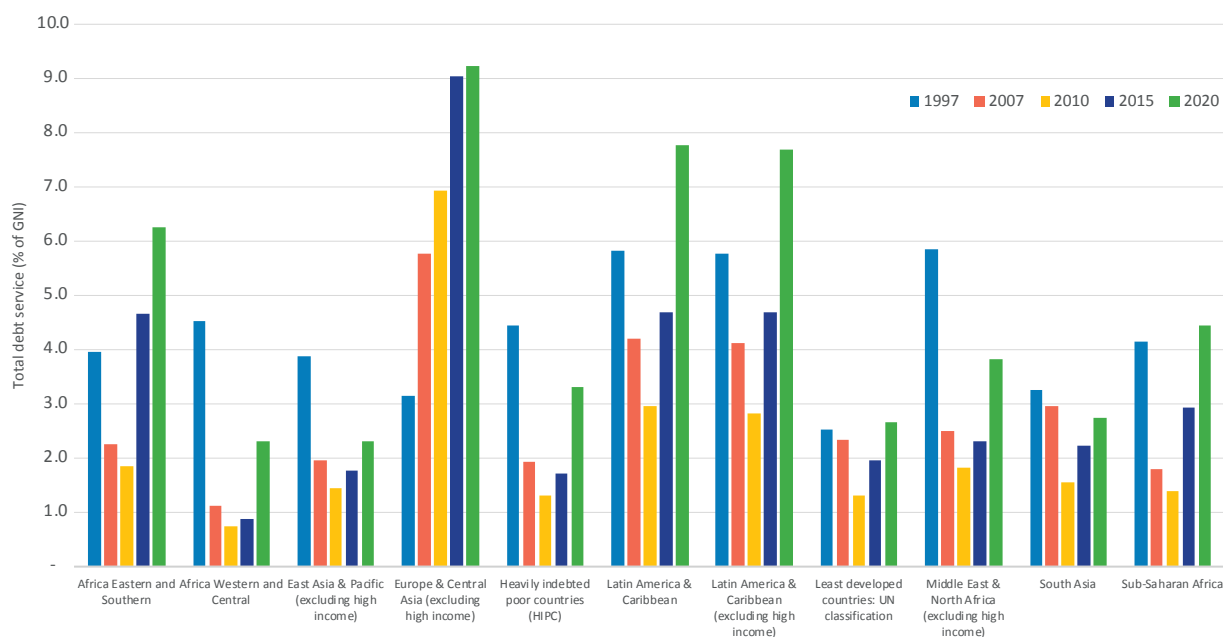
Source: World Bank Development Indicators (2022)

The latter argument may not be immediately intuitive as rising access to international capital markets generally corresponds to an economy’s financial, fiscal, and macroeconomic maturity. External debt stock statistics help to understand an economy’s broader position, including public and private sector liabilities. As such, access to capital markets by the country’s private sector may be linked to increasing competitiveness and structural improvement.

However, an opposing view of this argument is that, for developing nations

with limited industrial and competitive bases, the increase in debt is mainly driven by financial speculation, the relative ease of reaching out to international investors, and a technologically conducive post-GFC environment for issuing new debt. The debate on the determinants of debt is beyond the scope of this study (though some recent research, related to Africa is discussed below). What is important is that there has been a rise in both domestic and foreign borrowing by both public and private sectors across the board, and both trends are expected to be sustained in the short and medium-term.

Figure III: Total debt service by region, % of GNI



Source: World Bank Development Indicators (2022)

This trend leads to an overall increase in debt service costs, which puts pressure on fragile economies that have limited access to a wide range of policy and financial alternative instruments available to more developed and high-income economies. The pattern is evident in Figure III, which shows increasing total debt service costs across regions and income groups. The indicator has risen sharply for the African sovereigns in recent years. Inability to meet already accumulated and growing debt obligations could result in a sovereign default event, abruptly curtailing sovereign borrowers' ability to attract new funds and sustain ongoing development projects. Credit rating agencies (CRAs) assess the capacity to repay and maintain and update sovereign and corporate debt credit ratings.

The literature on credit ratings determination is quite extensive and diverse, with arguments both in support of and critiquing the methodology of the CRAs. One angle of criticism is the focus on the bonds' issuer paying the rating agencies, resulting in a conflict of interest in the Big Three ratings.¹⁰ The issuers may tend to shop for the best rating, and the CRAs may overrate the new

debt, assuming general macroeconomic improvement. Such a pattern complicates the accurate pricing of sovereign risk. At the same time, there is growing recognition of the oligopolistic industry structure of the credit rating industry, with the Big Three agencies controlling up to 90 per cent (and in some cases, more) of all ratings.¹¹

Despite some recent developments, most empirical studies linking credit ratings with national economic growth and development prospects have maintained a general balance of opinion with nuanced variations. For example, an early contribution found that credit ratings reflect a systematic ordering of risks consistent with macroeconomic fundamentals,¹² with fiscal and current deficits playing a smaller role in sovereign credit rating determination compared to per capita income, economic growth, default history, external debt, and the level of economic development. However, it is worth noting that the view remains that CRA's opinion announcements do impact market spreads, often allowing investors to forecast a future rating change.

Previous research has also found that

sovereign credit ratings are influenced by a range of factors,¹³ including GDP per capita, external debt, a proxy for developing country status, any history of sovereign default, real economic growth rate, and inflation. In developed countries, per capita income is found to be the most important variable explaining credit ratings, while external debt is more important for developing countries. However, the pro-cyclicality of CRA ratings across emerging markets has been a major concern, as ratings tend to improve during boom periods and worsen during downturns, exacerbating the macroeconomic situation in the country. A recent UNDESA study also highlighted this issue as one of the key impediments to economic development prospects across emerging markets.¹⁴

From an open macroeconomy perspective, changes in sovereign ratings have been shown to carry informational significance for market participants and have an economic impact on a group of countries in the European Union,¹⁵ even after controlling for a range of domestic and external market pressures. The implications of sovereign bond credit rating changes for the pricing of credit default swaps (CDS) are dependent on the actual credit rating level, and are non-linear. However, some studies have refuted the pro-cyclicality argument, suggesting that credit ratings are sticky and that non-macroeconomic news, such as market sentiment and default history, have a stronger effect on ratings changes. Another recent paper has pointed out that the Big Three have maintained a "business-as-usual" approach to rating actions in 2020-2021, as mentioned above.¹⁶

A recent empirical study found that the Big Three credit rating agencies exhibit a home bias towards the US and the countries with close economic and military relations with it, but not biases against individual groups of countries.¹⁷ Biases found in the literature are due to modeling errors, such as omitted variables that increase the dispersion in regional effects,

misleadingly showing rating agencies as biased towards or against a particular country group.

Critics of the credit rating industry argue that its oligopolistic practice poses a developmental problem for structurally weaker economies affected by sovereign credit rating determination and changes.¹⁸ One concern, already mentioned here, is the stigma associated with appeal for assistance, such as the G20 Common Framework for Debt Treatments and the Debt Service Suspension Initiative (DSSI) supported by the WB and the IMF. Back in spring 2021 it was Ethiopia's engagement with private creditors under the G20 framework that led Moody's to place the country on review for a downgrade, essentially following earlier similar moves by S&P and Fitch.¹⁹ A downgrade can result in limited access to international capital markets and higher borrowing costs, preventing developing nations from implementing sufficient macroeconomic and public policy measures, especially during times of crisis like the COVID-19 pandemic. This creates a threat to their fragile economies and exacerbates existing problems of underdevelopment.

Developing economies have been significantly impacted by the recent sharp downgrades of their credit ratings, resulting in higher borrowing costs, increased risks of debt sustainability, and competition for limited capital. A recent report estimates that 95 per cent of the downgrades have occurred in developing countries, which has negatively affected their ability to raise new capital and maintain established commitments.²⁰

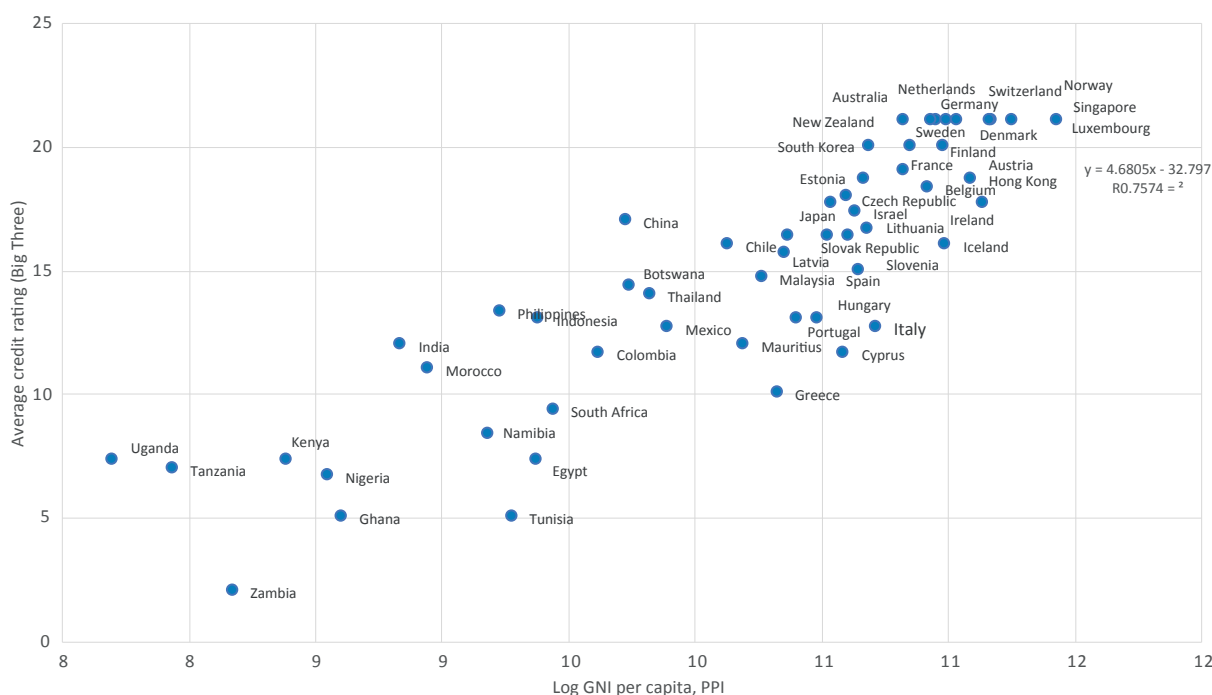
These downgrades pose three main challenges for developing countries. Firstly, the impact on borrowing costs and domestic financial markets' stability. Secondly, the incorporation of official actions, such as debt restructuring, in the ratings reviews. And thirdly, the degree to

which rating methodologies consider non-economic factors, including climate change, in their country reviews. Another concern is that credit rating agencies (CRAs) tend to overemphasize short-term economic trends while undervaluing the long-term potential for technological advancements, social factors, and environmental mitigation.

Figure IV provides valuable context for understanding the relationship between credit rating determinants and macroeconomic development outcomes. The graph illustrates a strong positive correlation between a country's GNI per capita and its average credit rating. However, this general trend also reveals important idiosyncrasies related to credit ratings determination, changes, and assignments. By using per capita income as a proxy for macroeconomic development, Figure IV

enables comparison of countries with similar income levels but different credit ratings. For instance, the graph highlights significant credit rating gaps among countries such as Tunisia and the Philippines, Egypt and Indonesia, Chile and Mauritius. Beyond the African continent, this comparison can be made between countries such as China and Greece, the Czech Republic and Italy, Iceland and New Zealand, among others. These gaps in average credit ratings for countries with similar per capita incomes suggest that some economies may be unfairly penalized for various discretionary reasons, unrelated to obvious discrepancies. Therefore, it is crucial to understand how changes in credit ratings, assigned by the Big Three credit rating agencies, can affect an economy's ability to finance its development priorities, particularly as we approach the 2030 SDG deadline.

Figure IV: Average credit rating and income per capita by country



Source: GNI per capita (2016-2020 average) 2017 PPP \$ (WDI, 2022); Rating scores are average of the Big Three CRAs from Trading Economics (2022) converted to Hill et al (2010) scale.

A 2021 working paper written by UNDESA economists examines the impact of CRAs on structural development. The paper identifies four key issues with the CRAs: potential bias

in their ratings, the pro-cyclicality of their ratings, governance issues and conflicts of interest, and the need to incorporate climate risk into their assessments.²¹

Regarding the first challenge of potential bias in their ratings, the authors analyze credit rating changes and find evidence of a bias towards under-rating developing economies by the Big Three.

The authors also highlight the pro-cyclicality of CRAs' ratings, which is influenced by qualitative aspects of their risk evaluation methodology. This pro-cyclicality tends to make capital flows to developing countries more pro-cyclical as well. Previous research on sovereign debt in African nations indirectly supports this trend.²²

The third important point raised by the paper is the concern over governance, quality, and impartiality in ratings assessment process. The authors highlight the role of individual

country analysts in determining the CRAs' stance on country risk, which can lead to inconsistent and biased ratings.

Finally, on climate risk, the authors argue that CRAs need to adopt a holistic approach that considers the long-term positive effects of investment in sustainable and environmentally resilient projects by developing countries. Such investments may result in short-and medium-term fiscal deficits and an increased role of the state in the economy, which can lead to a downgrade by the CRAs. However, in the longer run, pragmatic fiscal policies and expanded effective investment in countries more susceptible to climate risk can have a net positive and wide-ranging macroeconomic effect.

3. The role of multinational organizations in assisting African countries with credit ratings

Credit ratings play a critical role in the development process in today's globalized financial environment. To assist countries in obtaining their sovereign credit ratings, multinational organizations have worked closely with the Big Three CRAs to build technical and institutional capacity. The United Nations Development Program (UNDP) has been at the forefront of integrating African nations into the international sovereign credit rating system, enabling their competitive access to international capital markets.

The acquisition of sovereign credit ratings was seen as a way for African countries to attract significant levels of new financing for development, which could surpass official development assistance (ODA) and other inflows, such as migrant workers' remittances. This new funding, obtained at lower borrowing costs than domestic markets, would allow countries to address a range of development needs, including poverty reduction, healthcare, and infrastructure development, bringing the continent closer

to the MDGs by 2015. The top priority was to establish an enabling environment to tap into previously inaccessible (or largely limited) private funds and streamline new investment for development.²³

In 2003, the UNDP partnered with S&P to fund the agency's rating activity of African sovereign borrowers and provide technical country support. (Standard & Poor's, 2004). By 2004, S&P had assigned credit ratings to 13 African nations, in contrast to only one sovereign rating in 1994, which was assigned to South Africa. The African Sovereign Credit Rating Initiative was established as part of the UNDP and S&P partnership to contribute to a comprehensive framework of reducing poverty, improving socio-economic development prospects, and effective integration into the global economy.

Acquiring a credit rating signals to the international investor community that a country is on the path towards balanced macroeconomic stability and ready to

access international capital. The UNDP-funded credit ratings by S&P for African sovereigns were intended not only to enable these countries, especially in Sub-Saharan Africa, to issue sovereign bonds, but also to motivate Africa to compete for global private equity and debt flows with other developing economies.

Here, prerequisites for attracting either debt or equity are the same and both markets complement, rather than substitute, each other. The presumption of a competitive macroeconomic development and inclusive growth of the domestic economy were key factors motivating the structuring of the African Sovereign Credit Rating Initiative, which ended in 2006.

Since the launch of the above initiative, several African countries have been able to tap international capital markets to raise capital, sometimes at lower borrowing costs than they would face domestically.²⁴ These countries need to access international capital markets to finance their development projects and may face a sovereign rating “ceiling,” which acts as a benchmark for the country’s private sector’s activity on the global stage.

It is worth noting that unrated countries should not be considered “at the bottom of the rating spectrum”, as they can still have comparable estimated ratings based on a

mix of macroeconomic fundamentals that are similar to those of rated emerging markets. This highlights the importance of efforts such as the UNDP and S&P partnership on Africa sovereign credit ratings, which aim to promote greater financial deepening and development.²⁵

Since the African Sovereign Credit Rating Initiative and more recently, as of August 2022, there were 32 African countries with a sovereign rating, as shown in Table 1. However, the evident concern is that with two exceptions (Botswana and Mauritius), the rated African sovereigns are of non-investment grade. A 2004 S&P report notes, “African sovereigns face a particular challenge in addressing investor perceptions” about these countries’ entrenched macroeconomic fragility, fiscal, and social instability.²⁶ Stated differently, there is an embedded perception among global investors of the continent’s underdevelopment and higher probability of default risk than elsewhere. All of the rated African nations have undergone ratings changes over time, with some countries such as Burkina Faso, Ghana, and Mali experiencing more than one change by the same CRA by 2022. A complete history of credit ratings by African country and by each Big Three CRA can be found in Annex II, based on data archives from Trading Economics.

Table 1: Credit ratings and investment positions of African countries, Big Three CRAs and Trading Economics

CREDIT RATING					INVESTMENT POSITION			
	S&P	Moody's	Fitch	TE	S&P	Moody's	Fitch	TE
Angola	B-	B3	B-	25	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Benin	B+	B1	B+	33	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Botswana	BBB+	A3		67	Lower medium grade	Upper medium grade		Lower medium grade
Burkina Faso	CCC+			20	Substantial risks			Substantial risks
Cameroon	B-	B2	B	28	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Cape Verde	B-		B-	27	Highly speculative		Highly speculative	Highly speculative
Congo	B-	Caa1		20	Highly speculative	Substantial risks		Substantial risks
Egypt	B	B2	B+	31	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Ethiopia	CCC	Caa2	CCC	18	Substantial risks	Substantial risks	Substantial risks	Substantial risks
Gabon	N/A	Caa1	B-	23		Substantial risks	Highly speculative	Substantial risks
Ghana	CCC+	Caa1	CCC	20	Substantial risks	Substantial risks	Substantial risks	Substantial risks
Ivory Coast	BB-	Ba3	BB-	40	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative
Kenya	B	B2	B+	33	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Lesotho			B	30			Highly speculative	Highly speculative
Madagascar	B-				Highly speculative			
Mali		Caa2		15		Substantial risks		Substantial risks
Mauritius		Baa3		60		Lower medium grade		Lower medium grade
Morocco	BB+	Ba1	BB+	50	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative
Mozambique	CCC+	Caa2	CCC	18	Substantial risks	Substantial risks	Substantial risks	Substantial risks
Namibia		B1	BB-	40		Highly speculative	Non-investment grade speculative	Non-investment grade speculative
Niger		B3				Highly speculative		
Nigeria	B-	B2	B	28	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Republic of the Congo	CCC+	Caa2	CCC	20	Substantial risks	Substantial risks	Substantial risks	Substantial risks
Rwanda	B+	B2	B+	33	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Senegal	B+	Ba3		37	Highly speculative	Non-investment grade speculative		Highly speculative
Seychelles			B+	35			Highly speculative	Highly speculative
South Africa	BB-	Ba2	BB-	41	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative
Swaziland		B3		30		Highly speculative		Highly speculative
Tanzania		B2		35		Highly speculative		Highly speculative
Togo	B	B3		30	Highly speculative	Highly speculative		Highly speculative
Tunisia	N/A	Caa1	CCC	25		Substantial risks	Substantial risks	Highly speculative
Uganda	B	B2	B+	31	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Zambia	SD	Ca	RD	30		Substantial risks		Highly speculative

Source: Trading Economics (2022) as of August 2022 and author's approximation.

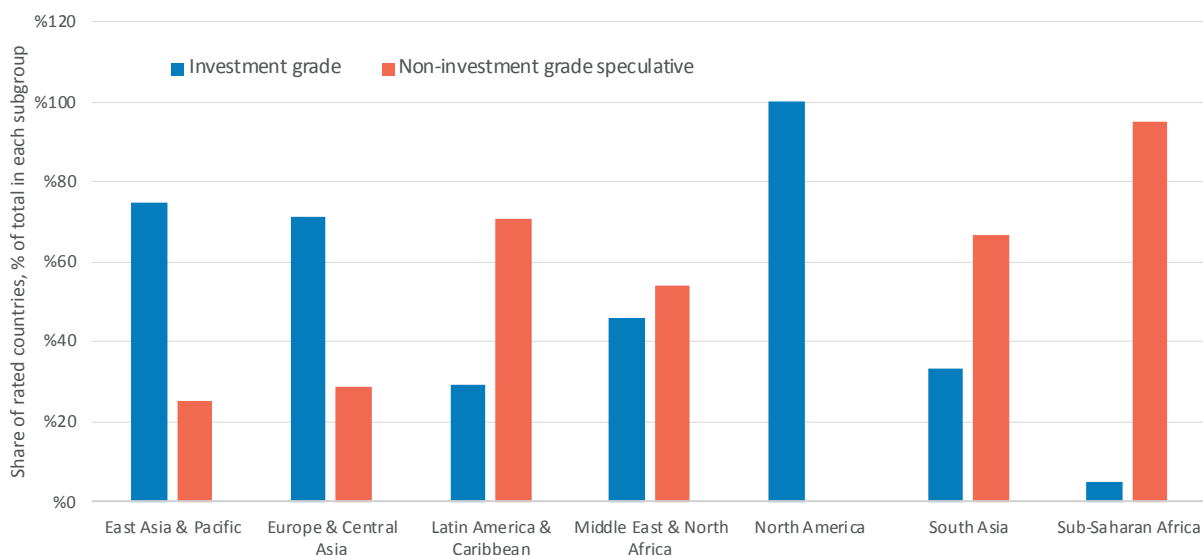
The COVID-19 pandemic had a significant impact on African sovereign borrowers, with up to 62.5 per cent of rated African countries downgraded by the Big Three CRAs between 2020 and first half of 2021, compared to a global average of 31.8 per cent.²⁷ This led to negative reviews of rating outlooks, with 17 African nations receiving a downward outlook revision (four from positive to stable and 13 from stable to negative), and the only two countries with investment grade ratings before the pandemic, Morocco and South Africa, being downgraded.

These early results are also corroborated in a comparative analysis by CountryRisk.io.²⁸ Looking at a slightly shorter time frame (January 2020 – February 2021), this analysis finds that on average, 41 per cent of rated African countries were downgraded, with S&P downgrading 50 per cent -the largest number compared to Fitch (42 per cent) and Moody’s (32 per cent). The average share of global downgrades across

the Big Three was 21 per cent of all rated countries. Although there were downgrades across other regions, the largest share of downgrades was (and continues to be according to recent reports) in Africa, where at the time of writing 94 per cent of its sovereign borrowers are currently rated non-investment grade.

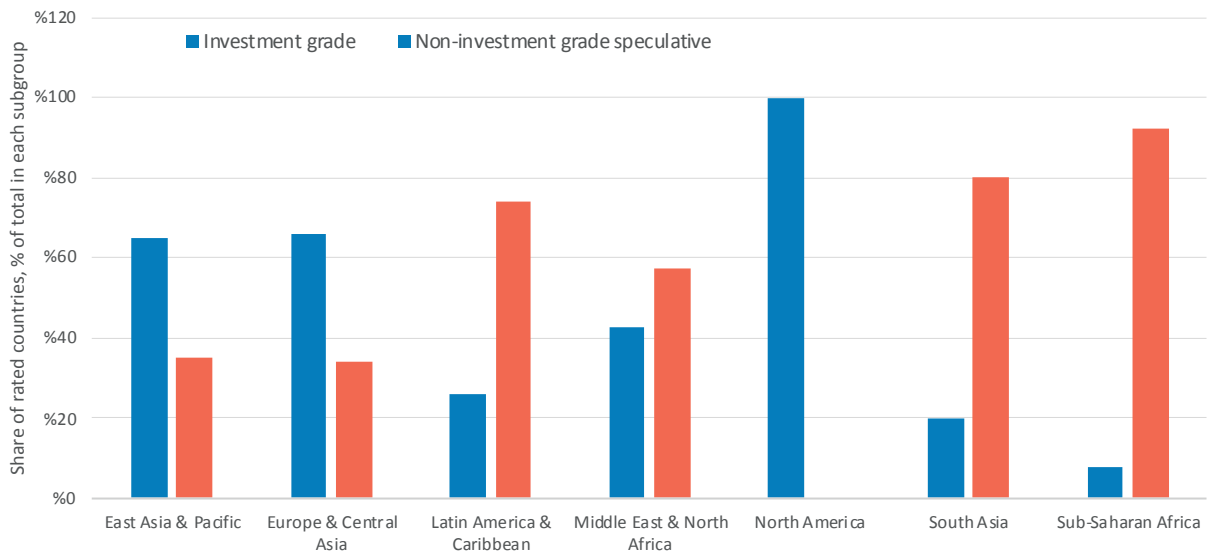
Furthermore, a comparison of global credit rating distributions by region reveals an unequal distribution of credit ratings and a differentiation in the cost of borrowing and access to financing. Figures V, VI, and VII illustrate the current state of investment and non-investment grade ratings by region for each Big Three CRA as a percentage share of the total number of countries rated in each region. The charts demonstrate a consistent credit rating pattern across all regions for the Big Three. This is visible in the uneven treatment of Latin America and North America and in the under-rating of Sub-Saharan Africa.

Figure V: Proportion of S&P's investment and non-investment grade ratings (% of total rated in each region)



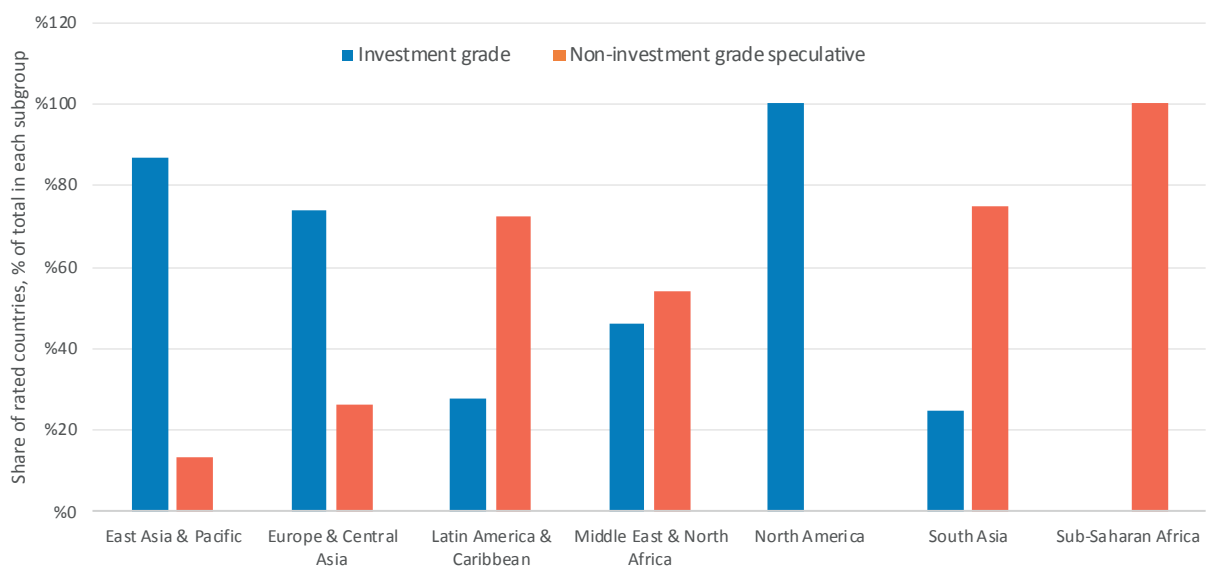
Source: author's estimation based on ratings from Trading Economics (2022).

Figure VI: Proportion of Moody's investment and non-investment grade ratings (% of total rated in each region)



Source: author's estimation based on ratings from Trading Economics (2022).

Figure VII: Proportion of Fitch's investment and non-investment grade ratings (% of total rated in each region)



Source: author's estimation based on ratings from Trading Economics (2022).

International organizations monitor the activities of the CRAs and how their ratings impact economic prospects in developing nations, especially those on the African continent. Noting the crucial role of credit ratings in the modern international economy, an UNCTAD report points out that “The assessments of CRAs appear to be based on a bias against most kinds of government intervention”.²⁹ Moreover, the report finds sovereign ratings of the Big Three to be highly

correlated, reflecting the earlier reported oligopolistic nature of the CRA sector and a focus on “business-friendly” indicators, rather than considering other qualitative components of specific country indicators. The overreliance on the Big Three credit ratings has led to regulatory concerns about the limited role of independent measures. Consequently, a generally accepted code of conduct has been introduced that allows national authorities to exercise some discretion in the

adoption of the CRA ratings. However, the question remains whether African countries possess the same macroeconomic capacity as advanced economies.

More recently, at the peak of the pandemic the role of the CRA was a subject of discussion in the Human Right Council of the UN General Assembly. The report highlighted inherent structural issues with CRAs and their “failure to perform well their role of assessing risk and addressing the information asymmetry” between lenders and borrowers.³⁰ This pattern negatively impacts the macroeconomic outlook of sovereign borrowers and can worsen debt crises (at the peak of the pandemic), leading to dire effects on human rights and public health outcomes. The report identifies five structural flaws in the current Big Three CRA framework: 1) an oligopolistic model led by private companies with a quasi-governmental role in international capital markets; 2) conflicts of interest and conflicting roles; 3) procyclicality of ratings and a lack of social indicators; 4) premise of an ideological bias in ratings; 5) a lack of accountability (technically, the published ratings and outlooks are the opinions of CRAs, which market participants are free to accept or ignore). The report calls for a reform of the current system with attention to the problems in the human rights domain. (Some of these points will be addressed in the policy recommendations section below).

The impact of sovereign downgrades can have significant statistical and economic spillover effects.³¹ This means that a downgrade of one sovereign may impact macroeconomic conditions and ratings in geographically neighboring or economically linked countries. The hasty announcements of CRAs may spur instability across local financial markets. This is where policymakers should preventively develop more effective communication campaigns to educate the

public and investors about their country’s specific conditions. Additionally, since downgrades can impact other sectors beyond sovereign debt markets, contingency plans must be prepared across domestic financial and non-financial sectors.

Furthermore, since CRA regulations may not align with domestic financial market regulations, it is important to review and map relevant guidelines for investors. However, the lack of technical and financial capacity in African countries poses a challenge, making it even more crucial for international organizations to actively monitor and become involved with African sovereign credit ratings.

In the immediate term, this could result in exacerbating macroeconomic conditions and slower growth across the African continent. It is likely there may be future increases in the costs of borrowing while volumes of financing attracted by the African sovereign borrowers may decline due to ongoing ratings downgrades. For instance, South Africa's 10-year bond yields rose by more than 100 basis points (from 8.24 per cent to 9.27 per cent) in eight months, while the US 10-year bond yield declined by roughly the same amount (from 1.83 per cent to 0.67 per cent).³²

These outcomes would not only complicate governments’ attempts to address the direct consequences of the pandemic but also hinder their ability to allocate additional funding to development initiatives, ultimately undermining long-term financing efforts towards structural economic transformation. Furthermore, if downgrades persist, Africa may experience a reversal in flows as capital starts to leave the weakest economies first. Consequently, there is an ongoing initiative for developing domestic, Africa-based credit rating agencies, a topic we will review in the next section.

4. African sovereign borrowers and the international credit ratings: a dynamic relationship

As early as 2008, UNCTAD foresaw a rising market power for the Big Three CRAs and suggested the establishment of new national agencies in the rated countries with proper competitive regulation.³³ This would address the problems of market power, transparency, conflict of interest, accountability, ratings objectivity, and accuracy that had already been identified in previous discussions. During the global financial crisis (GFC), credit ratings were found to have exacerbated the crisis according to a separate empirical paper.³⁴ Credit downgrades resulted in systemic market losses and liquidity dry outs, with additional evidence of pro-cyclicality. This highlights the potential impact of ratings changes on Africa's nascent capital markets, similar to sovereign markets. As a result, there has been

a push across Africa to create Africa-based CRAs.

Table 2 captures several active Africa-based CRAs, highlighting their year of establishment, geographic and sector coverage, and ownership structure. The oldest entities, Augusto & Co and Bloomfield Investment, remain fully Africa-structured and have broad pan-African coverage. While Africa-based rating agencies tend to cover a broader range of sectors in the private markets, they have limited coverage of sovereign debt.³⁵ Their ratings provide more detailed information on the rated debt issuer and are often higher than those of the Big Three.³⁶ It is worth noting that Table 2 also includes two Africa-based CRAs whose plans have been recently announced and discussed further below.

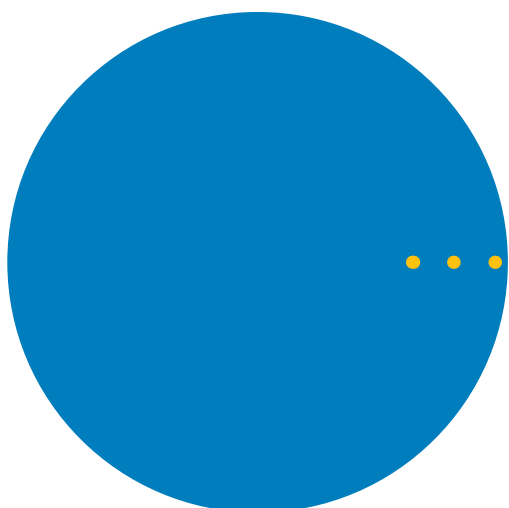


Table 2: Select Africa-based Credit Rating Agencies (CRA)

Credit Rating Agency	Year established	HQ location	Structure	Geographic coverage	Markets covered	Website
Agusto & Co.	1992	Kenya, Nigeria, Rwanda	Domestic (Africa) CRA	Africa (primary focus, Nigeria)	Banks; Corporate Bonds; Funds & Investment Managers; Corporates; Finance & Leasing; Insurance Companies; Microfinance Banks; Mortgage Institutions; Municipal Bonds; Securities & Investment Firms; Trustee Firms; Sovereigns & Supranationals	www.agusto.com
Beacon Ratings		Ghana	Domestic (Africa) CRA	pan-African	SMEs rating; Insurance Companies rating; Bank Loan rating; Fund Manager Quality rating; Corporate Entities rating; Financial Institutions rating; Commercial Paper rating; Microfinance Institutions rating	https://www.beaconratings.com/
Bloomfield Investment	2007	Cote D'Ivoire	Domestic (Africa) CRA	pan-African	Commercial and industrial companies; financial institutions, financial instruments, public companies and local and sovereign authorities	https://bloomfield-investment.com
GCR Ratings	1996	Mauritius [offices across Africa]	As of May 2022, Moody's holds 51% stake. Originally established as the African arm of the New York Stock Exchange-listed Duff & Phelps	pan-African	Wide range corporate sector across various industries.	https://gcratings.com/
Middle East Rating & Investors Service		Egypt	A joint venture between Moody's Investors Service, Finance & Banking Consultants International, and Egyptian Joint Stock Company	Egypt	Financial institutions; corporate; structured finance.	https://merisratings.com/

Credit Rating Agency	Year established	HQ location	Structure	Geographic coverage	Markets covered	Website
Announced to be established in 2022						
Sovereign Africa Ratings	Announced 2022	South Africa	Domestic (Africa) CRA	pan-African	Sovereign ratings only	https://www.fsca.co.za/News%20Documents/FSCA%20Press%20Release%20-%20FSCA%20grants%20Sovereign%20Africa%20Ratings%20(Pty)%20Ltd%20credit%20rating%20agency%20licence%2022%20March%202022.pdf
African Credit Rating Agency	Announced 2022	N/A	Domestic (Africa) CRA	pan-African	Wide range corporate sector across various industries.	https://concertopr.com/en/the-african-credit-rating-agency-acra-an-alternative-to-the-big-three/

Source: author's compilation

A recent analysis by Pillay and Sikochi (2022) profiles Global Credit Ratings Company Limited (GCR)—the largest Africa-based CRA and for a long time supported by the African Union and UN Economic Commission for Africa.³⁷ Earlier in 2022, Moody's acquired a majority stake (51 per cent) in GCR, establishing a more tangible footprint on the continent. Pillay and Sikochi view GCR as representative of the current activities of other Africa-based CRAs in terms of scope of coverage (pan-African) and product offerings.

Similar to other Africa-based CRAs (e.g., Agosto and Bloomfield), GCR leverages local expertise in deriving their ratings, which is a substantial advantage over the Big Three. The agency covers a larger subset of private sector entities across a larger group of countries when compared to S&P by Pillay and Sikochi (2022). Additionally, their results show that GCR's rating methodology is more nuanced towards national characteristics. However, the GCR dataset is missing timeseries across some indicators and entities, compounded by overlapping short- and long-term ratings. The authors also point to potential conflicts of interest, as GCR was previously owned by a private equity firm that may have produced overinflated ratings of some larger

firms prior to Moody's takeover. This adds another possible dimension of uncertainty in terms of special interests' influence and the threat of GCR, as an Africa-based CRA, reverting to a Big Three trend of negative perception bias against African countries.³⁸

This highlights the need for a clear and effective regulatory structure in the Africa-based CRA sector. While there is a lack of a continent-wide regulator, some regional centralized approaches are in effect (e.g., West African Monetary Union). Recent country-specific initiatives in Africa have motivated the creation and growth of national credit rating agencies, as outlined in the latest report by the African Peer Review Mechanism (APRM).³⁹

In this environment, the African Union (AU), an intergovernmental organization uniting 54 member states of Africa, established in 1999, has taken a leading role in scrutinizing the Big Three's rating actions and analyzing the socio-economic effects of sovereign ratings downgrades. In fact, at the beginning of 2022, Senegal's President Macky Sall, who is also the head of the AU, called for the creation of a pan-African credit rating agency.⁴⁰ The new agency is intended to withstand the current "arbitrary" ratings actions by the Big Three CRAs leading to

a rise in borrowing costs and decreasing access to international capital markets for Africa's public and private debt issuers. In addition to criticizing the macroeconomic and technical methodology, the AU argued that subjective factors such as culture and language seem to prevent the Big Three from providing an objective review of Africa's debtors.

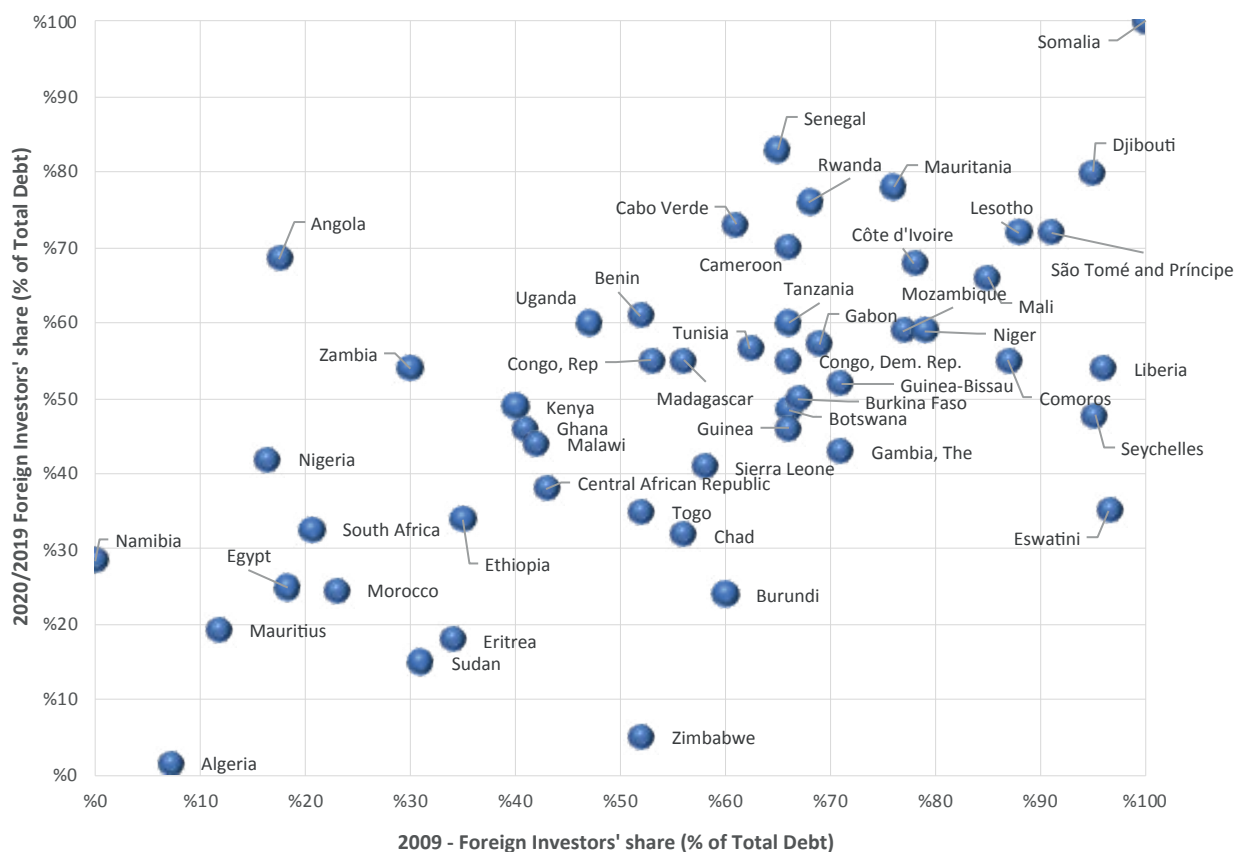
In response to the AU's announcement calling for the creation of a pan-African credit rating agency, Stanislas Zeze Bayard, the CEO of Bloomfield Investment, highlighted the perception of risk inherent in the Big Three CRAs' ratings of African debt.⁴¹ He argued that the Big Three do not take into account the structural weaknesses of African nations (and private sector corporate borrowers) that define the efforts needed to overcome the impacts of the COVID-19 pandemic. Bayard also pointed out the problem of foreign exchange constraints facing most African sovereigns, which refers to the inability of borrowing entities to generate sufficient revenues in foreign currencies needed for debt repayment. This developmental contrast between the dominant (international reserve) and peripheral (developing economy) currencies

is explored in a recent analysis focusing on a group of leaving emerging markets.⁴²

Hence, the push for a local pan-African agency that would strengthen local CRAs' capacity and rating operations in local currencies, if sustained and supported at the political level, could lead to the emergence of a new, robust pan-African institutional ratings network. This would then encourage more borrowers to rely on Africa-based ratings, contributing to the sector's competitive growth towards generating adequate and informed credit ratings with attention to local nuance.

It is worth noting that the growth in Africa-based CRAs' activities is also closely linked to the rise in local financial markets' development. This can be seen through various measures, including the World Bank's Global Findex database on financial inclusion and the digital economy. Another indicator that provides interesting insight is the IMF's analysis of bondholders and types of sovereign debt, as shown in Figure VI, which displays the holdings of government debt by investor base (foreign vs. domestic) across a broad range of African countries.⁴³

Figure VIII: Foreign investors' share of holdings of government debt in Africa



Source: author's compilation based on data from Arslanap and Tsuda (2014)

Note: the data shows a percentage share of foreign investors' holdings of debt issued by African countries as a percent of total debt.

There is a generally positive trend comparing 2009 to 2019 foreign investor holding shares. This suggests, with some exceptions (e.g., Angola) that foreign investors seem to have a geographic market preference, keeping their funds in the country they are already familiar with. Part of the explanation here may be due to the already mentioned Big Three's procyclical and "address" biases in rating activities. However, we leave this discussion outside of the scope of the present analysis noting that an introduction and acceptance of an Africa-based credit agency with wide regulatory and supervisory powers may shift the current ownership balance, allowing for increased debt and equity inflows to the continent. One step towards this is the recent announcement for creation of a Sovereign Africa Ratings (SAR) agency based in South Africa (see table 2).⁴⁴ The new agency would

service the entire African region investing in the local expertise in developing an alternative to the Big Three ratings.

While the Big Three CRAs currently play an important role in connecting African sovereign borrowers to international capital markets, getting sovereign credit ratings right is crucial. However, until a uniform African agency (as proposed by the African Union) gains the buy-in of all African nations and can systematically develop a consistent set of credit ratings, the volume and scale of the Big Three's operations will continue to supersede any local efforts in Africa. The Big Three's influence is also supported by regulatory requirements around the world and institutional investors' guidelines. A successful pan-African institutional ratings network could potentially rival the Big Three's influence in the long run.

5. A comparative analysis of sovereign debt ratings in Sub-Saharan African economies

The APRM reports that sovereign credit ratings across Africa continued to be downgraded in the first half of 2022, following earlier downgrades (as discussed in Section III). Five countries - Burkina Faso, Ghana, Mali, Namibia, and Tunisia - had their ratings negatively revised, while Angola and Democratic Republic of Congo (DRC) received upgrades to their ratings. Six countries--Côte d'Ivoire, Mozambique, Senegal, Seychelles, South Africa, and Uganda - had a positive change in their ratings outlooks, and only Egypt received a negative outlook.

As has been suggested above, credit rating agencies often use methodologies that go beyond macroeconomic and public finance fundamentals, particularly for emerging and developing economies. This can lead to frequent changes in ratings that are not necessarily based on an intended bias (although recent publications have raised concerns about bias), but rather reflect idiosyncratic assessments following the CRA's core methodology.⁴⁵ In more contrasting terms, this can be compared to Keynes's beauty contests, where opinions on best performing financial securities are not rational (or based on fundamentals) but instead idiosyncratic and based on subjective views on default probabilities.⁴⁶

To explore this further, we conducted a comparative rating analysis between the Big Three ratings and the Trading Economics (TE) algorithm. The TE database provides scores on a scale of 0 to 100, with 100 being the best investment-grade rating, and relies on a forward-looking macroeconomic model without any discretionary opinions found in the Big Three methodology. While TE scores do not necessarily represent the most accurate assessment of sovereign default risk, they are more understandable

and less prone to mis-estimation. Using an equivalence table (Table A2.1), we compared TE's model-based scores to those of the CRAs across all rated economies, including a subset for African economies, with ratings updated as of August 2022. Two data sources were used for alternative sovereign ratings: Trading Economics and CountryRisk.io.⁴⁷

In this analysis, we follow a methodology of assigning maximum and minimum boundary ranges as follows:

- ρ_{ij} : a credit rating for country i by CRA j
- TE_i : TE's algorithm's score for country i
- $max_{(\rho_j)}$: upper limit of score equivalent range for a credit rating by CRA j
- $min_{(\rho_j)}$: lower limit of score equivalent range for a credit rating by CRA j

For example, an S&P rating of AAA is equivalent to a TE score between 96 and 100. So $max(\rho_{S\&P})=100$ and $min(\rho_{S\&P})=96$. The idiosyncrasy ι of a credit rating for country i by agency j is then calculated as:

Underrating: if $max_{(\rho_j)} < TE_i$:

$$\iota_{ij} = max(\rho_{ij}) - TE_i \quad (1)$$

Overrating: if $min(\rho_{ij}) > TE_i$:

$$\iota_{ij} = min(\rho_{ij}) - TE_i \quad (2)$$

Within range: if $TE_{ij} \in [max(\rho_{ij}) - min(\rho_{ij})]$:

$$\iota_{ij} = 0 \quad (3)$$

For example, S&P's rating of AA+ has an equivalent range of TE's algorithm scores between 91 and 95. If S&P rates a country as AA+ but the TE algorithm gives it a score of 97, $\iota_{ij} = 95 - 97 = -2$, so the idiosyncrasy here leads to an under-rating. Likewise, a rating of AA+ against a score of 88 would be an overrating, with $\iota_{ij} = 91 - 88 = +3$.

We have updated the sample with more recent data and re-estimated for a larger group of rated African countries, while omitting the reporting of re-confirmation results for brevity (available upon request). Additionally, Table

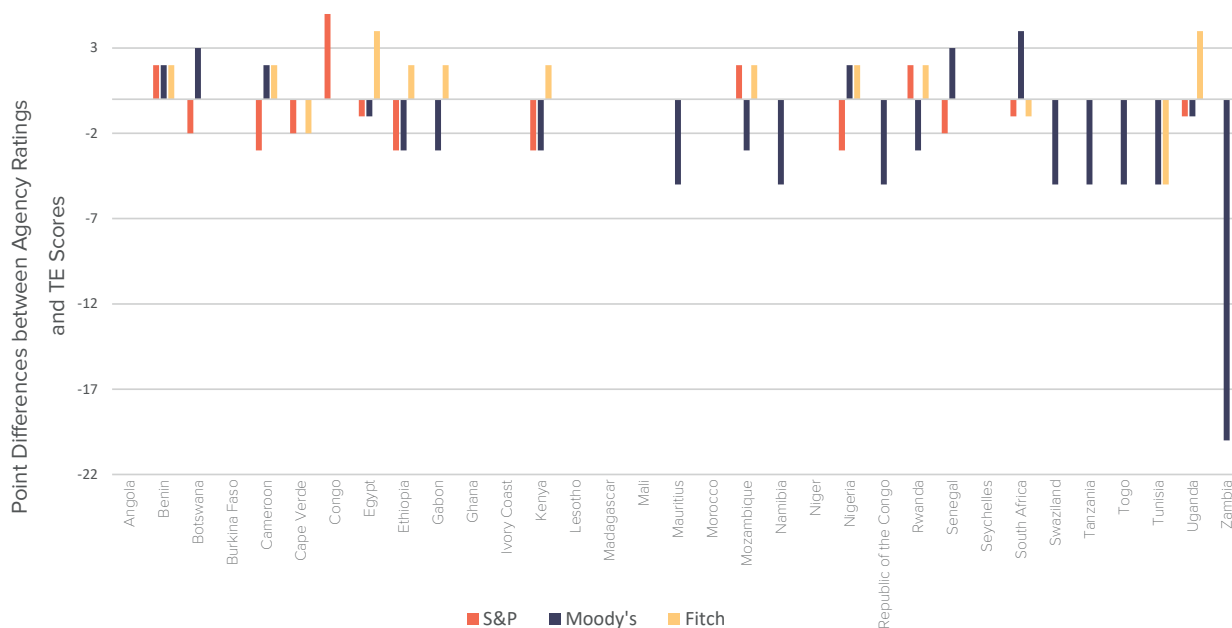
A2.1 provides a comparison of the scores of the Big Three CRAs with an alternative ranking provided by CountryRisk.io, which constructs its methodology to allow for consistent country default risk monitoring on a large set of countries. The methodology is transparent, model-driven based on publicly available data, adopting a longer horizon to avoid cyclicalities and short-term volatilities, and avoids analytical discretion or qualitative assessments.⁴⁸

According to the CountryRisk.io data, sovereign credit ratings as of December 31, 2021, there are some idiosyncrasies in the credit ratings of the Big Three and some deviations from TE results.

The CountryRisk ranking is based on a range from 0 to 21, where 21 is the lowest or "default" ranking. Each numerical value corresponds to a fixed alpha-numeric ranking of the Big Three, making mapping and comparison of alternative rankings more intuitive and immediate. Table A2.3 presents the results of this mapping.

Furthermore, Hill et al. (2010) rely on a 1 to 21 range only in reverse direction, where 21 is the highest or "prime" ranking. In line with Assa and Scarpini (2022), we adopt the scale of Hill et al. (2010) for all subsequent estimation.

Figure IX: Variance among Big Three CRAs and Trading Economics scores (points)



Source: author's estimates based on data from Trading Economics as of August 22, 2022

Note: based on rating scores mapping as described in Table A2.1; negative values represent under-rating by the Big Three CRAs; positive values are overshoot compared to Trading Economics mapping and implied scores; the 0 values reflect equal rating across all rating scales; while "na" scores indicate no available rating for the country; Madagascar and Niger are not rated by Trading Economics. The idiosyncratic case of Zambia reflects the country's 2020 default amid complex dependence on bilateral funding from China's public and private banks (see Setser, 2022 for additional insights and ramifications of Zambia's debt restructuring for a larger group of emerging markets).

Figure IX summarizes our analysis on over-/under-rating of African sovereigns. A positive variance between the ratings of the Big Three CRAs and those of Trading Economics indicates an over-rating (overshoot) by one or all agencies compared to TE scores, while a negative score indicates an under-rating of the

sovereign debt. However, some ratings are missing and are therefore not reported.

We provide the full findings in Annex I, with Table A1.2 comparing Trading Economics ratings to those from Big Three CRAs for Africa and Table A1.3 contrasting CountryRisk.io with Big Three CRAs. In both cases, there

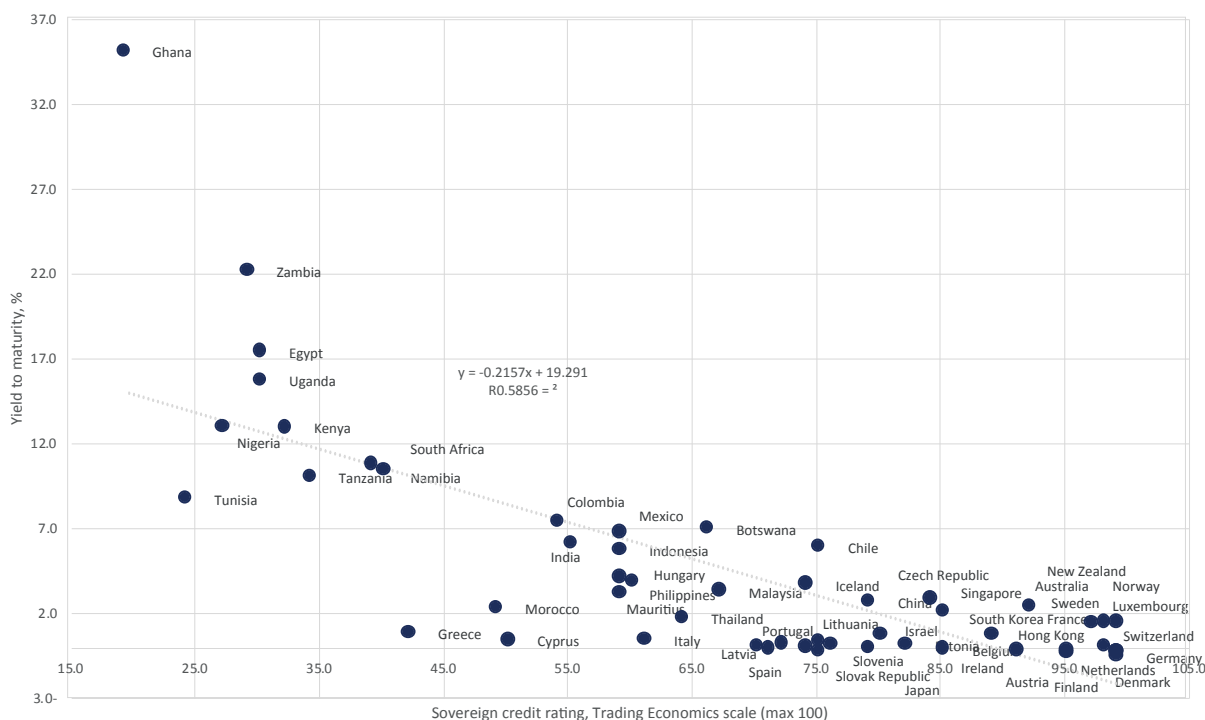
is evidence of inconsistent (idiosyncratic) rating across African sovereign borrowers. A complete list of credit rating mismatches for all rated countries is provided in a separate MS Excel table or available upon request. Some examples of our results are reported below.

Estimating the opportunity costs of rating idiosyncrasies for sovereign bonds in Africa

Equipped with the above results we proceed to attempt to estimate the potential financial impact of the identified idiosyncrasies. In this context we are interested in the relationship of the credit rating with the

average yield on sovereign bond (i) and the market value of debt outstanding (v). We expect the sovereign bonds yields to be inversely related, and volume outstanding to be positively related to credit ratings. The inverse relationship between the credit rating and yield is initially visible in Figure X as investors, though searching for a higher yield, also require a higher compensation for a riskier investment associated with the lower rating. As expected, most of the advanced economies, with minor exceptions (e.g., Greece), enjoy a higher credit rating on the Trading Economics scale and lower cost of borrowing reflected by their average yield to maturity in percentage terms.

Figure X: Yield to maturity and credit rating



Source: author's estimates based on data from S&P (2022) and TE (2022)

Next, we construct the first regression based on a sample of 53 countries, converting the ρ_γ (where γ is the country) from alpha-numeric to numeric scores following Hill *et al* (2010). As an extension to the original model, we update the average debt outstanding information (including the yield, rating, volume outstanding, etc.) for 13 African countries (due to data availability) found in the S&P

Sovereign Bond Index for each country's database.

For the y to ρ relationship we also account for the GNI per capita (PPP) in log form (g). For the v to ρ relationship we include a measure of the country's economy (s), measured as log of share of the country's GDP in PPP (all data are from WDI, 2022). The two principal equations then are:

$$i = \alpha + \beta_1 y_\gamma + \beta_2 \rho_\gamma + \varepsilon_\gamma \quad (1)$$

$$v = \alpha + \mu_1 s_\gamma + \mu_2 \rho_\gamma + \varepsilon_\gamma \quad (2)$$

It is important to note that our intent is not to develop a new comprehensive model for determining y or v . Instead, we aim to identify the general directional movement of the key variables in this model. We find all relationships to be statistically and economically significant, with expected signs. As a direct outcome of our regression analysis, we can explore some possible scenarios with implications for individual countries' y and v . The regression results for equations (1) and (2) are presented in Annex III, and with the derived coefficients, we can estimate the opportunity cost of credit rating idiosyncrasies for each country, including both interest rate savings and the potential additional financing that a country could attract if its sovereign rating improves

by one point. Table 3 contains a series of panels that provide useful information. For example, Table 3a reports countries in our sample rated as BBB+ by S&P, with Botswana being one of the three countries with that rating in Africa. S&P underrates Botswana compared to the TE score. On the TE scale, a rating of A- corresponds to a range of 65-70, which is higher than Botswana's S&P rating. In Table 3d, we see that Moody's rates Botswana as A3, which is technically within the TE range. However, when we compare Botswana to its peers in either group, we observe that it has a yield of 7 percent and a market value of debt outstanding that is only 9.72 percent of its GDP. This suggests that, without rating idiosyncrasies, Botswana, with its relatively high GNI per capita, could borrow at more competitive terms and in larger amounts. Tables 3b and 3c lead to similar conclusions for their respective country groups.

Table 3: Comparison of select African countries to "peers" in rating scores as reported by Moody's, S&P, and Trading Economics

a) Select countries rated BBB+ by S&P

Country	Income group	Yield To Maturity, %	S&P rating	TE score	Market value of debt outstanding as % of GDP	GNI per capita, \$
Botswana	Upper middle income	7.0	BBB+	67	9.72	17,100
Philippines	Lower middle income	3.9	BBB+	61	30.77	10,220
Thailand	Upper middle income	1.7	BBB+	65	37.63	18,510

b) Select countries rated BB+ by S&P

Country	Income group	Yield To Maturity, %	S&P rating	TE score	Market value of debt outstanding as % of GDP	GNI per capita, \$
Morocco	Lower middle income	2.3	BB+	50	57.85	7,700
Greece	High income	0.9	BB+	43	45.68	30,620
Colombia	Upper middle income	7.4	BB+	55	24.33	15,140

c) Select countries rated Baa3 by Moody's

Country	Income group	Yield To Maturity, %	S&P rating	TE score	Market value of debt outstanding as % of GDP	GNI per capita, \$
Mauritius	Upper middle income	3.2	Baa3	60	50.32	26,800
India	Lower middle income	6.1	Baa3	56	35.35	6,920
Italy	High income	0.5	Baa3	62	106.85	45,210

d) Select countries rated A3 by Moody's

Country	Income group	Yield To Maturity, %	S&P rating	TE score	Market value of debt outstanding as % of GDP	GNI per capita, \$
Botswana	Upper middle income	7.0	A3	67	9.72	17,100
Malaysia	Upper middle income	3.3	A3	68	32.22	28,780
Latvia	High income	0.2	A3	73	25.62	31,590

To estimate the potential impact of a rating change, we rely on the estimated fitted values from regressions (1) and (2), \hat{i} and \hat{v} and plug in both the observed and adjusted credit rating.

Take the case of Botswana as an example again. The fitted yields for Botswana are 5.8 per cent at BBB+ rating \hat{i}_0 and 5.2 per cent \hat{i}_1 if the rating is improved to A-. The per cent difference in yield turns out to be 11 per cent. Applying these savings to the observed 7 per cent yield at BBB+ rating, results in an idiosyncrasy-adjusted yield of 6.2 (\hat{i}_e). In a similar fashion the difference between the fitted volume of bonds at BBB+ and A- is an increase of 6.6 per cent, implying interest savings of \$72 million over the life of the bonds.

Given Botswana's currently outstanding market value of US\$1.6 billion, applying the derived value of the volume difference, would result in an additional US\$103 million in sovereign bonds. It is then not difficult to see the significance that credit rating adjustments have on the smaller economies' development strategies. Table 4 provides a similar estimation for all 13 African countries in the sample. Full sample estimation results are available upon request.

As a reminder, the number of African countries in our sample is limited by data availability in the primary source on sovereign bonds data, namely, S&P Bond Index dataset.

Table 4: Sovereign Bonds in Domestic Currencies: Observed and Estimated Yield, Volume and Opportunity Costs for 13 African Economies

Country	Observed Yield to Maturity	Par Weighted Coupon, %	Market Value Outstanding (millions of \$US)	Weighted Average Maturity, years	Adjusted Yield To Maturity	Interest savings (millions of \$US)	Opportunity Cost (millions of \$US)
Botswana	6.99	6.20	1,549	7.57	6.22	72	103
Egypt	17.41	13.63	139,597	2.52	16.41	2,757	9,264
Ghana	35.11	19.27	11,393	2.97	33.53	333	756
Kenya	12.93	12.26	32,827	9.83	12.31	1,128	2,178
Mauritius	3.17	3.75	7,163	5.36	2.83	117	475
Morocco	2.31	3.40	68,753	6.73	2.16	641	4,562
Namibia	10.77	9.13	3,013	9.49	10.14	116	200
Nigeria	12.97	13.21	40,600	11.37	12.36	1,454	2,694
South Africa	10.46	8.56	139,704	12.62	9.77	7,096	9,271
Tanzania	10.05	12.77	6,737	11.26	9.61	191	447
Tunisia	8.76	6.85	4,987	4.29	8.32	79	331
Uganda	15.72	15.18	6,527	7.73	15.05	193	433
Zambia	22.17	11.55	2,834	4.15	21.34	66	188
					Total	14,243	30,903

Source: author's estimate

Overall, **African countries could be drawing additional US\$ 31 billion in new financing funds** available to them in domestic-currency sovereign credit.

Furthermore, these 13 nations may be **saving nearly US\$ 14.2 billion in total interest costs.**

6. Eurobonds

One important aspect to consider when analyzing the African debt crisis is the impact of Eurobonds. Eurobonds are sovereign bonds issued by African nations in foreign currency, primarily in USD and EUR. Since 2006, the issuance of Eurobonds by African nations has rapidly increased, making it an important source of development financing for some countries. However, the accelerated issuance of foreign currency denominated debt has led to an increasing pace of sovereign credit rating assessments by the Big Three rating agencies. This trend has become more notable since the GFC. The deterioration of credit ratings for most

African countries is a major concern, as it raises serious questions about the cost of debt service.

A recent critique has highlighted potential conflicts of interest, lack of knowledge of country-specific factors, and unreliable methodology in credit rating evaluations.⁴⁹ These same factors influence perceptions of risk and low credit ratings for African Eurobonds, despite their high risk and high returns for investors.

While the investor pool for Eurobonds is more diverse and competitively determined,

resulting in higher returns for investors, this also translates to higher borrowing costs for the issuing sovereign borrower. Additionally, unlike domestically issued debt, Eurobonds come with the added obligation of repayment in an international reserve currency, rather than the country's national currency. It is important to note that Eurobonds do not come with preconditions like multilateral concessionary financing.⁵⁰ Given that credit ratings determine the cost, volume, and terms of Eurobond operations, there is an urgent need for a comprehensive approach to addressing any concerns about credit ratings, with a focus on the specific details of each country's situation. This approach must incorporate a reliable methodology that takes into account the unique circumstances of African nations.

To better understand the scale of the questions surrounding African Eurobonds, we have constructed a novel dataset using data from the Bloomberg Terminal. This dataset includes information on most Eurobonds issued by African states, including those currently outstanding with mixed maturities and issued at different times. The sample includes the earliest issued bond in the dataset, a 30-year bond by Tunisia from 1997 with a yield of 19.1 per cent and a US\$ 150 million amount issued. The most recent bonds, summarized in Table 6, were issued in the first half of 2022 by Angola, Nigeria, and South Africa (two bonds). The relatively high borrowing cost, as measured by the yield to maturity, is consistent across all African sovereigns.

Table 6: Africa's most recent Eurobond issuances as of 1H 2022

Country	Yid to Mty (Ask)	Issue Date	Amt Issued	Maturity	BBG Composite	Currency
Angola	10.60	4/14/22	1,750,000,000	4/14/32	B-	USD
Nigeria	12.65	3/24/22	1,250,000,000	3/24/29	B-	USD
South Africa	7.59	4/20/22	1,400,000,000	4/20/32	BB-	USD
South Africa	8.74	4/20/22	1,600,000,000	4/20/52	BB-	USD

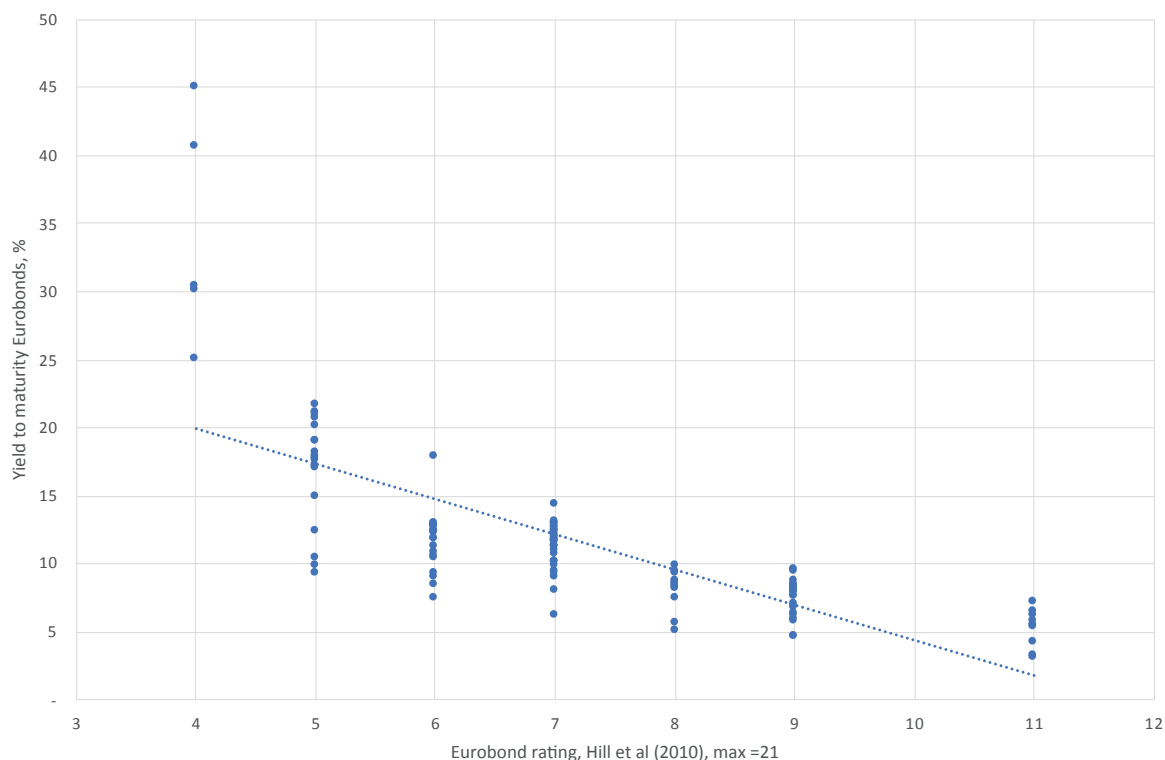
Source: Bloomberg Terminal

Note: only rated bonds are reported

In our analysis of the African Eurobond dataset, we focus on bonds that are reported with Bloomberg's credit ratings. Table 6 also includes a Bloomberg composite rating score, which is an equally weighted average of ratings from the Big Three credit rating agencies (and DBRS, where available). In cases where only two of the three ratings are available, Bloomberg's index is rounded down to the lower score. While informative for portfolio allocating investors, such a rating seems to overlook the nuances of a country's specific situation in favor of risk aversion.

The available data allows us to confirm an earlier finding on negative correlation between credit ratings and cost of borrowing. Figure IX plots data for all rated Eurobonds in our sample, showing that lower credit ratings correspond to higher borrowing costs for the borrowing governments. In fact, the plot resembles a textbook risk-return graph, where investors are compensated with incrementally higher returns for taking on additional risk. Yet, the question remains as to what this means in terms of sustaining the efforts of African nations to finance their development projects (or repay accumulated debt).

Figure XI: Eurobond rating and yield to maturity, Africa



Source: author's estimated based on data from Bloomberg terminal

Note: only Bloomberg rated bonds; credit rating follows Hill et al (2010) 0 - 21 scale

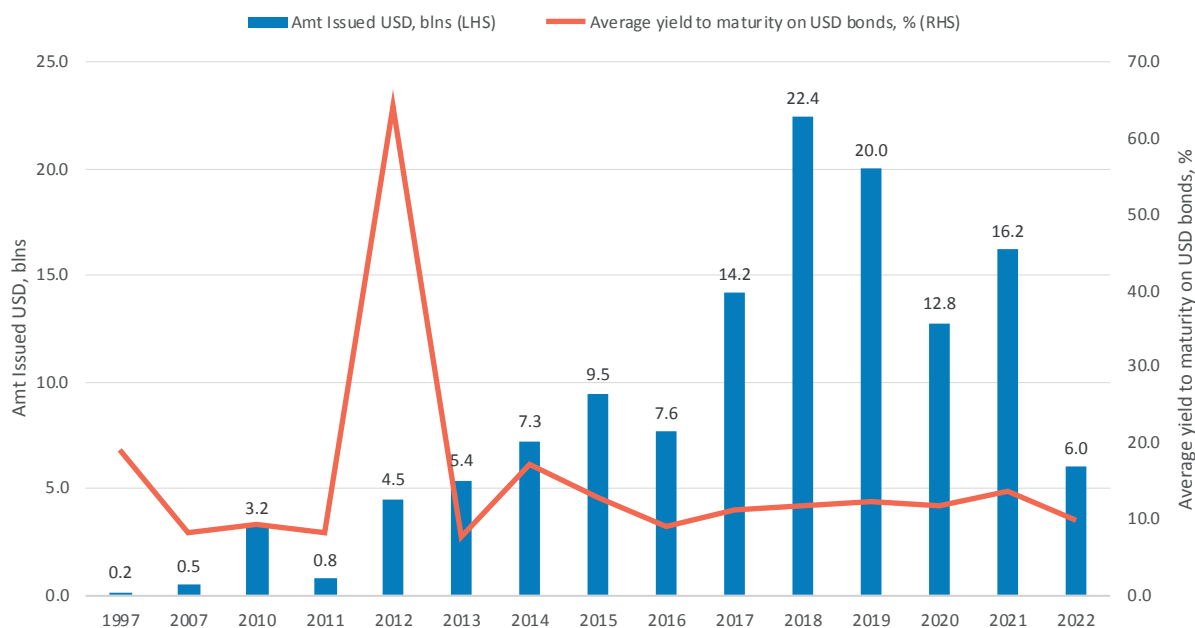
Next, Figures X through XIII provide a summary of the amounts issued and average yields (across all maturities) by year of first issuance and country for currently outstanding bonds. The panels are divided into two sets for USD and EUR-denominated bonds, as some countries issued in either or both currencies. There are several interesting observations that can be made from this data.

One notable trend is the increase in Eurobond issuance across Africa since the GFC, in both USD and EUR. This trend came to an abrupt stop in 2020 but resumed in the following years (our data ends with August 2022). This access to international capital markets is seen as a positive development for African nations, as it has provided them with additional hard currency proceeds to invest in domestic development projects. Moreover, the active presence of African sovereign borrowers in international markets has contributed to the increased weight of these countries in emerging markets bond portfolio indices. Recent years have seen a relatively strong track

record of bond repayments, with both small and large African economies accessing international capital markets.⁵¹

In the early 2010s, the yields on African nations' USD bonds experienced a significant spike in response to the US Federal Reserve's deliberations on monetary policy tightening. However, these yields have since declined, though they still remain remarkably higher than the returns on any comparable instruments across emerging markets and, particularly, in advanced economies (Figure X). One of the first studies conducted after the GFC found that external factors, such as investors' perceptions, speculative changes in prices of the country's main raw commodity exports, and the US Federal Reserve's monetary policy decisions, often dominated domestic factors in explaining the cost of borrowing for African sovereign borrowers.⁵² Subsequently, a later study examining more mature markets found that country-specific domestic factors were becoming increasingly important alongside global macroeconomic conditions, as African countries increased their borrowing.⁵³

Figure XII: Amount issued and average yield to maturity of USD denominated Eurobonds by African nations, by year of issuance (for bonds currently outstanding)

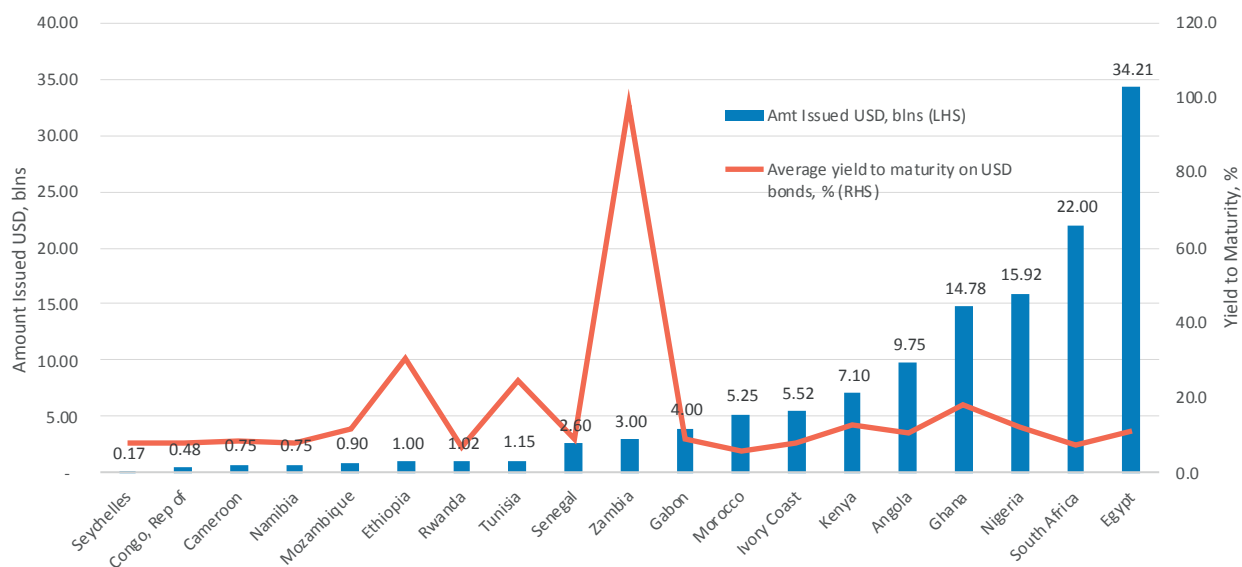


Source: author's estimated based on data from Bloomberg terminal
 Note: only Bloomberg rated bonds

In terms of initial amounts issued, Egypt is leading the continent with US\$34 billion and EUR4.7 billion in bonds denominated in the two currencies. Ivory Coast is leading the continent in the EUR issuance with EUR6.9 billion and US\$5.52 billion. When it comes to the cost of borrowing, Morocco has the lowest average at 5.8 per cent, while Zambia (98 per cent) and Ethiopia (30.5 per cent) have the highest averages for the US\$ priced bonds sub-group.

In the EUR sub-group, Morocco and South Africa share the lowest yields at 4.7 per cent, while Tunisia's yield is the highest at 36.9 per cent. Again, these are average estimates across all bond maturities in our sample and do not reflect any specific bond's characteristics. We also omit reporting the coupon rate for brevity, but all data are available upon request.

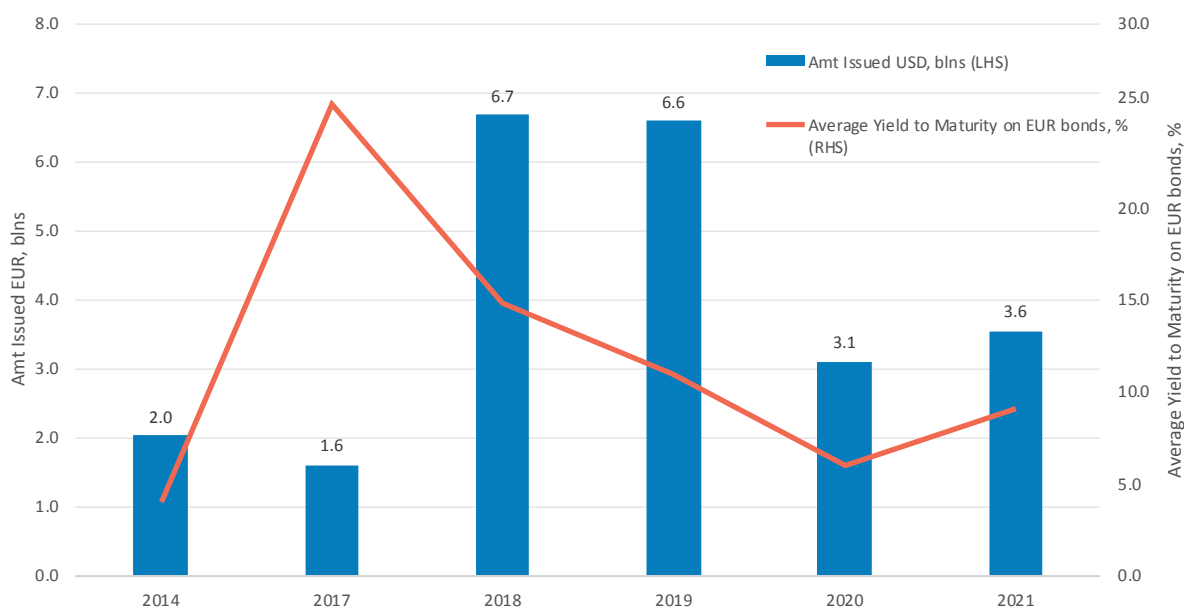
Figure XIII: Amount issued and average yield to maturity of USD denominated Eurobonds by African nations, by country (for bonds currently outstanding)



Source: author's estimated based on data from Bloomberg terminal

Note: only Bloomberg rated bonds

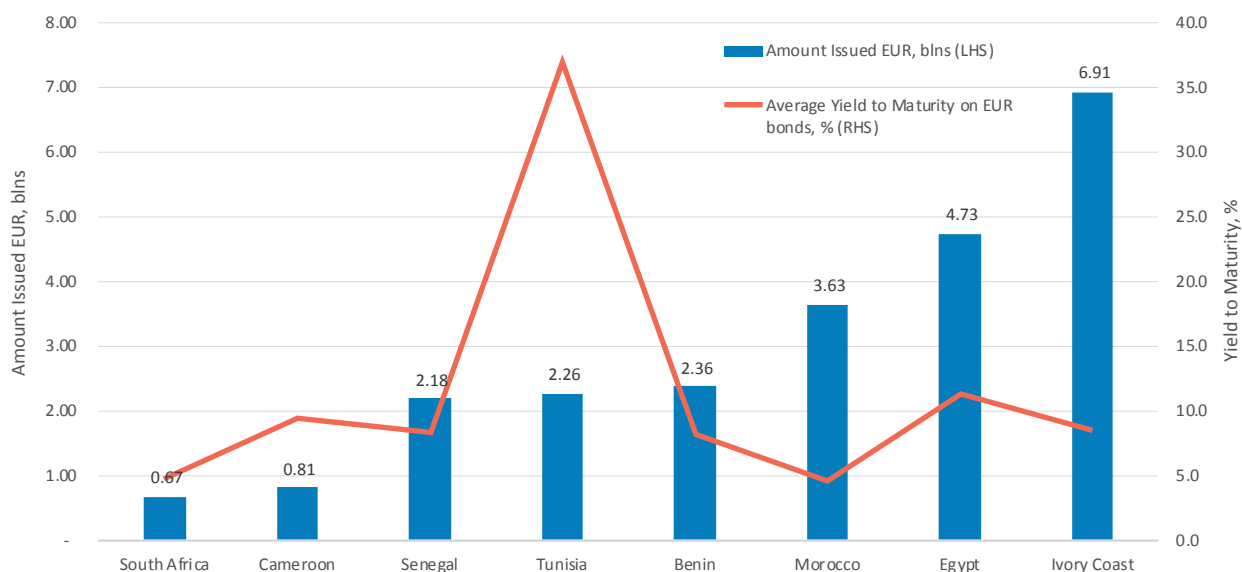
Figure XIV: Amount issued and average yield to maturity of EUR denominated Eurobonds by African nations, by year of issuance (for bonds currently outstanding)



Source: author's estimated based on data from Bloomberg terminal

Note: only Bloomberg rated bonds

Figure XV: Amount issued and average yield to maturity of EUR denominated Eurobonds by African nations, by country (for bonds currently outstanding)



Source: author's estimated based on data from Bloomberg terminal

Note: only Bloomberg rated bonds

Compared to EUR-denominated bonds, USD-denominated bonds carried higher yields and coupon payments across all maturity groups as shown in Table 6 and Table 7. One noteworthy takeaway from this data is the ability of largely developing countries to confidently access international capital markets with bonds representing all maturity ranges, generally adhering to the “longer maturity – higher required yield” expectation of developed bond markets. For

example, both Egypt and Ghana have issued 40-year Eurobonds in the past. However, in 2022, some countries such as Kenya and Ghana were unable to place new bonds in the international capital markets due to high expected yields from international investors, as found by the APRM. Furthermore, the yields for Ghana increased after Moody's downgraded the country's sovereign debt in February 2022.⁵⁴



Table 7: Average yield, coupon, and total amount issued for the EUR denominated bonds in Africa by maturity

Maturity	Average Yield to Maturity	Average Coupon Rate	Total Amount Issued, EUR blns
under 5 years	40.7	6.8	0.57
6 - 10 years	12.4	4.4	8.81
11 - 20 years	8.6	4.9	11.53
21 - 30 years	9.6	6.8	2.30
31 + years	9.5	6.9	0.36
EUR Totals	11.5	5.0	23.56

Source: author's estimated based on data from Bloomberg terminal
 Note: only Bloomberg rated bonds

Table 8: Average yield, coupon, and total amount issued for the USD denominated bonds in Africa by maturity

Maturity	Average Yield to Maturity	Average Coupon Rate	Total Amount Issued, USD blns
under 5 years	11.8	4.6	6.08
6 - 10 years	17.5	6.7	49.24
11 - 20 years	11.8	7.0	37.92
21 - 30 years	10.8	7.2	31.60
31 + years	14.8	8.5	5.50
USD Totals	13.9	6.8	130.34

Source: author's estimated based on data from Bloomberg terminal
 Note: only Bloomberg rated bonds

African governments have arguably been accumulating Eurobond—linked debt at increasing levels.⁵⁵ Much of the new borrowing is of short- to medium-term maturity. Despite being earmarked for long-term infrastructure projects, debt servicing requires a larger share of government revenues, as discussed in Section II above. The author argues that much of the new debt has been used for bond refinancing and budget deficit needs, rather than the intended developmental projects. One reason for the “bond spree” is the relative ease of issuing such instruments by the sovereign governments. The bonds lack the conditionalities of multilateral agencies and require minimal reporting on the specific use of proceeds.

Incidentally, this is where a diaspora bond instrument may become relevant.⁵⁶ Similar to a conventional Eurobond, a diaspora bond is marketed to the country’s diaspora living abroad. The key driving factor is the altruism of a diaspora investor, willing to invest in the development of their ancestral country while earning a lower than market return (known as a ‘patriotic discount’) and the state borrowing at significantly lower costs. Such bonds presuppose active and transparent reporting by governments to bondholders on the use of funds intended for longer-term developmental projects.

While the implementation of a diaspora bond program may seem straightforward, it has proven to be more complex than expected. Despite several attempts (most notably,

India), including by African countries such as Ethiopia, Kenya, and Nigeria, the only sustainable diaspora bond implementation program is Israel's Israel Bonds initiative, operated by the Development Corporation for Israel.⁵⁷ According to Gevorkyan, the launch of the program in the 1950s marked Israel's entry into the international capital markets during a time when such access was limited to only a few industrialized nations. Since then, the country has been able to borrow at below-market costs, in foreign currency, and implement a range of critical infrastructure and development projects supporting the economy. In more contemporary terms, additional flexibility to the operations for bondholders, such as opportunities to gift or transfer bonds to individuals or educational organizations and other options, have further strengthened sophistication and added positive socio-economic impact of the instrument.

The success of the Israel Bonds program is due in part to the appeal it has to the diaspora, but this is only one component. In addition to the reliance on the global Jewish communities, Israel's diaspora bonds have also appealed to friends of Israel and the country has maintained a stellar repayment track record with no defaults. On the financial side, partial guarantees from the US Treasury have provided additional reassurance to global investors about the lower risk of the Israel Bonds. Ultimately, however, the success of the program is due to the transparency of the state on how the funds are spent. Full accountability is offered not only to the primary bondholders but also to the general public, supplemented by a robust and engaging outreach campaign. It is precisely this combination of structural, accountability, and diaspora-engagement factors that has contributed to the success of the Israel Bond programs, earning the country access to additional comparatively lower cost funding.

Can a similar success be replicated in the

case of Africa? Launching a diaspora bond initiative at a time when there is a lack of transparency in Africa's Eurobonds program could result in heightened risk perception by investors and further credit rating downgrading for the issuing countries. This raises a broader question about the impact of Eurobond credit ratings on the issuing African country's economy and broadly development prospects. A recent analysis compared macroeconomic outcomes to a synthetic counterfactual of no new Eurobond issuance, finding that new debt issuance has contributed to approximately 10 per cent rise above the business-as-usual scenario in GDP per capita across Africa. However, the downside of new Eurobond issuance is the heightened risk of debt sustainability in the longer term, requiring proactive debt management.⁵⁸

Sovereign downgrades have been a recurring issue for Egypt, Kenya, Namibia, South Africa, and Zambia over the past decade⁵⁹, with a persistent pattern of downward revisions due to "unsolicited credit ratings" assignments, i.e., those given without the issuer's request. Moody's appears to have provided the greatest number of such unsolicited revisions, mainly downgrades, which have been and continue to be contested by the affected governments (e.g., the case of Ghana—a statement in the epigraph to this paper). As has been mentioned earlier, there are at minimum two immediate concerns emanating from credit ratings downgrades: the rising cost of borrowing (yield) for the sovereign borrower and a marked decrease in volume of new funds raised in the international capital markets. In fact, depending on the degree of a downgrade (e.g., from investment to non-investment grade), the country may lose access to the international capital markets entirely due to the perceived default risk, which a credit rating is supposed to convey.

On that point, other researchers argue

that credit ratings adjustments have little effect on Africa's new Eurobond yields.⁶⁰ The authors find that changes in ratings are largely anticipated due to the pre-announcement practice followed by CRAs since 2014. As such, the period between pre-announcement and actual credit rating change provides sufficient time for the yield to adjust, reflecting the market's expectations. Hence, the impact on yields from credit rating changes is predictable and modest, with two exceptions being the 2017 Namibia and South Africa downgrades to non-investment grade. Removing the regulatory calendar may help capture the significant impact of credit rating actions on Africa's Eurobond yields more clearly and reintroduce the unanticipated element to the CRAs' ratings releases.

Finally, another earlier analysis concluded that credit rating downgrades, and a practice similar to what we have described in this paper as "idiosyncratic" ratings change, have direct macroeconomic impacts for African sovereign borrowers with subsequent economic development effects in the bond issuing country.⁶¹ Leveraging a decade of strong economic growth and benign global capital markets conditions, both relatively advanced and less developed African nations have actively tapped the Eurobond market.

Despite this environment, the authors found that African countries are paying a premium in borrowing costs of 2.9 percentage points more than what the macroeconomic fundamentals and current credit ratings might suggest. The authors argue that higher coupon payments can only be explained by a penalty on the borrowing nations resulting from investor's biased perception (consistent with studies mentioned in the earlier sections of this report). They estimated the net present value of such bias at US\$2.2 billion of coupon payments. The reason why the authors conclude that credit ratings do not help explain the bias is due to the majority of the countries falling in

a similar credit range (around B, as reported in Figure IX earlier).

Estimating the opportunity costs of idiosyncrasies for Africa's Eurobonds

To assess the potential interest cost savings and opportunity costs in Africa's Eurobond issuances, we will be using the methodology outlined in Section V. We will ensure consistency in our references to all variables. Our primary input data is from a download of information on 99 emerging markets' government bond issuances denominated in USD and EUR. This data was obtained from Bloomberg Terminal and is current as of November 14, 2022, at the level of individual securities.

As described above, Bloomberg offers its own average credit rating based on the rating from the Big Three CRAs. However, in order to prepare the data for analysis, we had to exclude some securities and country data due to missing information. This could include individual securities without a credit rating or other important data.

The final dataset used in the estimation includes information on Eurobonds for 79 emerging market economies. Within this, we focus on 16 African nations that have Eurobonds outstanding and are rated by either all or at least one BigThree CRA (or Bloomberg) to provide a basis for further analysis. As a first step, we convert all bonds' outstanding amounts to USD using current exchange rates, as some countries have issued bonds in both USD and EUR (refer to Figures IX-XIII above). We then add the country's GDP in PPP data (both total and per capita) to the dataset and calculate the economy's share of the world economy. We average information on individual securities to derive country-level data. Finally, we add a credit rating reference based on Hill et al. (2010), consistent with the earlier exercise and as per the mapping in Table A2-1.

Using this final dataset, we estimate

equations (1) and (2) as described earlier, with OLS regression. The macroeconomic data allows us to add another variable, to control for the effect of large economies (by adding a dummy variable for high or upper middle-income economy based on the WB country classification). As might be anticipated, the relationship is non-linear for several reasons. Available research looks into a host of external and internal factors when it comes to the determination of the Eurobonds' yields and debt volumes outstanding.⁶² Here, we are interested in the directional signs in the relationships

of macroeconomic variables and credit ratings with the yield to maturity (i) and debt volumes (v). The results are reported in the Annex IV tables A4-1 and A4-2.

Using the fitted and one-level-adjusted credit ratings, we can estimate the opportunity cost and interest savings for African economies' Eurobonds. Table 8 shows the results of this analysis, which involves comparing the yields and debt volumes before and after adjusting the credit rating upward by one level.

Table 9: Eurobonds: Observed and Estimated Yield, Volume and Opportunity Costs for 16 African Economies

Country	Observed Yield to Maturity	Par Weighted Coupon, %	Market Value Outstanding (millions of \$US)	Weighted Average Maturity, years	Adjusted Yield To Maturity	Interest savings (millions of \$US)	Opportunity Cost (millions of \$US)
Angola	9.95	8.75	9,114	16.58	9.26	538	710
Benin	8.56	5.35	2,290	15.12	7.92	141	178
Cameroon	10.56	6.50	995	10.84	9.86	50	77
Cote d'Ivoire	8.16	5.84	10,089	16.67	7.47	706	786
Egypt, Arab Rep.	11.81	6.04	54,568	13.61	10.88	4,017	4,250
Ethiopia	35.58	6.63	1,000	10.00	33.56	75	78
Gabon	9.31	6.82	2,573	10.42	8.67	117	200
Ghana	33.47	7.85	14,149	15.73	31.57	929	1,102
Kenya	10.53	7.25	7,100	13.49	9.77	428	553
Morocco	5.37	3.19	9,040	14.77	4.79	608	704
Namibia	8.17	5.25	750	10.00	7.48	38	58
Nigeria	11.56	7.49	15,995	15.54	10.77	1,016	1,246
Rwanda	10.17	5.60	2,042	10.00	9.43	106	159
Senegal	8.70	5.74	13,600	17.17	8.04	897	1,059
South Africa	6.99	5.43	45,401	19.00	6.33	3,466	3,536
Tunisia	21.21	6.17	10,410	8.22	19.87	697	811
					Total	13,829	15,508

Source: author's estimate

To illustrate, consider the case of Angola. Based on the analysis, a one-level improvement in credit rating is associated

with an increase in borrowing capacity by an additional US\$710 million. In addition, the borrowing terms improve, with the estimated

average yield to maturity decreasing from 10 per cent to 9.3 per cent. This change is expected to result in total interest cost savings of US\$538 million for Angola.

Table 10 summarizes the results for the 16 African countries for which the opportunity costs estimates were possible (consistent with the example of Angola). These estimates suggest that African nations could attract an additional US\$15.5 billion in new funding from international investors through a one-level credit rating improvement. Additionally, these 16 economies could potentially save nearly US\$46 billion in total interest costs.

Combining the numbers from both tables, the full cost of credit rating idiosyncrasies in Africa is estimated to be US\$74.5 billion in excess interest and foregone funding for

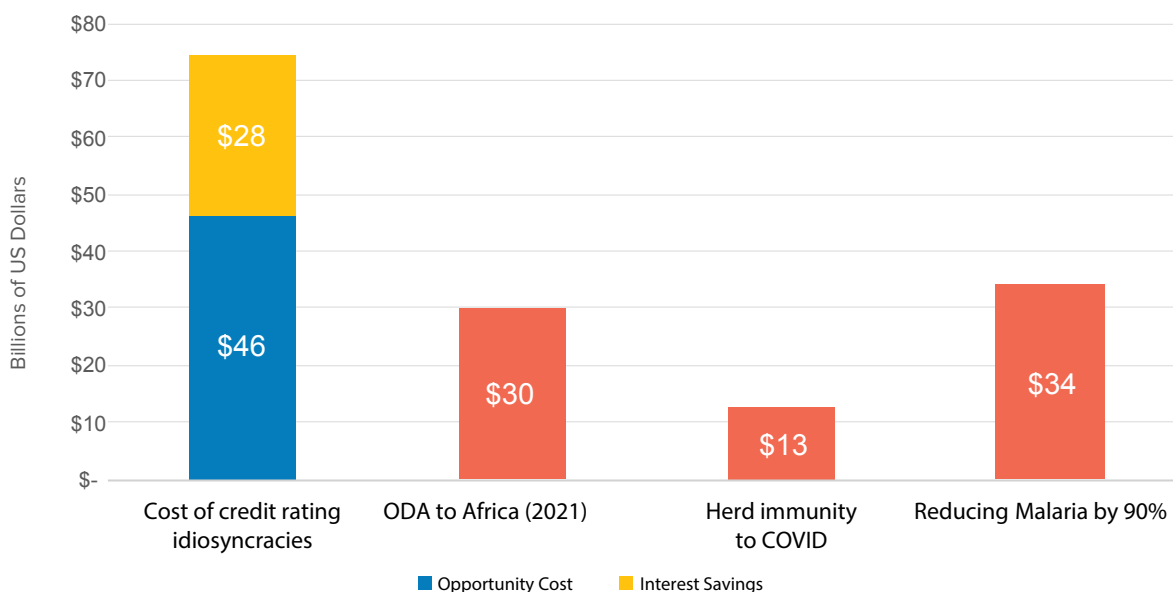
the countries. This amount is nearly 12% per cent more than all of Africa's net official development assistance in 2020.

Development, however, cannot be solely measured in dollars and euros. It is important to contextualize the development costs of observed idiosyncrasies in relation to Africa's development financing gaps.

The estimated cost US\$74.5 billion is:

- 6 times the cost of vaccinating 70 per cent of Africans (US\$12.5 billion) to achieve herd immunity to COVID-19²
- 80% of Africa's annual infrastructure investment needs (estimated at \$93 billion)³. More than twice the cost of reducing malaria by 90 per cent (US\$34 billion)⁴

Figure 5: Development Costs of Credit Ratings Idiosyncrasies

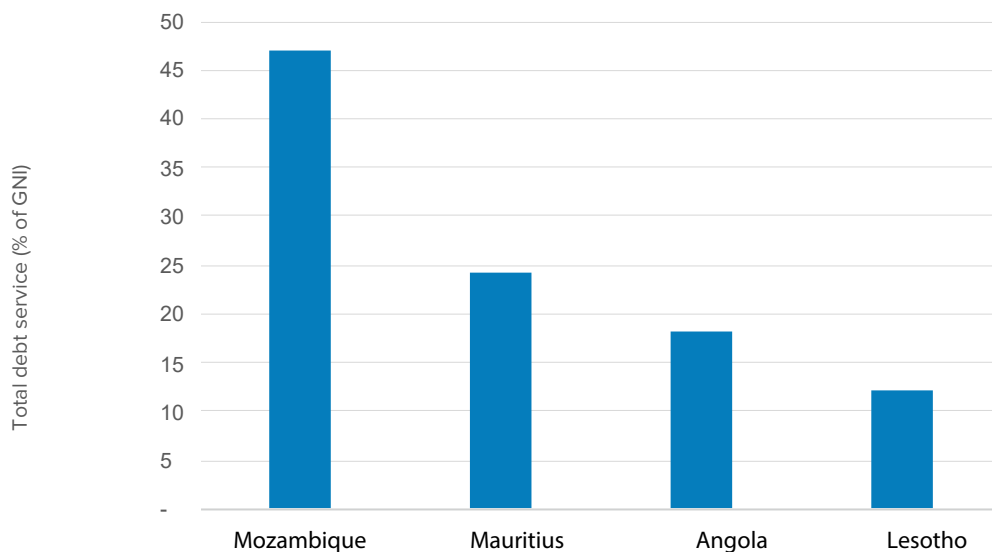


Reducing interest rates paid by African countries on both domestic and foreign debt could greatly decrease the debt-service burden they face. This, in turn, would enable them to repay the principal faster

and free up funds for more investments in development. This is especially important for African countries that allocate significant proportions of their national income to debt service, as illustrated in Figure 6.

2. <https://blogs.worldbank.org/health/calculating-sub-saharan-africas-covid-vaccination-financing-gap>
 3. <https://documents1.worldbank.org/curated/en/744701582827333101/pdf/Understanding-the-Cost-of-Achieving-the-Sustainable-Development-Goals.pdf> Odusola, Weyinmi Omamuli, and Ben Slay.
 4. <https://www.who.int/news/item/23-08-2019-malaria-eradication#:~:text=The%20%2434%20billion%20is%20the,need%20to%20be%20by%202030>

Figure 6: Current Debt Service for Selected African Countries



7. Policy recommendations for different stakeholders

The preceding analysis has important policy implications for all stakeholders in the credit ratings policy and practice space in Africa, particularly in the context of sustainable development financing. Given the disproportionate impact of even minor credit rating adjustments on macroeconomic dynamics, sustainable economic development goals must be prioritized.

As might be expected, there is a well-established debate on generating reasonable alternatives to the current credit ratings oligopolistic market power in Africa. In addition to academic and policy work, the APRM and the African Union have been active in monitoring the failings of the CRA and encouraging policy action on revising the current system.

A long-term strategy with far-reaching consequences for national economies may be the development of some domestic financial sovereignty. This involves strategically deploying public investment towards productive capacity to expand countries' policy space, reduce external indebtedness, and allocate more resources

towards human development for the SDGs. However, there are two important factors to consider. First, achieving this objective will require sustained and concerted economic and public policy efforts spanning a decade or more. Second, while reducing excessive indebtedness is desirable, completely eradicating sovereign debt as an instrument of fiscal-development policy and a benchmark for the local capital market may turn out to be a limitation. From the global capital markets (investor's) point of view, advanced and emerging economies, sovereign debt serves as a necessary benchmark of risk free and/or reference asset in access to the country's private capital markets.⁶³

Another policy option is to develop a more comprehensive regulatory framework that fosters a structured and formal dialogue between the CRAs and debt-issuing governments. There are also calls to increase diversity among country analysts at the major CRAs to address the potential influence of home bias, discussed above. Furthermore, some experts have proposed longer-term ratings, including clearly defined long-term ratings or not rating bonds over a certain

maturity, to address the earlier mentioned problems of procyclicality, e.g., worsening ratings in the declining phase of a business cycle and correcting global investors' short-term bias (insights shared by a wide range of researchers and policymakers across both Africa-focused and sovereign ratings related studies).⁶⁴

The consensus among experts is that alternative operational models for credit rating services require regulatory reform at both the international and African continental levels. This could be achieved through the direct involvement of the African Union (AU), which would work with individual countries to develop a common regulatory framework and assessment criteria. The aim is to promote more transparent and direct communication among all stakeholders, within the specific macroeconomic context of each African nation. In addition, there are proposals to engage supranational bodies such as the United Nations, its agencies, the G-20, and the IMF. The goal here would be to change the established structure and promote a more independent public oversight of sovereign credit ratings. This approach seeks to expand the use of alternative, model-based assessments of a country's solvency, taking into account longer-term macroeconomic development priorities.

Some of the initial additional suggestions on improving the current system of credit ratings can be summarized in the following list:

1. Establishing a multilateral credit rating agency

There are potential benefits to establishing a multilateral credit agency that would be accountable to supranational organizations such as the United Nations, in addressing the immediate shortcomings and market failures of the present oligopolistic framework with the dominance of the Big Three. An independent agency would act as a more transparent resource, relying less

on discretionary and idiosyncratic actions and instead implementing a consistent and publicly documented methodology and model-driven assessments of countries' debt, with attention to regional nuances and each national economy's macroeconomic priorities. However, there are concerns regarding the implementation of such a profound structural shift in what is seen as a generally private market space, as well as a lack of support for the initiative outside of developing countries' groups, and potential conflicts of interest. The latter hazard would arise from the perceived inefficiency of decision-making in a large multilateral agency, as opposed to private sector efficiency, and uncertainty about the degree of trust such an agency would enjoy in private international capital markets.

2. Implementing a regional pan-African rating agency

Another proposal to address the shortcomings of the Big Three CRA's in Africa is the establishment of a pan-African rating agency, which would require the involvement of the African Union working closely with national monitoring and regulatory agencies, as well as ministries of economics and finance. Currently, efforts are already underway to implement such a strategy. To ensure its success, it is crucial to maintain open lines of communication and regulatory consistency among the involved national stakeholders, as well as engage with the rating agencies currently operating in Africa, as previously discussed. This latter group could potentially provide institutional and practical capacity for a more objective credit market assessment of Africa's sovereigns.

3. Strengthen the capacity of and promote a more efficient marketplace among already existing Africa-based CRAs

The existing Africa-based CRAs that primarily serve the local market have significant untapped potential. These agencies possess unique analytical capabilities specific to the countries and

markets they cover, in addition to their general knowledge about the continent. However, as discussed in this report, these agencies are currently an undiscovered asset for international investors seeking informed and nuanced knowledge of the market and debt sustainability assessments. To address this issue, UNDESA, APRM, the African Union, and other international actors could consider providing financial and regulatory assistance to help local CRAs strengthen and grow their technical and institutional capacity. This would contribute to a more balanced market space in the African credit ratings field and help create more inclusive and competitive international capital markets. The competitive advantage of Africa-based CRAs stems from their better understanding of the regional macroeconomic structures and coverage of sectors that are not included in the assessments of the Big Three.

4. Instituting greater transparency of the Big Three methodology

Greater transparency is long overdue in the operations of the Big Three CRAs, as this is a necessary first step to modernizing and improving the entire system with far-reaching positive spillovers into the international capital markets. This transparency would also provide more objective assessments of macroeconomic positions for African borrowers. While the Big Three have made some attempts to provide general information on their credit rating methodologies, much remains unclear about the underlying assumptions. This report suggests that there is a significant amount of idiosyncratic decision-making, either by individual analysts or as a general trend among certain country groups. This lack of transparency may disconnect the ratings from the real events on the ground, which the Africa-based CRAs may have a better view of. Long-term ratings using different risk scenarios have been proposed to help curb the CRA's home bias and pro-cyclical ratings, which is related to this issue.

5. Adoption and standardization (for financial markets participants) of alternative ratings

This proposal (#5) calls for a collaborative effort between local and multinational actors, including leading international investor groups and the Big Three CRAs, to conduct ongoing peer reviews of existing credit ratings systems, methodologies, and relevance across different country groups. The aim is to develop a more country-context connected approach that prioritizes medium-term development over formal compliance with threshold fiscal indicators, and supports any necessary debt restructuring. For African nations, this would be an especially important step, requiring the Big Three CRAs to connect with a future pan-African agency and develop pragmatic communication channels with each nation's relevant government agencies, perhaps with mediation by the African Union. It is crucial to shift the established mechanistic thinking of credit ratings and move towards a more comprehensive approach that takes into account each country's unique circumstances. Such an approach would avoid automatically downgrading a country's rating in response to an appeal for debt relief assistance administered during a crisis, such as the COVID-19 pandemic.

6. Renewed focus on ESG and SDG priorities in each economy

Prioritizing medium to long-term macroeconomic development goals necessarily entails prioritizing the ESG and SDG targets as objective measures of a national economy's macroeconomic and financial position. Likewise, considering carbon offsets as collateralized assets could improve ratings in some countries. A more transparent and active inclusion of these priorities in the existing and new model-driven credit rating frameworks can help achieve a more nuanced approach that distinguishes between the long-term needs of a developing economy and the short-term business cycle fluctuations of advanced economies. This proposal can

address problems such as home bias and procyclicality while also capturing the macroeconomic benefits of implementing new technologies and environmental efficiencies that lead to sector growth and more sustainable development. To implement this proposal, it will be necessary to engage with local and international stakeholders, including the Big Three CRAs, and encourage their commitment to incorporating ESG and SDG targets into their rating methodologies.

It is crucial to recognize the significant impact that the above proposals would have on the global sovereign ratings system. By promoting macroeconomic fairness for African sovereign borrowers, these alternatives could lead to a profound structural reform of the contemporary system of sovereign ratings. As a result, emerging markets and developing nations worldwide could benefit from joint policy initiatives and further discussions.

8. Conclusion

This report highlights the significance of the idiosyncrasies in sovereign debt credit ratings across African economies to a broader group of developing, low-income, and emerging markets. While the viability of a multilateral credit rating agency as a substitute to the Big Three CRAs in Africa's oligopolistic environment remains uncertain, this report supports recent calls for urgent change to introduce greater transparency and consider more country-context sensitive methodology in the credit rating system.

A more inclusive and responsible credit rating system would account for the

Implementing these proposals, either partially or in full, would require significant changes to the institutional and operational infrastructure of international capital markets, and the long-term impact would extend beyond the CRAs to impact all types of financial institutions in the market. It would also require the involvement of leading national agencies across developed markets, such as the U.S. Securities and Exchange Commission.

From the perspective of national and private borrowers in Africa, the first step would be to consolidate local capacity, as discussed earlier. This would involve continuing the discussions around the proposed reforms to the ratings system, as well as consistently accumulating country-specific data and counterfactuals to provide a more objective macroeconomic situation than may be captured by idiosyncratic credit ratings. These measures would foster a more stable environment for sustainable development in Africa.

difference in long-term development finance in a country lacking financial depth compared to more advanced economies with robust capital markets. The cornerstone of any critical review effort of the present sovereign credit ratings should be a country's medium to long-term economic development strategy, prioritizing sustainable development over short-term fiscal prudence.

Despite the proliferation of financial modes of global interconnection, conventional economic development priorities remain relevant and essential in Africa and other developing regions across the world.

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Annex I - Data Tables

Table A1.1 Sovereign debt credit ratings mapping

S&P	Moody's	Fitch	DBRS	Description	TE	Country Risk.io	Hill et al
AAA	Aaa	AAA	AAA	Prime	100	1	21
AA+	Aa1	AA+	AA (high)	High grade	95	2	20
AA	Aa2	AA	AA	High grade	90	3	19
AA-	Aa3	AA-	AA (low)	High grade	85	4	18
A+	A1	A+	A (high)	Upper medium grade	80	5	17
A	A2	A	A	Upper medium grade	75	6	16
A-	A3	A-	A (low)	Upper medium grade	70	7	15
BBB+	Baa1	BBB+	BBB (high)	Lower medium grade	65	8	14
BBB	Baa2	BBB	BBB	Lower medium grade	60	9	13
BBB-	Baa3	BBB-	BBB (low)	Lower medium grade	55	10	12
BB+	Ba1	BB+	BB (high)	Non-investment grade speculative	50	11	11
BB	Ba2	BB	BB	Non-investment grade speculative	45	12	10
BB-	Ba3	BB-	BB (low)	Non-investment grade speculative	40	13	9
B+	B1	B+	B (high)	Highly speculative	35	14	8
B	B2	B	B	Highly speculative	30	15	7
B-	B3	B-	B (low)	Highly speculative	25	16	6
CCC+	Caa1	CCC	CCC (high)	Substantial risks	20	17	5
CCC	Caa2	CCC	Extremely speculative	Substantial risks	15	18	4
CCC-	Caa3	CCC (low)	In default with little prospect for recovery	Substantial risks	10	19	3
CC	Ca	CC		Substantial risks	10	20	2
C	C	C		Substantial risks	5	20	1
D	/	DDD		In default	0	21	0
DD	D			In default	/		-1
D				In default			-2

Source: CountryRisk.io; Trading Economics; Assa and Scarpini (2022).

Table A1.2 Trading Economics and Big Three Ratings Comparison for Africa

Country	S&P	Moody's	Fitch
Angola	0	0	0
Benin	2	2	2
Botswana	-2	3	na
Burkina Faso	0	na	na
Cameroon	-3	2	2
Cape Verde	-2	na	-2
Congo	5	0	na
Egypt	-1	-1	4
Ethiopia	-3	-3	2
Gabon	na	-3	2
Ghana	0	0	0
Ivory Coast	0	0	0
Kenya	-3	-3	2
Lesotho	na	na	0
Madagascar	na	na	na
Mali	na	0	na
Mauritius	na	-5	na
Morocco	0	0	0
Mozambique	2	-3	2
Namibia	na	-5	0
Niger	na	na	na
Nigeria	-3	2	2
Republic of the Congo	0	-5	0
Rwanda	2	-3	2
Senegal	-2	3	na
Seychelles	na	na	0
South Africa	-1	4	-1
Swaziland	na	-5	na
Tanzania	na	-5	na
Togo	0	-5	na
Tunisia	na	-5	-5
Uganda	-1	-1	4
Zambia	na	-20	na

Source: author's estimates on data from Trading Economics as of August 22, 2022

Note: based on rating scores mapping as described in Table A2.1; negative values represent under-rating by the Big Three CRAs; positive values are overshoot compared to Trading Economics scores; the 0 values reflect equal rating across all rating scales; while "na" scores indicate no available rating for the country; Madagascar and Niger are not rated by Trading Economics.

Table A1.3 CountryRisk Ratings Comparison to Big Three, Africa

Country Name	Fitch	Moodys	S&P	Country risk
Algeria				Highly speculative
Angola	Substantial risks	Highly speculative	Substantial risks	Substantial risks
Benin	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Botswana		Upper medium grade	Lower medium grade	Upper medium grade
Burkina Faso			Highly speculative	Highly speculative
Burundi				Substantial risks
Cameroon	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Cabo Verde	Highly speculative		Highly speculative	Highly speculative
Central African Republic				Highly speculative
Chad				Highly speculative
Congo, Dem. Rep.		Substantial risks	Substantial risks	Highly speculative
Congo, Rep.	Substantial risks	Substantial risks	Substantial risks	Substantial risks
Cote d'Ivoire	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative	Highly speculative
Djibouti				Non-investment grade speculative
Egypt, Arab Rep.	Highly speculative	Highly speculative	Highly speculative	Substantial risks
Equatorial Guinea				Substantial risks
Eritrea				Substantial risks
Ethiopia	Substantial risks	Substantial risks	Substantial risks	Highly speculative
Gabon	Highly speculative	Substantial risks		Highly speculative
Gambia, The				Highly speculative
Ghana	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Guinea				Substantial risks
Guinea-Bissau				Substantial risks
Guyana				Non-investment grade speculative
Kenya	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Lesotho	Highly speculative			Highly speculative
Liberia				Substantial risks
Madagascar				Highly speculative
Malawi				Substantial risks
Mali		Substantial risks		Highly speculative
Mauritius		Lower medium grade		Highly speculative

Country Name	Fitch	Moodys	S&P	Country risk
Morocco	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative
Mozambique	Substantial risks	Substantial risks	Substantial risks	Substantial risks
Namibia	Non-investment grade speculative	Non-investment grade speculative		Highly speculative
Niger		Highly speculative		Highly speculative
Nigeria	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Rwanda	Highly speculative	Highly speculative	Highly speculative	Non-investment grade speculative
Sao Tome and Principe				Highly speculative
Senegal		Non-investment grade speculative	Highly speculative	Highly speculative
Seychelles	Highly speculative			Non-investment grade speculative
Sierra Leone				Substantial risks
Somalia				
South Africa	Non-investment grade speculative	Non-investment grade speculative	Non-investment grade speculative	Lower medium grade
South Sudan				Substantial risks
Sudan				Substantial risks
Tanzania		Highly speculative		Non-investment grade speculative
Togo		Highly speculative	Highly speculative	Highly speculative
Tunisia	Highly speculative	Substantial risks		Highly speculative
Uganda	Highly speculative	Highly speculative	Highly speculative	Highly speculative
Zambia	In default	Substantial risks	In default	Substantial risks
Zimbabwe				Substantial risks

Source: author's estimates based on CountryRisk.io (2022) and Trading Economics (2022) data.

Annex II - Credit ratings history in Africa – by country

Angola

Agency	Rating	Outlook	Date
Fitch	B-	Positive	Jul 15 2022
S&P	B-	Stable	Feb 04 2022
Fitch	B-	Stable	Jan 21 2022
Moody's	B3	Stable	Sep 13 2021
Moody's	Caa1	Stable	Sep 08 2020
Fitch	CCC	N/A	Sep 04 2020
Moody's	B3	Under Review	Mar 31 2020
S&P	CCC+	Stable	Mar 26 2020
Fitch	B-	Stable	Mar 06 2020
Fitch	B	Negative	Jul 12 2019
S&P	B-	Negative	Feb 08 2019
Fitch	B	Stable	Dec 28 2018
Fitch	B	Under Review	Dec 21 2018
Moody's	B3	Stable	Apr 28 2018
Fitch	B	Stable	Apr 25 2018
Moody's	B2	Under Review	Feb 07 2018
Moody's	B2	Stable	Oct 20 2017
S&P	B-	Stable	Aug 11 2017
Fitch	B	Negative	Sep 23 2016
S&P	B	Negative	Aug 12 2016
Moody's	B1	Negative	Apr 29 2016
Fitch	B+	Negative	Mar 25 2016
Moody's	Ba2	Negative Watch	Mar 04 2016
S&P	B	Stable	Feb 12 2016
Fitch	B+	Stable	Sep 15 2015
S&P	B+	Negative	Aug 14 2015
Fitch	BB-	Negative	Mar 27 2015
Moody's	Ba2	Negative	Mar 04 2015
S&P	B+	Stable	Feb 13 2015
Moody's	Ba2	Stable	Aug 08 2014
Fitch	BB-	Stable	Apr 11 2014

Agency	Rating	Outlook	Date
Moody's	Ba3	Positive	Aug 22 2012
Fitch	BB-	Positive	May 23 2012
Fitch	BB-	Stable	Nov 21 2011
S&P	BB-	Stable	Jul 12 2011
Moody's	Ba3	Stable	Jun 03 2011
Fitch	BB-	Stable	May 24 2011
Moody's	B1	Positive Watch	Apr 26 2011
S&P	B+	Stable	May 19 2010
Fitch	B+	Positive	May 19 2010
Moody's	B1	Positive	May 19 2010

Source: <https://tradingeconomics.com/angola/rating>

Benin

Agency	Rating	Outlook	Date
Fitch	B+	Stable	Oct 29 2021
Moody's	B1	Stable	Mar 09 2021
Fitch	B	Positive	Feb 11 2021
Fitch	B	Stable	Apr 09 2020
Moody's	B2	Positive	Jun 18 2019
Fitch	B	Positive	Mar 08 2019
S&P	B+	Stable	Jul 05 2018
S&P	N/A	N/A	Nov 01 2013
S&P	B	Stable	Feb 20 2012
Fitch	N/A	N/A	Jan 25 2012
Fitch	B	Stable	Sep 15 2004

Source: <https://tradingeconomics.com/benin/rating>

Botswana

Agency	Rating	Outlook	Date
S&P	BBB+	Stable	Sep 17 2021
Moody's	A3	Stable	Apr 23 2021
S&P	BBB+	Negative	Sep 18 2020
Moody's	A2	Negative	May 29 2020
S&P	BBB+	Stable	Mar 27 2020
S&P	A-	Stable	Oct 27 2017
S&P	A-	Negative	Apr 29 2016
Moody's	A2	Stable	Nov 24 2011
Moody's	A2	Negative	Aug 05 2011
Moody's	A2	Negative	Feb 19 2010
S&P	A-	Stable	Feb 15 2010
Moody's	A2	Stable	Mar 12 2009
S&P	A	Negative	Feb 19 2009
Moody's	A2	Positive	Aug 07 2007
S&P	A	Stable	Apr 02 2001
Moody's	A2	Stable	Mar 12 2001

Source: <https://tradingeconomics.com/botswana/rating>

Burkina Faso

Agency	Rating	Outlook	Date
S&P	CCC+	Stable	May 13 2022
S&P	CCC+	Under Review	Jan 26 2022
S&P	B	Stable	May 26 2017
S&P	B-	Positive	May 27 2016
S&P	B-	Stable	Dec 05 2014
S&P	B	Negative Watch	Nov 03 2014
S&P	B	Stable	Aug 06 2008
S&P	B	Positive	Jul 06 2006
S&P	B	Stable	Mar 05 2004
Fitch	N/A	N/A	Jan 25 2012
Fitch	B	Stable	Sep 15 2004

Source: <https://tradingeconomics.com/burkina-faso/rating>

Cameroon

Agency	Rating	Outlook	Date
Fitch	B	Stable	Apr 12 2021
Moody's	B2	Stable	Aug 07 2020
Moody's	B2	Under Review	May 27 2020
Fitch	B	Negative	Apr 22 2020
S&P	B-	Stable	Apr 10 2020
Moody's	B2	Stable	Jun 14 2019
S&P	B	Negative	Apr 12 2019
Moody's	B2	Negative	Jun 07 2018
Moody's	B2	Stable	Aug 05 2016
Fitch	B	Stable	Nov 21 2011
S&P	B	Stable	Feb 26 2007
Fitch	B	Stable	Jun 12 2006
S&P	B-	Stable	May 03 2006
Fitch	B-	N/A	Feb 15 2005
S&P	CCC	Stable	Dec 03 2004
Fitch	B	Negative Watch	Jul 05 2004
S&P	B	Stable	Nov 26 2003
Fitch	B	Stable	Sep 04 2003

Source: <https://tradingeconomics.com/cameroon/rating>

Cape Verde

Agency	Rating	Outlook	Date
S&P	B-	Stable	Feb 19 2021
S&P	B	Negative	Aug 28 2020
Fitch	B-	Stable	Apr 17 2020
Fitch	B	Positive	Dec 13 2019
S&P	B	Stable	May 05 2017
S&P	B	Negative Watch	Mar 31 2017
S&P	B	Stable	Oct 07 2016
S&P	B	Negative	Apr 08 2016
Fitch	B	Stable	Mar 21 2014
Fitch	B	Stable	Mar 21 2014
S&P	B	Stable	Dec 13 2013

Agency	Rating	Outlook	Date
S&P	B+	Negative	Jun 21 2013
Fitch	B+	Negative	Apr 05 2013
Fitch	B+	Stable	Nov 21 2011
S&P	B+	Stable	May 24 2011
S&P	B+	Negative	Dec 24 2009
Fitch	B+	Stable	Jun 22 2009
S&P	B+	Stable	Dec 04 2008
Fitch	B+	Positive	Mar 11 2008
Fitch	B+	Stable	Aug 15 2003

Source: <https://tradingeconomics.com/cape-verde/rating>

Congo

Agency	Rating	Outlook	Date
S&P	B-	Stable	Jan 28 2022
Moody's	Caa1	Positive	Oct 18 2021
S&P	CCC+	Positive	Jul 30 2021
S&P	CCC+	Stable	Jul 31 2020
S&P	CCC+	Positive	Aug 02 2019
Moody's	Caa1	Stable	Jun 18 2019
Moody's	B3	Negative	Dec 08 2017
S&P	CCC+	Stable	Aug 04 2017
S&P	B-	Negative	Feb 05 2016
S&P	B-	Stable	Dec 13 2013
Moody's	B3	Stable	Sep 06 2013

Source: <https://tradingeconomics.com/congo/rating>

Egypt

Agency	Rating	Outlook	Date
Moody's	B2	Negative	May 26 2022
Moody's	B2	Stable	Apr 17 2019
Fitch	B+	Stable	Mar 21 2019
Moody's	B3	Positive	Aug 28 2018
S&P	B	Stable	May 11 2018
Fitch	B	Positive	Jan 16 2018
S&P	B-	Positive	Nov 10 2017
S&P	B-	Stable	Nov 11 2016

Agency	Rating	Outlook	Date
S&P	B-	Negative	May 13 2016
S&P	B-	Stable	Nov 13 2015
S&P	B-	Positive	May 15 2015
Moody's	B3	Stable	Apr 07 2015
Fitch	B	Stable	Dec 19 2014
Fitch	B	Stable	Dec 19 2014
Moody's	Caa1	Stable	Oct 20 2014
Fitch	B-	Stable	Jan 03 2014
S&P	B-	Stable	Nov 15 2013
Fitch	B-	Negative	Jul 05 2013
S&P	CCC+	Stable	May 09 2013
Moody's	Caa1	Negative	Mar 21 2013
Fitch	B	Negative	Jan 30 2013
Moody's	B2	Negative Watch	Jan 18 2013
Moody's	B3	Negative	Jan 12 2013
S&P	B-	Negative	Dec 24 2012
S&P	B	Negative	Aug 23 2012
S&P	B	Negative Watch	Jun 25 2012
Fitch	B+	Negative	Jun 15 2012
S&P	B	Negative	Feb 10 2012
Fitch	BB-	Negative	Dec 30 2011
Moody's	B2	Negative Watch	Dec 21 2011
S&P	B+	Negative	Nov 24 2011
Moody's	B1	Negative	Oct 27 2011
S&P	BB-	Negative	Oct 18 2011
Moody's	Ba3	Negative	Mar 16 2011
S&P	BB	Negative	Mar 10 2011
Fitch	BB	Negative Watch	Feb 03 2011
S&P	BB	Negative Watch	Feb 01 2011
Moody's	Ba2	Negative	Jan 31 2011
Fitch	BB+	Negative	Jan 28 2011
Moody's	Ba1	Stable	Aug 19 2009
Fitch	BB+	Stable	Aug 18 2008
Moody's	Ba1	Negative	Jun 23 2008

Agency	Rating	Outlook	Date
Fitch	BB+	Positive	Jun 18 2007
S&P	BB+	Stable	Mar 14 2005
Moody's	Ba1	Stable	Nov 15 2003
S&P	BB+	Negative	Aug 22 2003
Fitch	BB+	Stable	Aug 21 2002
S&P	BB+	Stable	May 22 2002
Fitch	BBB-	Negative	Jan 22 2002
Moody's	Ba1	Negative	Nov 07 2001
Fitch	BBB-	Stable	Sep 21 2000
S&P	BBB-	Negative	Jul 03 2000
Moody's	Ba1	Stable	Nov 14 1997
Moody's	Ba2	Positive Watch	Oct 01 1997
Moody's	Ba2	Positive	Oct 01 1997
Fitch	BBB-	N/A	Aug 19 1997
S&P	BBB-	Stable	Jan 15 1997
Moody's	Ba2	Stable	Oct 09 1996

Source: <https://tradingeconomics.com/egypt/rating>

Ethiopia

Agency	Rating	Outlook	Date
S&P	CCC	Negative	Nov 10 2021
Moody's	Caa2	Negative	Oct 20 2021
S&P	CCC+	Negative	Sep 24 2021
Moody's	Caa1	Under Review	May 17 2021
Moody's	B2	Under Review	Mar 10 2021
S&P	B-	Negative Watch	Feb 12 2021
Fitch	CCC	N/A	Feb 09 2021
Moody's	B2	Negative	Aug 07 2020
Moody's	B2	Under Review	May 07 2020
S&P	B	Negative	Apr 10 2020
Fitch	B	Negative	Oct 01 2019
Moody's	B1	Negative	Sep 20 2019
S&P	B	Stable	May 09 2014
Moody's	B1	Stable	May 09 2014
Fitch	B	Stable	May 09 2014

Source: <https://tradingeconomics.com/ethiopia/rating>

Gabon

Agency	Rating	Outlook	Date
Fitch	B-	Positive	Aug 26 2022
Fitch	B-	Stable	Aug 24 2021
Moody's	Caa1	Stable	Dec 04 2020
Fitch	CCC	N/A	Apr 03 2020
Moody's	Caa1	Positive	Jun 14 2019
Fitch	B	Stable	Oct 05 2018
Moody's	Caa1	Stable	Jun 08 2018
Fitch	B	Negative	Oct 13 2017
Moody's	B3	Negative	Jul 03 2017
Fitch	B+	Negative	May 06 2016
Moody's	B1	Negative	Apr 29 2016
S&P	N/A	N/A	Apr 01 2016
Moody's	Ba3	Negative Watch	Mar 04 2016
S&P	B	Stable	Jan 29 2016
Fitch	B+	Stable	Mar 08 2015
Moody's	Ba3	Stable	Dec 12 2014
Fitch	BB-	Negative	Dec 05 2014
Fitch	BB-	Stable	Mar 21 2013
Fitch	BB-	Positive	Apr 05 2012
S&P	BB-	Stable	Feb 20 2012
Fitch	BB-	Stable	Oct 29 2007

Source: <https://tradingeconomics.com/gabon/rating>

Ghana

Agency	Rating	Outlook	Date
Moody's	Caa2	Under Review	Sep 30 2022
Fitch	CC	N/A	Sep 23 2022
Fitch	CCC	N/A	Aug 10 2022
S&P	CCC+	Negative	Aug 05 2022
Moody's	Caa1	Stable	Feb 04 2022
Fitch	B-	Negative	Jan 14 2022
Fitch	B	Negative	Jun 22 2021
S&P	B-	Stable	Sep 11 2020
S&P	B	Negative	Apr 30 2020
Moody's	B3	Negative	Apr 17 2020

Agency	Rating	Outlook	Date
Moody's	B3	Positive	Jan 24 2020
Analyst			Oct 17 2019
Analyst	20		Oct 17 2019
Analyst	20		Oct 10 2019
S&P	B	Stable	Sep 14 2018
S&P	B-	Positive	Oct 06 2017
Fitch	B	Stable	May 12 2017
Moody's	B3	Stable	Sep 23 2016
Moody's	B3	Negative	Mar 15 2015
S&P	B-	Stable	Oct 24 2014
Moody's	B2	Negative	Jun 27 2014
Fitch	B	Negative	Mar 28 2014
Fitch	B	Negative	Mar 28 2014
S&P	B	Negative	Dec 06 2013
Moody's	B1	Negative	Dec 05 2013
Fitch	B	Stable	Oct 17 2013
S&P	B+	Stable	Sep 04 2013
Fitch	B+	Negative	Feb 15 2013
Moody's	B1	Stable	Dec 20 2012
S&P	B	Stable	Nov 29 2011
Fitch	B+	Stable	Sep 24 2010
S&P	B	Stable	Aug 27 2010
S&P	B+	Negative	Mar 16 2009
Fitch	B+	Negative	Mar 03 2009
Fitch	B+	Stable	Feb 07 2008
Fitch	B+	Positive	Feb 01 2006
Fitch	B+	Stable	Mar 17 2005
Fitch	B	Positive	Dec 02 2003

Source: <https://tradingeconomics.com/ghana/rating>

Ivory Coast

Agency	Rating	Outlook	Date
Moody's	Ba3	Positive	Jun 27 2022
Fitch	BB-	Stable	Jul 19 2021
S&P	BB-	Stable	Jul 06 2021
Moody's	Ba3	Stable	Aug 07 2020
Moody's	Ba3	Under Review	Jun 12 2020
Fitch	B+	Positive	Nov 12 2019
Fitch	B+	Stable	Dec 18 2015
Moody's	Ba3	Stable	Nov 05 2015
Fitch	B	Positive	Jul 11 2014
Moody's	B1	Positive	Jul 08 2014
Moody's	B3	Stable	Sep 06 2013

Source: <https://tradingeconomics.com/ivory-coast/rating>

Kenya

Agency	Rating	Outlook	Date
S&P	B	Stable	Mar 05 2021
S&P	B+	Negative	Jul 14 2020
Fitch	B+	Negative	Jun 19 2020
Moody's	B2	Negative	May 07 2020
Moody's	B2	Stable	Feb 13 2018
Fitch	B+	Stable	Feb 09 2018
Moody's	B1	Under Review	Oct 02 2017
S&P	B+	Stable	Oct 14 2016
S&P	B+	Negative	Oct 16 2015
Fitch	B+	Negative	Jul 17 2015
Moody's	B1	Stable	Nov 08 2012
S&P	B+	Stable	Nov 19 2010
Fitch	B+	Stable	Jan 16 2009
S&P	B	Positive	Aug 04 2008
S&P	B	Stable	Mar 10 2008
S&P	B	Negative	Feb 04 2008
Fitch	B+	Negative	Jan 30 2008
Fitch	B+	Stable	Dec 12 2007
S&P	B+	Stable	Sep 08 2006

Source: <https://tradingeconomics.com/kenya/rating>

Lesotho

Agency	Rating	Outlook	Date
Fitch	B	Stable	Jul 22 2022
Fitch	B	Negative	Aug 13 2020
Fitch	B	Stable	Aug 19 2019
Fitch	B+	Negative	Aug 24 2018
Fitch	B+	Stable	Apr 22 2016
Fitch	BB-	Stable	May 20 2013
Fitch	BB-	Negative	Nov 21 2011
Fitch	BB-	Negative	May 31 2011
Fitch	BB-	Stable	Sep 18 2006
Fitch	BB-	Negative	Nov 04 2005
Fitch	BB-	Stable	Nov 30 2004
Fitch	B+	Positive	Sep 26 2003
Fitch	B+	Stable	Sep 02 2002

Source: <https://tradingeconomics.com/lesotho/rating>

Madagascar

Agency	Rating	Outlook	Date
S&P	B-	Positive	Apr 11 2022

Source: <https://tradingeconomics.com/madagascar/rating>

Mali

Agency	Rating	Outlook	Date
Moody's	Caa2	Stable	Sep 09 2022
Moody's	Caa2	Negative	Jun 03 2022
Moody's	Caa2	Under Review	Feb 04 2022
Moody's	Caa1	Stable	Mar 22 2021
Moody's	Caa1	Negative	Sep 08 2020
Moody's	B3	Stable	Feb 26 2019
Fitch	B+	Stable	Sep 02 2002

Source: <https://tradingeconomics.com/mali/rating>

Mauritius

Agency	Rating	Outlook	Date
Moody's	Baa3	Stable	Jul 29 2022
Moody's	Baa2	Negative	Mar 04 2021
Moody's	Baa1	Negative	Apr 01 2020
Moody's	Baa1	Stable	Jun 26 2012
Moody's	Baa2	Positive Watch	Mar 16 2012
Moody's	Baa2	Negative Watch	Aug 08 2007
Moody's	Baa2	Stable	Jun 01 2006
Moody's	Baa2	Negative	Dec 21 2005
Moody's	Baa2	Stable	Mar 28 1996
Fitch	B+	Stable	Sep 02 2002

Source: <https://tradingeconomics.com/mauritius/rating>

Morocco

Agency	Rating	Outlook	Date
Moody's	Ba1	Stable	Jul 01 2022
S&P	BB+	Stable	Apr 02 2021
Moody's	Ba1	Negative	Feb 04 2021
Fitch	BB+	Stable	Oct 23 2020
S&P	BBB-	Negative	Oct 02 2020
Fitch	BBB-	Negative	Apr 28 2020
S&P	BBB-	Stable	Oct 04 2019
Moody's	Ba1	Stable	Nov 20 2018
S&P	BBB-	Negative	Oct 05 2018
Moody's	Ba1	Positive	Feb 24 2017
Moody's	Ba1	Stable	Sep 02 2014
S&P	BBB-	Stable	May 16 2014
Moody's	Ba1	Negative	Feb 11 2013
S&P	BBB-	Negative	Oct 11 2012
S&P	BBB-	Stable	Mar 23 2010
S&P	BB+	Stable	Apr 11 2008
Fitch	BBB-	Stable	Apr 19 2007
S&P	BB+	Positive	Mar 26 2007
S&P	BB+	Stable	Aug 09 2005
S&P	BB	Positive	Mar 08 2004

Agency	Rating	Outlook	Date
Moody's	Ba1	Stable	Jun 18 2003
S&P	BB	Stable	Feb 21 2003
Moody's	Ba1	Negative	Dec 03 2001
S&P	BB	Negative	Nov 02 2001
Moody's	Ba1	Stable	Jul 22 1999
S&P	BB	Stable	Mar 02 1998

Source: <https://tradingeconomics.com/morocco/rating>

Mozambique

Agency	Rating	Outlook	Date
Fitch	CCC+	N/A	Aug 26 2022
Moody's	Caa2	Positive	Mar 11 2022
S&P	CCC+	Stable	Nov 22 2019
Fitch	CCC	N/A	Nov 07 2019
Moody's	Caa2	Stable	Sep 20 2019
Moody's	Caa3	Stable	Feb 15 2019
Fitch	RD	N/A	Oct 27 2017
S&P	SD	N/A	Jan 18 2017
S&P	CC	Negative	Nov 04 2016
S&P	CCC	Negative	Aug 05 2016
Moody's	Caa3	Negative	Jul 08 2016
S&P	CCC	Negative Watch	May 27 2016
Fitch	CC	N/A	May 23 2016
Moody's	Caa1	Negative Watch	May 20 2016
Fitch	CCC	N/A	May 02 2016
S&P	B-	Stable	Apr 15 2016
Moody's	Caa1	Stable	Apr 15 2016
S&P	SD	N/A	Apr 01 2016
S&P	CC	Negative	Mar 15 2016
Moody's	B3	Negative	Mar 15 2016
Fitch	B	Negative	Mar 11 2016
Moody's	B2	Negative Watch	Dec 17 2015
Fitch	B	Stable	Oct 30 2015
S&P	B-	Negative	Sep 24 2015
Moody's	B2	Negative	Aug 07 2015

Agency	Rating	Outlook	Date
S&P	B-	Negative Watch	Jul 06 2015
S&P	B	Stable	Feb 14 2014
Moody's	B1	Stable	Sep 20 2013
S&P	B+	Negative	Aug 16 2013
Fitch	B+	Stable	Jul 05 2013
Fitch	B	Positive	Jul 20 2012
Fitch	B	Stable	Nov 21 2011
S&P	B+	Stable	Dec 21 2007
S&P	B	Positive	Jul 07 2004
Fitch	B	Stable	Jul 15 2003

Source: <https://tradingeconomics.com/mozambique/rating>

Namibia

Agency	Rating	Outlook	Date
Fitch	BB-	Stable	Jun 24 2022
Moody's	B1	Stable	Apr 05 2022
Moody's	Ba3	Negative	Dec 04 2020
Fitch	BB	Negative	Jun 22 2020
Fitch	BB	Stable	Jun 16 2020
Moody's	Ba2	Negative	May 22 2020
Moody's	Ba2	Stable	Dec 06 2019
Fitch	BB	Stable	Oct 01 2019
Fitch	BB+	Negative	Feb 21 2019
Fitch	BB+	Stable	Nov 20 2017
Moody's	Ba1	Negative	Aug 11 2017
Moody's	Baa3	Negative	Dec 02 2016
Fitch	BBB-	Negative	Sep 02 2016
Fitch	BBB-	Stable	Dec 09 2011
Moody's	Baa3	Stable	Sep 22 2011
Fitch	BBB-	Positive	Dec 13 2010
Fitch	BBB-	Stable	Dec 07 2005

Source: <https://tradingeconomics.com/namibia/rating>

Niger

Agency	Rating	Outlook	Date
Moody's	B3	Stable	Aug 06 2019

Source: <https://tradingeconomics.com/madagascar/rating>

Nigeria

Agency	Rating	Outlook	Date
Moody's	B2	Stable	Nov 29 2021
Fitch	B	Stable	Sep 30 2020
Fitch	B	Negative	Apr 06 2020
S&P	B-	Stable	Mar 26 2020
S&P	B	Negative	Feb 28 2020
Fitch	B+	Negative	Dec 19 2019
Fitch	B+	Negative	Dec 19 2019
Moody's	B2	Negative	Dec 04 2019
Fitch	B+	Stable	Nov 02 2018
Moody's	B2	Stable	Nov 07 2017
Fitch	B+	Negative	Jan 25 2017
S&P	B	Stable	Sep 16 2016
Fitch	B+	Stable	Jun 23 2016
Moody's	B1	Stable	Apr 29 2016
S&P	B+	Negative	Mar 18 2016
Moody's	Ba3	Negative Watch	Mar 04 2016
Fitch	BB-	Negative	Mar 30 2015
S&P	B+	Stable	Mar 20 2015
S&P	BB-	Negative Watch	Feb 10 2015
S&P	BB-	Negative	Mar 27 2014
S&P	BB-	Negative Watch	Mar 21 2014
Moody's	Ba3	Stable	Nov 07 2012
S&P	BB-	Stable	Nov 07 2012
S&P	B+	Positive	Dec 29 2011
Fitch	BB-	Stable	Nov 21 2011
Fitch	BB-	Stable	Oct 21 2011
Fitch	BB-	Negative	Oct 22 2010
S&P	B+	Stable	Aug 21 2009
S&P	BB-	Negative	Mar 27 2009
S&P	BB-	Stable	Feb 06 2006

Agency	Rating	Outlook	Date
Fitch	BB-	Stable	Jan 30 2006

Source: <https://tradingeconomics.com/nigeria/rating>

Republic of the Congo

Agency	Rating	Outlook	Date
Fitch	CCC+	N/A	Sep 16 2022
S&P	CCC+	Stable	Sep 04 2020
S&P	B-	Negative	Apr 08 2020
Fitch	CCC	N/A	Mar 27 2019
Moody's	Caa2	Stable	Oct 12 2018
S&P	B-	Stable	Sep 21 2018
Moody's	B3	Negative	Dec 08 2017
Fitch	CC	N/A	Sep 06 2017
S&P	CCC+	Stable	Sep 05 2017
S&P	CCC+	Stable	Aug 04 2017
Moody's	Caa2	Negative	Jul 28 2017
S&P	CCC	Negative Watch	Jul 07 2017
Moody's	B3	Negative	Oct 04 2016
Fitch	CCC	N/A	Aug 11 2016
S&P	B-	Stable	Aug 09 2016
Fitch	RD	N/A	Aug 03 2016
S&P	SD	N/A	Aug 02 2016
Moody's	B3	Negative Watch	Aug 01 2016
Fitch	C	N/A	Jul 28 2016
Moody's	B2	Negative	Apr 29 2016
S&P	B-	Stable	Mar 25 2016
Moody's	B1	Negative Watch	Mar 04 2016
Fitch	B	Negative	Mar 04 2016
Moody's	Ba3	Negative	Nov 13 2015
Fitch	B+	Negative	Sep 18 2015
S&P	B	Stable	Feb 09 2015
S&P	B+	Stable	Oct 22 2013
Fitch	B+	Stable	Oct 11 2013
Moody's	Ba3	Stable	Oct 11 2013

Source: <https://tradingeconomics.com/republic-of-the-congo/rating>

Rwanda

Agency	Rating	Outlook	Date
Fitch	B+	Negative	Jul 21 2021
Moody's	B2	Negative	Oct 13 2020
S&P	B+	Negative	Aug 07 2020
S&P	B+	Stable	Aug 09 2019
S&P	B	Positive	Aug 10 2018
S&P	B	Stable	Sep 09 2016
Moody's	B2	Stable	Aug 12 2016
S&P	B+	Negative	Mar 11 2016
S&P	B+	Stable	Mar 13 2015
S&P	B	Positive	Sep 12 2014
Fitch	B+	Stable	Jul 25 2014
Fitch	B	Positive	Aug 15 2013
S&P	B	Stable	Oct 29 2012
S&P	B	Positive	Dec 29 2011
Fitch	B	Stable	Aug 24 2010
Fitch	B-	Positive	Dec 16 2006

Source: <https://tradingeconomics.com/rwanda/rating>

Senegal

Agency	Rating	Outlook	Date
Moody's	Ba3	Stable	Mar 18 2022
Moody's	Ba3	Negative	Aug 07 2020
Moody's	Ba3	Under Review	Jun 12 2020
S&P	B+	Stable	Dec 06 2019
S&P	B+	Positive	Jun 15 2018
Moody's	Ba3	Stable	Apr 13 2017
Moody's	B1	Positive	Nov 07 2014
S&P	B+	Stable	Jul 05 2013
Moody's	B1	Stable	Mar 09 2011
S&P	B+	Negative	May 27 2010
S&P	B+	Stable	May 26 2009
S&P	B+	Negative	Jul 27 2006
S&P	B+	Stable	Dec 18 2000
S&P	B	Positive	Dec 29 2011

Source: <https://tradingeconomics.com/senegal/rating>

Seychelles

Agency	Rating	Outlook	Date
Fitch	B+	Positive	May 13 2022
Fitch	B+	Stable	Nov 19 2021
Fitch	B	Stable	Dec 18 2020
Fitch	B+	Stable	May 06 2020
Fitch	BB	Stable	Jun 21 2019
Fitch	BB-	Stable	Jul 31 2015
Fitch	B+	Stable	Aug 08 2014
Fitch	B	Positive	Jan 30 2013
Fitch	B	Stable	Feb 03 2011
Fitch	B-	Positive	Feb 01 2010
Fitch	B+	Stable	Jul 25 2014
Fitch	B	Positive	Aug 15 2013

Source: <https://tradingeconomics.com/seychelles/rating>

South Africa

Agency	Rating	Outlook	Date
S&P	BB-	Positive	May 20 2022
Moody's	Ba2	Stable	Apr 01 2022
Fitch	BB-	Stable	Dec 15 2021
Moody's	Ba2	Negative	Nov 20 2020
Fitch	BB-	Negative	Nov 20 2020
S&P	BB-	Stable	Apr 30 2020
Fitch	BB	Negative	Apr 03 2020
Moody's	Ba1	Negative	Mar 27 2020
S&P	BB	Negative	Nov 22 2019
Moody's	Baa3	Negative	Nov 01 2019
Fitch	BB+	Negative	Jul 26 2019
Moody's	Baa3	Stable	Mar 23 2018
S&P	BB	Stable	Nov 24 2017
Moody's	Baa3	Under Review	Nov 24 2017
Moody's	Baa3	Negative	Jun 09 2017
Fitch	BB+	Stable	Apr 07 2017
Moody's	Baa2	Negative Watch	Apr 03 2017
S&P	BB+	Negative	Apr 03 2017

Agency	Rating	Outlook	Date
Fitch	BBB-	Negative	Nov 25 2016
Moody's	Baa2	Negative	May 06 2016
Moody's	Baa2	Negative Watch	Mar 08 2016
S&P	BBB-	Negative	Dec 04 2015
Fitch	BBB-	Stable	Dec 04 2015
Moody's	Baa2	Negative	Nov 06 2014
Moody's	Baa2	Stable	Nov 06 2014
Fitch	BBB	Negative	Jun 13 2014
S&P	BBB-	Stable	Jun 13 2014
Fitch	BBB	Stable	Jan 10 2013
S&P	BBB	Negative	Oct 12 2012
Moody's	Baa1	Negative	Sep 27 2012
S&P	BBB+	Negative	Mar 28 2012
Fitch	BBB+	Negative	Jan 13 2012
Moody's	A3	Negative	Nov 09 2011
S&P	BBB+	Stable	Jan 25 2011
Fitch	BBB+	Stable	Jan 17 2011
Moody's	A3	Stable	Jul 16 2009
S&P	BBB+	Negative	Nov 11 2008
Fitch	BBB+	Negative	Nov 09 2008
Fitch	BBB+	Stable	Jun 17 2008
Fitch	BBB+	Positive	Jul 25 2007
Moody's	Baa1	Positive	Jun 05 2007
Fitch	BBB+	Stable	Aug 25 2005
S&P	BBB+	Stable	Aug 01 2005
Moody's	Baa1	Stable	Jan 11 2005
Fitch	BBB	Positive	Oct 21 2004
Moody's	Baa2	Positive Watch	Oct 14 2004
S&P	BBB	Stable	May 07 2003
Fitch	BBB	Stable	May 02 2003
Fitch	BBB-	Positive Watch	Mar 11 2003
Moody's	Baa2	Positive	Feb 26 2003
S&P	BBB-	Positive	Nov 12 2002
Fitch	BBB-	Positive	Aug 20 2002

Agency	Rating	Outlook	Date
Moody's	Baa2	Stable	Nov 29 2001
Moody's	Baa3	Positive Watch	Oct 12 2001
Fitch	BBB-	Stable	Sep 21 2000
Fitch	BBB-	N/A	Jun 27 2000
Fitch	BB+	N/A	May 19 2000
S&P	BBB-	Stable	Feb 25 2000
Moody's	Baa3	Positive	Feb 07 2000
Moody's	Baa3	Stable	Oct 08 1998
Moody's	Baa3	Negative Watch	Jul 17 1998
Fitch	BB	N/A	May 28 1998
Fitch	BB	Positive Watch	Feb 17 1998
S&P	BB+	Stable	Nov 20 1995
S&P	BB	Stable	Oct 03 1994
Moody's	Baa3	Stable	Oct 03 1994
Fitch	BB	N/A	Sep 22 1994

Source: <https://tradingeconomics.com/south-africa/rating>

Swaziland

Agency	Rating	Outlook	Date
Moody's	B3	Stable	Jul 20 2020
Moody's	B2	Negative	Mar 10 2020
Moody's	B2	Negative	Mar 10 2020
Moody's	B2	Negative	Oct 27 2017

Source: <https://tradingeconomics.com/swaziland/rating>

Tanzania

Agency	Rating	Outlook	Date
Moody's	B2	Stable	Aug 21 2020
Moody's	B1	Negative	Mar 02 2018

Source: <https://tradingeconomics.com/tanzania/rating>

Togo

Agency	Rating	Outlook	Date
Moody's	B3	Stable	Jun 05 2019
S&P	B	Stable	Jun 01 2019

Source: <https://tradingeconomics.com/togo/rating>

Tunisia

Agency	Rating	Outlook	Date
Moody's	Caa1	Under Review	Sep 30 2022
Fitch	CCC	N/A	Mar 18 2022
Moody's	Caa1	Negative	Oct 14 2021
Fitch	B-	Negative	Jul 08 2021
Moody's	B3	Negative	Feb 23 2021
Fitch	B	Negative	Nov 23 2020
Moody's	B2	Negative	Oct 06 2020
Fitch	B	Stable	May 12 2020
Moody's	B2	Under Review	Apr 17 2020
Moody's	B2	Stable	Feb 14 2020
Moody's	B2	Negative	Oct 16 2018
Fitch	B+	Negative	May 27 2018
Moody's	B2	Stable	Mar 14 2018
Moody's	B1	Negative	Aug 18 2017
Fitch	B+	Stable	Feb 03 2017
Moody's	Ba3	Negative	Nov 22 2016
Fitch	BB-	Negative	Mar 04 2016
Moody's	Ba3	Stable	May 25 2015
Fitch	BB-	Stable	Mar 27 2015
S&P	N/A	N/A	Dec 18 2013
Moody's	Ba3	Negative	Nov 25 2013
Fitch	BB-	Negative	Oct 30 2013
S&P	B	Negative	Aug 16 2013
Moody's	Ba2	Negative	May 29 2013
Moody's	Ba1	Negative Watch	Feb 28 2013
S&P	BB-	Negative	Feb 19 2013
Fitch	BB+	Negative	Dec 12 2012
S&P	BB	Stable	May 23 2012
S&P	BBB-	Negative	Jul 28 2011
S&P	BBB-	Stable	Mar 16 2011
Fitch	BBB-	Negative	Mar 02 2011
Moody's	Baa3	Negative	Jan 19 2011
S&P	BBB	Negative Watch	Jan 18 2011

Agency	Rating	Outlook	Date
Fitch	BBB	Negative Watch	Jan 14 2011
Moody's	Baa2	Stable	Apr 17 2003
Fitch	BBB	Stable	May 24 2001
Fitch	BBB-	Positive	Sep 21 2000
S&P	BBB	Stable	Mar 21 2000
Moody's	Baa3	Positive	Feb 03 2000
Fitch	BBB-	N/A	Sep 14 1995
Moody's	Baa3	Stable	Apr 06 1995

Source: <https://tradingeconomics.com/tunisia/rating>

Uganda

Agency	Rating	Outlook	Date
Fitch	B+	Stable	Jun 20 2022
Fitch	B+	Negative	Jun 24 2020
Moody's	B2	Stable	Nov 18 2016
Moody's	B1	Negative	Apr 20 2016
Fitch	B+	Stable	Feb 13 2015
S&P	B	Stable	Jan 17 2014
Moody's	B1	Stable	Dec 20 2013
Fitch	B	Positive	Sep 05 2013
S&P	B+	Negative	Dec 11 2012
Fitch	B	Stable	Oct 07 2011
Fitch	B	Positive	Aug 19 2009
S&P	B+	Stable	Dec 09 2008
Fitch	B	Stable	Mar 17 2005

Source: <https://tradingeconomics.com/uganda/rating>

Zambia

Agency	Rating	Outlook	Date
Fitch	RD	N/A	Nov 18 2020
S&P	SD	N/A	Oct 21 2020
S&P	CCC-	Negative	Sep 25 2020
Fitch	C	N/A	Sep 24 2020
Fitch	CC	N/A	Apr 16 2020
Moody's	Ca	Stable	Apr 03 2020
S&P	CCC	Negative	Feb 21 2020

Agency	Rating	Outlook	Date
S&P	CCC+	Stable	Aug 23 2019
Fitch	CCC	Negative	Jun 27 2019
Moody's	Caa2	Negative	May 23 2019
S&P	B-	Negative	Feb 22 2019
Fitch	B-	Negative	Oct 11 2018
S&P	B-	Stable	Aug 24 2018
Moody's	Caa1	Stable	Jul 27 2018
Moody's	B3	Stable	Jan 26 2018
S&P	B	Stable	Aug 25 2017
Moody's	B3	Negative	Apr 19 2016
S&P	B	Negative	Mar 18 2016
Fitch	B	Negative	Feb 24 2016

Agency	Rating	Outlook	Date
Moody's	B2	Stable	Sep 25 2015
S&P	B	Stable	Jul 01 2015
Moody's	B1	Negative	May 29 2015
Fitch	B	Stable	Mar 13 2015
Fitch	B	Positive	Sep 19 2014
Fitch	B	Stable	Oct 28 2013
S&P	B+	Negative	Oct 25 2013
Moody's	B1	Stable	Nov 07 2012
Fitch	B+	Negative	Mar 01 2012
S&P	B+	Stable	Mar 22 2011
Fitch	B+	Stable	Mar 02 2011

Source: <https://tradingeconomics.com/zambia/rating>

Annex III – Regression outputs for domestic bond estimates in Section V

Table A3.1 Sovereign yield determinants

Dependent variable: average yield on sovereign bond – i

	Coefficients	Std. Error
GNI pc, PPP	-2.35***	1.25
rho	-0.64***	0.23
Constant	37.75	9.83
Adj R Square	0.64	
Observations	54	

Table A3.2 Volume outstanding determinants

Dependent variable: market value of debt outstanding – v

	Coefficients	Std. Error
Ln of Economy Size	1.21***	0.09
rho	-0.06***	0.03
Constant	-22.27	2.42
Adj R Square	0.79	
Observations	54	

Annex IV – Regression outputs for Eurobond estimates in Section VI

Table A4.1 Eurobond yield determinants

Dependent variable: average yield to maturity on a Eurobond – i

	Coefficients	Std. Error
GDP, PPP	-0.06	0.19
rho	-2.99***	0.54
Constant	41.99	6.44
Adj R Square	0.3	
Observations	79	

Table A4.2 Volume outstanding determinants

Dependent variable: amount of Eurobond debt outstanding – v

	Coefficients	Std. Error
Ln of Economy Size	8.30	9.68
rho	0.13***	0.04
Constant	21.44	0.38
Adj R Square	0.13	
Observations	79	

Endnotes

1. Wheatley, 2020
2. e.g., as explored in a historical analysis by Roos, 2019
3. as Tran *et al* (2021) find
4. e.g., Griffith-Jones and Kraemer, 2021
5. e.g., Gevorkyan and Khemraj, 2022; Thirwall, 2013
6. for an insightful discussion see Fazzari and Variato, 1994
7. See Standard and Poor's (2004)
8. See IMF (2022)
9. Assa (2012) empirically assesses the increasing significance of financialization – a degree to which financial transactions and financial markets dominate over productive real economic activities. Echoing that analysis, Caldentey and Vernengo (2021) provide a detailed review of financialization as new concept in economic development in a high-debt and limited industrial development in some Latin American economies. Elsewhere, Assa (2021) develops a comprehensive critique of contemporary macroeconomic indicators, specifically GDP, which are strongly influenced by how the impact of financial markets and services are measured. The former may have more relevance in the advanced economies, while the latter (e.g., proliferation of online and other electronic payment systems, microlending in local and foreign currencies, bypassing regulation, etc.) is often prevalent across developing economies.
10. See e.g., Strier, 2008; Bolton *et al*, 2012; etc.
11. e.g., Hung *et al*, 2022
12. Cantor and Parker (1996)
13. Afonso (2003)
14. See Griffith-Jones and Kraemer (2021)
15. Aizenman *et al* (2013)
16. See Mora (2006) and Tran *et al* (2021)
17. Yalta and Yalta (2018)
18. Ghosh (2021)
19. Moody's 2021 and Singh, 2021
20. UNDESA (2022)
21. Griffith-Jones and Kraemer (2021)
22. Gevorkyan and Kvangraven, 2016; Senga *et al*, 2018
23. UNDP, 2004
24. Canuto *et al* (2011)
25. This is an overall theme traced in Gevorkyan and Canuto, 2016
26. S&P (2004)
27. Fofack (2021)
28. Kraemer, 2021
29. UNCTAD (2015, p. 106)
30. Li (2021, p. 1)
31. Arezki *et al* (2011)
32. Fofack (2021)
33. UNCTAD (2008)
34. Sy (2009)
35. As part of the field research for this project, email requests for insights on sovereign ratings from some of the Africa-based CRAs remained unanswered. An email response from GCR indicated the agency did not provide sovereign ratings.
36. Dunand (2022)
37. Pillay and Sikochi (2022)
38. Dunand, 2022
39. APRM (2022). African Peer Review Mechanism, established in 2003, is a self-monitoring assessment and review arrangement among the African Union member states promoting political stability, economic integration, and sustainable development. For more information see: <https://au.int/en/aprm>
40. VOA, 2022
41. Lago, 2022
42. See Gevorkyan and Khemraj (2022)
43. Arslanap and Tsuda (2014)
44. For some recent update on SAR see <https://transformsa.co.za/2022/08/sovereign-africa-ratings-appoints-its-chief-operating-officer/>

45. e.g., Wheatley, 2022
46. Keynes, 1936
47. Trading Economics (2022) and CountryRisk.io (2022)
48. See Obenhuber (2022) for CountryRisk.io update on methodology <https://www.countryrisk.io/blog/how-weve-changed-our-sovereign-risk-score-methodology>
49. Chirikure *et al* (2022)
50. Mutize (2021)
51. Smith (2021)
52. Gevorkyan and Kvangraven (2016)
53. Senga *et al* (2018)
54. APRM (2022)
55. Mutize (2021)
56. Gevorkyan 2021a, 2021b
57. For more information on the Israel Bonds program see <https://www.israelbonds.com/Home.aspx>
58. Chuku and Yenice (2022)
59. Chirikure *et al* (2022)
60. Rusike and Alagidede (2021)
61. Olabisi and Stein (2015)
62. e.g., Gevorkyan and Kvangraven (2016), Senga *et al* (2018) and others.
63. For example, see Borensztein *et al* 2007 on a related discussion.
64. e.g., Griffith-Jones and Kraemer, 2021; Assa and Scarpini, 2022; Chirikure *et al*, 2022; Ghosh, 2021.

