

Borrow with Sorrow?

The Changing Risk Profile of Sub-Saharan Africa's Debt

César Calderón
Albert G. Zeufack



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Abstract

In the post-global financial crisis period, the financing of countercyclical policies led not only to a reduction in the fiscal surpluses across Sub-Saharan African countries, but also an increase in their levels of indebtedness. Although public debt for the region in 2018 was still below that of the pre-debt forgiveness period, the risk profile of public debt has sharply increased. The share of concessional public debt has been declining while that owed to private creditors and non-Paris Club bilateral creditors has been rising. The resulting reconfiguration of public debt has led to increased

debt service in the region. Hence, the higher risk profile of debt and rising payments might lower the threshold for debt distress in the region. Addressing public debt vulnerabilities requires the buildup of external and fiscal buffers by conducting prudent fiscal policies and implementing growth-enhancing reforms, and the strengthening of debt management practices. However, the policy toolkit can be enlarged by gradually moving from debt management to balance-sheet management of the public sector, and policies to boost the efficiency of public investment.

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Borrow with Sorrow?

The Changing Risk Profile of Sub-Saharan Africa's Debt*

César Calderón and Albert G. Zeufack¹

Key Words: Debt sustainability, debt composition, bond issuances

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¹ E-mail: Calderón: ccalderon@worldbank.org; Zeufack: azeufack@worldbank.org.

Introduction

This paper documents recent trends in public debt and its composition over the past decade in Sub-Saharan Africa. It argues that although the level of indebtedness of the region as a whole is still lower than the one before debt forgiveness, the risk profile of public debt has increased sharply. The share of concessional public debt has been declining while that owed to private creditors and non-Paris Club bilateral creditors has been rising. The resulting reconfiguration of public debt has led to a significant increase in the region's debt service. The combined higher risk debt profile and rising service might lower the threshold for debt distress in the region.

We argue in this paper that in order to contain public debt vulnerabilities, policy makers need to build external and fiscal buffers by conducting prudent fiscal policies and implementing growth-enhancing reforms. African governments also need to strengthen debt management practices to reduce the vulnerabilities associated to their debt profile. Finally, the policy discussion should not be circumscribed to debt management and debt sustainability analysis in gross terms. A more holistic approach to address fiscal and debt risks and vulnerabilities should gradually move from public debt management to public balance sheet management.

Also, public investment management matters. New borrowing contracted by Sub-Saharan African policy makers should be devoted to high-quality investment projects with credible rates of returns. Governments should have a strong pipeline of public sector projects (i.e. infrastructure) and implement a public investment management system that fosters the efficiency of public investment. Proceeds from government bond issuances should be invested efficiently in productive capacity. This also includes improvement in governance to prevent capture by interest groups — e.g. to avoid pressure to spend bond receipts on immediate needs rather than investment or the failure to implement policies consistently.

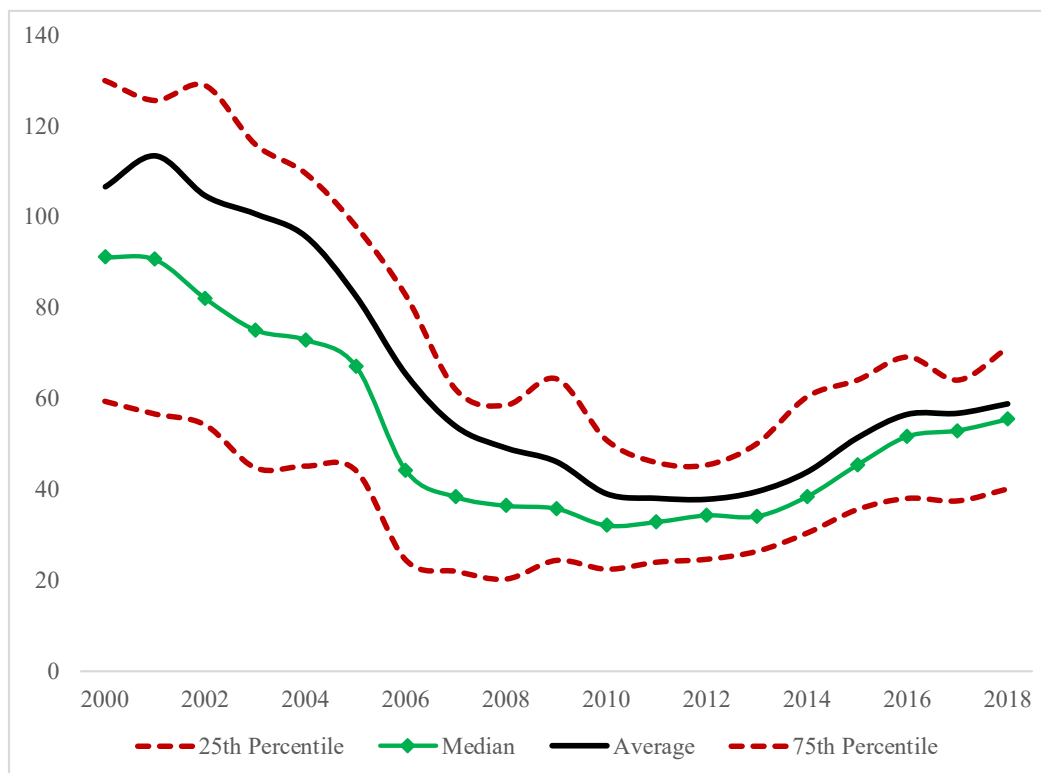
The remainder of this paper is organized as follows. Section 2 documents recent trends in general government gross debt stocks in Sub-Saharan Africa over the past two decades. It distinguishes the evolution of debt across different country groups in the region classified by income levels and the degree of resource abundance. Additionally, it examines the recent increase in public debt denominated in domestic currency. Section 3 zooms in on the external borrowing of the government. It documents the increase in public external debt since 2013 and the rapid increase in public external debt service. Moreover, it presents an overview on sovereign bond issuances in the region over the past two decades. Section 4 indirectly analyzes whether the increase in public debt is associated to greater growth, investment and efficiency of investment, or related to either greater consumption or investment. Section 5 discusses the policy options of countries in the region to manage risks and contain vulnerabilities in public debt. It argues that the policy toolkit of African policy makers needs to be enhanced by implementing strategies to manage the risks of the public-sector balance sheet and put emphasis on policies to boost investment efficiency. Section 6 concludes.

2. Public debt in Sub-Saharan Africa

Public debt levels in Sub-Saharan Africa were on a downward trajectory until 2012. Throughout the end of the 1990s and the 2000s, 30 African low-income countries (LICs) benefitted from more than US\$100 billion in debt relief provided under the Heavily Indebted Poor Country (HIPC) and Multilateral Debt Relief Initiatives (MDRI). Public debt levels in Sub-Saharan Africa therefore declined until 2012 to a median (average) of 34 (38) percent of GDP. The interquartile range declined sharply from 64 percent of GDP in 2004 (the previous year to the MDRI being launched) to about 21 percent of GDP in 2012.

After 2012, the dynamics and composition of public debt changed significantly (**Figure 1**). Between 2012 and the end of 2018, public debt in the region increased from an average of 38 to 59 percent of GDP. About three-quarters of the countries in Sub-Saharan Africa saw their public debt relative to GDP rise by more than 10 percentage points, while more than 40 percent of the countries experienced an increase of more than 20 percentage points. And the composition of public debt changed significantly. Countries shifted away from traditional concessional sources of financing, toward more market-based debt and lending from new bilateral creditors. The share of multilateral and concessional debt declined while the share of non-Paris Club debt increased (see **Section 3** for more details).

Figure 1. General Government Gross Debt (% GDP)



Source: IMF World Economic Outlook Database, October 2018.

The fast and broad-based debt re-accumulation from 2013, and the increasing exposure to market risks raises concerns about debt sustainability. The number of Sub-Saharan African countries at high risk of debt distress, based on the LIC Debt Sustainability Framework (DSF), increased significantly, from eight countries in 2013 to eighteen by the end of 2018.

This section discusses key trends of public debt in Sub-Saharan Africa drawing from annual data of 45 countries in the region.² For each of these countries, public debt refers to general government gross debt. Public debt is evaluated at three points in time: 2007, after the delivery of the first wave of debt relief under HIPC and MDRI to 17 of 30 countries; in 2013, before the plunge in commodity prices in 2014 and the year that marks a turning point in debt dynamics changing noticeably; and in 2018, for which the most recent data for most of the countries are available.

2.1. Public Debt Dynamics

From 2013 to 2018, the level of public debt has increased on average from 38 percent of GDP to 59 percent of GDP while the median public debt increased from 34 to 55 percent over the same time period. Note that the (GDP-) weighted average public debt in the region excluding Nigeria (the largest economy in the region and with low debt levels after the GDP rebasing) increases from 42 percent in 2013 to 62 percent in 2018 (Figure 2).³

Figure 2. General Government Gross Debt in Sub-Saharan Africa (% GDP)



Source: IMF – World Economic Outlook Database, October 2018

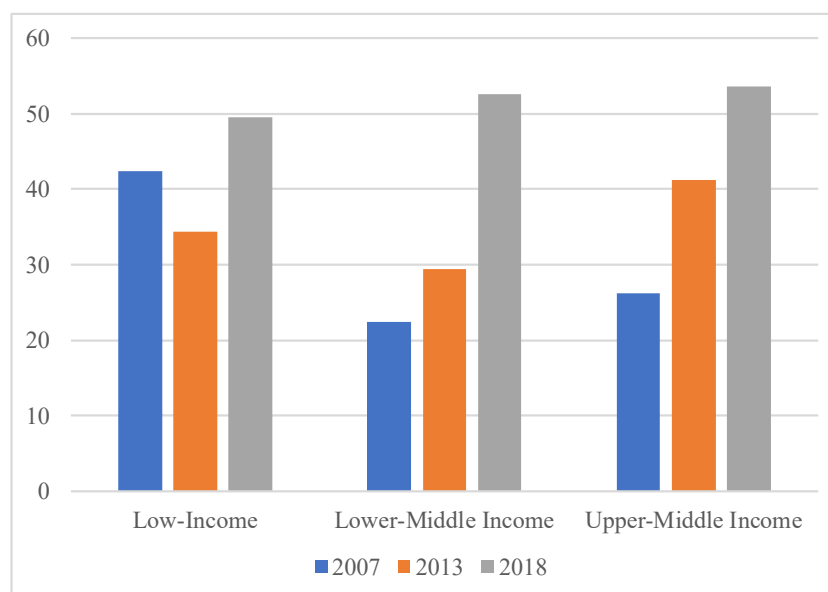
Public debt has been rising across all income groups in the region, with the largest increase recorded by lower-middle-income countries (LMCs), an average increase of 26 percentage points of GDP since 2013. By 2018, the (simple) average public debt of LMCs in the region reached 74

² Eritrea, Somalia, and South Sudan are excluded due to the lack of reliable data.

³ Using GDP-weighted averages does not change this narrative. Although debt increased only moderately between 2007 and 2012, debt accumulation accelerated significantly in the region thereafter in GDP-weighted terms.

percent of GDP (while the median was about 71 percent of GDP). Note that the weighted average of public debt across LMCs in the region by 2018 is 53 percent. Excluding Nigeria, the public debt levels of LMCs totaled 83 percent of GDP in 2018, an amount that is 36 percentage points of GDP higher than its level in 2013 (**Figure 3**). The pace of public debt accumulation for low-income countries (LICs) and upper-middle-income countries (UMCs) was slower: the (weighted) average public debt of LICs increased by 15 percentage points to 50 percent of GDP in 2018 while that of UMCs increased by 12 percentage points to 54 percent over the same time period (**Figure 3**).

Figure 3. Public Debt of SSA, by income level (% GDP)



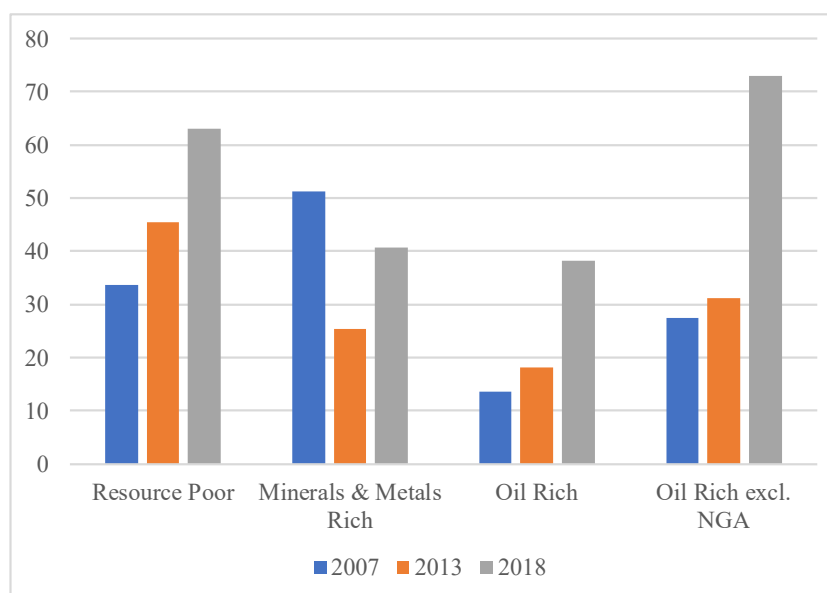
Source: The figure reports GDP-weighted averages by region. LIC=Low income countries, LMIC=Lower-middle income countries, UMIC=Upper-middle income countries. IMF – World Economic Outlook Database, October 2018

The increase in public debt levels affected both resource poor and resource rich countries in the region but that rise in public debt was the most pronounced in oil abundant countries (**Figure 4**). From 2013 until the end of 2018, the median public debt of resource rich countries increased by 20 percentage points (to 47 percent of GDP), as the commodity price boom came to an end and fiscal positions deteriorated. The debt dynamics were even worse for oil exporters, where median debt-to-GDP grew from 31 to 54 percent of GDP over the span of five years. The debt levels of Angola and the Republic of Congo more than doubled during the period 2013-18 whereas that of Equatorial Guinea in 2018 was more than five times as large that of 2013. Only Nigeria maintained public debt below 25 percent of GDP at the end of 2018.⁴ Excluding Nigeria, the public debt level of oil rich countries increased by more than 40 percentage points since 2013 (to 73 percent of GDP

⁴ The debt numbers for Nigeria cover central government debt only, compared with general government debt for the other countries.

in 2018). The pace of public debt increase was slower for resource poor countries (18 percentage points of GDP) and minerals and metals abundant countries (15 percentage points).

Figure 4. Public Debt in Sub-Saharan Africa, by resource abundance (% GDP)

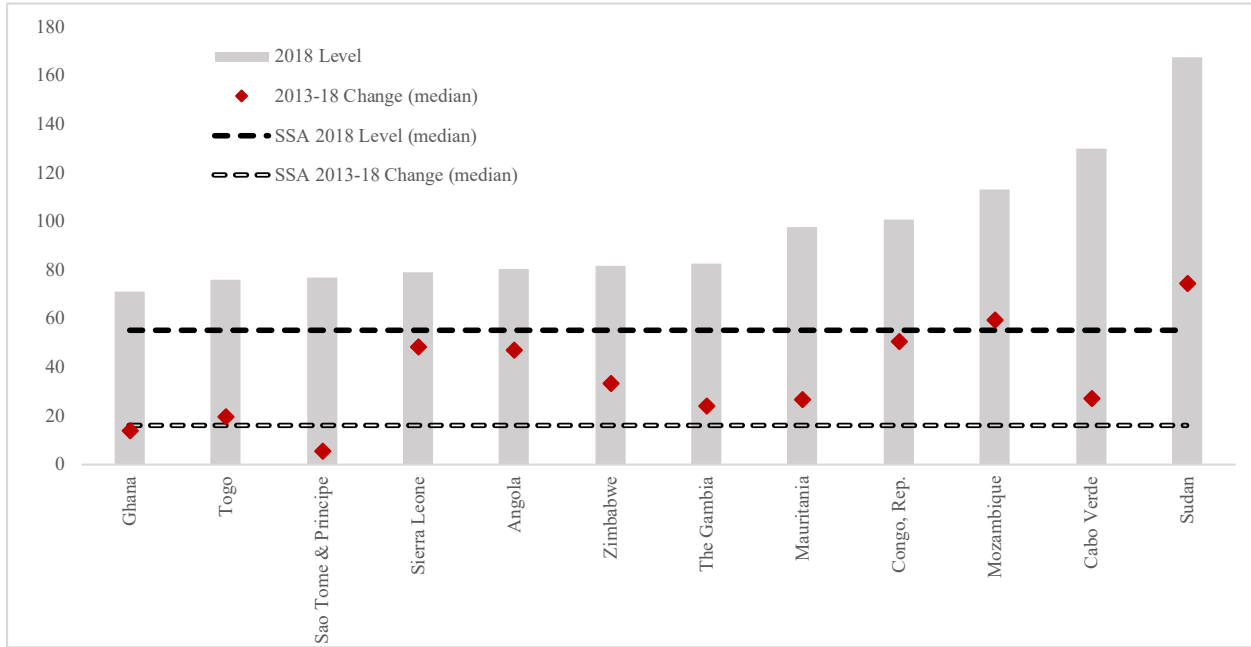


Source: The figure reports GDP-weighted averages by region. IMF – World Economic Outlook Database, October 2018

Fast borrowers had among the highest debt levels in 2018.⁵ **Figure 5** and **Figure 6** add more granularity to the broader debt trends over the past five years. The figures show the 75th percentile of countries with the highest debt levels in 2018, as well as the sharpest increases in public debt between 2013 and 2018, respectively. Eight of the twelve fast-borrowing countries over the past five years can be found in the 75th percentile of debt-to-GDP in 2018. This implies that these eight countries (Angola, Cabo Verde, Congo Rep., Mauritania, Mozambique, Sierra Leone, Sudan, and Zimbabwe) not only exhibit the largest levels of indebtedness but also their debt levels grew at the fastest pace. Additionally, seven of the 12 fastest-borrowing countries are commodity dependent (of which 4 are oil abundant countries). Yet, 40 percent of the fastest borrowers are not commodity exporters, such as Sudan, Mozambique, and Cabo Verde.

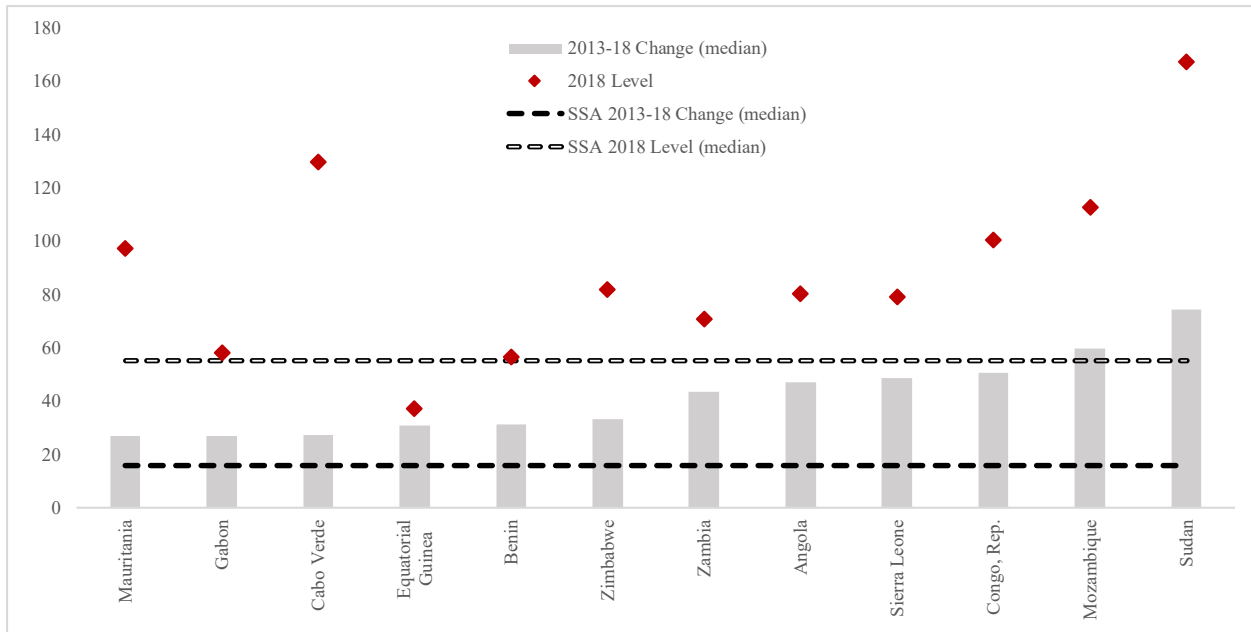
⁵ Fast borrowers are defined as those countries in the upper quartile of the distribution of the change in public debt between 2013 and 2018, measured in percentage points of GDP.

Figure 5. Public debt in select Sub-Saharan African countries, 2018 (% GDP)



Source: IMF – World Economic Outlook Database, October 2018

Figure 6. Change in public debt in select Sub-Saharan African countries, 2012-17 (% GDP)

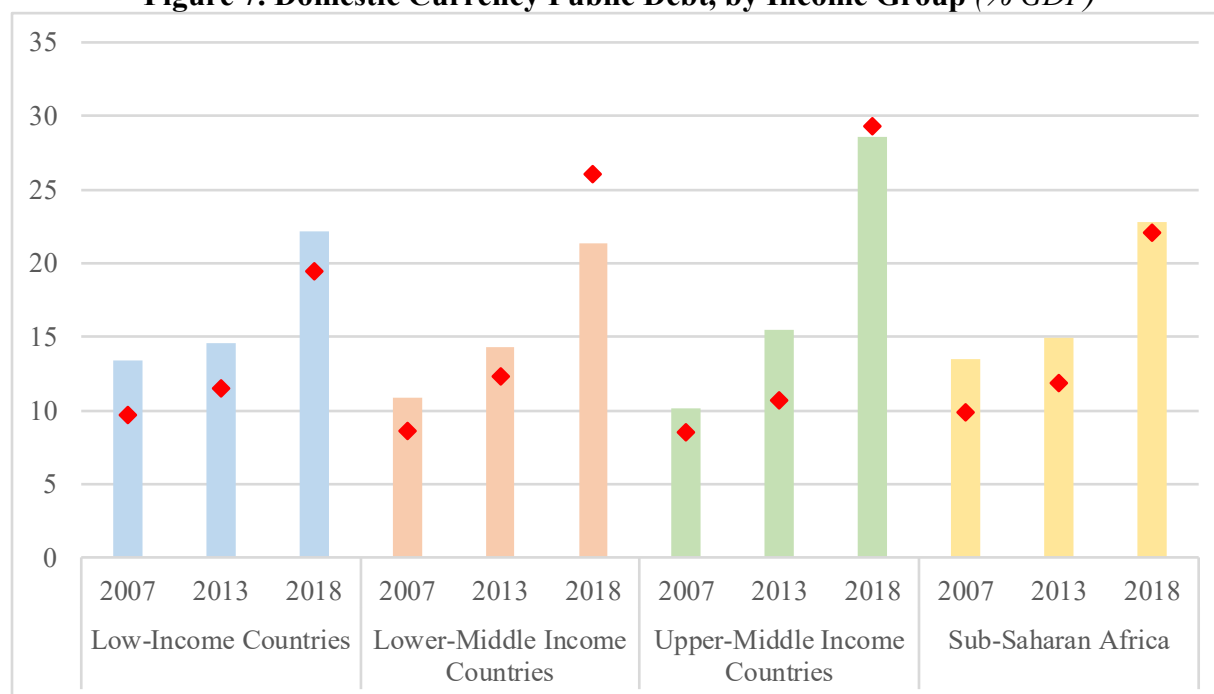


Source: IMF – World Economic Outlook Database, October 2018

2.2. Currency Composition of Public Debt: Domestic Currency Debt on the Rise

Alongside the recent increase in public debt, the currency composition of debt portfolios has been changing.⁶ Foreign currency denominated debt still accounts for the larger part of total debt; however, domestic currency denominated debt has been increasing at a faster pace. For the whole region, the median general government gross debt denominated in foreign currency stood at 29 percent of GDP at the end of 2018 whereas that of public debt in domestic currency was 22 percent of GDP. Between 2013 and 2018, however, median domestic currency debt increased by 10 percentage points, and median foreign currency debt by 7 percentage points (figures 7 and 8).

Figure 7. Domestic Currency Public Debt, by Income Group (% GDP)



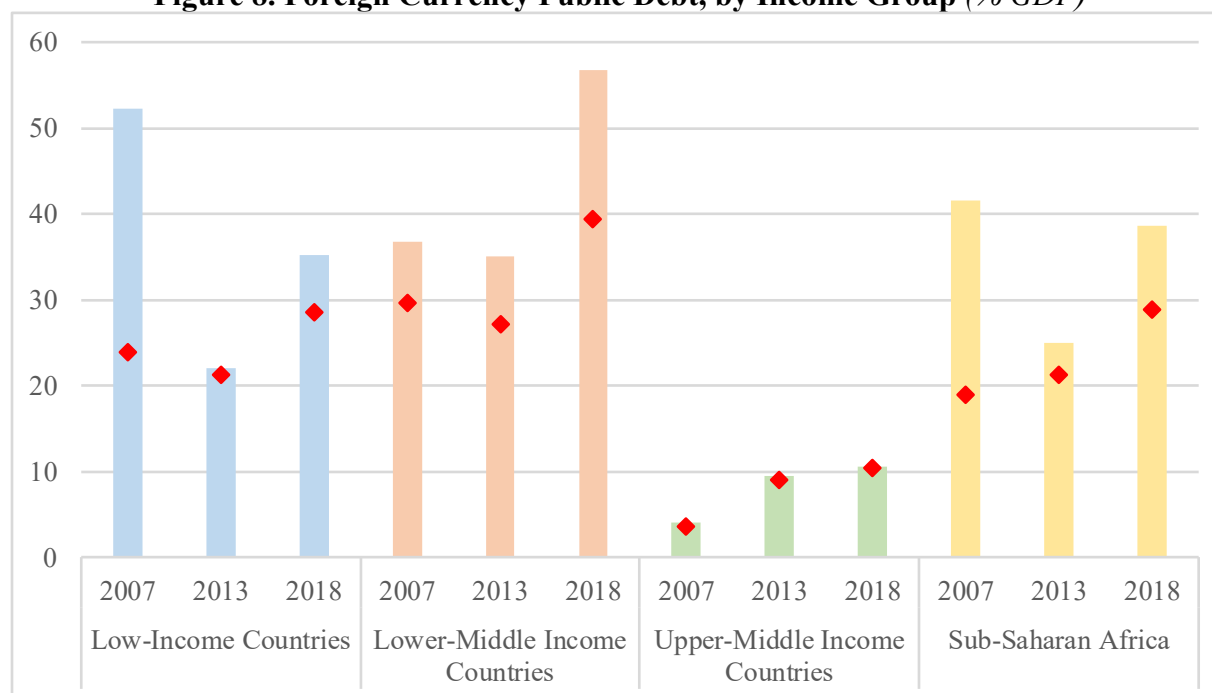
*Note: The columns represent group simple averages whereas red dots (diamonds) represent the group medians.
Source: World Bank; IMF – World Economic Outlook Database, October 2018*

The increase in domestic currency debt was particularly pronounced in upper-middle-income countries (**Figure 7**). Median levels increased from 11 percent of GDP in 2013 to 29 percent in 2018. The median domestic debt of LICs and LMCs also increased although at a slower pace than UMCs, 8 and 14 percentage points of GDP, respectively. The heavier reliance on domestic currency financing in UMCs is not surprising, as these countries have deeper and more developed domestic debt markets and are therefore able to raise more domestic financing. Commodity

⁶ The set of countries used for the analysis of domestic and foreign currency denominated debt is smaller than the set of countries used for the total public debt analysis. For several countries, the split between domestic and external debt is not reported: Burkina Faso, the Democratic Republic of Congo, Gabon, Lesotho, Madagascar, Mauritius, Nigeria, São Tomé and Príncipe, and Zimbabwe.

exporters and small states, of which only a few are UMICs, have experienced the steepest increase in domestic debt.

Figure 8. Foreign Currency Public Debt, by Income Group (% GDP)



*Note: The columns represent group simple averages whereas red dots (diamonds) represent the group medians.
Source: World Bank; IMF – World Economic Outlook Database, April 2018*

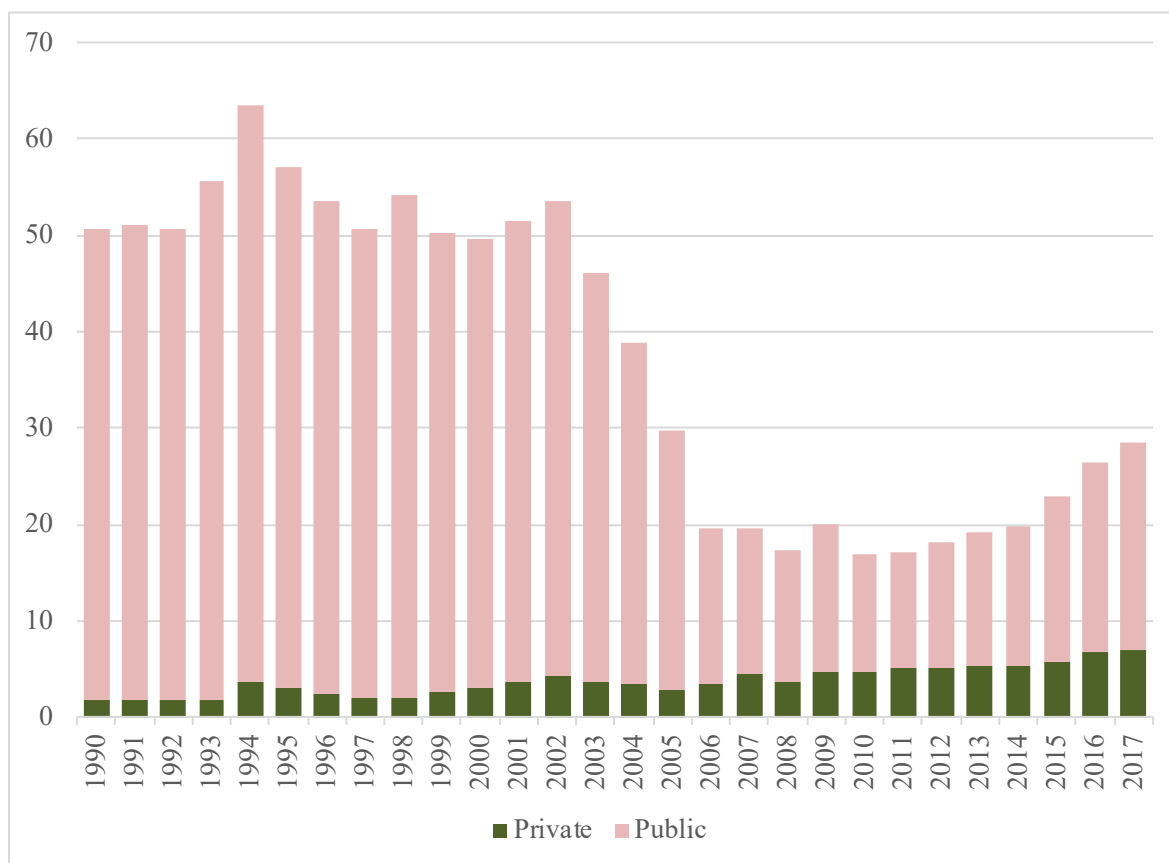
The increase in foreign currency public debt, on the other hand, was particularly pronounced in lower-middle-income countries: LMCs have recorded substantial increases in foreign currency denominated debt since 2013 and display the highest foreign currency debt to GDP share in 2018 (**Figure 8**). During the recent episode of accelerated borrowing, median foreign currency debt increased by 12 percentage points in LMCs, from 27 to 39 percent of GDP. One emerging factor behind this increase was the ability of some of the LMCs in the region to tap international capital markets. During the past few years, Sub-Saharan African countries have issued international market-based bonds at an increasing pace. Most of the countries that issued such bonds were LMCs, such as Angola, Ghana, Côte d'Ivoire, Kenya, and Nigeria.

3. New trends in external borrowing: International bond issuances

3.1 External Public Debt Outlook in Sub-Saharan Africa

Debt in Sub-Saharan Africa (SSA) has been on the rise and most of the concerns are focused on the sustainability of public sector net worth. Section 2 shows that the median public debt to GDP ratio in the region increased from 34 percent of GDP in 2013 to about 55 percent in 2018. During this period, general government gross debt increased more than 10 percentage points of GDP for about three-quarters of the countries in the region (32 out of 45 countries)—and, within this group, public debt grew more than 20 percentage points of GDP for 19 Sub-Saharan African countries. The recent debt build-up has culminated in the highest debt-to-GDP ratios since countries in the region received substantial debt relief through programs such as the Heavily-Indebted Poor Countries (HIPC) and the Multilateral Debt Relief Initiative (MDRI).

Figure 9. External Debt Stock in Sub-Saharan Africa, 1990-2016 (% GNI)



Note: GNI = Gross national income. Source: The World Bank – World Development Indicators

When looking at the evolution of external borrowing in Sub-Saharan Africa, the bulk of external debt consists of obligations of public debtors, including the national government, political subdivisions, and autonomous public bodies, and external obligations of private debtors that are

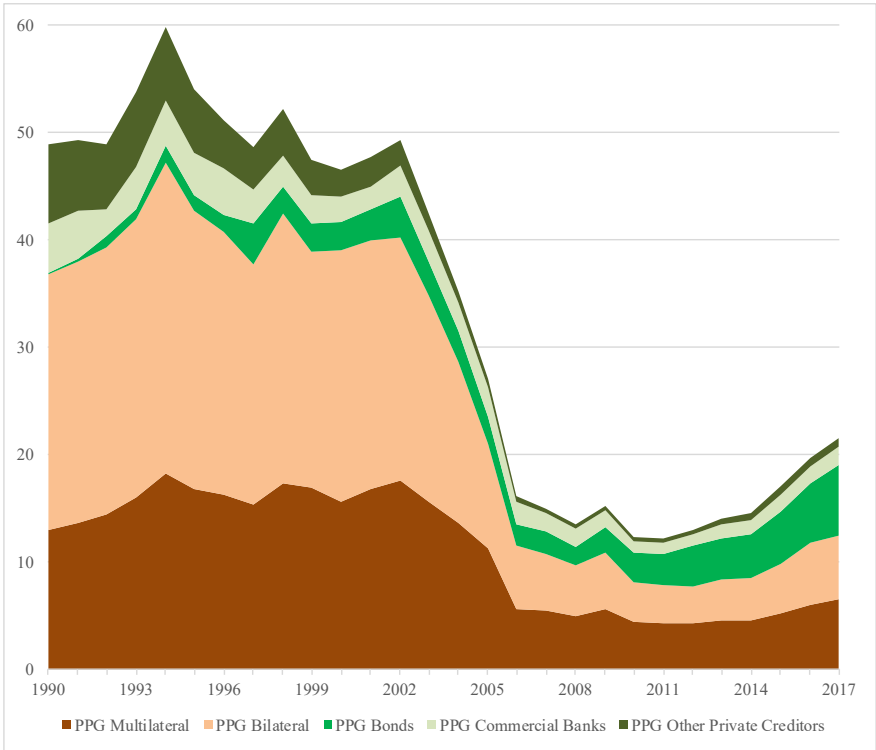
guaranteed for repayment by a public entity. For instance, public and publicly-guaranteed debt was about 75 percent of the outstanding external debt in the region by 2017. However, it is important to point out that the share of private non-guaranteed debt in total external debt stocks has increased from about 4 percent in the early 1990s to about 25 percent in 2017 (Figure 9).

This section highlights two recent developments in the evolution of external public debt in Sub-Saharan Africa over the past decade.

Fact I. There is a shift in the composition of public external debt: Countries have started to seek more financing from non-Paris Club governments and private creditors.

For the region as a whole, there is heightened concern about public debt sustainability due to changes in the composition of the debt portfolio: there is an increasing portion of the public external debt that is owed to private creditors and non-Paris Club governments. Sub-Saharan African countries have traditionally sought financing from multilateral organizations. These organizations typically charge low interest rates and are often willing to renegotiate debts in the event of economic problems. However, a large and growing share of the debt of SSA governments is now owed to commercial creditors, who charge higher yields and are typically less open to restructuring. For instance, the share of the public external debt in the region owed to multilateral organization and bilateral creditors has decreased from about 80 percent of the public external debt in the 1990s to 59 percent over the period 2013-17 (Figure 10).

Figure 10. PPG External Debt in Sub-Saharan Africa, 1990-2017 (% GNI)

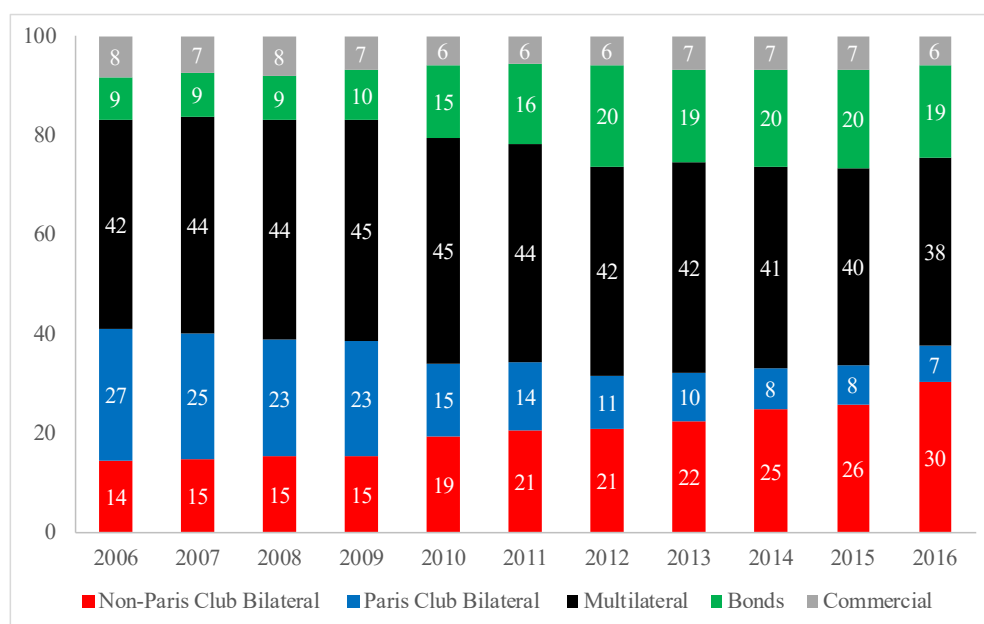


Note: PPG = Public and publicly-guaranteed. GNI= Gross national income. Source: The World Bank – World Development Indicators

Figure 10 also shows that: (i) the share of commercial debt in total public and publicly guaranteed (PPG) debt remained stable from 2007 to 2016, and (ii) the share of PPG bonds increased from 9 percent in 2007 to 19 percent in 2016. The amount owed to bondholders (6.6 percent of GNI in 2017) is now comparable to that owed to either multilateral organizations or bilateral creditors (6.5 and 5.9 percent of GNI in 2017, respectively).

As argued above, the share of the public external debt being held by non-Paris Club governments and private creditors (bondholders and private commercial banks) has been gradually rising in the post-debt-relief period. **Figure 11** shows that the composition of bilateral debt has changed significantly: countries have shifted from Paris Club debt toward non-Paris Club creditors. Within one decade after HIPC and MDRI, the share of non-Paris Club creditors in total PPG debt doubled, from 15 percent in 2007 to 30 percent in 2016, while the share of Paris Club bilateral debt decreased from 25 to 7 percent. At the end of 2016, non-Paris Club debt accounted for 80 percent of total bilateral debt. This trend is even more pronounced in commodity exporting countries, where the share of non-Paris Club creditors increased to nearly 90 percent of total bilateral debt at the end of 2016.

Figure 11. Composition of PPG Public Debt over time (%)

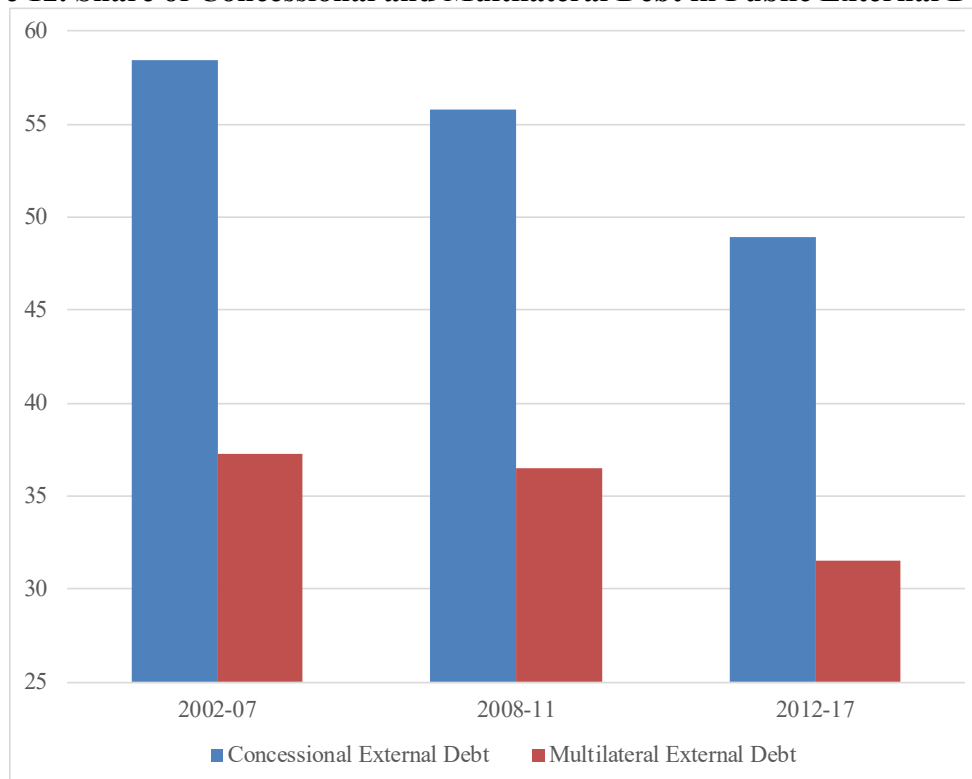


Source: World Bank International Debt Statistics and staff calculations. Published in: World Bank (2018) Africa's Pulse, Volume 17. Washington, DC: The World Bank, October

The change in the composition of public debt in Sub-Saharan Africa summarized above implies that the region is gradually moving away from traditional concessional sources of financing. Over the past 15 years we have observed a gradual and protracted change in the composition of debt portfolios in Sub-Saharan Africa away from traditional concessional sources of financing (**Figure 12**). The share of multilateral and concessional debt (from multilateral and bilateral sources) in the region's public external debt has steadily declined over time. The average share of concessional

debt declines from about 58 percent in 2002-07 to 49 percent in 2012-17 while that of multilateral debt decreases from 37 percent to 32 percent over the same time period.

Figure 12. Share of Concessional and Multilateral Debt in Public External Debt (%)



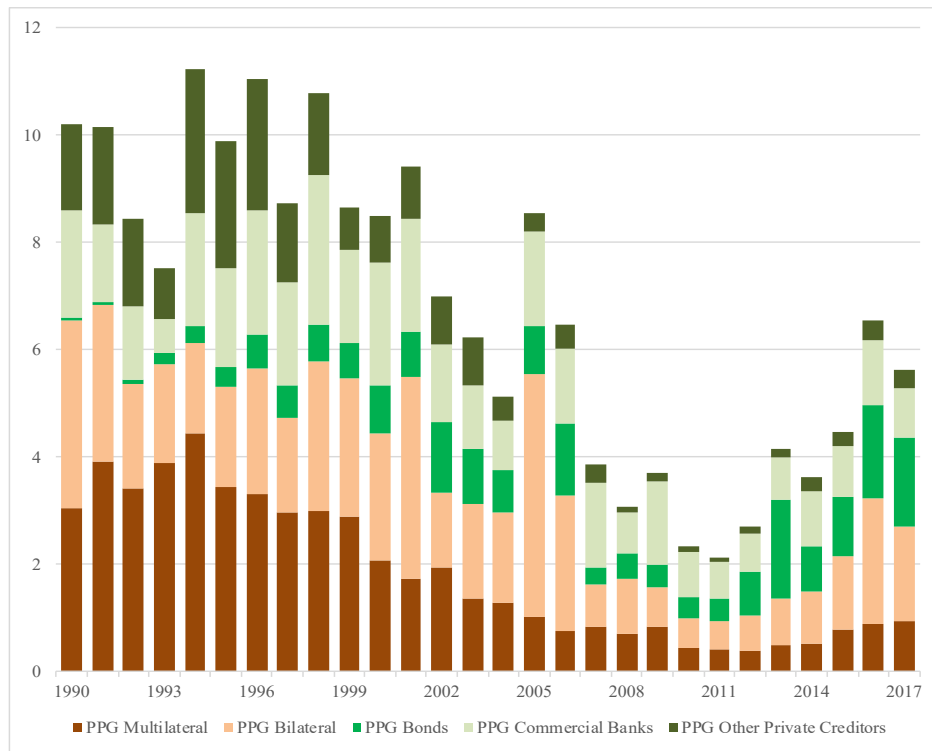
Source: World Bank – International Debt Statistics

Fact II. The change in the composition of public external debt has rendered not only a riskier debt profile but also costlier external debt service.

Rising debt owed to private creditors and non-Paris Club governments, which comes often at shorter maturities and higher interest rates, is rendering larger debt service burdens for borrowing countries in the region. Since 2010, total public external debt service in the region increased by about 4 percentage points of exports and this increase has been driven by service to bilateral creditors (mainly, non-Paris Club governments) and bondholders (**Figure 13**). Unlike government members of the Paris Club, these groups of creditors may not have the mechanisms to coordinate with other creditors —thus, hindering processes of debt resolution.

Debt levels for the region remain modest in comparison to emerging markets and are still lower than they were at the start of the 2000s. However, there are a few countries where the debt outlook is worrisome. Sub-Saharan Africa’s public debt problems are currently concentrated in Mozambique, Angola, the Republic of Congo, Ghana, Nigeria and Zambia. However, a small shock may prompt a crisis in other countries (say, Kenya). Mozambique already had to renegotiate its debt while debt service costs account for more than 15% of government revenue in Angola and Kenya and more than 20 percent in Zambia, Ghana and Nigeria.

Figure 13. PPG External Debt Service (% Exports)



Note: PPG = Public and publicly-guaranteed. Source: The World Bank – World Development Indicators

3.2 Sovereign Bond Issuances in Sub-Saharan Africa

In the aftermath of the global financial crisis, countries in the region started looking for alternative sources of development finance—notably, infrastructure financing—as bilateral loans and grants from Euro Area countries and the United States diminished. In addition to resorting to financing from non-Paris Club governments, Sub-Saharan Africa’s frontier economies had measured success in tapping international bond markets. Early issuers of Eurobonds included the Democratic Republic of Congo (\$454 million), Gabon (\$1 billion) and Ghana (\$750 million) in 2007.

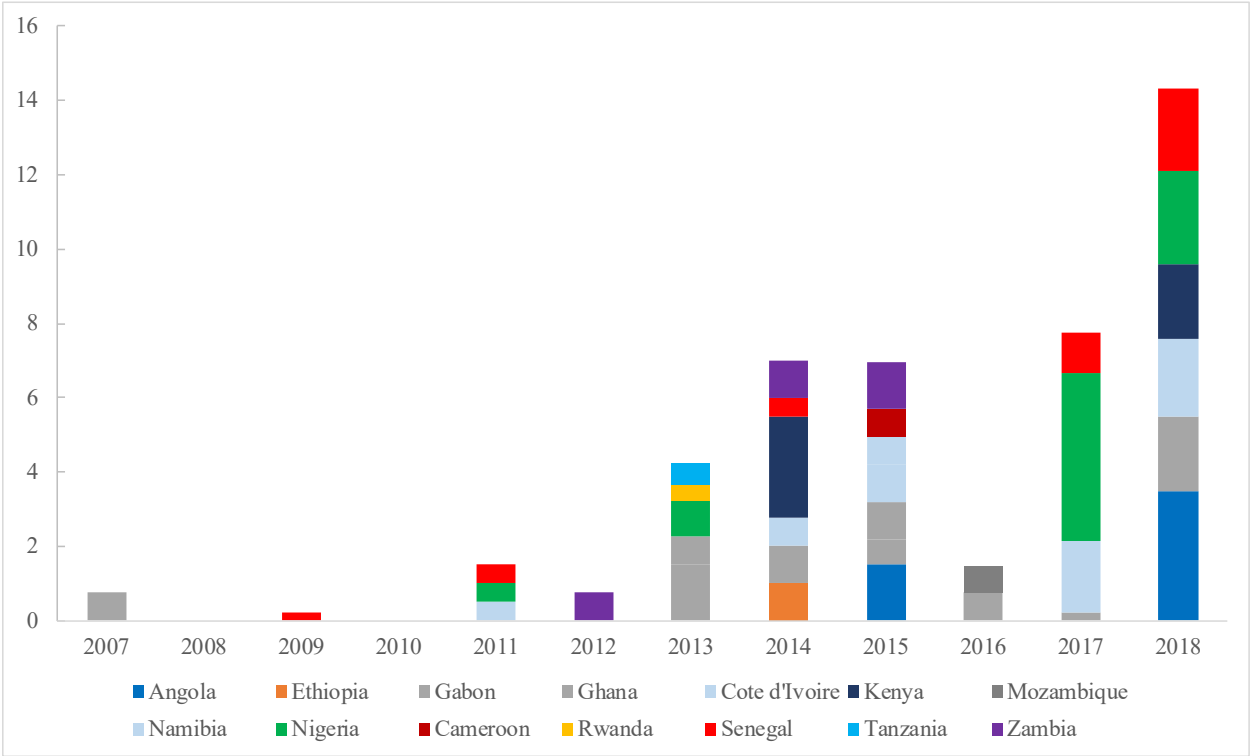
Sub-Saharan African countries have been issuing Eurobonds at an increasing pace.

During the post-global financial crisis period, several low- and lower-middle-income countries in the region have been issuing Eurobonds at an accelerating pace (**Figure 14**). The conditions for international issuances have been benign, with strong and continuous demand from investors and suppressed risk spreads, reflecting investors’ “*search-for-yield*”. By 2018, 16 countries in the region have taken advantage of high and steady demand and issued in international markets.⁷

⁷ The group of countries under analysis in the figures excludes South Africa given its continuous presence in international markets. In addition, the Republic of Congo and Côte d’Ivoire issued bonds in the context of debt exchange/restructuring, in 2007 and 2010 respectively.

Between 2013 and 2015, there was a rapid rise in sovereign bond issuance with more Sub-Saharan African countries accessing international capital markets. These included Côte d’Ivoire, Senegal, Angola, Nigeria, Tanzania, Namibia, Rwanda, Kenya, Ethiopia and Zambia, generating commercial debt exceeding \$17.5 billion. A total of 13 LICs and LMICs in the region accessed the bond markets during 2013 and 2015. In 2013, the largest sovereign bond issuance shares were made by Gabon (\$1.5 billion), Nigeria (\$1 billion), and Ghana (\$0.75 billion). In 2014, the largest issuances were made by Kenya (\$2.75 billion), with Ethiopia, Ghana, and Zambia accruing \$1 billion each. The bulk of these bonds are due between 2021 and 2025 and they are expected to trigger an average repayment of about \$4 billion annually over that interval.

Figure 14. International bond issuances on select LICs and LMICs in Sub-Saharan Africa (US\$ billions)



Source: World Bank, Bloomberg. Published in: World Bank (2018) *Africa’s Pulse*, Volume 18. Washington, DC: The World Bank, October

Sovereign debt issuance increased from an average of US\$6 billion in the period 2013-15 to US\$8.2 billion since 2017. Issuance has been on relatively favorable terms: the weighted average coupon is 6.5 percent and the average maturity is 20 years. Seven countries in the region account for more than three-fourths of the total bond debt issued: South Africa, Côte d’Ivoire, Ghana, Nigeria, Angola, Zambia, and Kenya. By 2018, 16 countries have issued bonds, several of them on a regular basis, with issuances of considerable size (Figure 4). Conditions for international bond issuances have been favorable, with high and steady demand from investors. In 2017, three countries (Côte d’Ivoire, Nigeria, and Senegal) raised US\$ 7.6 billion. In the first half of 2018, six frontier economies in the region (Angola, Côte d’Ivoire, Ghana, Kenya, Nigeria, and Senegal)

have raised US\$14.3 billion —an amount already larger than the US\$ 7.8 billion issued by Sub-Saharan African frontier markets in 2017. On May 2018, Angola and Ghana were the only frontier economies in the region that issued Eurobonds. South Africa, the only emerging market economy in the region, also issued in May.

Four common features emerge from Sub-Saharan African issuances in the first three quarters of 2018: first, Eurobond issuances substantially exceeded prior years. Angola, Côte d'Ivoire, Kenya, Ghana, Nigeria and Senegal issued more than US\$14 billion in international markets, with Angola issuing the largest amount (US\$3.5 billion). Second, countries were able to continue lengthening the maturities of the issued Eurobonds. Sovereign issuers in 2018q2 went to the markets with a two-tranche issue, including 30-year bond issuances. For instance, Angola raised US\$1.75 billion in 30-year Eurobonds while Ghana raised US\$1 billion on Eurobonds of similar maturity. Nigeria was the first Sub-Saharan African country (aside from South Africa) to successfully issue an international bond with a maturity of 30 years, and an amount of US\$3 billion in 2017. Third, the demand for Eurobonds was still high for the sovereign issuers in May 2018: Angola's US\$3.5 billion issuance attracted about 3 times in terms of the value of orders from investors. In the case of Ghana, the US\$2 billion bond issuance was four times over-subscribed (US\$8 billion in offers received).⁸ Finally, Sub-Saharan African countries have continued issuing at favorable terms. For instance, Ghana has sold US\$2 billion of dual-tranche Eurobonds with 10- and 30-year maturities and it will pay favorable yields. Ghana sold sovereign Eurobonds of US\$1 billion each of the 10- and 30-year notes at 7.625 and 8.625 percent, respectively.⁹

The increase in amounts issued and the lengthening of maturities took place against a worsening of sovereign credit ratings. From 2016 onwards, more than 12 Sub-Saharan African countries experienced at least one downgrade by a major credit rating agency (Fitch, Moody's, S&P). By the third quarter of 2018, none of the sovereign issuers depicted in Figure 4 held an investment grade rating by a major rating agency. While most countries are currently rated at a speculative/highly speculative grade, Gabon, Mozambique, and Zambia are rated as substantial risk. More specifically, Angola issued US\$3 billion (\$1.75 billion of 10-year bonds with a yield of 8.25% and \$1.25 billion of 30-year bonds with a yield of 9.375%) despite being downgraded from B2 to B3 by Moody's at the end of April. However, the outlook for the country's sovereign debt was changed from negative to stable.

Between the months of June and October of 2018, no international sovereign bond issuances took place as market sentiment to emerging markets and frontier economies deteriorated. The appetite

⁸ This continues the trend observed in the post-global financial crisis period. For instance, in 2012, Zambia's \$750 million issuance attracted over ten times more in terms of the value of orders from investors (\$11 billion). Similarly, Rwanda's maiden \$400 million bond issuance in 2013, Senegal's \$500 million bond issuance in 2014 and Côte d'Ivoire's \$750 million issuance in 2014 were eight times oversubscribed.

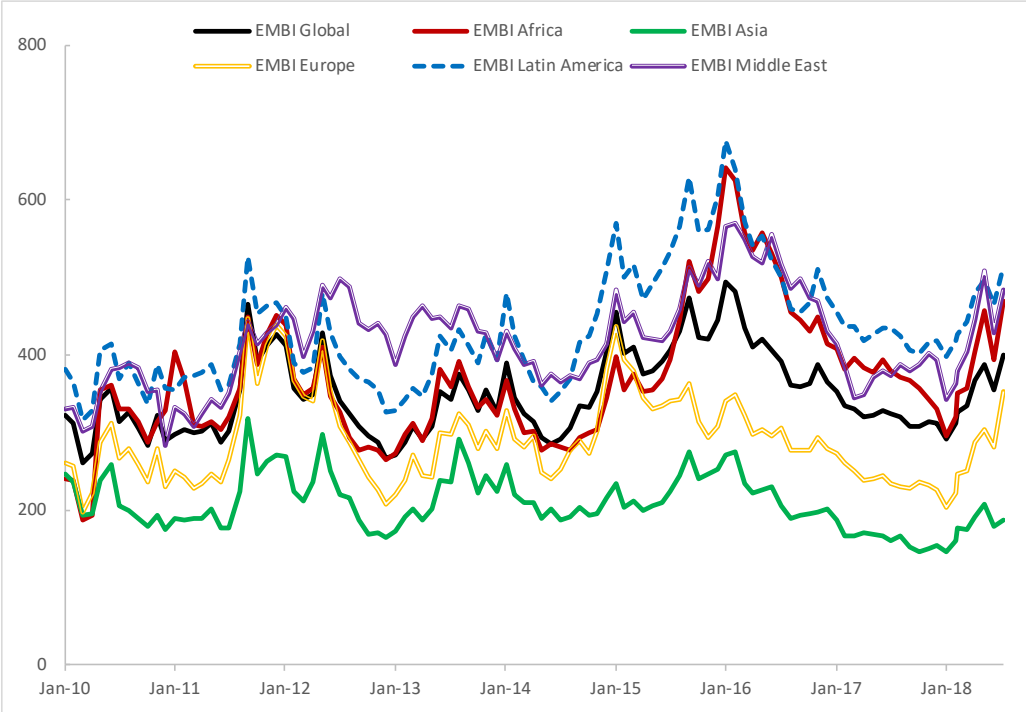
⁹ The average coupon rate of Eurobond issuances in the region is 6.5 percent. For some countries, the yield of these bonds is lower than the coupon rate —thus, reflecting secondary prices for the bond that are higher than that at issuance and, hence, a greater demand for these bonds. On the other hand, the yield is greater than the coupon in Sub-Saharan issuers that are already in high risk or in debt distress (Angola, Republic of Congo and Zimbabwe). The evolution of yields over time and its behavior across countries still broadly reflect ample global liquidity rather than country fundamentals. This scenario is evolving as the current global financial conditions are tightening for emerging markets and developing economies.

for emerging market bonds was reduced due to a stronger US dollar and higher returns on US bonds —where the 10-year bond yield surpassed the 3 percent threshold during the month of May. Concern about the escalation of trade tensions between the United States and China resulted in outflows from emerging market funds and lower Eurobond prices —including for Sub-Saharan African countries. Specifically, the performance of Eurobonds has been dismal in the countries with the largest perceived macroeconomic vulnerabilities —that is, Argentina, Turkey, and Zambia.

Borrowing costs in international bond markets have been gradually increasing.

Figure 15 shows the evolution of the cost of borrowing for international sovereign bonds across different groups of emerging markets and developing economies (EMDEs). Until 2015, Africa’s emerging bond index spread (Africa EMBI) was roughly aligned with JP Morgan’s global emerging market bond index spread (Global EMBI) over the US Treasury. In contrast, sovereign issuers in Sub-Saharan Africa have repeatedly issued above the Global EMBI spread since 2015—and, notably, above emerging markets in Asia and Europe.

Figure 15. Bond spreads of Emerging Markets and Developing Countries (in basis points)



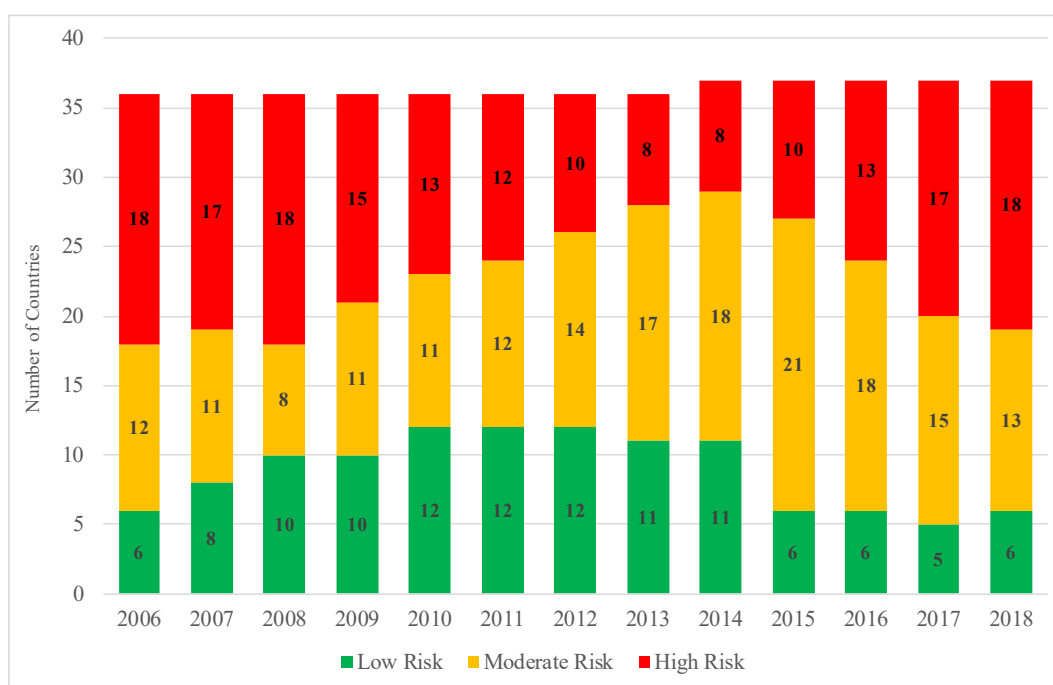
Source: World Bank, Bloomberg. Published in: World Bank (2018) *Africa’s Pulse*, Volume 18. Washington, DC: The World Bank, October

In the first half of 2018, the gap between the global and African spreads narrowed as countries in the region issued international bonds at favorable conditions. However, unfavorable market sentiment to emerging market and developing countries bonds —triggered by the macroeconomic imbalances in Argentina and Turkey— may have widened again the gap between the African and global bond spreads.

Since 2013, the number of Sub-Saharan African countries in risk of debt distress has increased sharply.

The Low-Income-Country Debt Sustainability Framework (LIC DSF) analyzes and evaluates the public debt situation in LICs on an annual basis and assesses the countries' risk of debt distress. In 2006, 18 countries in the region were at a high risk of debt distress, roughly equaling the number of countries at moderate and low risk combined (**Figure 16**).¹⁰ After the region received more than US\$100 billion in debt relief under HIPC and MDRI in nominal terms, debt sustainability ratings improved. The number of countries at high risk of debt distress decreased to eight in 2013-14. The trend reversed afterwards, and the region started to borrow rapidly—notably, borrowing from non-Paris Club governments and private creditors (bondholders and commercial banks). In line with this changing composition, LIC-DSF risk ratings started to deteriorate and the number of countries at high risk of debt distress or in distress more than doubled to 18 by October 2018.

Figure 16. Evolution of the risk of debt distress: SSA LIC DSF countries



Source: World Bank, Low-Income Country Debt Sustainability Framework

¹⁰ The number of Sub-Saharan African countries for which LIC Debt Sustainability Analysis (DSAs) have been prepared has changed over time. As of now, DSAs are available for 34 active International Development Association–eligible countries, excluding inactive countries and countries in arrears to the World Bank, that is, Eritrea, Somalia, Sudan, and Zimbabwe.

The 2017 review of the LIC DSF introduced reforms to ensure that the framework remains appropriate for the rapidly changing financing landscape facing LICs.¹¹ Additionally, the revised LIC DSF aims to improve insight about debt vulnerabilities. The basic architecture of the LIC DSF remains intact, but it is supplemented by a set of reforms including, among others, the simplification of debt indicators and thresholds, tailored stress tests, and an assessment of other potential risk factors.

In line with the deterioration in LIC DSF risk ratings, sovereign debt ratings by major rating agencies deteriorated over the past two years. Between 2016 and the first quarter of 2018, 12 Sub-Saharan African countries' long-term foreign currency debt was downgraded at least one notch by one of the three major rating agencies.¹² In contrast, only two countries received an upgrade by at least one notch over the same period, Burkina Faso and Senegal.

Rising bond issuances by sovereigns in Sub-Saharan Africa are coming along with risks associated to refinancing as well as fluctuations in currencies and interest rates.

Access to international financial markets comes with several benefits to issuing countries, such as the ability to raise large volumes in a short time span, the diversification of the investor base, and supplementing low domestic savings rates. African countries have issued bonds to manage debt and finance investment in much needed infrastructure to sustain growth. Nevertheless, the considerable sizes of many international bonds and their denomination in foreign currency (largely US dollar denominated debt) leave countries exposed to changes in market sentiment, risk assessments, future exchange rate depreciation, or changes in global rates due to monetary tightening in major economic areas. This holds true especially if bonds were issued in a bullet structure, where principal is due at maturity.¹³

Potential risks should be considered by SSA countries issuing international sovereign bonds. For instance, infrastructure project delays may lead to considerable carry costs for not using the proceeds (implementation risks). Inefficient spending of the funds may lead to heightened inability to repay the bond at maturity (debt sustainability problems). By the first semester of 2018, 18 countries (more than 40 percent of LIC DSA countries) in the region were at high risk of debt distress—three times as many as in 2013. When bond financing represents the bulk of the country's external debt or when there is very little depth and liquidity in the bond market, the country may face roll-over risks. Additional problems arise when maturities are shorter than the projects that are to be funded. Borrowing in a currency other than the domestic one may also lead to currency or exchange rate risk. When currencies weaken—say, when advanced economies conduct a contractionary monetary policy—interest payments on the Eurobond in dollar terms become relatively more expensive than repaying domestic debt. Risks are heightened due to currency mismatches and the danger of a sharp depreciation when the bond is due.

¹¹ The World Bank Board paper on the revised LIC DSF can be found at: <http://documents.worldbank.org/curated/en/823731506617907804/Review-of-the-debt-sustainability-framework-for-low-income-countries-proposed-reforms>.

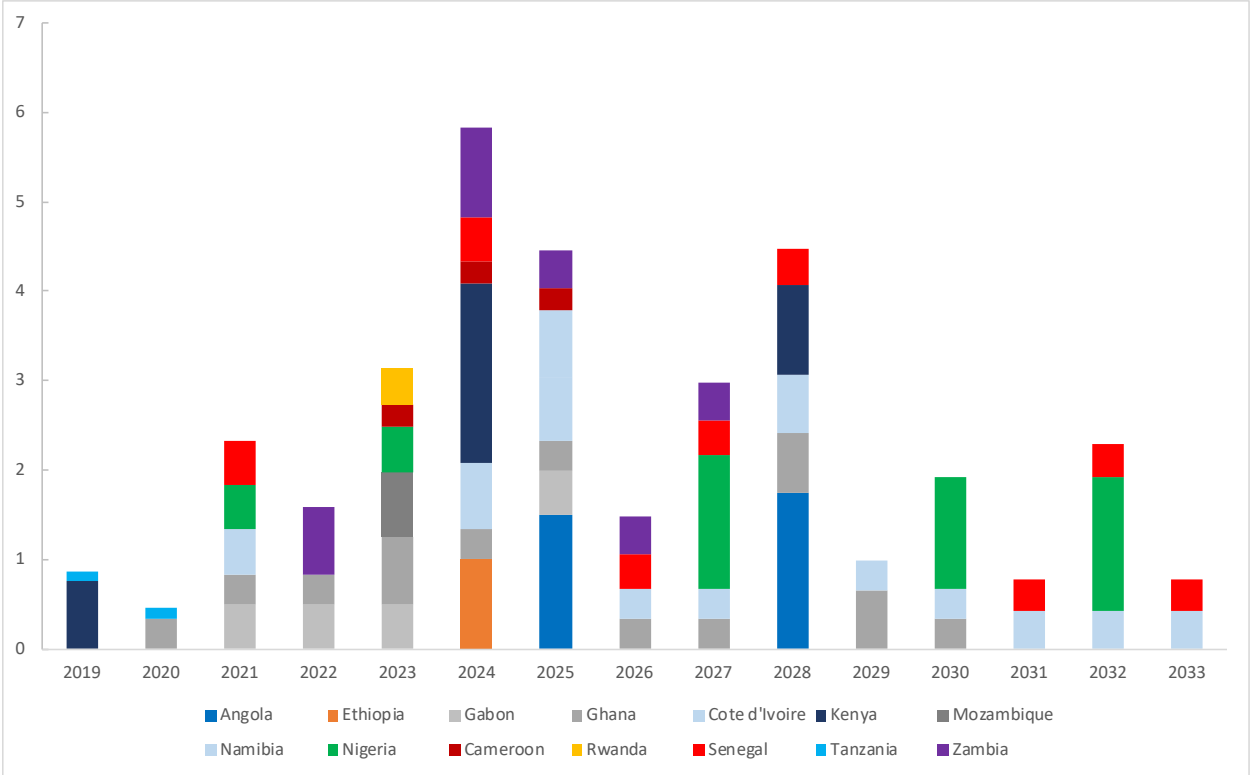
¹² Fitch, Moody's, and Standard & Poor's.

¹³ To manage upcoming maturity peaks, Ghana announced the plans to use some of the proceeds of its international bond issuance in May 2018 to refinance debt and up to \$750 million as revenue for its 2018 budget.

Monetary policy normalization in developed countries could limit the availability of loanable funds via Eurobond issuances. Countries in the region have enjoyed favorable external conditions for several years but could well confront a tightening in financial conditions due to the move to normalization of monetary policy in advanced countries, a decrease in other sources of funding, and rising sovereign risks in the region. International bond market conditions are still bullish; however, it is questionable whether these conditions will hold in the future.

From 2021 onwards, international bonds will begin to mature and the large repayments pose significant refinancing risk to the region (**Figure 17**). About US\$3.7 billion in debt per year is set to mature in Sub-Saharan Africa during 2019-20. The amount of maturing debt will exceed US\$8 billion in 2024. Countries with bond debt maturing in the coming years could face greater refinancing risks if international financial market conditions tighten and global investors lose interest in rolling over existing debt or purchasing new debt issuances. In addition to refinancing risk, liquidity risks have increased in several Sub-Saharan African countries as changes in the level and composition of PPG external debt raised debt service payments. Several countries breached their respective thresholds, indicating potential liquidity bottlenecks.

Figure 17. International Bond Repayments for select LICs and LMICs in Sub-Saharan Africa (US\$ billions, estimates)



Source: World Bank (2018) Africa's Pulse, Volume 18. Washington, DC: The World Bank

The likelihood of a tighter than expected US monetary policy which will push up bond yields presents another source of risk. However, yield spreads are wide enough that marginal increases in US dollar yields may not have a large impact on total borrowing costs. Other drivers, including currency depreciation and growth slowdown, would play a more destabilizing role. For instance, a weaker currency poses significant risk to debt sustainability in Angola and Ghana. Slower growth would lead to problems across the region.

The procurement of sovereign bonds carries the potential to cause or compound debt sustainability challenges. Generally, funds generated from Eurobond issuances have been invested in non-income-generating social infrastructure which limits the repayment capabilities of these countries. Moreover, at least three countries, namely Rwanda, Gabon and Ghana, have allocated a portion of Eurobond funds towards re-financing public debt.

4. The Need to “Borrow without Sorrow”: Financing Infrastructure

Sub-Saharan Africa is a region with a massive deficit in infrastructure. It trails the rest of the developing world not only in the quantity and quality of the infrastructure network but also in terms of population access to these services. Severe infrastructure bottlenecks need to be addressed and the potential growth benefits of addressing these bottlenecks are large (World Bank 2017).

Narrowing the infrastructure gap requires financing. Earlier estimates point to infrastructure needs of the region exceeding US\$93 billion per year over the next decade (Briceño and Garmendia 2010). Actual investments in infrastructure amounted to US\$45 billion per year while about one-third of the infrastructure gap can be met through operational optimization—that is, through gains from eliminating operational inefficiency, gains from tariff cost recovery, among others. This leaves a financing gap of US\$31 billion (5 percent of the region’s GDP). Public-private partnerships could potentially finance 40 percent of this optimized gap (that is, an annual amount of nearly US\$12 billion). In addition, more recent estimates by the African Development Bank suggest that the region’s infrastructure needs amount to US\$130 billion to US\$170 billion per year, with a financing gap in the range of US\$68 billion to US\$108 billion (AfDB 2018).

The limited domestic resource mobilization and other pressing demands for public investment (for instance, education and health) would lead countries to seek funds externally. The global financial crisis arguably drove developing countries—and, notably, Sub-Saharan African countries—to alternative sources of development finance. Countries in the region have resorted to loans from non-Paris Club governments and international bond issuances to (at least partly) finance infrastructure projects—as bilateral loans and grants from European countries and the United States have diminished.

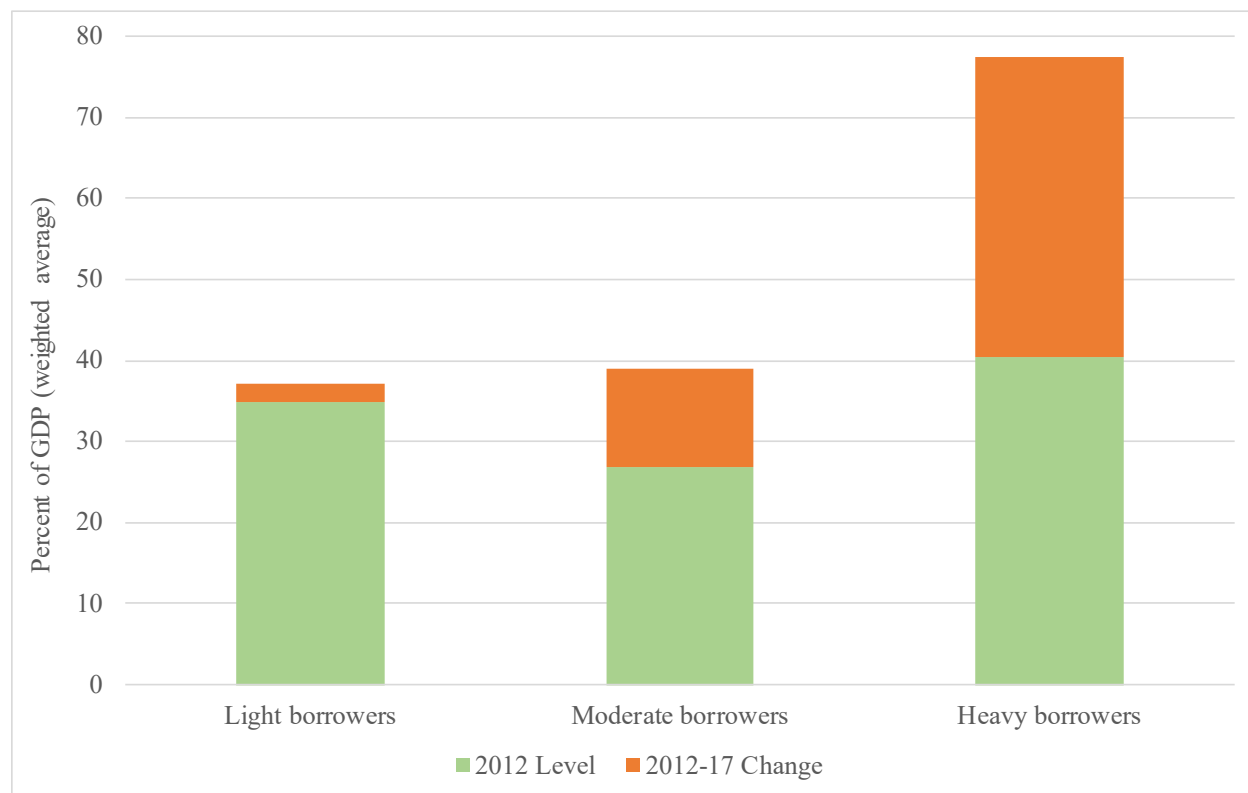
Intensity of debt accumulation and use of resources

Section 2 documented the increase of public debt levels in the region as a whole; however, the pace of public debt accumulation has varied widely across countries. According to the intensity of debt build-up, Sub-Saharan African countries can be classified by the accumulation of their general government gross debt (as a percentage of GDP) between 2012 and 2017 into:

- *Light borrowers* are those countries with cumulative debt variation lower than 10 percent of GDP between 2012 and 2017. The (weighted) average cumulative variation of public debt for light borrowers is 2.2 percent of GDP while their (weighted) average level of public debt is 37.1 percent of GDP. It includes countries like Botswana, the Comoros, Congo, Dem. Rep., Côte d'Ivoire, Eritrea, Guinea-Bissau, Lesotho, Madagascar, Mauritius, São Tomé and Príncipe, Seychelles, and Tanzania.
- *Moderate borrowers* are countries with cumulative public debt variation between 10 and 20 percent of GDP in the period 2012-17. On average, the cumulative variation of public debt for moderate borrowers is 12.2 percent of GDP while their (weighted) average public debt stock amounts to 39.1 percent of GDP. It includes countries like Burkina Faso, Burundi, Cameroon, Ethiopia, Guinea, Kenya, Liberia, Malawi, Mali, Mauritania, Niger, Nigeria, Rwanda, Senegal, South Africa, Eswatini, and Uganda.

- *Heavy borrowers* are countries with cumulative public debt variation greater than 20 percent of GDP from 2012 to 2017. The cumulative variation of public debt for heavy borrowers is, on average, 36.9 percent of GDP and the level of general government gross debt is 77.4 percent of GDP. This group includes the following countries: Angola, Benin, Cabo Verde, Central African Republic, Chad, Congo Rep., Equatorial Guinea, Gabon, Ghana, Mozambique, Namibia, Sierra Leone, South Sudan, Sudan, The Gambia, Togo, Zambia, and Zimbabwe.

Figure 18. Public Debt in Sub-Saharan Africa, by intensity of debt accumulation



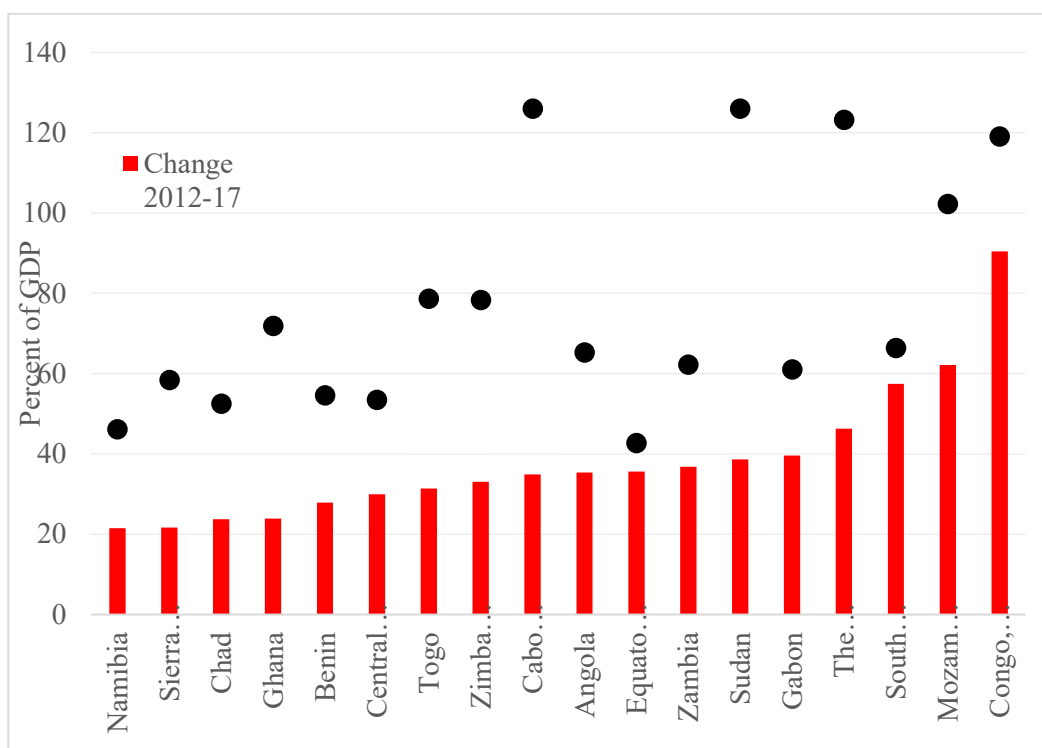
Source: International Monetary Fund, World Economic Outlook Database.

Figure 18 shows the evolution of public debt stocks over the past five years across the different groups of SSA countries classified by their debt intensity. This figure corroborates the conjecture that there is a great deal of heterogeneity in the pace of public debt accumulation over the past five years. On average, heavy borrowers already had the largest public debt stock among SSA countries but relatively contained at about 40 percent of GDP in 2012. At the same time, the group of heavy borrowers experienced the largest accumulation of public debt from 2012 to 2017. Public debt stocks of heavy borrowers in the region almost doubled by 2017 (i.e. the average level of public debt amounted to 77.4 percent of GDP).

There is variability across countries in both the level and pace of accumulation of public debt within the group of heavy borrowers in Sub-Saharan Africa (**Figure 19**). The median cumulative

variation of general government gross debt from 2012 to 2017 is about 35 percent of GDP, while their median public debt stock is 66 percent of GDP. Zooming in on the group of heavy borrowers, it can be pointed out that five out of eighteen heavy borrowers in the region have a public debt stock that exceeds 100 percent of GDP; namely, Cabo Verde, Republic of Congo, The Gambia, Mozambique and Sudan. Additionally, three heavy borrowers (Ghana, Togo, and Zimbabwe) have public debt levels that are above 70% of GDP (but still below 100% of GDP).

Figure 19. Public debt level and change across heavy borrowers in Sub-Saharan Africa



Source: International Monetary Fund, World Economic Outlook Database.

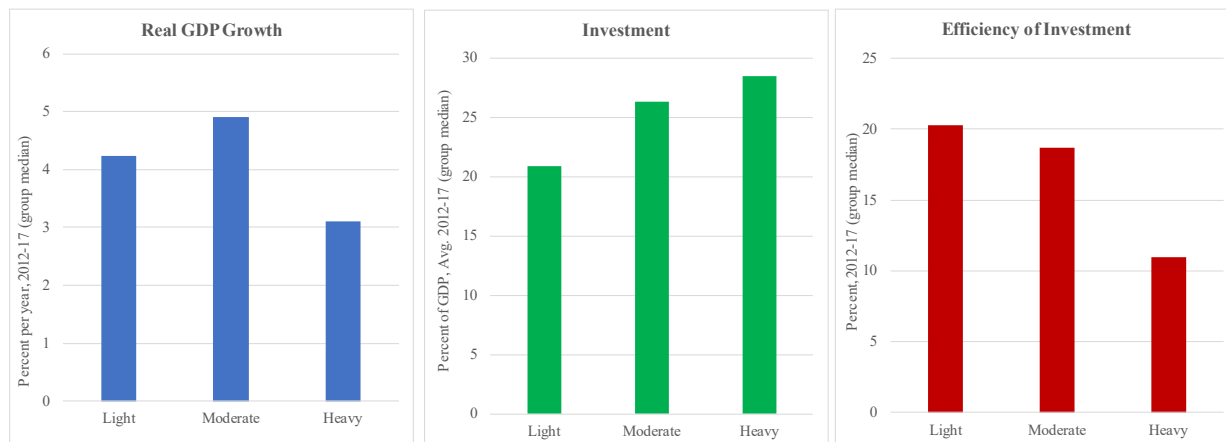
Public debt increased sharply over the past five years: What do SSA countries have to show for?

Public debt has an important impact on the economy in the short- and the long-run. It has been argued that debt (contracted to finance deficits) can stimulate aggregate demand and output in the short run but crowds out capital and reduces output in the long run (Elmendorf and Mankiw, 1999). Others have argued that there is a non-linear effect of public debt on economic growth that arises once the country surpasses a tipping point of fiscal sustainability. That is, debt overhang could distort investment decisions in environments with very high public debt (Krugman 1988; Aguiar et al. 2009).

In the context of infrastructure financing, public debt may have a positive impact on the economy to the extent that the stream of revenues generated by the infrastructure project under finance is sufficient to repay the debt. In other words, it has a positive impact if the returns from the investment project guarantee the sustainability of public finances. An indirect way to examine the

returns is to compare the GDP growth, investment ratios and efficiency of investments of the different types of borrowers in the region.

Figure 20. Growth, investment and efficiency of investment across types of borrowers in Sub-Saharan Africa, 2012-17



Source: World Bank, World Development Indicators. Elaboration: AFRCE Staff estimates.

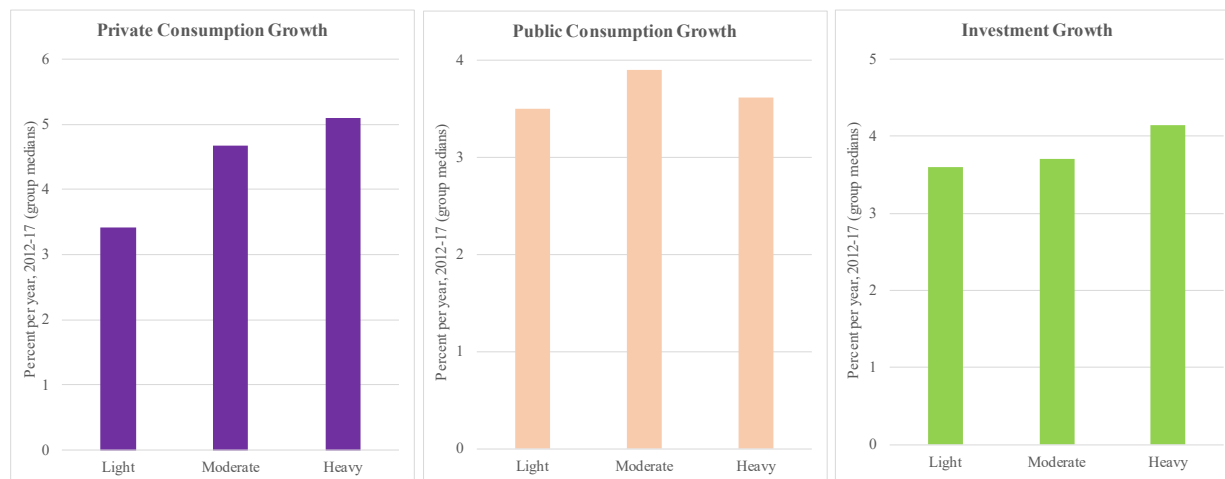
Figure 20 reports the median rate of GDP growth, total investment (as percentage of GDP) and the efficiency of investment (as proxied by the growth multiplier of investment). It shows that heavy borrowers exhibit the highest investment coefficients with a median of 28.4 percent of GDP as opposed to the 26.3 and 20.9 percent of GDP coefficients displayed by moderate and light borrowers' rates of investment. However, heavy borrowers show the lower returns for that higher investment coefficient —as captured by the growth rate of GDP. Total output of heavy borrowers grew at an average annual rate of 3.1 percent. Note that the GDP growth rate of light and moderate borrowers totaled 4.2 and 4.9 percent per year. These findings imply that heavy borrowers might be financing greater investment; however, the efficiency associated to that spending is significantly lower than that of the other groups of borrowers within the region. Finally, light borrowers have lower investment spending (relative to the size of their economy) that it is conducted more efficiently.

An alternative way to examine whether the sustainability of the funds borrowed by the private sector is to indirectly compute the drivers of growth from the aggregate demand perspective. The idea is that sustainability of the funds borrowed would be associated to higher growth of investment rather than higher growth in (private or public) consumption.

Figure 21 reports the median growth rates per year of private consumption, public consumption, and gross capital formation (investment) for the different types of borrowers across Sub-Saharan Africa during the period 2012-17. Private consumption growth among heavy borrowers was the largest (5.1 percent per year) as opposed to growth rates per year of 4.7 and 3.4 for moderate and light borrowers. In the case of public consumption, it is the group of moderate borrowers that exhibit the largest growth rate (3.9 percent per year). It can be inferred then that moderate

borrowers in the region are financing public consumption (e.g. goods and services, compensation of employees). In other words, they might be looking for budget support. Finally, there are no considerable differences in the growth rate of investment between light and heavy borrowers — i.e. it fluctuates between 3.6 and 3.7 percent per year. However, total investment grew at 4.1 percent per year among heavy borrowers. The findings from Figures 20 and 21 show that heavy borrowers in the region are experiencing a debt-fueled inefficient investment.

Figure 21. Growth of aggregate demand components across types of borrowers in Sub-Saharan Africa, 2012-17

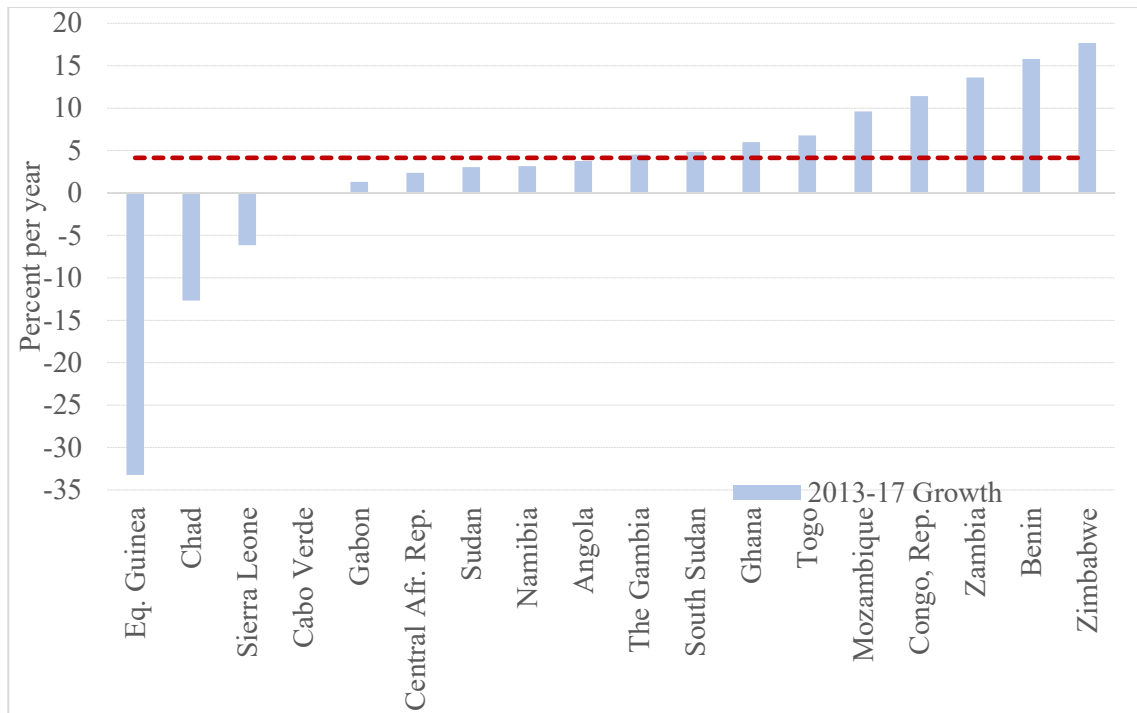


Source: World Bank, World Development Indicators. Elaboration: AFRCE Staff estimates.

The rate of growth in the components of aggregate demand across types of borrowers in the region depicted in **Figure 21** conceals the great degree of heterogeneity across countries within each group. Additional insights are provided about the cross-country behavior of investment growth among heavy borrowers and that of public consumption growth among moderate borrowers.

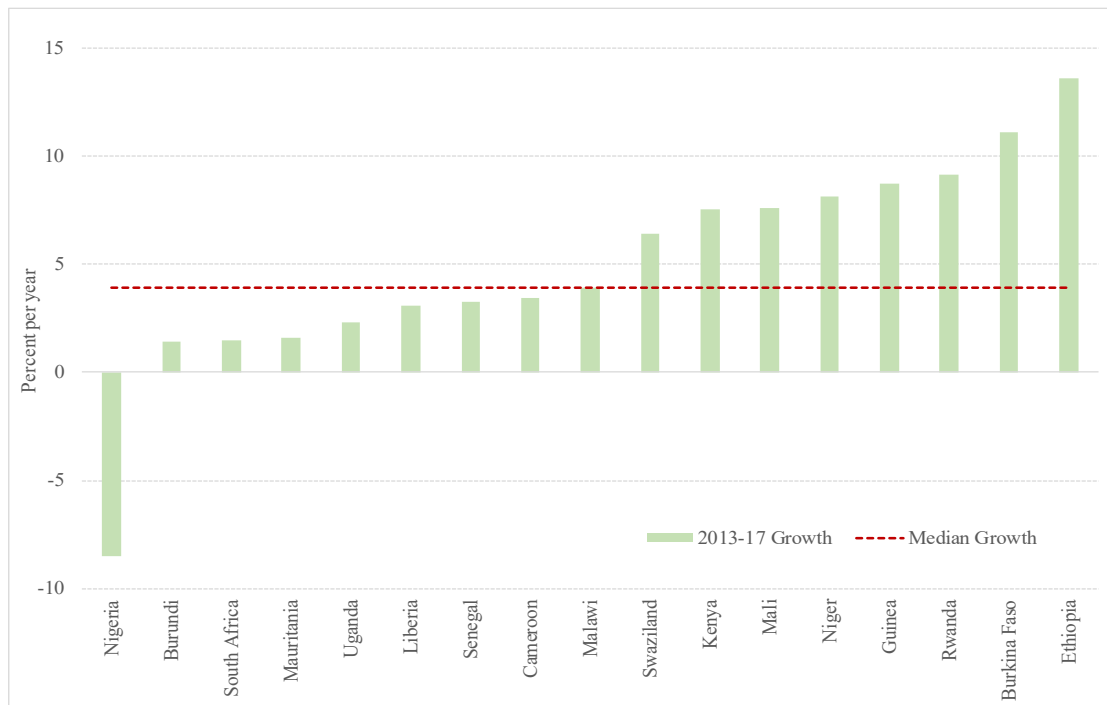
Figure 22 reports the annual average growth rate of gross capital formation across 18 heavy borrowers in Sub-Saharan Africa. Three countries in this group experienced a collapse in investment growth (Equatorial Guinea, Chad and Sierra Leone). The collapse in investment might be attributed partly to adverse commodity price shocks (e.g. plunge in the price of oil and iron ore) as well as idiosyncratic shocks (fragility and conflict, and health shocks). On the other hand, 14 countries in this group exhibit positive investment growth, with a median of **7.4** percent per year. This growth rate fluctuates from **1.3** percent per year (Gabon) to **17** percent (Zimbabwe).

Figure 22. Investment Growth across heavy borrowers in Sub-Saharan Africa, 2012-17



Source: World Bank, World Development Indicators. Elaboration: AFRCE Staff estimates.

Figure 23. Public Consumption growth across SSA moderate borrowers, 2012-17

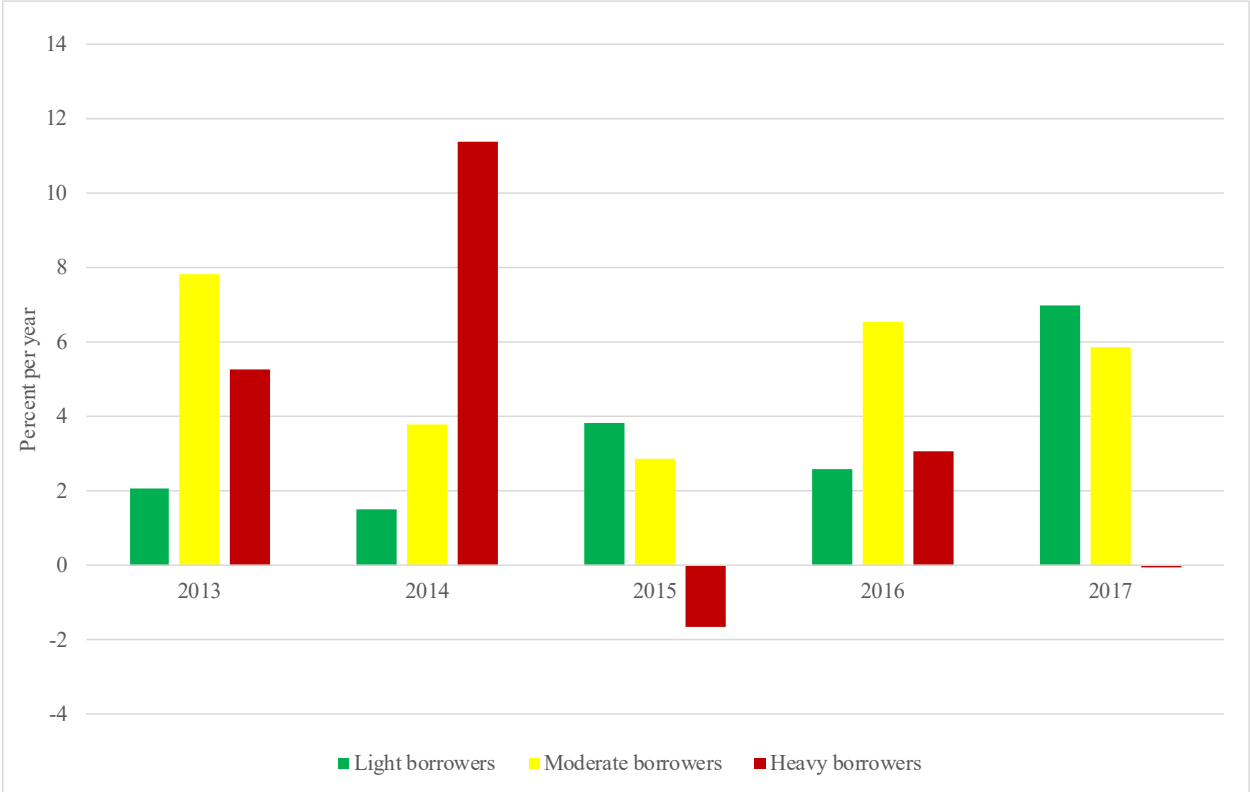


Source: World Bank, World Development Indicators. Elaboration: AFRCE Staff estimates.

Figure 23 plots the annual average growth rate of public consumption (in real terms across moderate borrowers in the region during the period 2012-17. Note that with the exception of Nigeria, public consumption grew during the period under analysis for all moderate borrowers. The median annual growth rate for these 16 countries is 5.2 percent. Five moderate borrowers have an annual growth rate of public consumption that exceed 8 percent (Niger, Guinea, Rwanda, Burkina Faso and Ethiopia).

Figure 24 shows the annual evolution of investment growth by group of borrowers from 2013 to 2017. Interestingly, there are divergent trends in investment growth across country groups: (a) there is a steady increase in the (cross-country) median rate of growth of investment of light borrowers from about 2 percent in 2013 to 7 percent in 2017. (b) Investment growth by moderate borrowers declines up to 2015 (partly attributed to the decline in commodity prices and recovers swiftly (to 6-6.5 percent in 2016-17). (c) After the plunge in commodity prices in 2014-5, the growth of investment not only decelerates sharply but it does not recover in the subsequent years. This implies that the investment growth collapse is more marked among heavy borrowers after the sharp commodity price decline.

Figure 24. Investment growth by groups of borrowers in Sub-Saharan Africa, 2013-17



Source: World Bank, World Development Indicators. Elaboration: AFRCE Staff estimates.

5. Policy discussion

Containing public debt vulnerabilities has typically led to a policy discussion that puts a lot of emphasis on debt management issues such as: (a) policies/mechanisms to enhance debt-capacity building and transparency —enhancing procedures of public debt recording, monitoring and reporting to avoid “debt surprises”— and (b) strengthening debt management practices —where the World Bank can play a role in disseminating best practices in the management of risks associated to currency and interest rate fluctuations, refinancing, contingent liabilities, and SOE debt, among others.

Debt management, however, is only one dimension of a more holistic strategy to reduce debt vulnerabilities. That strategy should include: (a) practices that help manage the risks of the balance sheet of the government —including public assets and non-debt liabilities (contingent liabilities), and (b) policies that foster the efficiency of public investment.

Building debt management capacity

Several countries in the region have a narrow coverage of public debt data (for instance, data on domestic arrears and contingent liabilities of state-owned enterprises) and limit data transparency. The lack of data and/or transparency hinders the debt sustainability analysis and the assessment of fiscal risks, thus elevating the probability of debt surprises (e.g. Mozambique, Republic of Congo, and Zambia). Resorting to borrowing from non-traditional creditors has also led to opacity on the terms and conditions of loans (especially, collateralized loans).

In this context, international financial institutions can provide technical assistance and develop tools to build capacity to record, monitor, and report debt in Sub-Saharan African countries. The World Bank should continue improving upon its tool to monitor a country’s capacity and performance on debt recording, monitoring and reporting —that is the Bank’s Debt Management Performance Assessment (DeMPA). There is also scope to enhance accessibility and user friendliness of the public debt data, and encourage countries to improve reporting and compliance with established statistical standards.

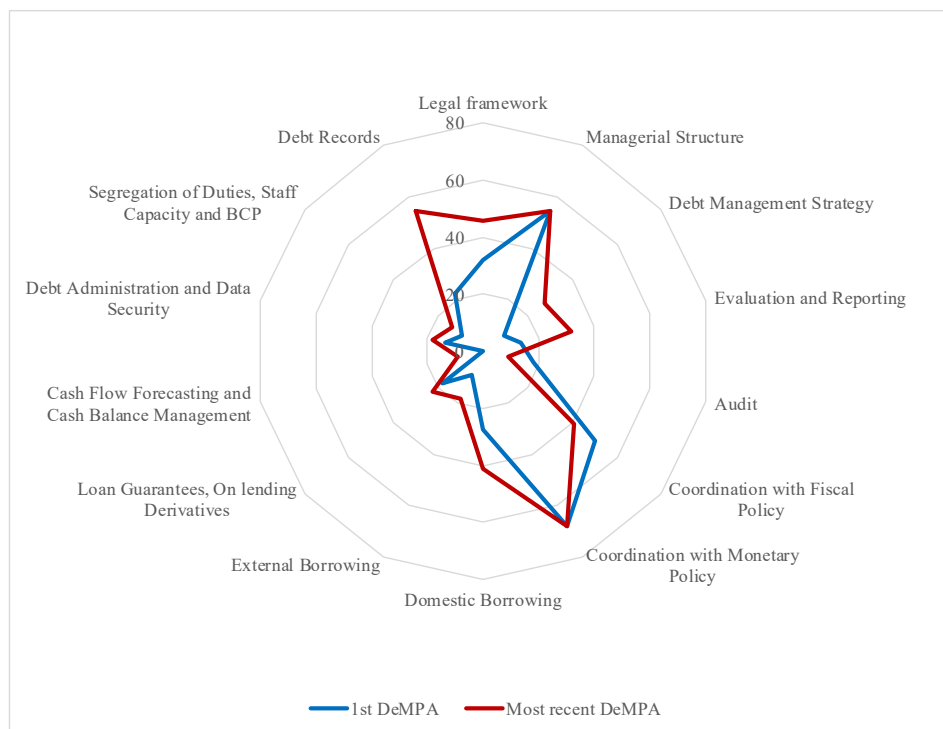
There is concern of greater vulnerability of domestic debt markets amid the rise in gross public debt denominated in domestic currency (and given the lack of depth of these markets). According to DeMPA, less than 50 percent of countries in the region fulfill the minimum requirements for sound international standards in the legal framework for debt management.¹⁴ For domestic borrowing, only 40 percent of the countries in the region adhere to sound practices, and only 22 percent meet the minimum requirements for effectively managing loan guarantees, on-lending, and the issuance of derivatives.

At the same time, progress has been achieved in several areas: the number of countries that have prepared and approved a formal debt management strategy, based on robust cost and risk analysis, has increased significantly. The percentage of countries following sound practice in debt recording

¹⁴ The results discussed here are based on a sample of 22 Sub-Saharan African countries that have more than one assessment.

increased from roughly 20 to nearly 60 percent. Further progress has been achieved in evaluation and debt reporting, domestic borrowing and the governance of guarantees, and debt administration and data security (Figure 25).

Figure 25. Percentage of countries meeting minimum DeMPA requirements



Notes. The Debt Management Performance Assessment (DeMPA) is a tool used for assessing public debt management performance through a comprehensive set of indicators. Source: World Bank; based on DeMPAs in 22 countries.

Strengthening debt management practices

In order to improve the risk and maturity profile of government debt portfolios, public debt managers have implemented policies to foster the development of local currency bond markets. This allows governments to issue debt in their own currency, thus reducing their dependence on external funding and exposure to exchange rate risk. Second, governments have raised the average life of their portfolio by issuing long-term, fixed-rate instruments—thus, reducing the exposure to interest rate fluctuations and reducing risks of refinancing. More recently, frontier markets in the region have been able to issue 30-year sovereign bonds (Nigeria, Angola and Ghana). Third, sound macroeconomic policies and financial reforms may allow governments to diversify their funding sources. Achieving investment grade—as a result of these policies—may enlarge the pool of creditors, including foreign investors and domestic institutional investors (say, pension funds and insurance companies). Finally, market instruments can also help governments secure the funds needed to deal with the aftermath of large negative shocks—e.g. issuance of explicit state-

contingent debt to hedge against some risks such as government debt indexed to GDP, exports, or export commodity prices. However, the hedging potential of these instruments has not yet been fully realized.

Improving the efficiency of spending

A large share of the resources owed to private creditors and non-Paris Club governments is devoted to infrastructure financing—especially, among Sub-Saharan African countries. In the context of infrastructure financing, public debt will be sustainable if the stream of revenues generated by the infrastructure project under finance is sufficient to repay the debt.

In the context of financing infrastructure, the policy discussion should also stress policy actions that improve investment management among countries in the region—that is, enhance those institutions that ensure the effective use of public resources. Choosing a quality investment project (with an output multiplier greater than one) depends on the government identifying a pipeline of good projects and that it has the solid institutional framework to support the phases of planning, allocation, and implementation of public infrastructure investment programs. For instance, infrastructure project delays may lead to considerable carry costs for not using the proceeds (implementation risks). In sum, the quality of investments is key to improve the project's returns.¹⁵

The public investment multiplier can then be enhanced by implementing policies that foster the efficiency of public investment. Evidence shows that improving the institutions and procedures governing project appraisal, selection, and monitoring can render considerable economic dividends. The public investment multiplier could double if the gap between the bottom and top performers in public investment efficiency is closed (IMF 2015). Finally, a reduced amount of public investment is not a cause of concern as long as it reflects improved efficiency of spending, improved public procurement, reduced red tape and corruption, among others. With reduced budgets, the government may also try to crowd-in private investment. When combined with better commitment to regulation, rising private investment in infrastructure will improve access, affordability, quality of infrastructure and enhance public savings (World Bank 2017).

Moving from debt management to balance-sheet management¹⁶

The standard fiscal sustainability analysis has typically focused on flows (say, revenues, expenditures and balances) with an assessment of stocks that are primarily restricted to gross debt positions. Focusing solely on debt misses a wide array of government activity. Broadening the scope of analysis from public debt to public wealth may shed light on the assets that the government controls and non-debt liabilities—e.g. pensions. An assessment of the public-sector

¹⁵ There is evidence that government investment in low-income countries crowds in private investment: an additional dollar of government investment leads to two additional dollars of private investment, and 1.5 additional dollars on output in the subsequent period (Eden and Kraay 2014).

¹⁶ This discussion draws heavily from IMF (2018).

balance sheets fosters transparency and accountability by analyzing not only what the government owes but also what it owns, how assets and liabilities are managed, and where the risks lie on both sides of the balance sheet (IMF 2018).

Recent empirical analysis shows that financial markets account for governments' asset positions along with debt levels to determine borrowing costs for emerging markets (Hadzi-Vaskov and Ricci 2016; Henao-Arbelaez and Sobrinho 2017) and advanced economies (Gruber and Kamin 2012). That is, countries with stronger balance sheets pay lower interest on their debt. In addition, countries with strong balance sheets experience shallower and shorter recessions compared with those with weaker balance sheets (IMF 2018).

Better balance sheet management enables countries to improve fiscal policy making along several dimensions: first, it provides an assessment of the scale and nature of public assets and nondebt liabilities. The identification of the nature of public assets can help design strategies to improve their yields and, hence, increase fiscal revenues (Detter and Fölster, 2015). Second, it enhances the identification and management of risks. An examination of both sides of the public-sector balance sheet will reveal mismatches. From an intertemporal perspective, an analysis of the balance sheets will enable the comparison of current wealth vis-à-vis future fiscal pressures. Finally, it allows a more systematic assessment of the impact of policies on public finances by taking into account their short- and long-term effects on both asset and liability sides of the balance sheet.

Accounting for assets on the public-sector balance sheet, on the other hand, does not invalidate the existing public debt vulnerabilities in a country. The focus on gross debt is typically related to the fact that many public assets might be illiquid or not marketable, and unavailable to meet short-term rollover and deficit financing needs.

Finally, the analysis of public sector balance sheets for LICs poses several challenges: first, the availability and quality of the data used to estimate the value of public assets. Second, it is far from trivial to choose a methodology of asset valuation —especially for non-financial assets that are rarely traded. In addition, there is no single methodology to value different types of assets. Third, it is most likely that LICs' governments may not provide their citizens information on the value of public assets to avoid the scrutiny.

6. Conclusion

This paper documents recent trends in public debt and its composition over the past decade in Sub-Saharan Africa. It argues that although the level of indebtedness of the region as a whole is still lower than the one before debt forgiveness, the risk profile of public debt has increased sharply. The share of concessional public debt has been declining while that owed to private creditors and non-Paris Club bilateral creditors has been rising. The resulting reconfiguration of public debt has led to a significant increase in the region's debt service. The combined higher risk debt profile and rising debt service might lower the threshold for debt distress in the region.

A more holistic approach to address fiscal and debt risks and vulnerabilities should gradually move from public debt management to public balance sheet management. This strategy requires the identification and measurement of public assets as well as government non-debt liabilities —e.g. pensions, contingent liabilities, among others. Broadening the scope of analysis from gross public debt to public wealth may foster transparency and accountability by assessing what the government owns and owes, implementing strategies to manage both assets and liabilities and the identification of risks on both sides of the public-sector balance sheet. Finally, working with African countries to invest more in public investment management programs and investing bond receipts in productive assets instead of immediate needs may all be part of a constructive policy agenda.

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