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JANUARY 2019

## Africa's Rising External Debt, Part 1: A Tempest in a Teapot?

The growth of government debt in Africa has accelerated in recent years, giving it renewed prominence in the debate amongst investors, international organizations, and policymakers. A major point of contention among the investor community is whether African countries risk falling into the same problems that they faced in the late 1990s-early 2000s and if another round of debt restructuring, similar to the HIPC initiative<sup>1</sup>, will consequently be needed. In this paper, we analyze the external debt situation and outlook for Africa. We conclude that market chatter has prematurely sounded the alarm on a potential HIPC2, and African countries have a viable path forward for bolstering their debt-servicing capacities through expanded tax bases. We also highlight how the current protectionist wave could affect African exports and negatively impact their ability to service external debt.

### THE CURRENT SITUATION

Africa's government debt has indeed increased considerably in recent years, as illustrated in Figure 1. However, from the perspective of an external debt investor, we think that the situation is not as dire as some are suggesting.<sup>2</sup> Prima facie, the call for an HIPC2 initiative seems hasty. Both total and external regional debt (as a share of GDP) have increased in recent years. However, these ratios are still well below those recorded in the early 2000s when the HIPC initiative was in force. Furthermore, following the growth in private lending to emerging markets in recent years, a repetition of the HIPC initiative seems unlikely as the IMF has adopted a new framework for lending to countries. If an IMF debt sustainability analysis (DSA) indicates that a country has a high probability of facing debt distress, i.e. if the country would be a possible candidate for HIPC, the IMF requires the private sector's participation in debt rescheduling. Finally, at present, there is not much appetite in the Paris Club for another round of official debt reduction.

<sup>1</sup> In 1996, the IMF and World Bank launched the Heavily Indebted Poor Countries (HIPC) Initiative. This comprehensive program aimed to reduce the debt burdens of poor countries to manageable levels, providing \$76 billion in debt-service relief to over 30 countries. <https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/16/11/Debt-Relief-Under-the-Heavily-Indebted-Poor-Countries-Initiative>.

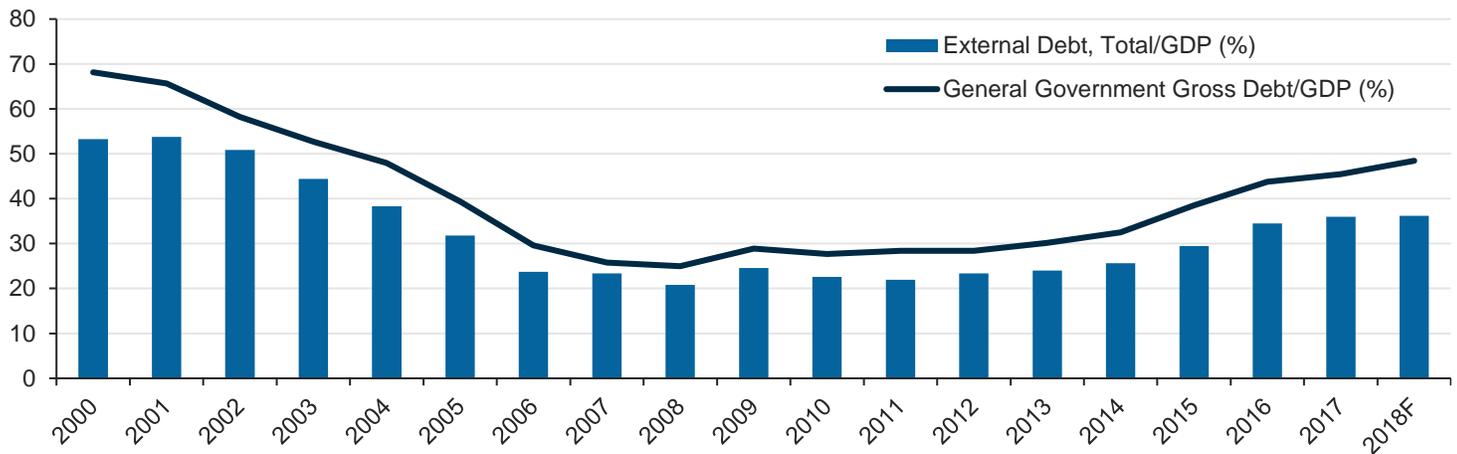
<sup>2</sup> Kate Allen (2018), African nations' debt costs at levels last seen before write-offs, FT May 23, 2018 <https://www.ft.com/content/f1fd67ea-5e75-11e8-9334-2218e7146b04>;

Chris Giles and David Pilling (2018), African nations slipping into new debt crisis, FT April 19, 2018 <https://www.ft.com/content/baf01b06-4329-11e8-803a-295c97e6fd0b>;

IMF (2018), Fiscal Monitor April 2018, <https://www.imf.org/en/Publications/FM/Issues/2018/04/06/fiscal-monitor-april-2018>.

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**FIGURE 1: SUB-SAHARAN AFRICAN DEBT (% GDP)**

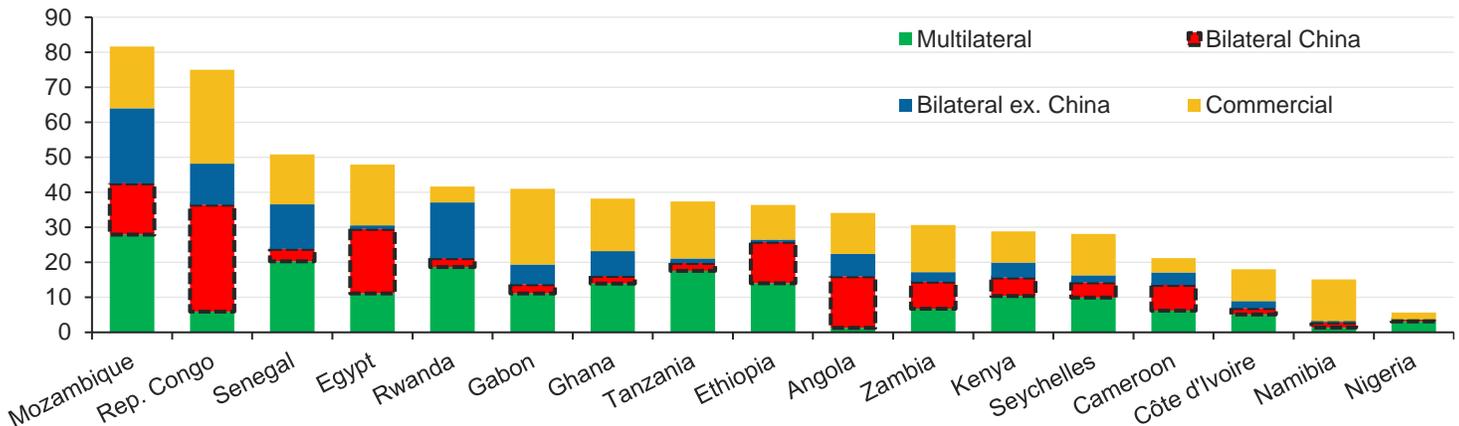
Source: IMF as of year end 2017.

The Sub-Saharan universe, as defined by the IMF, comprises 45 countries (including South Africa but excluding the North African region) with a 2017 per capita income ranging from \$652 (Central African Republic) to \$38,933 (Equatorial Guinea) and a ratio of government debt to GDP ranging from 14% (Botswana) to 131.2% (Eritrea). Many of these countries do not have tradable external debt, hence they are not relevant for mainstream external debt investors. The fourteen African countries that constitute the investable African universe, which are also included in J.P. Morgan's NexGem index, are more pertinent to our analysis.<sup>3</sup> Therefore, we will focus our analysis on this subset of African countries.

The first step of our analysis involves looking at the breakdown of government debt in our sample. The composition is strikingly divergent from country to country. However, in assessing the risk for a foreign-debt investor, we focus on external debt and its composition as the external-debt burden depends on two main factors: first, the borrowing terms that, in turn, depend on the type of lender and; second, the debtor's ability to earn foreign exchange to service its debt, i.e. its macroeconomic and political outlook.

Figure 2 shows the breakdown of external government debt in our sample. A few observations emerge immediately: first, commercial debt (i.e., eurobonds and bank loans) is generally a smaller share of external debt than debt owed to multilateral and bilateral creditors; second, Chinese debt varies from country to country and is a large component of foreign debt in only Angola, Egypt, and Ethiopia; third, other bilateral debt is usually small, except in Mozambique, which is in default.

<sup>3</sup> The following African countries are included in the J.P. Morgan's NexGem Index at the time of writing and are the object of our analysis: Angola, Cameroon, Cote D'Ivoire, Egypt, Ethiopia, Gabon, Ghana, Kenya, Mozambique, Namibia, Nigeria, Senegal, Tunisia, and Zambia. Morocco and South Africa are not included, and they account for 37.7% of the index. The other, non-African, countries included in the index are Armenia, Azerbaijan, Belarus, Belize, Bolivia, Costa Rica, Ecuador, El Salvador, Georgia, Guatemala, Honduras, Iraq, Jamaica, Jordan, Mongolia, Pakistan, Papua New Guinea, Paraguay, Sri Lanka, Suriname, Tajikistan, and Vietnam.

**FIGURE 2: GOVERNMENTS' EXTERNAL DEBT (SUB-SAHARAN AFRICA, % OF GDP, END 2017)**

Source: Jefferies, China Africa Research Initiative, PGIM Fixed Income as of year end 2017.

The composition of external debt is important because different creditors imply different repayment terms: multilateral and bilateral debt usually has more generous terms than commercial debt. They are also often restructured or rescheduled (when not cancelled outright) by the lending country in situations of debt distress. For example, Chinese debt has already been restructured in Angola, and there is increasing talk that debt owed by some African countries to Saudi Arabia could be rescheduled as well. Furthermore, emergent bilateral creditors, like China and Saudi Arabia, are not members of the Paris Club or the OECD's Development Assistance Committee. Therefore, their lending practices are not bound by the Paris Club's rules and regulations<sup>4</sup>, and bilateral debt is often extended to countries for strategic or political reasons, not exclusively economic ones. A recent study on the determinants of Chinese lending to poor countries finds that "China sends more development finance to countries with worse institutional outcomes than the West. It also finds that bilateral trade relations and UN voting alignment have a stronger impact on China's development finance than that of western countries."<sup>5</sup> Furthermore, there is no transparency in most bilateral debt situations: information is not publicly available about maturity and interest rate, whether it is a collateralized loan, or whether it is tied-aid (i.e., foreign aid that has to be spent on imports from the donor country or financing investments of the donor country in the aid-receiving country, which is a practice forbidden under the rules of the OECD's Development Assistance Committee). The IMF is trying to shed light on Chinese debt financing when discussing a program with a country, as was recently observed with the IMF's discussions with Pakistan.<sup>6</sup>

<sup>4</sup> Carmen M. Reinhart (2018), *Exposing China's Overseas Lending*, Project Syndicate, Oct. 31, 2018, <https://www.project-syndicate.org/commentary/china-opaque-foreign-development-loans-by-carmen-reinhart-2018-10>.

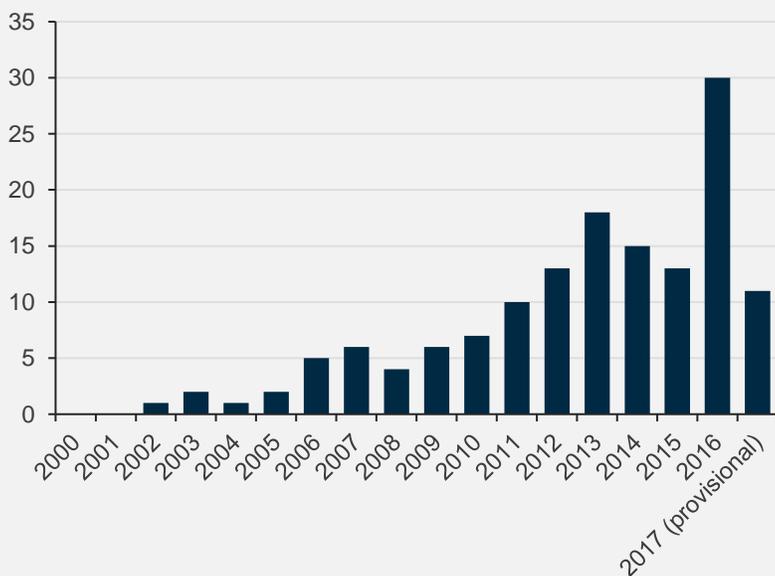
<sup>5</sup> David G. Landry (2018), *Comparing the Determinants of Western and Chinese Development Finance Flows to Africa*. Working Paper No. 2018/21. China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University, Washington, DC. Retrieved from <http://www.sais-cari.org/publications>.

<sup>6</sup> Mihir Sharma (2018), *Pakistan Bailout Exposes Potholes in Belt and Road*, Bloomberg <https://www.bloomberg.com/opinion/articles/2018-10-11/pakistan-bailout-exposes-flaws-in-china-s-belt-and-road>; and Josh Zumbun – Saumya Vaishampayan (2018), *For IMF Help, Pakistan Might Have to Disclose Its China Debts*, Wall Street Journal, October 11, 2018, <https://www.wsj.com/articles/for-imf-help-pakistan-might-have-to-disclose-its-china-debts-1539234162>.

## BOX 1: CHINA'S LENDING TO AFRICA

Increased lending by China to frontier economies has increasingly drawn more attention. Unfortunately, official data on these arrangements are not available. To our knowledge, the best reliable estimate is provided by the China Africa Research Initiative (CARI), a research center at The Johns Hopkins' School of Advanced International Studies. CARI collects data on loans announced by Chinese authorities, which are usually communicated during the Forum on China-Africa Cooperation (FOCAC) that typically takes place in September. CARI then tracks the developments of the announced loans, i.e. whether the loan has been disbursed partially or completely. The result of their work is summarized in the chart below, which illustrates the accelerating pace of Chinese lending in Africa.

**FIGURE A: CHINESE LOANS TO AFRICA (U.S. \$ BILLIONS)**



Source: CARI as of year end 2017. Note: Some of these loans may have already been repaid.

According to CARI's analysis, "in just three African countries, Chinese loans are currently the most significant contributor to high risk of/actual debt distress," with the three countries being Congo, Djibouti, and Zambia.<sup>7</sup> Another recent study on the Belt and Road Initiative (BRI) reaches a similar conclusion: "we identify eight countries where BRI appears to create the potential for debt sustainability problems and where China is a dominant creditor in the key position to address these problems."<sup>8</sup> Of these eight countries, only one (Djibouti) is in Africa, but it is not part of the investable universe.

The external debt owed to private creditors, which is not large in our sample, is what really matters to investors. Gabon is the most commercially-indebted country, with that segment accounting for about 20% of GDP. However, even a small share of commercial debt can default, as highlighted by the recent Mozambican experience.

## SERVICING EXTERNAL DEBT

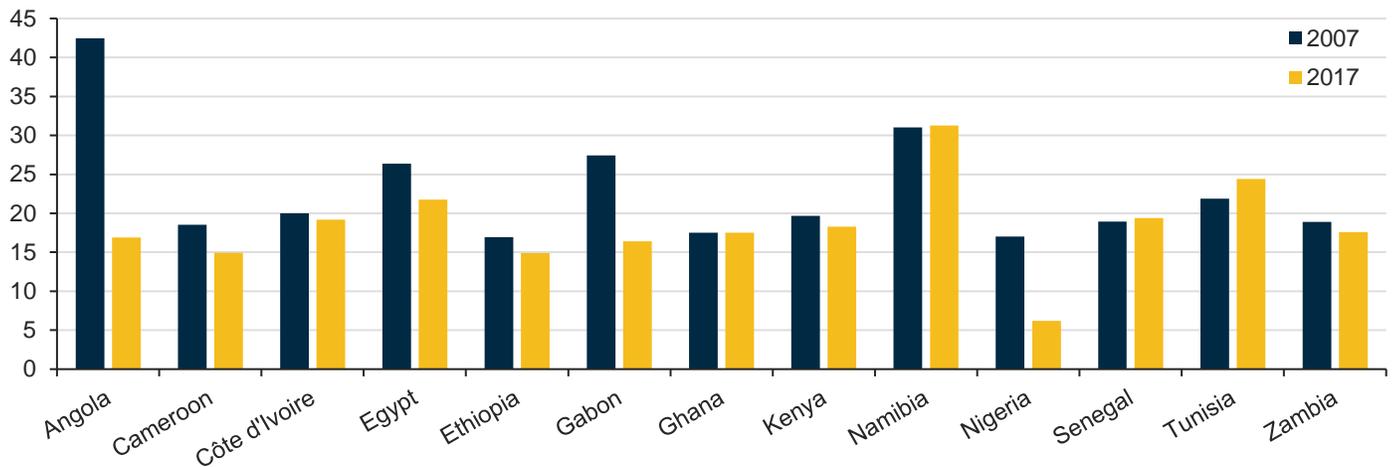
Servicing external debt generally relies on two pillars: raising revenue (through taxes, mostly) and converting it into dollars, which requires foreign exchange (FX) reserves. In some cases, countries may already receive a portion of their tax revenue in dollars. For example, Zambia receives dollar-denominated royalties from mining companies. Countries can also raise additional revenue via privatization, which often involves a foreign partner. In this analysis, we concentrate on tax revenues, including social security contributions, to see whether the countries in our sample have improved revenue collection efforts over the past decade.

Figure 3 shows the ratios of revenue to GDP among our sample. The oil exporting countries (Angola, Gabon, and Nigeria) have recorded a significant decrease in revenues following the drop in oil prices between 2007 and 2017. For the other countries, the situation has not changed significantly.

<sup>7</sup> Janet Eom, Deborah Brautigam, and Lina Benabdallah (2018), *The Path Ahead: The 7th Forum on China-Africa Cooperation, Briefing Paper 1/2018*, SAIS China Africa Research Initiative (<https://static1.squarespace.com/static/5652847de4b033f56d2bdc29/t/5b84311caa4a998051e685e3/1535389980283/Briefing+Paper+1+-+August+2018+-+Final.pdf>).

<sup>8</sup> The other seven countries identified as being at risk of debt distress are: the Kyrgyz Republic, Lao People's Democratic Republic, the Maldives, Mongolia, Montenegro, Pakistan and Tajikistan. See, John Hurley, Scott Morris, and Gailyn Portelance. 2018. "Examining the Debt Implications of the Belt and Road Initiative from a Policy Perspective." CGD Policy Paper. Washington, DC: Center for Global Development. <https://www.cgdev.org/publication/examining-debt-implications-belt-and-roadinitiative-policy-perspective.pdf>.

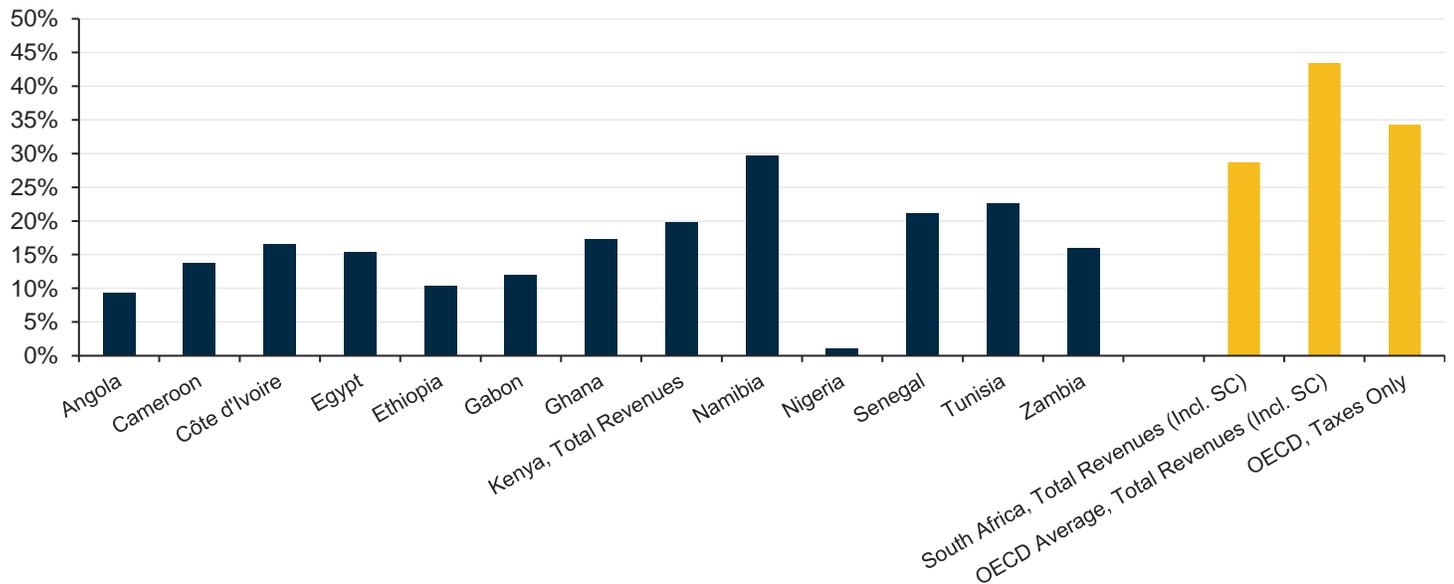
**FIGURE 3: GENERAL GOVERNMENT REVENUE (% OF GDP)**



Source: IMF as of year end 2017.

Therefore, we must narrow our analysis to non-resource-based government tax revenues to compare the ability to raise domestic taxes across our sample.

**FIGURE 4: NON-RESOURCE-BASED GOVERNMENT REVENUES (INCL. SOCIAL CONTRIBUTIONS; % GDP BASED ON MOST RECENT DATA)**



Source: WIDER-UNU, <https://www.wider.unu.edu/project/government-revenue-dataset>; data sourced as of year end 2018. Note, only total revenues are available for Kenya, which is in the sample set. South Africa is not in the sample set.

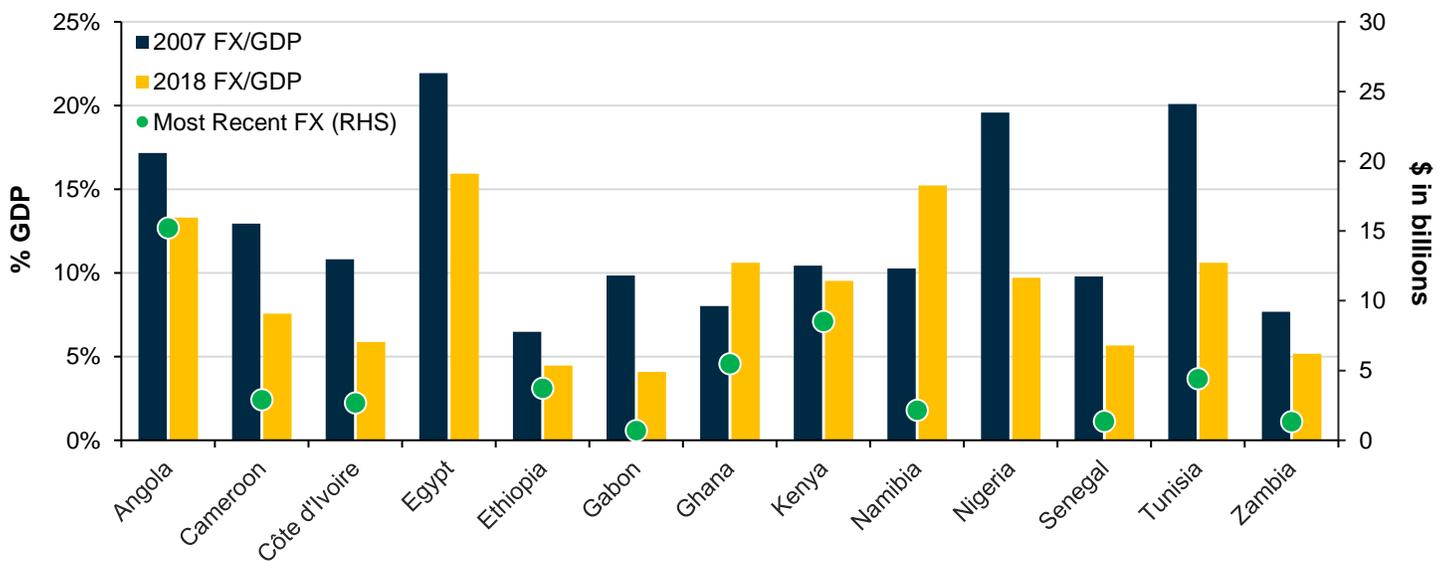
Most countries' low level of non-resource-based tax revenue, as observed in Figure 4, reveals the potential for an increase in tax collection. In some cases, tax revenues as a percentage of GDP are merely half of the OECD average. Clearly, OECD countries generally have more diversified and more monetized economies, broader tax bases, and better administrative capacity than the average African country. South Africa's revenue ratio could be taken as a medium-term target. In considering different policy options for increasing revenue, an expansion of the tax base is generally preferable to an increase in tax rates.

Some countries have started utilizing technology to increase the efficiency of domestic tax collection. For example, Ghana has introduced the Ghana Card, which serves as a national identity card and also facilitates more accurate taxpayer registration. In conversation with the Ghanaian authorities, we were told that there are around 6.0 million phone-banking accounts, but only 1.2 million registered taxpayers in the country. Even when accounting for the possibility of citizens holding multiple bank accounts, this statistic indicates that there is scope for broadening the tax base.

A recent comprehensive study on the mobilization of tax revenues by the Africa Growth Initiative at the Brookings Institute corroborates our findings: “the region’s still-lower tax revenues are due to both lower taxation capacities—about 20 percent of GDP on average—and to inefficiencies in revenue collection. Addressing both factors can significantly boost revenues in sub-Saharan Africa to levels comparable to those of OECD countries. Encouragingly, both tax capacity and efficiency in revenue mobilization are increasing region-wide, contributing to the 4 percentage point increase in tax-to-GDP ratio over the past two decades or so.”<sup>9</sup> Recent IMF programs have also emphasized the need to increase tax revenues, primarily via a broadening of the tax base.

The second pillar of the ability to service external debt is the availability of FX reserves, which are used to pay debt denominated in foreign currencies.

**FIGURE 5: FX RESERVES, CHANGE SINCE 2007**



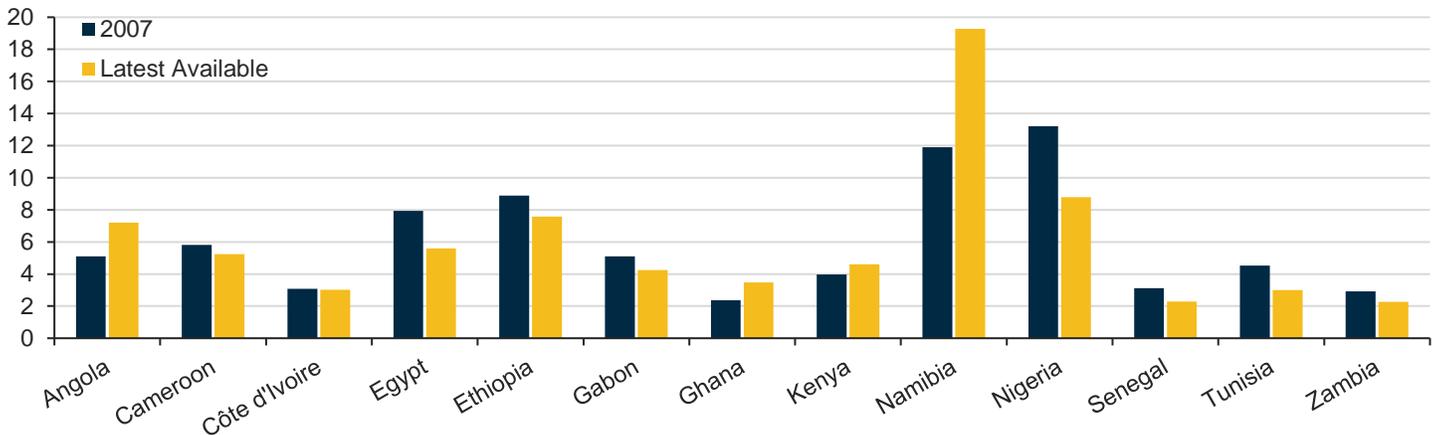
Source: Haver Analytics as of December 2018. The most recent FX reserves for Egypt (\$39.7 billion) and Nigeria (\$38.6 billion) are not shown in the chart as they have much higher FX reserves than the other countries in Figure 5.

Over the past decade, FX reserves as a share of GDP have decreased the most in Nigeria because of the heterodox exchange rate policy followed by the authorities in recent years, but they remain the highest in the sample in USD terms.

<sup>9</sup> Brahim S. Coulibaly and Dhruv Gandhi, *Mobilization of tax revenues in Africa - State of play and policy options*, Africa Growth Initiative at Brookings, October 2018 [https://www.brookings.edu/wp-content/uploads/2018/10/Mobilization-of-tax-revenues\\_20181017.pdf](https://www.brookings.edu/wp-content/uploads/2018/10/Mobilization-of-tax-revenues_20181017.pdf)

In terms of months of imports, Figure 6 shows that the situation has not changed dramatically in any country, with the exception of Namibia and Nigeria.

**FIGURE 6: FX RESERVES (MONTHS OF IMPORTS)**



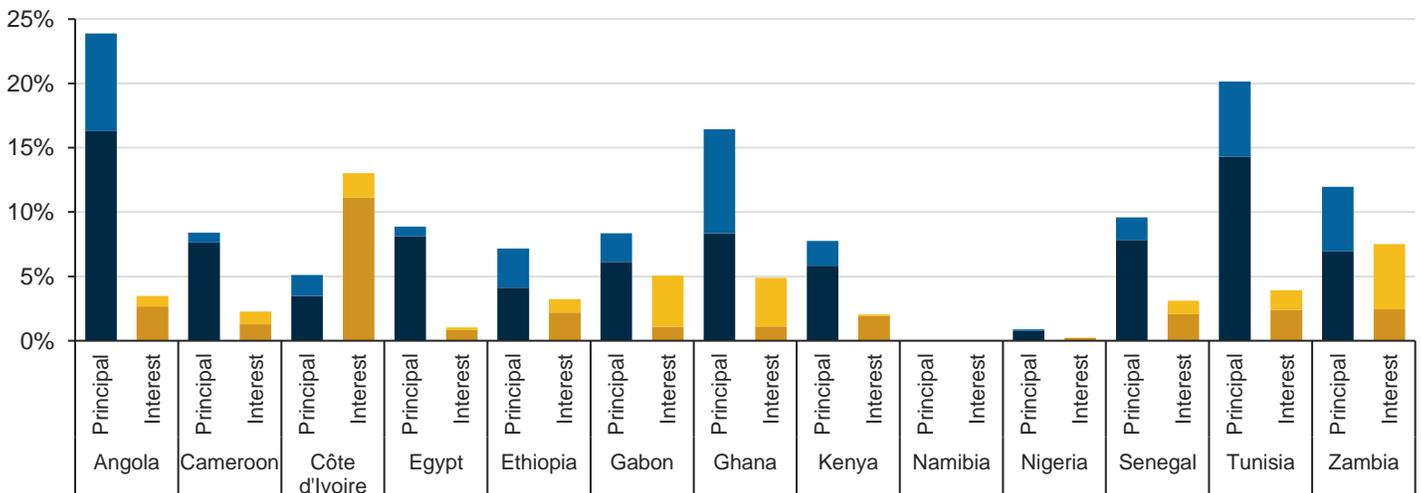
Source: Haver Analytics, BCEAO. Data sourced at year end 2018.

One caveat in the analysis of FX reserves is that some of these countries are members of the WAEMU (West African Economic and Monetary Union, i.e. Cote d'Ivoire and Senegal) and CEMAC (Central African Economic and Monetary Community, i.e. Cameroon and Gabon) whereby FX reserves are pooled, and the French Treasury and Banque de France provide a backstop in case of liquidity crises.

## LOOKING AHEAD

The projected cumulative external debt service for the countries in our sample over the next five years is displayed in Figure 7. It is a mixed picture, but Angola and Tunisia appear to be the countries with the highest debt repayment burden over the next five years. Note, Angola has been a major recipient of Chinese loans, and Tunisia has been receiving bilateral loans since the Jasmine Revolution of 2011. Hence, we think there is a non-negligible probability that these loans will be rolled over.

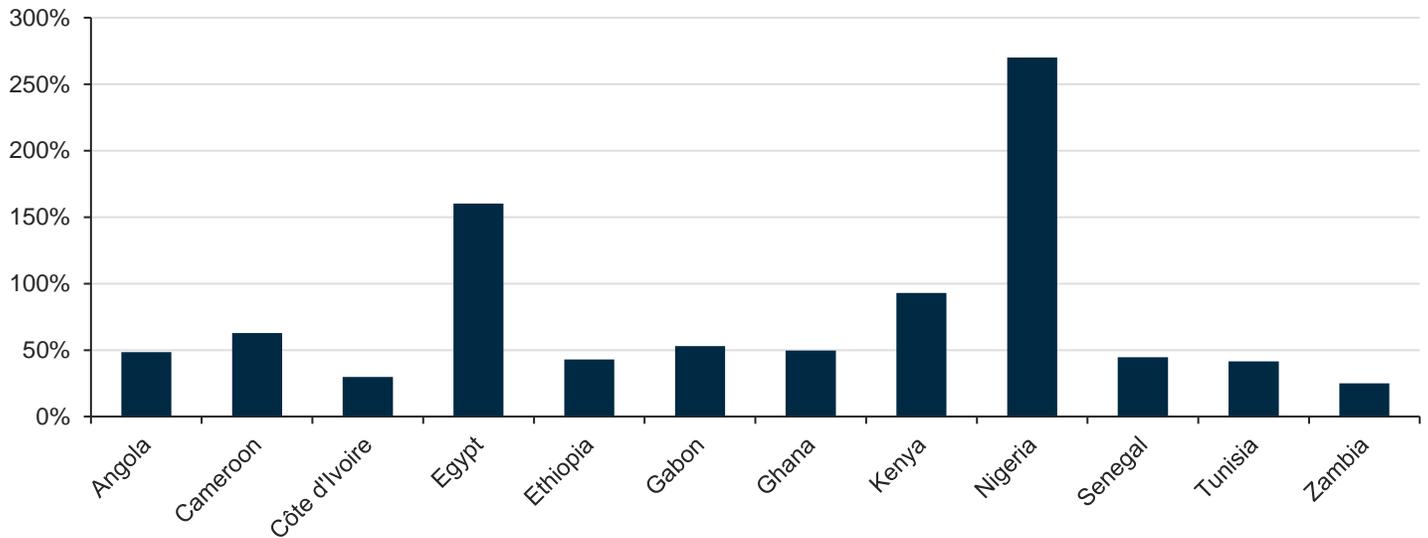
**FIGURE 7: DEBT SERVICE PROJECTIONS, 2019-2023 (% OF ESTIMATED 2018 GDP)**



Source: World Bank, Haver Analytics. Data sourced as of year end 2018.

In examining the ability to pay, we focus on the ratio between current FX reserves and projected debt service payments, as observed in Figure 8.

**FIGURE 8: FX RESERVE COVERAGE OF TOTAL DEBT SERVICE FOR 2019-2023\***



Source: Haver Analytics and BCEAO. Data sourced as of year end 2018. \*Debt service payments include both principal and interest payments to both private and official creditors.

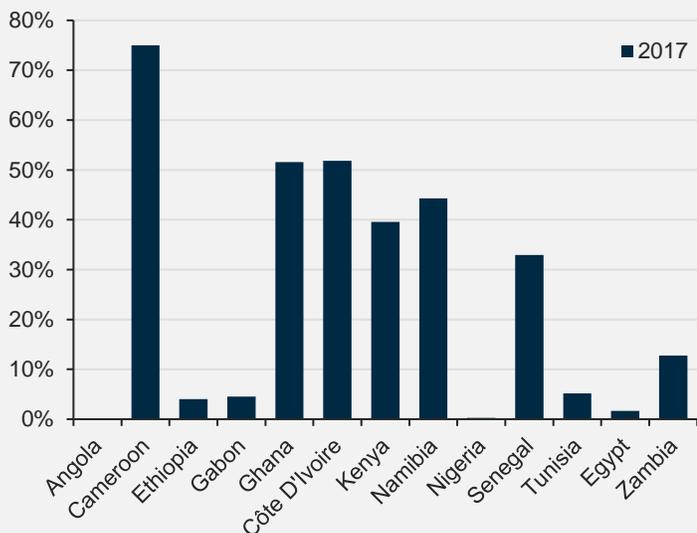
The ratio between FX reserves and future debt service is an imperfect metric (it assumes no change in reserves, no new short-term external borrowing), but it gives us an idea of the countries that could face liquidity constraints. Most countries exhibit a ratio between 40% and 60% with Egypt and Nigeria being the exceptions. Zambia appears to be the country in the most vulnerable situation (remember that Cameroon, Côte d'Ivoire, Gabon, and Senegal enjoy the backstop of the French authorities).

## BOX 2: AFRICAN EXPORTS: HOW VULNERABLE TO PROTECTIONISM?

As protectionist rhetoric escalates across the globe, it could affect the export performance of African countries and constrain their ability to earn foreign exchange, thereby hindering their ability to service external debts.

Exporters of crude oil or of other industrial commodities face low or zero tariffs at present (Figure B shows the percentage of a country's exports affected by tariffs). Angola and Nigeria, which export almost exclusively oil, face tariffs rates near zero. Exporters of light manufactured goods and food, e.g. Côte d'Ivoire, Ghana and Kenya, are somewhat penalized.

**FIGURE B: 2017 PERCENTAGE OF TOTAL EXPORTS TO THE WORLD AFFECTED BY TARIFFS**



Source: Global Trade Alert Databank as of year end 2017.

While the incidence of tariffs looks high for some African exporters, these countries enjoy preferential treatment in developed markets. As seen in the following table, Africa's major bilateral trading partners currently allow a significant percentage of, if not all, exports to enter their countries duty-free. For example, Angola, Ethiopia, Senegal, and Zambia are included in the EU's Everything But Arms (EBA) initiative, i.e. their exports can enter the EU market duty free. Côte d'Ivoire, Ghana, Kenya, and Nigeria enjoy the Generalized System of Preference that will expire in 2023. This system allows duty free access to the EU market only up to a certain amount until one of the following conditions is met:

- When the average value of imports from a GSP beneficiary country (divided by the total value of all GSP imports for that section) over three years exceeds the general threshold of 57%.
- For vegetable products, animal or vegetable oils, fats and waxes, and mineral products, graduation applies when the percentage share referred to exceeds 17.5%.
- For textiles, graduation applies when the percentage share referred to exceeds 47.2%.

Percentage of African products (tariff lines) that can be imported duty-free				
	EU	U.S.	China	India
<b>Schemes for least-developed countries</b>	100% except arms	82%	97%	94%
<b>Schemes for developing countries (GSP)</b>	57% (+reduced rates for most other products)	68%	No schemes	
<b>Other unilateral schemes: GSP+ (EU), African Growth and Opportunity Act (U.S.)</b>	89%	84%		
<b>Bilateral agreements (EPA/FTA)</b>	100% except arms + few exceptions for South Africa & North African countries	Almost no agreements in place (only U.S.-Morocco)		

Source: European Commission, <http://ec.europa.eu/trade/policy/countries-and-regions/development/>. Data sourced as of year end 2018.

Some African exports are, therefore, subject to tariffs. However, access to developed markets is not prohibited nor are countries facing punitive tariffs or significant quantitative restrictions at present. Going forward, hopefully African non-commodity exports will avoid tighter export restrictions. As the risk of protectionism heightens, investors should follow trade policy trends closely to assess a country's ability to earn the foreign currency needed to service its foreign debt.

## **IN CONCLUSION—SHOULD WE BE WORRIED?**

Our analysis suggests that Africa's external government debt is generally under control. Specific countries, such as Zambia and Mozambique (which is in default), face more difficult challenges than others, but barring major disruptions to the world economy, the region as a whole does not appear to be at risk of defaulting and/or restructuring its external debt. In our view, the more alarmist commentary on African-Chinese debt should be taken with a grain of salt. While China is certainly flexing its geopolitical and financial muscle in Africa, the Chinese share of bilateral debt among our sample is not yet at a worrisome level. Additionally, we believe that Chinese debt is being disbursed according to political and economic criteria. It has already been rescheduled in some cases and does not appear as burdensome as other types of debt in most countries. Furthermore, we are optimistic that improvements in both technology and fiscal policy will help sample countries broaden their tax bases going forward, thus further reducing the need for another HIPC-like initiative. Finally, as protectionist rhetoric intensifies, investors should follow trade policy trends closely to assess a country's ability to earn the foreign currency required to service its foreign debt.



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Source(s) of data (unless otherwise noted): PGIM Fixed Income as of January 2019.

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2019-0335