

SECTOR IN-DEPTH

14 November 2018



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Sovereigns – Africa

China's lending supports growth, exacerbates fiscal and external pressures in Sub-Saharan Africa

[China \(A1 stable\)](#) has taken a larger role in lending to Sub-Saharan African (SSA) governments, particularly for infrastructure projects. While this lending can support economic growth, it also risks amplifying credit risks for those with already high debt burdens and deteriorating external positions. China's willingness to renegotiate existing loans and the terms of these renegotiations will influence credit trajectories in the region.

- » **Chinese lending in infrastructure provides long-term economic boost.** Chinese lending to SSA governments has increased to more than \$10 billion annually between 2012 and 2017, from less than \$1 billion in 2001. An increase in China's lending based on announced commitments, or even maintaining the current pace of lending, should go some way towards addressing the continent's \$67.5-\$107.5 billion annual gap between its infrastructure investment needs and committed financing. However, the gains in terms of growth potential may be lower than could have been achieved through more borrowing with conditions on reforms and disclosures.
- » **But Chinese lending risks amplifying fiscal and external vulnerabilities in Sub-Saharan Africa.** Like any infrastructure-related borrowing, unless the investment financed by China generates substantial economic gains boosting debt servicing capacity, the credit implications of such lending include higher debt burdens, weaker debt affordability and weaker external positions. [Angola \(B3 stable\)](#), [Republic of the Congo \(Caa2 stable\)](#), and [Zambia \(Caa1 stable\)](#) are among the most indebted to Chinese creditors; while in [Ghana \(B3 stable\)](#), Angola, Zambia, and [Nigeria \(B2 stable\)](#) interest payments already absorb more than 20% of revenue. Zambia's external position is particularly fragile, given very low foreign exchange reserves.
- » **China's willingness to renegotiate loans – and the terms – will influence credit profiles.** As a number of SSA sovereigns face large bond maturities early next decade, the scope to renegotiate some outstanding Chinese loans will influence liquidity risks, especially for low-rated sovereigns. While there is evidence of some willingness of Chinese lenders to renegotiate loans, China's response to SSA sovereigns that face liquidity pressure is not uniform or transparent. The lack of predictability around the conditions attached to these restructurings mean the credit implications are less clear. A pledge of additional natural resources revenue or assets as part of the renegotiations offsets the credit positive effects of eased liquidity constraints.

Availability of data on China's lending in Sub-Saharan Africa

This report assesses the credit implications of lending by Chinese policy banks to Sub-Saharan African sovereigns, looking into the main trends for lending to recipient countries and implications for growth, debt sustainability and debt affordability, along with rollover risks.

We have relied on multiple sources for information on lending to specific countries and economic sectors, including data from Johns Hopkins SAIS China-Africa Research Initiative (CARI) as well as the College and William and Mary's AidData research lab. Where possible, we have also used government sources and data from international financial institutions like the IMF and World Bank.

Lending by Chinese entities is an increasingly important driver of infrastructure investment in Africa

Lending to African countries by Chinese entities increased to more than \$10 billion annually between 2012 and 2017, from less than \$1 billion in 2002. Rising lending by Chinese state-owned banks or by the Chinese government itself on both concessional (official development assistance, ODA) and non-concessional terms (other official flows, OOF) has complemented growth in private Chinese investment in recent years along with closer trade ties.

Several policy initiatives have seen China take a larger role in global lending, including its Belt and Road Initiative, a memorandum of understanding signed with the African Union in 2015 to focus on railway, highway, port projects and industrialization, as well as funding committed as part of the Forum on China-Africa Cooperation (FOCAC). At the 2018 FOCAC summit, China pledged an additional \$60 billion to African governments over three years in the form of various loans and commitments.

Exhibit 1

Chinese lending to African governments has increased significantly in recent years

Annual lending, US\$ billion



Source: Johns Hopkins School of Advanced International Studies, China-Africa Research Initiative

Angola (30%), Ethiopia (10%) and [Kenya \(B2 stable\)](#) (7%) received almost half of all Chinese investment on the continent between 2000-17. Other main recipients included the Republic of the Congo and Sudan (unrated), which each received around 5%, followed by Cameroon and Zambia, at around 4%.

Relative to the size of their respective economies, Chinese lending is largest in the Republic of Congo, Ethiopia and Angola (Exhibit 2). In the Republic of the Congo, Chinese loans make up the largest component of government debt, as bilateral loans from China have partly financed infrastructure projects. And more than half of Angola's external debt is owed to China as the latter has provided extensive loans since the end of the Angolan civil war in 2002. In Zambia and Kenya, Chinese debt makes up around a quarter of

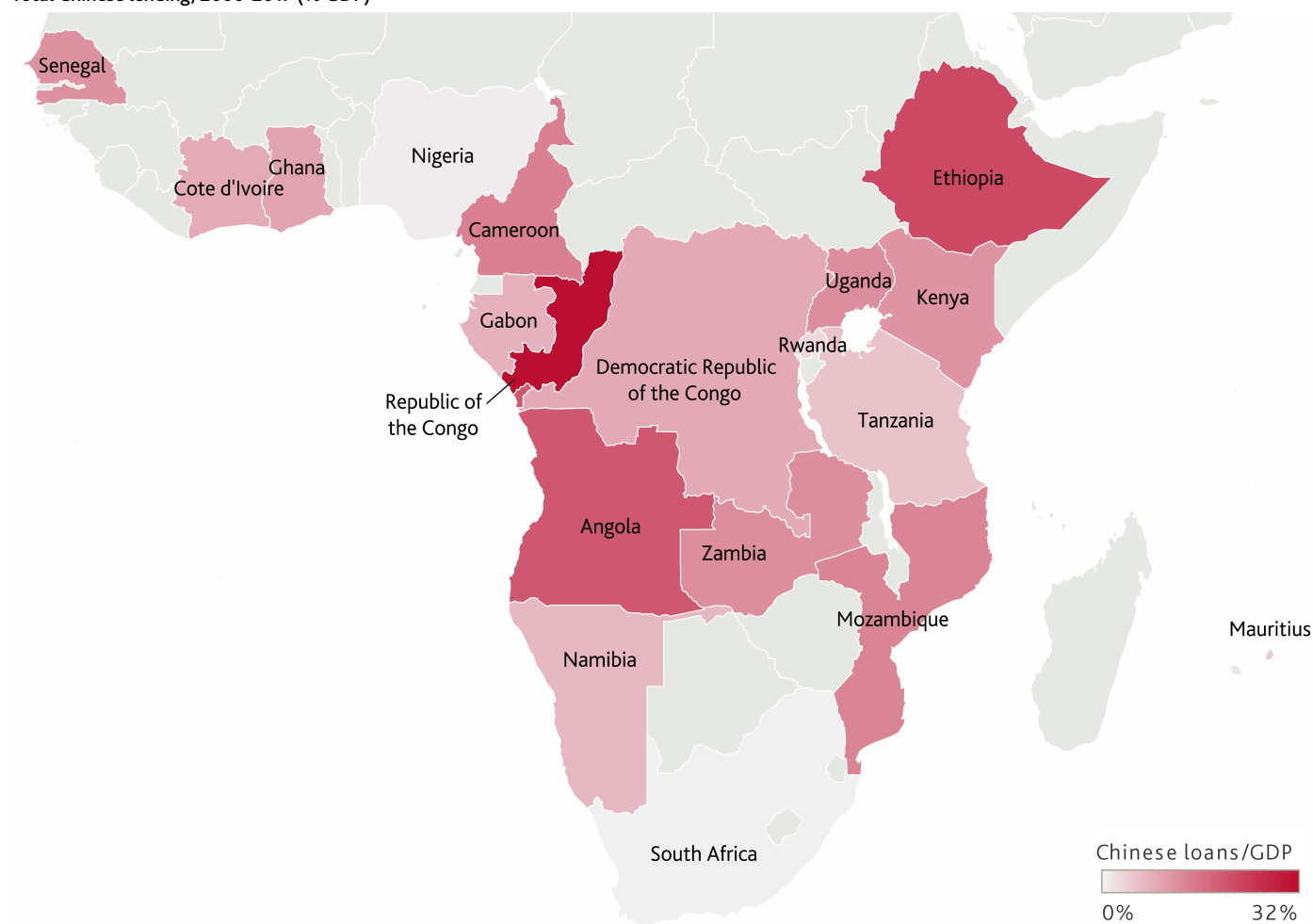
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external debt as China financed the Kafue Gorge hydropower project in Zambia and construction of the Standard Gauge Railway in Kenya.

Exhibit 2

The importance of Chinese financing for Sub-Saharan African sovereigns varies

Total Chinese lending, 2000-2017 (% GDP)



* Darker shades of red indicate larger loans in relation to the size of the domestic economy
Source: Johns Hopkins School of Advanced International Studies, China-Africa Research Initiative

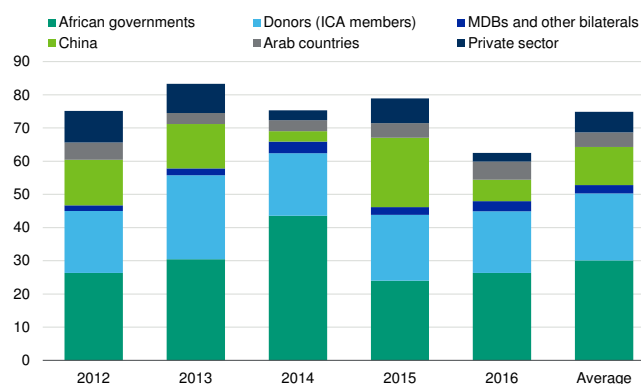
China-financed infrastructure investment should provide boost to long-term economic growth

A substantial amount of this financing has been directed to infrastructure investment. According to the Infrastructure Consortium for Africa (ICA), between 2012 and 2016, China was the third largest source of infrastructure funding and the single largest sovereign lender for infrastructure projects in Africa, behind African national governments as a group and ICA members (Exhibit 3). Most Chinese lending has been directed to infrastructure investment, in particular the power, transport, and communication sectors (Exhibit 4).

This investment should support economic growth and incomes by partly remedying the region's very large infrastructure deficiencies. The African Development Bank ([AfDB, Aaa stable](#)) has estimated that total infrastructure investment needs in Africa amount to \$130-170 billion per year if universal access is to be achieved by 2025 for major infrastructure such as power, transport, water supply and sanitation. The total financing gap, or the difference between infrastructure investment needs and committed financing, is estimated at \$67.5-107.5 billion a year.

Exhibit 3

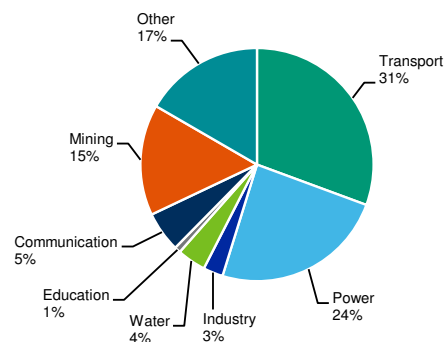
Chinese funding represents one of the largest single source of infrastructure financing
US\$ billion



Sources: Infrastructure Consortium for Africa (ICA), Moody's Investors Service

Exhibit 4

China primarily finances projects in the transport and power sectors
%, 2000-2016

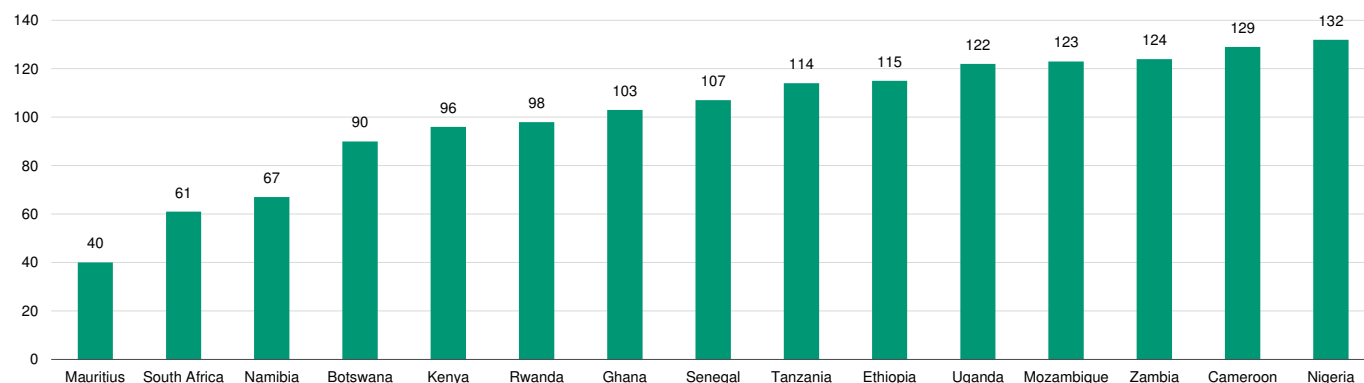


Source: Johns Hopkins School of Advanced International Studies, China-Africa Research Initiative

Beside the direct and short-term growth impact of investment, bridging the infrastructure gap is crucial to unlocking growth potential and facilitating economic development in the region including by more productively tapping abundant natural resources. SSA countries in general are less competitive than countries in other developing regions. According to the Global Competitiveness report 2017-18, poor infrastructure is listed as the second most distinctive constraint, after technological readiness, compared with the global average. More than half the countries in the region rank 100th or below out of 137 surveyed countries in terms of infrastructure quality (Exhibit 5). In general, poor quality of infrastructure is a key rating constraint in many countries, lowering our assessment of economic strength. For instance, unreliable and expensive cost of electricity continues to inhibit the development of larger manufacturing sectors, while poor road and transportation infrastructure increases the cost of trading across borders, weighing on overall competitiveness.

Exhibit 5

Global competitiveness sub-index: infrastructure
(rank, out of 137 countries, 2017-18 - A higher number denotes lower competitiveness)



Source: World Economic Forum

The World Bank estimates that closing the infrastructure gap, relative to the best-performing countries globally in terms of quantity and quality of infrastructure, could boost growth rates of per capita income by 2.6 percentage points per year. The Africa Infrastructure Development Index, a composite index measuring infrastructure development, points to countries like Ethiopia, Angola, Cameroon, and Zambia as among those with the greatest need for infrastructure investment.

There is evidence of the growth-supporting effects of China's lending. In Ethiopia for example, projects like the Ethiopia-Djibouti railway, electricity lines across the country, and improvements in irrigation attracting large levels of investment directly contribute

to the country's very high GDP growth. The government estimates the railway will reduce overall transactions costs by 20%, mostly via lower transportation costs. In the longer term, if the investment delivers increased, reliable and cheaper power, it will help the development of the manufacturing sector and contribute to higher productivity and income growth. In Kenya, the Standard Gauge Railway (SGR) directly contributed to growth during the construction phase, and cuts down on travel time, which reduces the cost of doing business. Over time, this can facilitate greater transport of cargo across the SGR and support industrialization.

Though the absence of transparent conditions and reform requirements may limit the benefits

While China's financing of infrastructure investment most likely boosts growth in Africa compared to a 'no investment' scenario, not all financing provides the same economic benefit. In particular, the lack of transparency over the conditions attached to Chinese lending and lack of reform and governance requirements, compared with those required by multilateral official creditors, may limit the long-term benefits.

Chinese financing typically comes without the requirement for broader structural reform that often accompanies official sector finance and can support potential growth by enhancing governance and competitiveness and by crowding in further investment. For example, World Bank and EU development assistance is often linked to compliance with objectives related to governance, socio-economic development, and democratic principles. The absence of such conditions attached to China's lending likely limit somewhat the broader and longer-term growth benefits from investment.

Moreover, the terms and conditions of Chinese loans and the projects that they finance are often less transparent than those of other lenders. Increased transparency can spur other official and private investment into the country. For example, an IBRD (World Bank Group) loan requires the recipient government to submit financial statements and evaluation reports and hire bank-approved experts to monitor transparency and efficiency of investment and compliance with safeguard policies. Similarly, IDA's non-concessional borrowing policy, among other things, sets ceilings on non-concessional borrowing and engages in capacity building in areas like debt management. The amount of lending is determined in part by a country's rank on the Country Policy and Institutional Assessment (CPIA), which measures the quality of policies and institutional arrangements. Chinese loans do not come with similar disclosures from the borrowing countries, limiting their catalytic effects.

Chinese lending also amplifies existing fiscal and external vulnerabilities

There are also the negative implications of additional lending for fiscal strength and external vulnerability. Like any investment, unless the investment financed from Chinese loans generates sufficient economic returns, at least over the medium term, to support the additional debt service obligations incurred, the principal credit implications of such lending are credit negative, including higher debt burdens, weaker debt affordability and in some cases weaker external positions. The efficiency of investment choices is closely related to the strength of institutions, which tends to be low in most SSA countries, as well as readily available financing, which may induce governments to borrow for inefficient investments.

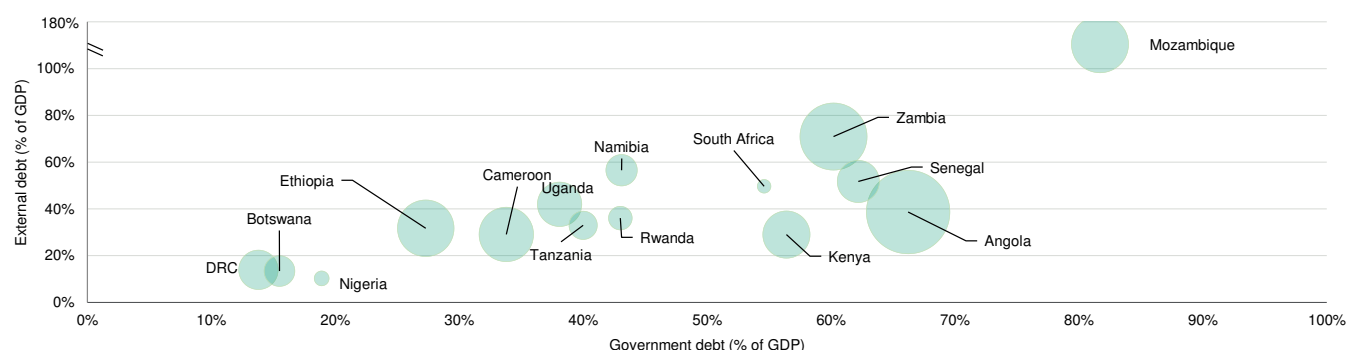
Inefficiencies in the public investment process can limit the economic gains from large infrastructure investments, and therefore contribute to permanently higher government debt loads. [IMF research](#) suggests that low efficiency, due to poor project selection or weak implementation for instance, can reduce the long-term economic gains. Even where the investment may ultimately enhance growth, debt repayments related to infrastructure may start before the project generates returns, requiring the government to manage a higher debt service burden for some time.

For countries with weak institutional frameworks, the additional administrative burden and time required to meet the requirements imposed by International Financial Institutions may encourage borrowing from Chinese creditors with less onerous requirements related to loan preparation, appraisal, or disbursements. If this is the case, borrowing can rise faster than debt sustainability considerations would imply. For example, in Kenya, the [World Bank noted](#) the rapid accumulation of debt from China, particularly when lending is non-concessional, can cause an overall increase in debt to unsustainable levels.

Exhibit 6

High levels of government and external debt limit room to take on more debt in some countries

2017 external debt and government debt, % GDP



*Size of the bubble represents total amount of Chinese loans between 2000 and 2017 as a percentage of GDP

Source: Moody's Investors Service, Johns Hopkins School of Advanced International Studies, China-Africa Research Initiative

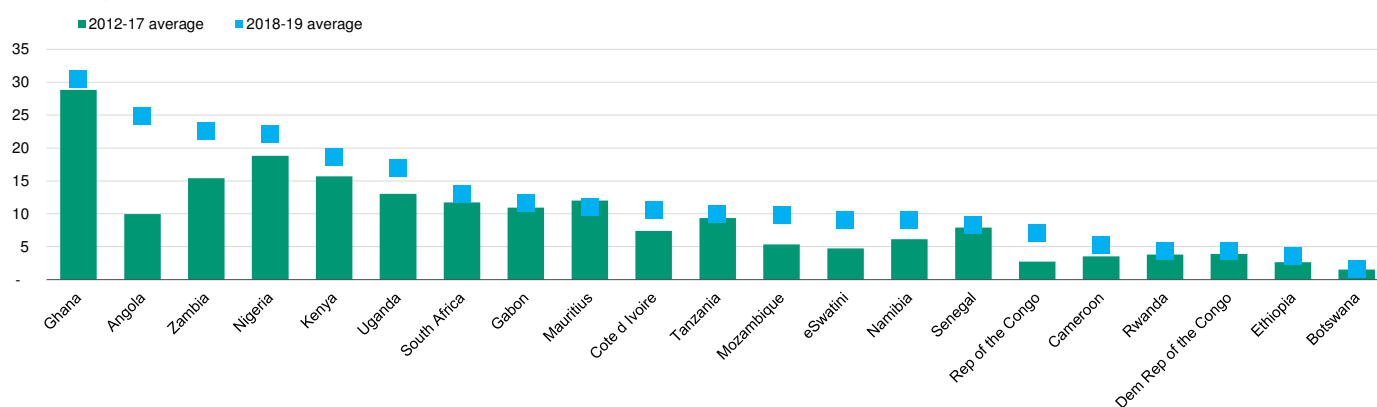
We have noted in previous research that debt-affordability ratios like interest-to-revenue ratios are indicators of sovereign credit strength, with more than half of sovereign defaults occurring at relatively low debt-to-GDP ratios (please see our research "[The Causes of Sovereign Defaults: Ability to Manage Crises Not Merely Determined by Debt Levels](#)"). Although there is very little visibility over the terms and conditions of Chinese loans to most African countries, the AidData research lab at William & Mary has indicated that of the \$56.5 billion Chinese official loans extended to SSA countries in 2000-2014, only 28% are fully concessional while the rest are categorized as "other official financing" on less concessional terms (albeit still well below domestic or external commercial borrowing rates).

Other things being equal, increased commercial external borrowing, including from China, will contribute to higher debt levels compared with the first half of the decade, increasing - particularly in an environment of depreciating currencies - debt-servicing costs for most SSA sovereigns over the next two years. In Angola, Zambia, Ghana and Nigeria, the interest/revenue ratio will exceed 20% over 2018 and 2019 (see Exhibit 7). Angola, Zambia and the Republic of the Congo are among the most indebted to Chinese creditors while more moderate debt levels in [Ethiopia \(B1 stable\)](#), [Cameroon \(B2 negative\)](#), and [Uganda \(B2 stable\)](#) contain the immediate risks from sizeable loans from China.

Exhibit 7

Most African sovereigns will see their debt-servicing costs increase

Interest to government revenue (%)



Source: Moody's Investors Service

Less transparent terms and debt sustainability conditions attached to China's loans also weigh on SSA sovereigns' fiscal strength

Another characteristic of Chinese loans is that a significant part are collateralized, or guaranteed by the sale of a specific quantity of a natural resource. The structure of the collateralization can take different forms in different countries, but in some instances the loan will be secured by earnings from a natural resource, like oil. In these cases, debt servicing is linked to the price of oil, so as the price falls, servicing the debt requires shipment of a greater quantity of oil. The China Africa Research Initiative at SAIS estimates that about a quarter of total lending between 2000 and 2014 comprised loans backed by natural resources. Loans collateralized with commodities tend to be made most often to commodity producing countries of lower creditworthiness, which limits the risks for the lending institution. But these loans exacerbate the sensitivity of a government's debt-service costs to shifts in commodity prices. A decline in commodity prices also increases the volume of exports required to service the commodity-backed loan, reducing the revenue available to service the sovereign's other debt.

The [Democratic Republic of the Congo \(B3 negative\)](#), for instance, pledged mining resources valued at \$6.5 billion to China, including operating costs estimated at \$3.5 billion, in return for a credit line of \$3 billion for infrastructure development. This agreement also created a Sino-Congolese joint venture named Sicominex. The loan is being disbursed until 2019 and is conditionally guaranteed by the government.¹ Meanwhile, much of Angola's financing from China resource-backed loans, although the conditions of the agreement are not disclosed. The Republic of the Congo has received financial support from China through similar schemes, where loans are collateralized with natural resources.

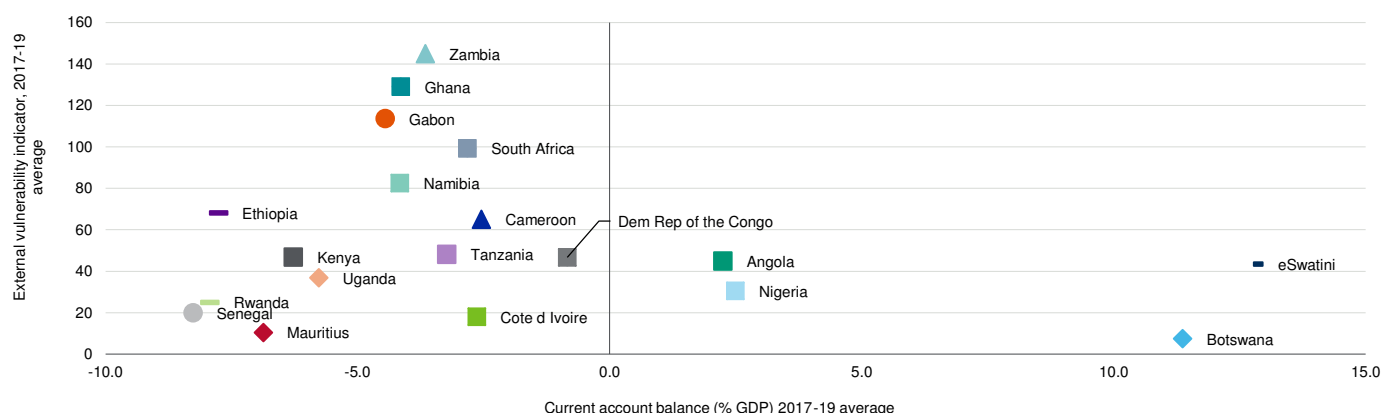
Additional external debt preceding a build-up of foreign-currency revenue puts pressure on external positions

Chinese loans also risk intensifying existing external vulnerabilities by increasing external debt loads and external debt-servicing costs. For commodity exporters, lower export earnings reduce the inflow of foreign currency and increase the risk of external pressures as Chinese and other external debt begins to fall due.

Zambia's external position is particularly fragile given sizeable funding needs, higher levels of external debt, and very low foreign exchange reserves. Large external debt obligations due from 2022 will intensify external pressures. For countries with narrow export bases, like Kenya or Uganda, or countries which rely on a single commodity as a source of foreign exchange earnings, like Zambia and Angola, the increase in external debt associated with China's lending may not be met with sufficient and stable foreign-currency earnings in the future.

Exhibit 8

Large current account deficits and elevated external debt payments already present significant external risks for most SSA sovereigns
Average external vulnerability indicator** and current account balance (% GDP), 2017-19



* Excludes Mozambique and the Republic of the Congo. Mozambique's current account deficit will average 27% of GDP in 2017-19. Republic of the Congo's EVI will average 300% in 2017-19.

** External Vulnerability Indicator (EVI) = (Short-term External Debt + Currently Maturing Long-Term Debt + Nonresident Deposits Over One Year) / Official Foreign Exchange Reserves

Sources: Moody's Investors Service, National Statistical Authorities

China's willingness to renegotiate loans can mitigate near-term liquidity risk

While Chinese lending amplifies fiscal and external vulnerabilities in some SSA countries, the scope to renegotiate some outstanding loans from China will influence government liquidity risks in the region. This is particularly relevant in countries like the Republic of the Congo, Democratic Republic of the Congo, Ethiopia, Cameroon and Angola, whose borrowing is concentrated on Chinese creditors. In Cameroon, for instance, China is the single largest creditor, at around 30% of total government debt.

In general, concentrated exposure to a single creditor, with little transparency about decisions to restructure the terms of the debt, increases rollover risks, weakening the fiscal profile. However, Chinese relations with a number of SSA sovereigns have been built over many decades and these countries likely represent strategic partners for China. For example, Angola supplies about 12% of China's crude oil imports, while in Ethiopia, Chinese financing of the railway and investment in special economic zones signals China's long-term interest in increasing the value added of Ethiopian exports. These long-term relationships and strategic interests appear to increase China's willingness to restructure debt where debt service pressures become unmanageable, thereby easing liquidity pressures at least over the near term.

Based on statements from SSA and Chinese government officials, Chinese policy banks have renegotiated outstanding debt with several SSA sovereigns². Loans for the Tanzania-Zambia Railway Authority (TAZARA) project were reportedly canceled in 2011. In 2016 and 2017, China agreed to write-off debt owed by the Mozambican government. In Zambia, government officials have reportedly sought to renegotiate outstanding debt with Chinese lenders. In 2018, Angola indicated its desire to restructure bilateral debt with overseas bilateral creditors. Cameroon's government also sought debt relief from Chinese creditors during the last FOCAC summit in September 2018.

Because China is not a member of the Paris Club, its policy banks can provide liquidity relief by extending maturities on existing loans, on a bilateral basis and without adhering to the terms and conditions of a Paris Club restructuring.³ Its willingness to do so can have negative implications for the borrowing sovereigns. For example, China's presence as a significant creditor can complicate negotiations with the IMF for financial assistance, as in the case of the heavily indebted Republic of the Congo, both due to the lack of transparency over outstanding debt owed to China and uncertainty about China's willingness to accept a restructuring of its loans should it be needed. While its CEMAC neighbours Cameroon and [Gabon \(Caa1 stable\)](#) have successfully agreed IMF programmes, and despite extensive negotiations, the Republic of the Congo has yet to secure a financing programme to provide a backstop--a key sticking point being China's participation in a debt restructuring.

Moreover, the lack of transparency and predictability around the conditions attached to these restructurings means that the credit implications are not clear. In some cases, where Chinese lenders have provided liquidity relief, this has come with higher resource concessions, which reduce future export earnings. Outside SSA, China received land in exchange for some debt relief in [Tajikistan \(B3 stable\)](#) and took control of the Hambantota Port in [Sri Lanka \(B1 negative\)](#). Based on past experience, countries rich in natural resources, like Angola, Zambia, and Republic of the Congo, or with strategically important infrastructure, like ports or railways in Kenya, are most vulnerable to the risk of losing control over important assets in negotiations with Chinese creditors. Even if debt restructuring alleviates immediate liquidity pressure, the loss of natural resources revenue or other assets is credit negative.

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- » **Sector Comment:** [Sovereigns – Central African Community: Shrinking financing options in regional market add to credit challenges](#), 24 August 2018
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Contributor

- » **Matt Bridle – AVP Research Writer**

Endnotes

- [1](#) The guarantee can only be called from 2034 onward if the government's portion of revenue from the mining project is insufficient to repay the loan. The guarantee call will take the form of new mining concessions and therefore no financial payment will be made. Projections suggest that the loan will be fully repaid before 2025, so the probability of the guarantee crystalizing is fairly low
- [2](#) In 2018, at the Forum on China-Africa Cooperation FOCAC in Beijing, China agreed to forgive some governments' interest-free loans
- [3](#) The Paris Club only negotiate debt restructuring with countries that have implemented and are committed to implementing reforms to restore their economic and financial situation.

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