



Sovereign bonds in sub-Saharan Africa

Good for growth or ahead of time?

Dirk Willem te Velde



Key messages

- Sovereign bonds currently present African countries with relatively inexpensive new sources of external finance for economic growth.
- A once rare phenomenon in sub-Saharan Africa (excluding South Africa), sovereign bond inflows stood at \$5 billion in 2013 – equivalent to 20% of aid to SSA and 12% of foreign direct investment inflows.
- While such bonds can support economic growth and transformation, they carry considerable risks for African countries, including currency risks, roll-over risks and greater macroeconomic volatility.
- Such risks could be reduced if developing countries implement the proceeds of sovereign bonds to plug economic and social infrastructure gaps as planned, and manage macroeconomic conditions to reduce currency risks.
- The international community could help by tapering quantitative easing in the most development-friendly way and by enhancing liquidity in the bond market in other ways to reduce roll-over risks.

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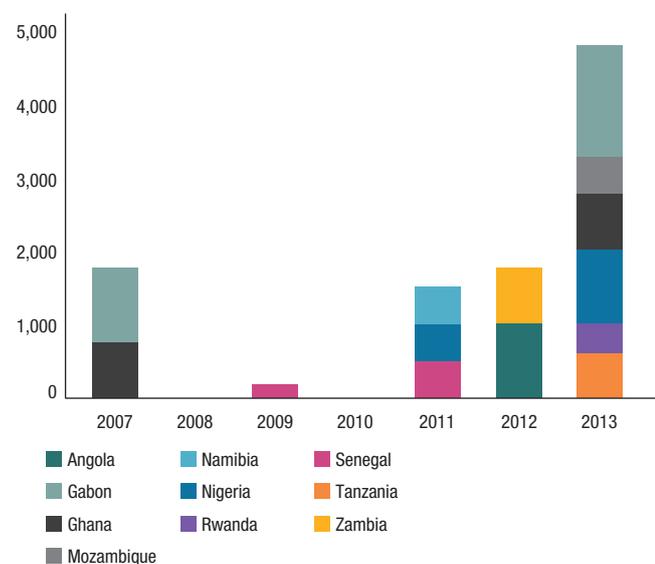
Most countries issue sovereign bonds to access capital markets to finance their development. A sovereign bond is a debt security issued by a national government. Known as a Eurobond, it is denominated in a foreign currency (usually the dollar, rather than, as its name would suggest, the Euro). Until

recently, countries in sub-Saharan Africa (SSA) made little use of this option, but this is changing. Indeed, the magnitude of recent bond flows to SSA is larger than it has ever been, and was equivalent to 20% of aid and 12% of foreign direct investment (FDI) in 2013.

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Figure 1: Bond issuances in SSA (excluding South Africa), 2007-2013, \$ million



Source: Hou et al. (2014).

Sovereign bonds can help to underpin growth and economic transformation. But this is not automatic. Indeed the risks, which span currency risks, roll-over risks and increased capital market volatility, can be considerable. It is time for both national governments and the international community to create an enabling environment for more and better international bond flows for SSA.

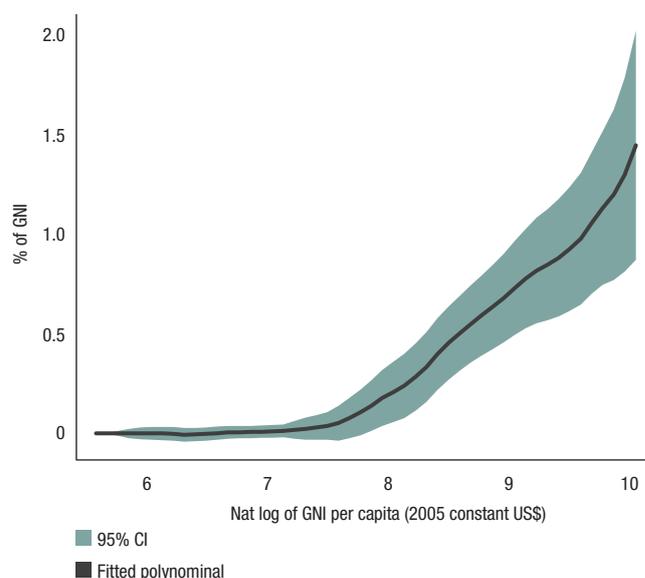
Sovereign bonds: what are the challenges?

During 2013, SSA countries issued one Eurobond after another in what looked like a beauty contest. Even low-income countries (LICs) that are relatively large aid recipients, such as Rwanda, issued a maiden Eurobond in 2013, and Cote d'Ivoire, Kenya and Zambia plan to do so in 2014. The advantages are clear: Eurobonds provide a new source of external finance for growth, have lower direct borrowing costs than domestic debt, and offer more choice and negotiation power. It is also clear that we are seeing a new and more advanced financial integration of sub-Saharan countries into the global economy. This briefing discusses the opportunities as well as the new challenges this presents, and sets out the policy implications.

A number of questions have emerged. Have SSA countries made the right choice in issuing sovereign Eurobonds and when should they issue more bonds? Should those countries that have not yet issued a bond do so now? If so, at what size? What is a reasonable coupon rate? And what can issuing countries and countries internationally do to make sure that sovereign bonds work for development? When are countries ready to enter the bond market, and when is it too soon?

The SSA context has changed markedly over the past decade. Private capital flows, and especially short-term capital flows, have risen rapidly since 2000, despite deep cuts in 2008-2010. Africa's financial sectors are maturing and growth has now

Figure 2: International bond flows (% of GNI), World Development Indicator (WDI) countries, 2000-2012



Note: Horizontal axis is ln scale: 7 = \$1096, 8 = \$2981, 9 = \$8103. CI = confidence interval.

Source: Kernel estimates based on World Development Indicators.

been sustained for two decades. Africa's external context has also changed. Monetary easing (or its tapering in developed countries), low but rising global interest rates, slowing economic growth in China and weaker commodity prices all matter for bond flows to SSA.

This briefing first presents the scale of sovereign bond issuance before reviewing their benefits and risks. It examines academic evidence on the impact of short-term capital inflows and discusses national policies. It concludes by outlining international policies for more and better bond inflows.

What is the scale of the issue?

SSA issued a record \$4.6 billion in 2013 in sovereign bonds (5% of developing country sovereign-bond issues), up from zero in 2010 (and around \$1 billion in 2001). Figure 1 charts progress from 2007-2013. Sovereign-bond inflows in SSA were equivalent to 12% of FDI inflows and 20% of aid in 2013.

Figure 2 shows bond inflows (as a percentage of GNI) increasing by level of income (ln scale). When countries have a GNI per capita of around \$3,000, average bond inflows (as a percentage of GNI) are around 0.25% per year. When GNI is only \$1,000, the ratio is 0.05%. For comparison, Zambia's bond inflows stood at 3.75% of GNI in 2012, which is 0.375% over 10 years (assuming it did not issue another bond in that period). Ghanaian bond inflows were 3.05% of GNI in 2007, which is around 0.6% of GNI over five years. It seems, therefore, that recent bond issuances in both countries are well ahead of the average in bond inflows over 2000-2012 in comparison to their national levels of development. Are African financial markets maturing ahead of time?

Table 1: Plans for using bond proceeds

Country	Value (million)	Use
Gabon (2013)	\$1,500	\$610 million to replace existing debt for better debt management
Ghana (2013)	\$750	For capital expenditure and refinancing public debt to reduce the cost of borrowing
Nigeria (2013)	\$1,000	To finance projects in the electricity sector, which is undergoing privatisation; to support a shift from domestic borrowing towards cheaper foreign credit
Rwanda (2013)	\$400	Construction of a 28-megawatt hydropower plant, the construction of a hotel and payment of some of state-owned RwandAir's debt
South Africa (2013)	\$2,000	Extend maturity of debt, use low financing costs, finance roads and power
Zambia (2012)	\$750	To invest in infrastructure

Source: Hou et al. (2014).

What are the potential benefits and risks?

Sovereign bonds have a number of stated benefits. African countries have issued bonds to **manage debt** and **finance investment in much-needed infrastructure** to sustain growth (the case for nearly all countries shown in Table 1). Countries such as Ghana have used a period of low global interest rates to access international capital markets, rather than using the higher interest rates needed to mobilise domestic capital. A number of countries (e.g. Rwanda) would also like to be **less dependent on traditional aid providers** and want finance for projects that such donors have been unlikely to fund.

Countries have also used maiden bonds to provide a **benchmark** for other entities to access the market. This has also led to financial-sector development and more liquidity on the corporate bond market. Eurobond notes were listed at the Ghana Stock Exchange and this facilitated access for local investors, with Ghanaian institutional investors (banks, insurance companies, pension funds) participating in the Eurobond offer. In Kenya, which is considering a \$1.75 billion Eurobond, the debt is expected to serve as a benchmark for domestic corporates to access foreign capital markets. Companies such as Kenya Power Ltd (the country's sole electricity distributor), ARM Cement Ltd (its second-largest cement-maker), and Kenya Electricity Generating Co. (East Africa's biggest power producer), are all considering following the Government's lead by selling Eurobonds.

But there are also major risks for SSA countries. For example, there can be carry costs for not using proceeds and these are greatest when there are delays in projects (**implementation risks**). A more serious risk is when countries are unable to manage debt (**debt sustainability risks**), spend the funds unwisely and do not have funds to repay the bond when it matures. Countries are

subject to **roll-over risks**, when the bond is a significant share of external debt or when there is very little depth and liquidity in the bond market. There are additional problems when maturities are shorter than the projects that are to be funded.

There is also a currency or **exchange-rate risk**. Greater capital inflows should lead to exchange-rate appreciation, but this is not a given. When currencies devalue (which happened as a response to US Federal Reserve tapering of quantitative easing (QE) in some fragile emerging economies), interest payments on the Eurobond in dollar terms become relatively more expensive than repaying domestic debt. This could undo the benefits of lower interest rates on Eurobonds than on domestic bonds. A currency that is half the value will lead to double the interest-rate payments and bond repayments. The real risk, therefore, lies in the currency mismatch (which could be reduced by foreign currency income, such as income from commodity exports, but these are also under threat with China growing more slowly) and the danger of a sharp revaluation when the bond is due. This, of course, is what happened earlier in 2014 in Argentina and Turkey (and indeed during the 1980s debt crisis).

The scale of the currency-rate risk is considerable. Ghana issued a bond in 2013 and its coupon rate was 7.875%. Interest rates on local debt can be 19-23%. Debt service on the Eurobond looks much lower at first glance, but would actually be very similar (7.875 plus 14.35 is around 22%) on domestic and sovereign bonds if we take into account annual exchange rate devaluation (Table 2 suggests this has been 14% per year since 2007). Ghana is also much more dependent on global conditions. This simple comparison suggests that it would be wise to pay more attention to the development of domestic bonds, as the currency risk is taken on by the bond issuer.

Finally, there is a **macroeconomic risk**. Large-scale capital

Table 2: Local currency / dollar exchange rate devaluation (annual rates)

	Ghana	Kenya	Nigeria	Rwanda	South Africa	Uganda
2007M1-2014M1	14.3%	3.1%	3.2%	3.0%	5.7%	5.0%
2012M1-2014M1	17.9%	0.3%	-0.6%	5.8%	15.0%	2.3%

Source: calculations based on World Bank data.

inflows could lead to volatility, credit booms and inflation, which need to be managed and sterilised.

Past experience on the impact of short-term capital inflows in low-income countries

The literature on the impact of FDI (long-term capital flows) on development paints a generally positive picture. However, the reverse seems true for short-term capital flows, at least in LICs. Hou et al. (2014) review the academic literature on the effects of short-term capital inflows, finding that portfolio bond flows in LICs and African countries have had a neutral or even negative effect on growth, although some studies stress that policies and country characteristics can make this impact positive (as discussed in the next section). The effects might be negative simply because bond flows have been small or because complementary policies have been weak – both factors that can change.

Choong et al. (2010) examine six LICs between 1988 and 2006, finding that FDI, portfolio investment and foreign debt have a negative impact on economic growth, but that the overall effect of all private capital flows on growth is positive in LICs with well-developed financial sectors. Shen et al. (2010) find that FDI has a positive effect on growth across a sample of 80 countries (31 HICs, 25 middle-income countries (MICS), and 24 LICs) from 1976 to 2007, while portfolio investment (i.e. bond and equity flows) has a negative effect. Examining selected SSA countries from 1980 to 2007, Brambila-Macias and Massa (2010) find that FDI and cross-border bank lending have a significant and positive impact on SSA's growth, while portfolio equity flows and bonds flows have no impact. Brambila-Macias et al. (2011) find that cross-border bank lending has a negative and significant impact on growth in a sub-sample of natural-resource economies. In their review of 44 countries, including LICs, from 1986 to 1997, Reisen and Soto (2001) find that FDI and portfolio-equity flows affect growth significantly, while bonds and official flows have little or no effect.

How can African countries make Eurobonds a success?

Developing countries can make themselves more attractive to bond inflows by: developing a clear plan to use the proceeds to plug economic and social infrastructure gaps; by improving economic growth potentials; generating greater commodity revenues; lowering inflation; reducing deficits on current account and government balances; and fostering capital-account convertibility and financial market development.

African countries could consider the following policy suggestions to make short-term capital inflows (and bonds in particular) work better for growth and development.

- Use macroeconomic policies (fiscal, monetary and exchange rate) to smooth the potential impact of increased inflows on inflation, exchange-rate appreciation and fiscal expansion and to limit the volatility that is particularly damaging in poor countries.
- Develop financial-sector policies to manage, regulate and maximise the potential of short-term equity and private bond flows. Promoting more liquidity in bond markets reduces roll-

over risks, for example.

- Ensure the proceeds of government bonds are invested in developing productive capacities or to fund a cost-lowering restructuring of debt flows. This would mark a major change from previous experiences, where debt has often become unsustainable.
- Monitor global monetary conditions to determine the right timing for bond issuances. The international context for issuance has been more negative recently. Ghana has postponed a third Eurobond (of up to \$1.5 billion) because of market expectations of high yields. Zambia's yield on its first Eurobond has increased from 5.2 in 2012 to 8.0, and with the fiscal deficit increasing the next issue of up to \$1 billion could be expensive. However, Eurobonds are still planned in Kenya and Cote d'Ivoire.
- Consider the use of capital-account management measures in cases of excessive volatility – these may only be needed if all else fails.

Many of these policies are well-known, but countries struggle to implement them to smooth the impact of short-term capital inflows. The challenges include capture by interest groups, e.g. by responding to pressure to spend bond receipts on immediate needs, not investment, and the failure to implement policies consistently. If countries have a weak policy framework, exposure to international bond flows will highlight the negative aspects further.

How can the international community help?

Emerging markets have seen increased capital inflows as a result of QE programmes in developed countries. Expectations that these would taper in developed countries after announcements by the US Federal Reserve led to a withdrawal of capital flows in mid-2013, although there was a bounce back when the taper did not materialise in September 2013. Now that tapering has begun in 2014, it has been followed by further global market volatility. It is crucial, therefore, that developing countries can manage such capital inflows and use them to their benefit while they last and manage volatility. A first look at recent bond issuances in SSA suggests that changing expectations and actions around a US tapering of bond-buying have had little impact. Rwanda and Tanzania issued before the May 2013 announcement and Gabon, Ghana, Mozambique and Nigeria issued afterwards.

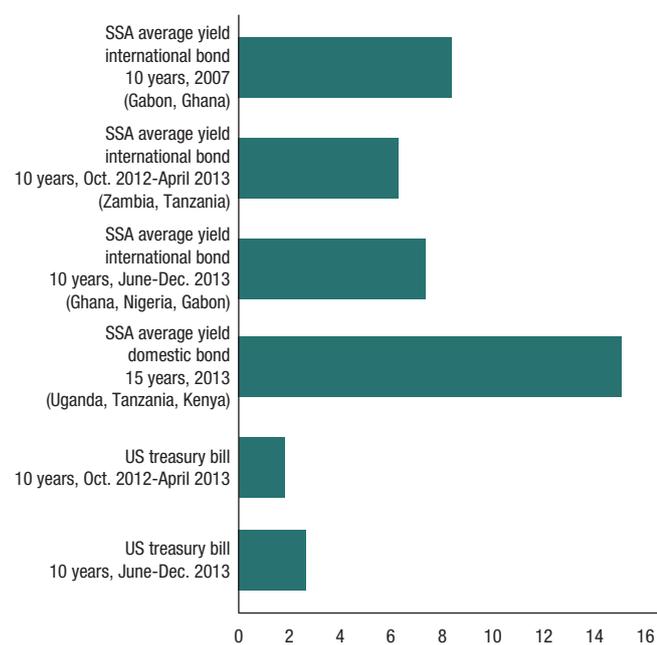
Since 2007, SSA has issued \$10 billion in bonds. Investors from the US and UK were the main buyers, accounting for more than two-thirds of total order books in Ghana, Namibia and Senegal (Table 3) – an illustration of the direct short-term financial links between developed and African countries (and, therefore, sensitivity to global economic conditions).

However, while African government bonds were still being issued, and were oversubscribed in Ghana and Nigeria, the yields on issued African bonds declined between 2007 (Ghana, the first issuer in SSA) and May 2013 in average terms. Yields have since increased by around 100 basis points by the end of 2013, in a similar way to US treasury-bill rates (Figure 3). In 2011, Nigeria's bond had a coupon rate of 6.75, and its yield fell to 3.64 in early 2013 but then increased to 6.24 by June of that year, after the Federal Reserve tapering announcement. Ghana argued that its coupon rate for a sovereign bond issued in August 2013 was pushed up because of potential tapering. It is now postponing a

Table 3: Composition of order book for government bonds

	No. of investors	US	UK	Europe	Asia	Other
Ghana (August 2013)	158	60%	21%	15%	2%	2%
Namibia (October 2011)	160	25%	40%	30%	5%	
Senegal (May 2011)	125	30%	37%	29%	4%	

Source: Hou et al. (2014).

Figure 3: Yields on government bonds

Source: Hou et al. (2014)

third issue. Kenya, meanwhile, has had to postpone its maiden Eurobond several times because of market volatility.

The international community could help by tapering QE in the most development-friendly way. It could, for example,

put more emphasis on coordinating and announcing monetary policies through international networks such as the G20. Doing this might reduce the global financial market volatility that is so damaging for poor countries (but also for the G20 itself). This could also help to prepare LICs for difficult conditions when the risks outlined above materialise.

External debt has increased in the past (1980s and 1990s) in developing countries and is increasing again, albeit at a slow pace. Past experience shows that when the situation turned sour, debt became unsustainable, but debt relief followed. This time, external debt is with private actors, not with government bodies, such as export credit agencies. When (interest on) bonds cannot be re-paid, what will happen? To reduce the probability of a default, countries need to monitor debt management and implement the projects for which the bond receipts were intended, while preparing for volatility and reducing currency risk by lowering government and current-account deficit and by increasing liquidity on the bond market. The international community can help by insisting on sustainable lending criteria, by creating a deeper investor base, and by supporting LICs through technical assistance and knowledge sharing.

A more liquid investor base would ease issuances and reduce roll-over risk for issuers and allow liquidity and hedging for investors. There is a need for liquidity providers (i.e. market developers) in bonds and hedging instruments, including foreign-exchange derivatives and interest-rate swaps. International financial institutions could step up to become market developers by taking on some of the risks that might otherwise fall on developing countries.

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