Sub-Saharan Africa International Sovereign Bonds

Part I
Investor and Issuer Perspectives

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Overseas Development Institute
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Abbreviations

DR  Democratic republic
FX  Foreign exchange
GNP Gross National Product
HIPC Heavily indebted poor countries
IMF International Monetary Fund
MSCI Morgan Stanley Capital International
OTC Over-the-counter
SSA Sub-Saharan Africa
US United States of America
1 Introduction

Sovereign bond markets are an important part of developed financial systems. In advanced economies they provide a mechanism for fiscal management – including capital and current expenditure – and the execution of monetary policy. They also indirectly assist corporate bonds and derivatives by providing a benchmark for pricing and hedging.

In developing economies sovereign bond markets remain underdeveloped. This is true of sub-Saharan Africa – the focus of this paper – where the outstanding stock of government securities was 14.8 percent of GDP in 2010, much lower than in other developing economies as well as advanced economies (IMF, 2014f).

Since the financial crisis there has been a surge in sovereign bond issues in the region. There is optimism that this will lead to deeper sovereign bond markets that will facilitate better fiscal and monetary policy. More importantly for developing countries, they offer an opportunity to finance development needs – such as in infrastructure, education and health – through private sector capital. In this paper we examine these recent trends and opportunities.

We start with a review of the characteristics and drivers of bond issues in sub-Saharan Africa since the global financial crisis of 2008. New issues for sub-Saharan Africa exceeded $6.25 billion in 2014 bringing stock to over $18 billion. There has been a wide diversity in issuing countries.

Bond had issuer-friendly terms with relatively low interest rates and reasonable maturities (compared to market-based benchmarks). Yields for issuing countries were most fairly priced relative to market-based comparatives. However, a minority appear to have been issued at excessively high interest rates.

Terms – including cost and maturity - were also unfavourable relative to concessional financing available from IFIs.

Importantly, bonds have been exclusively denominated in “hard” currencies, giving rise to foreign exchange risk.

Investor appetite has been driven by the “search for yield” as investors have responded to exceptionally low interest rates due to loose monetary policy in advanced countries. Also important to investors have been perceptions of improved macroeconomic prospects in sub-Saharan Africa. This has been reflected in improved - although still below investment grade - credit ratings.

Issuers have been attracted by the exceptional liquidity, positive terms and lack of conditionality. They have prioritised the advantages to them of the lack of conditionality of sovereign bonds over the preferential cost and maturity of concessional financing.

We then consider whether sovereign bond issues are contributing to economic development. The use of funds varies in relation to its potential contribution to development goals. Some countries have used funds positively, such as for infrastructure or important current expenditure in health and education. However some countries appear to have used funds for purposes with little or no developmental impact. For example, a minority of countries have used funds for “pork barrel” 1 political spending on public sector salaries and military hardware.

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1 A colloquialism for government projects that benefit people in a particular part of the country and that are done in order to help the political careers of elected officials. Such support might take the form of increasing votes in various ways or increasing political donations. It originates in the United States in the early 20th
The contribution to financial sector development has been under-researched to date but appears to be mixed. The investor base for sub-Saharan Africa has been broadened and has been composed of predominantly new international investors. However, it remains fickle. Concerns have also been raised about the suitability of frontier markets for retail investors by US regulators because of the high risk nature of these markets. Contributions to establishment of market benchmarks have been limited. Evidence regarding positive effects on reducing crowding-out in domestic markets remains ambiguous.

Sovereign debt has repeatedly been the source of risk as well as opportunity for developing countries and led to financial losses for issuers in some instances. Debt levels can become unsustainable and lead to defaults if poorly managed. Risks and policy options are discussed in detail in a second accompanying paper – “Sub-Saharan Africa Sovereign Bonds: Risks for Issuers”.

Century to describe the practise of keeping a barrel with a reserve supply of meat for communal use (Source: Oxford Dictionary).
2 Review of post-2009 sovereign bond issues

Prior to 2009 issue of sovereign bonds for sub-Saharan African countries had been negligible. This trend was reversed from 2008 when issues started to surge. In 2010 to 2012 issues were moderate with between $1.5 and $2.5 billion being issued annually but by 2013 and 2014 issues grew further, exceeding $5.1 billion and $6.25 billion respectively. (Figure 1).

**Figure 1: Sub-Saharan Africa sovereign bond issues (2009 - 3Q 2014) USD millions**

![Graph showing sovereign bond issues from 2009 to 2014](image)

Source: Bloomberg, Dealogic, The Financial Times

The issues led to the stock of outstanding sovereign bonds in the region growing from less than $1 billion in 2008 to over $18 billion by 2014 (IMF, 2014c).

Issuing countries are diverse. They include commodity exports such as Zambia, Nigeria and Angola, and larger, non-commodity exporting countries such as Kenya and Ghana. However they also include smaller countries such as Ethiopia, Rwanda, Namibia and the Seychelles. Some countries made multiple issues during the period including Senegal Nigeria, Ghana and Cote D'Ivoire. ³ (Figure 3)

---

² Full details of all issues are given in the appendix.
³ Cote D’Ivoire issued bonds in 2010 of $2.3 billion. However, they were part of a debt-restructuring program of defaulted debt from 1998. Interest payments on them were suspended in 2011 amid political unrest. The bond was part of a US$4.4 billion debt relief program under the Heavily Indebted Poor Countries (HIPC) Initiative in 2012 led by the IMF and the World Bank (Source: IMF, Press Release No. 12/239 June 26, 2012)
Figure 2: Sub-Saharan Africa Sovereign Bond Issues by country and year (2009 - 3Q 2014) USD Millions

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td></td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td>Cote d’Iviore</td>
<td>2,330</td>
<td></td>
<td>750</td>
<td></td>
<td>3,080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td></td>
<td></td>
<td>1,000</td>
<td></td>
<td></td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Gabon</td>
<td></td>
<td>1,500</td>
<td></td>
<td>1,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>750</td>
<td></td>
<td>1,000</td>
<td></td>
<td>1,750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td></td>
<td></td>
<td>2,000</td>
<td></td>
<td>2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>850</td>
<td></td>
<td>850</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Namibia</td>
<td>500</td>
<td></td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>500</td>
<td></td>
<td>1,000</td>
<td></td>
<td>1,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>400</td>
<td></td>
<td>500</td>
<td></td>
<td>1,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senegal</td>
<td>200</td>
<td>500</td>
<td>500</td>
<td></td>
<td>1,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seychelles</td>
<td></td>
<td>168</td>
<td></td>
<td>168</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td></td>
<td>600</td>
<td></td>
<td>600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td></td>
<td>750</td>
<td>1,000</td>
<td></td>
<td>1,750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>2,498</td>
<td>1,500</td>
<td>1,750</td>
<td>5,100</td>
<td>6,250</td>
<td>17,298</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Dealogic, The Financial Times

Interest rates - also termed coupons or yields - for sovereign bonds vary according to the credit rating of the issuing country and the maturity of the bond. Poorer ratings and longer maturities attract higher interest rates. Ratings are determined by credit agencies such as Moody’s and Standard and Poor’s and are important in determining their attractiveness to different investor classes.

Yields on new issues have broadly followed the expected upward sloping yield curve with increasing rates for longer maturities (figure 3). The average issuing yield was 7.07 percent with a 10-year maturity.

Figure 3: Yield and maturity at issue (2009-2014)

Source: Bloomberg, Dealogic, The Financial Times
Average interest rates have been market-determined. These have been significantly above concessional terms (Stiglitz & Rashid, 2013; Hou et al, 2014) but have been broadly in-line with private sector bonds with comparable credit ratings (IMF, 2014f).

The maturity of bonds – mainly 5 and 10 years - has been positive because of the advantages for issuing countries of such medium-term maturities (which is discussed further below). These maturities are reasonably long compared to other private market financing. However – as for interest rates – they are less favourable than terms available on concessional terms which can have maturities of up to 40 years.

Finally, bonds were exclusively denominated in US dollars, leaving foreign exchange risk with sovereign borrowers (Tyson et al, 2014).

Management of these issues will be discussed in the second accompanying paper.

Have bond yields been fairly priced for issuing countries?
There have been notable variations between countries and issues in yields (figure 4). Variations can be fairly explained by differences in countries credit rating or by different market conditions at different times, particularly in relation to investor appetite.

**Figure 4: Average issue yield by country (2009-2014)**

![Average issue yield by country (2009-2014)](image)

Source: Bloomberg, Dealogic, The Financial Times

This can be further illustrated by analysing comparative yields across bonds with the same credit rating. For example, a comparison of 10-year bonds for B+ rated issuers in liquidity bond markets would be expected to show bonds issued at similar yields. In sub-Saharan Africa they show considerable variation between countries and years (figure 5).

In 2011 both Nigeria and Senegal issued 10-year bonds with a B+ rating. As the rating is the same it would be expected that their yields would be similar (when issues under comparable market conditions). However Senegal paid a significantly higher coupon of 9.13 percent compared to 7.13 percent for Nigeria. The difference in the yields an additional cost to Senegal of $100 million over the life of the bond. By 2013 and 2014 yields for the two countries had fallen to more comparable levels. This was most likely attributable to investor perception between the two countries in 2011 – Such as a lack of familiarity with Senegal as an investment location compared to Nigeria – which had improved by 2013.

Similarly for Zambia the opposite trend is seen with yields increasing between 2012 and 2014 by 3.0 percent, despite steady credit ratings. This reflected investor concerns about
Zambia’s vulnerability to declining copper prices (which make up c. 70% of exports), currency volatility and discussions on the need for IMF support in 2014 (Tyson et al, 2014). This increase in yields increased interest payments on the 2014 Zambian bond by $300 million over its 10-year maturity compared to those that would have been made if it has been issued at the 2012 levels.

**Figure 5: Selected comparative issue yields for 10-year B+ bonds**

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Yield</th>
<th>Change</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>2011</td>
<td>7.13</td>
<td></td>
<td>B+</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2013</td>
<td>6.63</td>
<td>-0.50</td>
<td>B+</td>
</tr>
<tr>
<td>Senegal</td>
<td>2011</td>
<td>9.13</td>
<td>-2.88</td>
<td>B+</td>
</tr>
<tr>
<td>Senegal</td>
<td>2012</td>
<td>5.63</td>
<td></td>
<td>B+</td>
</tr>
<tr>
<td>Zambia</td>
<td>2014</td>
<td>8.63</td>
<td>3.00</td>
<td>B+</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Dealogic, The Financial Times

These variations raise the question of whether bonds have been fairly priced for issuing countries.

Issues have largely been made through a public offering managed by a lead underwriter. This has typically been a global investment bank. Recent issues, for example, have been managed by Deutsche Bank, Barclays and Citibank. Lead underwriters determine the yield on the bond and are responsible for setting the lowest yield for the issuers that will still ensure that the issue is fully subscribed by investors. If any bonds are unsold the underwriter is obliged to buy them at the issuing yield.

In 2013 and 2014 issues were heavily over-subscribed and saw yields fall immediately after issue in secondary markets, suggesting that bond yields were too high. For example, Kenya issued 5 and 10-year bonds of $2 billion at 5.875% and 6.875% respectively but the demand (“the order book”) was for $8 billion, a four-fold oversubscription by investors. Senegal issued a $0.5 billion 10 year bond at 6.25% and received an order book of $4 billion, an eight-fold oversubscription by investors. Cote D’Ivoire issued a 10-year $750m bond and received an order book of $4.75 billion, a more than six-fold oversubscription by investors.

Similarly, Namibia, Nigeria and Senegal all saw immediate drops in yields on secondary markets following primary issue (IMF, 2014f). This again suggests yields were too high. However, other comparisons suggest the yields were lower than might have been expected. For example, the 2014 Cote D’Ivoire issue was set at comparable levels to United Kingdom sovereign debt which suggests the yield was excessively low.

Overall the fairness of the yields for issuing countries appears to be mixed with most fairly priced but the minority appearing to have been issued at excessive interest rates. However, a fuller examination is needed to definitively conclude on this point, benchmarking issuances against appropriate market indicators.

Management of this issue is discussed in the accompanying paper.

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4 Alternatives include public auctions – which are most common in advanced economies with highly liquid and commoditised sovereign bond markets – and private placements – which are more common in illiquid markets and corporate bond markets.

5 Source: Author.


3 Drivers of bond issues

As discussed, since 2009 there has been a significant increase in the amount and number of issues in sovereign bond markets in sub-Saharan Africa. These trends have been driven by changes in both issuer (supply) and investor (demand) factors. Investors demand has been affected by factors relating to both international and country specific factors. This section discusses these drivers.

3.1 International Investor Demand

Since the 2007-08 financial crisis, advanced economies have maintained historically low interest rates and executed quantitative easing leading to exceptionally loose monetary conditions. Prospects for economic growth in advanced economies have been muted with a prospect of the “new mediocre” in the major advanced and emerging economies. These conditions have impacted investors through driving a search for higher yielding investments outside of advanced and emerging markets (Tyson, te Velde and Griffith-Jones, 2014a; Tyson, te Velde and Griffith-Jones, 2014b).

This has included increased interest in “frontier markets”. Frontier markets are generally defined as being the least developed countries with current low levels of financial market development. This includes in relation to capital markets and liquidity. Investors have become interested in them because they offer the prospects of greater and uncorrelated returns relative to advanced markets and established emerging markets.

Capital has flowed into frontier markets through a number of investment vehicles. This has included unregulated private investors such as private equity funds. Also important from 2012 was a broadening of investor classes including to regulated funds. This was further encouraged by high returns in 2012 and 2013 (figure 6) which led to increased flows into frontier market funds. The pressure on fund managers to invest those funds is one factor in the declining yields and over-subscription of issues notes in the earlier section. Concerns have been raised about the suitability of frontier markets for retail investors by regulators because of the high risk nature of these markets and warnings issued by US investors following perceived market hype.

Figure 6: “Frontier markets” annual performance

<table>
<thead>
<tr>
<th>Annual return</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI Frontier Markets</td>
<td>-18.6%</td>
<td>8.6%</td>
<td>26.3%</td>
<td>2.52%</td>
</tr>
<tr>
<td>MSCI Frontier Markets Africa</td>
<td>-20.1%</td>
<td>47.3%</td>
<td>25.8%</td>
<td>-17.52%</td>
</tr>
</tbody>
</table>

Source: MSCI

8 The MSCI Frontier Markets Index was launched in 2007 and consists of the following 24 frontier market country indexes: Argentina, Bahrain, Bangladesh, Bulgaria, Croatia, Estonia, Jordan, Kenya, Kuwait, Lebanon, Lithuania, Morocco, Kazakhstan, Mauritius, Nigeria, Oman, Pakistan, Romania, Serbia, Slovenia, Sri Lanka, Tunisia, Ukraine, and Vietnam.
12 In 2014 losses were made on many frontier funds but the impact on investor flows is not yet known.
14 Stated in US dollars terms
15 2014 returns are as at December 27th 2014
Such broadening of the investor base increases the potential pool of capital that can be mobilised for investment. However, it also heightens risks. This includes that capital flows can be more volatile. This potentially increases frontier markets to risks of transmission of global financial instability. To date frontier markets have had lower volatility than advanced and emerging markets during stable financial market conditions but experiencing much greater volatility during period of market disruption (IMF, 2013c).

This reflects both the dedicated investor class - which have a lower propensity to switch between asset classes - and the shallowness of markets which make them highly responsive to relatively limited capital outflows (IMF, 2013c).

These risks and the implications for issuing countries are discussed further in the accompanying paper.

### 3.2 Country Specific Factors

In addition to general demand for sovereign bonds, investor demand for sovereign bond issues has been differentiated by country. A number of factors differentiate those countries which have been particularly attractive to investors. The most important of these differentiating factors relating to the level of investor demand are discussed below.

#### Macroeconomic fundamentals

Flows into sub-Saharan Africa has been driven by investor views – colloquially termed “Africa rising” in financial markets - that the macroeconomic outlook has improved with better management and stability of macroeconomic fundamentals giving strong differential growth relative to other economies. Perceptions of social and political factors and the business environment have also improved.

This view has been differentiated by country within the region and changed over time as financial markets react to macroeconomic news. This includes changes in credit ratings which are discussed in the next section. Examples include the following:

- From 2011 to 2013 strong commodity prices globally created bullish views for commodity exporting countries such as Nigeria and Zambia. These views were then reversed due to 2014 falling commodity prices. This changing sentiment was reflected in increased yields for these countries (figure 5) and contributed to sharp currency devaluations.
- Macroeconomic management concerns in Ghana relating to fiscal spending on civil servant salaries, fiscal deficit levels and currency volatility caused a sharp risk retraction in 2014. In October 2014 this led to Ghana having to cancel a planned sovereign bond issue as yields on their bonds surged to a six-year high.
- The IMF lowered expectations for sub-Saharan Africa growth to 5.5% in October 2014 and this led to cancellations or delays of bond issues for Uganda, Tanzania and Ethiopia who had been expected to have debut sovereign bond issues in the fourth quarter of 2014.

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16 For non-sovereign capital flows there has also been significant differentiation by sector.
17 Although some investors lack discrimination – “little discrimination based on domestic fundamentals or policies” according to the IMF (IMF, 2014b, page 4).
18 The comparison for Nigeria is more difficult to determine than for Zambia. In 2013 Nigeria issued a 5-year bond in 2011 for 5.375 and – later that year - a 10-year bond for 6.3675%. However the increased yield could have been driven by the increased maturity as well as increased risk aversion by investors. A fuller benchmarking exercise would be required to determine this exactly.
21 Ethiopia’s bond issue was delayed but issued on December 4th 2014 (Source: Financial Times, Bloomberg).
Importantly for risk management, market sentiment relating to macroeconomic fundamentals can be volatile and affected by excessively simple and poorly nuanced economic views. For example, there was a sharp risk retraction relating to Ebola fears in 2014 for countries in West Africa\(^23\). This included in Nigeria and Ghana, despite them having limited economic links to the countries affected by Ebola and having negligible levels of infection themselves. \(^24\)

**Credit ratings**

Credit ratings are important because they determine a market consensus relating to the credit risk of a bond. They are sought as part of the primary issue process and influence the yield.

They also affect the investor categories to which the issue is marketed. This is because regulated investment managers – such as those managing pension and similar funds for non-professional investors – are restricted to investments in certain rating categories, most commonly “investment grade” bonds. Unregulated investors may be similarly restricted by fiduciary mandates although these are not determined by regulatory legislation.

Sub-Saharan countries rated by the major rating agencies\(^25\) increased to 17 by 2014 from only 4 in 2003. All bonds were rated below investment grade (BBB- or above) with a range from double BB- to single B-. This means they are defined as having “significant speculative characteristics” and “large uncertainties or major exposures to adverse conditions”. \(^26\) (Figure 7)

Since issue a number of countries had their rating or their “outlook” changed, leading to a change of credit rating. In 2014 this included;

- Downgrades for Nigeria, Burkino Faso and Ghana that issued previous bonds, and an upgrade for the DR Congo which has not yet issued sovereign bonds.
- Negative outlook warnings for Nigeria, Ghana, Burkino Faso (in addition to the actual downgrades), Zambia, and a positive outlook report for Rwanda. These changes will impact future issues cost and liquidity. (Figure 7)

Reasons for these changes in ratings and outlooks were varied. The following points were included in relation to specific countries;

- Nigeria: Concerns leading to downgrades included concerns relating to export revenues from oil as commodity prices slumped, recent sharp depreciation in the Naira and political tensions which has heightened political and institutional risks.
- Ghana: Problems leading to the downgrade relating to difficulties in financing the large budget deficit following prolonged discussions with the IMF which was followed by a sharp depreciation in the Cedi.
- DR Congo: The rating was upgraded because of low government debt levels and good economic growth and a view that there is continued political stability.
- Zambia: There was a negative outlook issued because of declining copper revenues, stalled talks with the IMF and political uncertainty following the death of the president in October 2014.
- Burkino Faso: The credit rating with downgrading following political instability with mass protests leading to the resignation of the President and pending

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\(^25\) Moody’s, Fitch and Standard & Poor’s

\(^26\) Standard and Poor’s definitions. See appendix for details.
elections in November 2015 which were seen as likely to impact economic activity and donor flows.

- Rwanda: The outlook was upgraded because of progress on fiscal consolidation as well as reduced exposure to risks related to terms of trade, reliance on donor support and refinancing the growing stock of government external debt.

**Figure 7: Standard and Poor’s ratings and outlook for selected countries**

*In declining order of credit worthiness*

<table>
<thead>
<tr>
<th>Issue rating</th>
<th>Country</th>
<th>Bond issued</th>
<th>2014 rating</th>
<th>2014 Outlook</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB-</td>
<td>Angola</td>
<td>Yes</td>
<td>Unchanged</td>
<td>Stable (Aug 2014)</td>
</tr>
<tr>
<td></td>
<td>Gabon</td>
<td>Yes</td>
<td>Unchanged</td>
<td>Stable (Mar 2014)</td>
</tr>
<tr>
<td>B+</td>
<td>Ethiopia</td>
<td>No</td>
<td>First rated in 2014</td>
<td>Stable (May 2014)</td>
</tr>
<tr>
<td></td>
<td>Kenya</td>
<td>Yes</td>
<td>Unchanged</td>
<td>Stable (Nov 2014)</td>
</tr>
<tr>
<td></td>
<td>Mozambique</td>
<td>Yes</td>
<td>Unchanged</td>
<td>Stable (Aug 2014)</td>
</tr>
<tr>
<td></td>
<td>Nigeria</td>
<td>Yes</td>
<td>BB-/B (Downgraded)</td>
<td>Negative (Sept 2014)</td>
</tr>
<tr>
<td></td>
<td>Senegal</td>
<td>Yes</td>
<td>Unchanged</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Zambia</td>
<td>Yes</td>
<td>Unchanged</td>
<td>Negative (Oct 2014)</td>
</tr>
<tr>
<td>B</td>
<td>Burkino Faso</td>
<td>No</td>
<td>B (Downgraded)</td>
<td>Negative (Dec 2014)</td>
</tr>
<tr>
<td></td>
<td>Cameroon</td>
<td>No</td>
<td>Unchanged</td>
<td>Stable (Nov 2014)</td>
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<tr>
<td></td>
<td>Ethiopia</td>
<td>Yes</td>
<td>Unchanged</td>
<td>Stable (Nov 2014)</td>
</tr>
<tr>
<td></td>
<td>Ghana</td>
<td>Yes</td>
<td>B- (Downgraded)</td>
<td>Negative (Oct 2014)</td>
</tr>
<tr>
<td></td>
<td>Rwanda</td>
<td>Yes</td>
<td>Unchanged</td>
<td>Positive (Sept 2014)</td>
</tr>
<tr>
<td>B-</td>
<td>DR Congo</td>
<td>No</td>
<td>B+/B (Upgraded)</td>
<td>Stable (Oct 2014)</td>
</tr>
<tr>
<td>Not rated</td>
<td>Cote d'Ivoire</td>
<td>Yes</td>
<td>n/a</td>
<td>Rated by Moody’s at B1 &amp; Fitch at B</td>
</tr>
<tr>
<td></td>
<td>Namibia</td>
<td>Yes</td>
<td>n/a</td>
<td>Rated by Moody’s at BAA3</td>
</tr>
<tr>
<td></td>
<td>Tanzania</td>
<td>Yes</td>
<td>n/a</td>
<td>Unrated</td>
</tr>
<tr>
<td></td>
<td>Seychelles</td>
<td>Yes</td>
<td>n/a</td>
<td>Rated by Fitch at B</td>
</tr>
</tbody>
</table>

Source: Standard and Poor’s, The Financial Times
**Attractiveness of issuing terms**

In addition to the fundamental risk-reward profile of a bond other factors also determine investor demand. There is a preference for bonds to be listed on international stock exchanges with legal governance in established jurisdictions for financial markets. These allow ease of secondary trading, price discovery and trusted legal processes in the event of any default or disputes. These factors reduce the liquidity and legal risks for investors.

Recent issues for sub-Saharan African sovereign bonds have been predominantly listed on the London Stock Exchange with the legal terms and processes under UK law. These have been attractive for investors because they are trusted locations with established regulatory and legal frameworks. They are also likely to assist in the development of more liquid secondary bond markets including for derivatives.

The jurisdiction and legal terms has been of particular concern in 2014 because of the recent support for hold-outs under jurisdictions in the United States for minority "vulture fund" investors in Argentinian debt. The IMF responded by recommending strengthening contractual frameworks for sovereign bonds defaults (Tyson 2014; IMF, 2014d).

**Financial market development**

Subsequent to a primary issue of a bond, investors manage their risk profiles. Such risk management is facilitated by liquid secondary and derivative markets relating to underlying bonds. This includes through providing benchmarks for pricing, liquidity for trading and opportunities to adjust risk profiles to changing investor preferences over the maturity of the bond. Derivatives used for such risk management include foreign exchange ("FX"), interest rate and credit derivatives. They can be traded on public exchanges and on over-the-counter ("OTC") markets as well as in both international and domestic financial markets.

Lack of such opportunities for risk management limits the investor base and appetite. This is because, without these opportunities, investors are restricted to a “buy and hold” strategy in the currency of issue. Enabling such markets is an important part of facilitating the development of sovereign and corporate bond markets.

In sub-Saharan Africa markets for risk management instruments are shallow and illiquid. Of particular concern for sub-Saharan African bond investors has been their ability to manage foreign exchange and credit risk. The current lack of foreign exchange hedging instruments - such as FX options and futures - has lead to the demand from investors exclusively for bonds denominated in US dollars.

As noted earlier, the recent listings on established international exchanges should help the development of these markets. It is also an area for potential policy intervention and this is discussed further in the accompanying paper.

### 3.3 Motivations for issuing countries

For issuing countries motivations for sovereign bond issues are varied and diverse. Some factors relate to the relative attractiveness of sovereign bonds compared to other sources of financing (figure 8). Other factors are independent of comparative financing.
### Figure 8: Comparison of financing sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sovereign bonds</strong></td>
<td>Lack of conditionality</td>
<td>Roll-over and refinancing risks (especially bullet repayments).</td>
</tr>
<tr>
<td></td>
<td>Fixed coupon rate is usual (No interest rate risk)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transparency of debt levels</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Act as benchmarks for corporate bonds</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>No foreign currency risk</td>
<td>Potential crowding out of private sector</td>
</tr>
<tr>
<td></td>
<td>Development of domestic financial markets</td>
<td>Higher interest compared with international bond29.</td>
</tr>
<tr>
<td><strong>International</strong></td>
<td>Greater diversification &amp; scale of investor base</td>
<td>Foreign currency risk</td>
</tr>
<tr>
<td></td>
<td>Access to competitive markets enhances the efficient pricing of bonds30</td>
<td>Capital flight risks</td>
</tr>
<tr>
<td></td>
<td>Market discipline from bond covenants, investors’ due diligence and market scrutiny</td>
<td>High transaction costs owing to capital market access (underwriting and credit-rating agencies) and long preparation period</td>
</tr>
<tr>
<td><strong>Loans</strong></td>
<td>Less susceptible to investor appetite</td>
<td>Variable rate (usually priced over Libor)</td>
</tr>
<tr>
<td></td>
<td>Crowd-in private sector investment</td>
<td>Limited competition on Financing terms.</td>
</tr>
<tr>
<td><strong>Donor financing</strong></td>
<td>Low debt-servicing cost</td>
<td>Limited contribution to financial sector development</td>
</tr>
<tr>
<td></td>
<td>Greater transparency</td>
<td>Reducing availability</td>
</tr>
</tbody>
</table>

Source: IMF, 2013f; Author

---

27 Comparison is between market-based instruments, See Sections 2 and discussion below table for comparison to non-market concessional financing.

28 Relevant to fixed coupon bonds only which represent 96% of sovereign bonds issued to date. 3% have had floating interest rates and 1% step-up coupons. See the accompanying paper Figure 1 for a further analysis of interest rate risks.

29 Differentials in rates between local and international markets relate to currency and to liquidity in different markets. Differences between currencies - in theory - are driven by risk-free interest rate differentials and should equalise versus foreign currency forward rates. In practise they can exist due to other issues such as short-term liquidity, lack of options and future markets and lack of arbitrage-driven equalization activity in markets. In African local bond markets there is poor liquidity and differential risk appetite relative to international capital markets. Although African local currency bond markets have grown steadily with total outstanding debt reaching more than $400bn in 2014. Foreign investors are deterred by the small size of many markets, limited liquidity and short yield curves. Currency volatility is also a concern. This decreases liquidity and creates interest rate differentials between local and international markets (Source: The Financial Times. October 15, 2014. "African local bonds – an untapped opportunity?").

30 According to the IMF. See section 4.2 for discussion of the empirical evidence relating to the contribution of sovereign bond to financial sector developments including efficiency gains.
**Sovereign bonds versus lending**

Lending – and particularly concessional lending – can be cheaper and have longer maturities than sovereign bonds (Stiglitz and Rashid, 2013).

However, sovereign bonds offer the key advantage – from the perspective of issuing governments – that they are not subject to conditionality that is usually attached to lending. This includes covenants and collateral (such as liens over infrastructure or its related revenues) for lending and development-related conditionality for concessional lending such as economic, social or environmental policy requirements.

Although there may be conditions including in the issuing terms for sovereign bonds – for example, relating to the use of funds – there is usually little on-going monitoring of the use of funds and little or no application of conditions of the type imposed by development agencies.

Also because of the strong investor appetite discussed earlier, sovereign bond markets have provided a liquid source of funds and an opportunity to raise financing much more rapidly than lending where lead times can be long (Tyson, te Velde and Burke, 2014).

**Domestic versus International Issues**

Sovereign bond can be issued in domestic or international markets. The majority of recent issues have been in international markets. However some sub-Saharan African counties have domestic bond markets including Kenya and Nigeria. For other countries domestic markets remain very limited.

Where domestic markets have liquidity, they have the key advantage of facilitating bond issues in local currency, thus avoiding currency risks, and assisting in development of local financial markets (See further comment in next section).

However international markets have the advantages of greater pools of liquidity and the potential for more efficient pricing.

The relative attractiveness of domestic and international markets for sovereign bond issues will vary according to short-term fluctuations in investor appetite. It will also change structurally as financial markets in sub-Saharan Africa mature. The comparative advantages need to be considered for each issue.
4 The development impact of sovereign bond issues

As noted in the introduction, sovereign bonds can be valuable in fiscal management – including capital and current expenditure - and monetary policy.

For developing countries an important further contribution is their potential to finance economic development. This contribution can be direct and indirect. The direct impact is determined by the use of the financing raised. The indirect impact relates to the contribution of sovereign bond issues on broader financial sector development. These two issues are discussed further below.

4.1 Uses of funds from sovereign bonds

Sovereign bond issues are usually accompanied by a formal statement of the planned use of the funds being raised. This is included in the prospectus for those bonds.

The stated objectives have largely presented positive uses for funds from a development perspective (figure 9). They have included important investment purposes, such as infrastructure investment in transport and energy, and current expenditure with development impacts, such as health and education.

Figure 9: Prospectus bond proceeds uses (2013 and 2014)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Stated purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>2014</td>
<td>Public infrastructure (Hydroelectricity)</td>
</tr>
<tr>
<td>Gabon</td>
<td>2013</td>
<td>Refinancing &amp; improved debt management</td>
</tr>
<tr>
<td>Ghana</td>
<td>2013</td>
<td>Capital investment &amp; refinancing</td>
</tr>
<tr>
<td>Mozambique</td>
<td>2013</td>
<td>Fishing boats</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2013</td>
<td>Infrastructure (Electricity)</td>
</tr>
<tr>
<td>Rwanda</td>
<td>2013</td>
<td>Infrastructure (Hydroelectricity; hotels) &amp; refinancing</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2013</td>
<td>Private placement without public disclosure</td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td>2014</td>
<td>Health and education</td>
</tr>
<tr>
<td>Ghana</td>
<td>2014</td>
<td>Refinancing &amp; public expenditure</td>
</tr>
<tr>
<td>Kenya</td>
<td>2014</td>
<td>Refinancing, capital and current expenditure</td>
</tr>
<tr>
<td>Senegal</td>
<td>2014</td>
<td>Public infrastructure (Electricity)</td>
</tr>
<tr>
<td>Zambia</td>
<td>2014</td>
<td>Transport &amp; energy infrastructure</td>
</tr>
</tbody>
</table>

Source: The Financial Times, prospectus documents

However, broader evidence suggests that the development impact of the use of funds raised through sovereign bond issues is mixed. This evidence is of importance because for the issues to be developmentally positive they need to provide incremental funds, rather than displace existing funds.

In some countries, sovereign bond issues have been associated with increased infrastructure investment – a positive for development outcomes. This includes the Côte d'Ivoire and Rwanda (IMF, 2014c).

However some countries appear to have used funds for purposes with little or no developmental impact. This includes using funds for “pork barrel” political spending. For example, in Ghana and Mozambique funds were used for public sector salary increases. Energy subsidies have also been pervasive in all countries except in Kenya, with an

31 The Mozambique issue drew considerable controversy because its stated purpose for the funds in the bond prospectus was “general corporate purposes” for its national fishing industry. Funds were later alleged to have been used to purchase military boats and equipment.
estimated cost of about 3.0 percent of GDP on average. In Mozambique, funds were also associated with financing of state-owned enterprises and purchases of military equipment. (IMF, 2014c).

4.2 Contributions to financial sector development

Sovereign bond issues may contribute indirectly to economic development by supporting financial market development. There are three main channels for this and each is discussed below.

Overall, there is limited empirical support that the current issues in sovereign bonds will contribute to broader financial sector development. Further research in needed into the relationship, the variables that determine it and how the development of government debt markets interacts with private financial markets as structural transformation takes place.

In addition – and as will be discussed in the accompanying paper – positive contribution to financial sector deepening need to be balanced with the risk of financial instability.

Broadening of the investor base

Sub-Saharan Africa sovereign bonds have previously has a small or non-existent investor base. Although some domestic markets have deepened in the last decade – for example in Nigeria and Kenya – they remain small relative to GDP.

By contrast, investors in the recent bond issues have been predominantly new international investors (IMF, 2014f). This includes regulated funds such as pension and mutual funds and sovereign wealth funds (Such as Norfund). This represents a potentially very large source of new capital for the region.

However, such investor appetite can be fickle. It has repeatedly been subject to volatility both in other regions – such as Asia and Latin America (Griffith-Jones and Tyson, 2012) – and in relation to sub-Saharan Africa in 2014 (Tyson et al, 2014; Velde, 2014).

Facilitating private capital market development

Sovereign bonds can help establishing a benchmark for the pricing of corporate bonds and derivatives thus facilitating deepening of financial markets. This has been the explicit purpose of some issues, such as in Nigeria. (IMF, 2014f)

However, establishing benchmarks requires development of financial markets in addition to primary issues of sovereign bonds. This includes liquid primary and secondary markets in bonds and related derivatives (including hedging instrument such as foreign exchange and interest rate futures and options and swap markets) across the maturity of the benchmarked instruments. Financial markets need to have established exchanges or market-makers (including primary dealers). It also requires a liquid market with frequent trading with sufficient volumes, maturities and prices to provide yield curve substantiation and market conventions for derivatives settlements.

Although longer-term these factors may emerge, they currently remain significantly underdeveloped and - in the short-term – development is unlikely to be significantly assisted by the current levels of primary sovereign bond issues.

Enlarging capital markets for private participants

It is possible that attracting funds from international investors for sovereign bonds will reduce crowding-out of financing by governments from the private sector in domestic markets.

This is important because domestic private capital markets are very limited with scarce capital being channeling into government securities (with 89 percent of local currency bonds by market capitalization being governments bonds) (IMF, 2013b). The lack of
financing for domestic private firms remains a constraint on growth (Beck and Maimbo, 2013)

However, there is limited empirical research to determine what impact sovereign bond issues are having on crowding-out in the private sector. Current regression analysis, in fact, suggests that they may increase crowding-out because government securities and corporate bond markets may act as substitutes for each other (IMF, 2013b).
5 Conclusion

Sub-Saharan Africa countries face a challenging macroeconomic environment. They need to maintain sound macroeconomic policies – including taking advantage of the current liquidity in capital markets - while implementing policies to maintain GDP growth rates. (IMF, 2014c). Sovereign bonds offer an opportunity to finance the investment that is needed for this economic development but also add to the challenges they face.

The post-2008 period has seen strong issues of international sovereign bonds for sub-Saharan Africa. The issues have had positive characteristics relative to other market-based sources of financing. Maturity – typically 5 to 10 years – has been good and for most - but not all – yields have been reasonable. More negatively, they have been exclusively denominated in USD dollars, creating foreign exchange risks for issuing countries. These risks require careful management including interest rate, foreign exchange and refinancing risks. They also have had unfavourable terms in relation to cost and maturity relative to concessional finance from IFIs.

Of greater concern is that the use of funds for pro-development purposes has been mixed. Some countries have used them responsibly such as, for example, for investment in infrastructure. Others have wasted them on current expenditure with limited or no development impact. This has included “pork barrel” political spending on public sector salaries, subsidies and military equipment.

Debt sustainability is dependent on retaining strong GDP growth and whether funds being raised have a “growth dividend” or are frittered away will be an important factor in differentiating those countries that repay and those that default. Investors would be well advised to differentiate more closely between responsible and irresponsible issuers.

Other risks are present. The trends have been driven by strong investor appetite. This has helped create a new investor base for “frontier markets” (although other positive impacts on domestic financial markets remain unproven). But it remains to be seen if this appetite continues. It is threatened by the prospects of normalisation of monetary policy in advanced economies (Velde, 2014). These issues raise the risks of a damaging reversal of capital flows.

Governments and development agencies are not passive actors in these issues. Both need to hold governments responsible for pro-growth use of funds.

In addition, management and mitigation of the risks is possible through policy. In the accompanying paper - “Sub-Saharan Africa Sovereign Bonds: Risks for Issuers” - these risks are examined further along with examination of what effective policy action can be taken.
References


Tyson, J. 2014. "If the old order won’t adapt they will simply be passed over“ The Financial Times. August 6, 2014. http://www.ft.com/cms/s/0/ee5a40fa-1bfc-11e4-9db1-00144feabdc0.html#axzz3K02FORpu


Velde, D. Te 2014. “Sovereign bonds in sub-Saharan Africa: Good for growth or ahead of time?” Overseas Development Institute.
Appendix

Figure 10: Sub-Saharan Africa Sovereign Bond Issues (2006 - 3Q 2014)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Yield at issue</th>
<th>Tenor</th>
<th>Size ($mn)</th>
<th>S&amp;P rating at issue</th>
<th>Currency</th>
<th>Bond type</th>
<th>Coupon type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senegal</td>
<td>2009</td>
<td>9.473</td>
<td>5</td>
<td>200</td>
<td>B+</td>
<td>USD</td>
<td>Bullet</td>
<td>Fixed</td>
</tr>
<tr>
<td>Seychelles</td>
<td>2010</td>
<td>5</td>
<td>16</td>
<td>168</td>
<td>Not rated</td>
<td>USD</td>
<td>Sinkable</td>
<td>Step-up</td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td>2010</td>
<td>17.354</td>
<td>22</td>
<td>2330</td>
<td>Not rated</td>
<td>USD</td>
<td>Sinkable</td>
<td>Flat trading</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2011</td>
<td>7.126</td>
<td>10</td>
<td>500</td>
<td>B+</td>
<td>USD</td>
<td>Bullet</td>
<td>Fixed</td>
</tr>
<tr>
<td>Senegal</td>
<td>2011</td>
<td>9.125</td>
<td>10</td>
<td>500</td>
<td>B+</td>
<td>USD</td>
<td>Bullet</td>
<td>Fixed</td>
</tr>
<tr>
<td>Namibia</td>
<td>2011</td>
<td>5.835</td>
<td>10</td>
<td>500</td>
<td>Not rated</td>
<td>USD</td>
<td>Bullet</td>
<td>Fixed</td>
</tr>
<tr>
<td>Angola</td>
<td>2012</td>
<td>7.19</td>
<td>7</td>
<td>1000</td>
<td>BB-</td>
<td>USD</td>
<td>Sinkable</td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td>2012</td>
<td>5.625</td>
<td>10</td>
<td>750</td>
<td>B+</td>
<td>USD</td>
<td>Bullet</td>
<td>Fixed</td>
</tr>
<tr>
<td>Tanzania</td>
<td>2013</td>
<td>6.284</td>
<td>7</td>
<td>600</td>
<td>Not rated</td>
<td>USD</td>
<td>Sinkable</td>
<td>Floating</td>
</tr>
<tr>
<td>Rwanda</td>
<td>2013</td>
<td>6.746</td>
<td>10</td>
<td>400</td>
<td>B</td>
<td>USD</td>
<td>Bullet</td>
<td>Fixed</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2013</td>
<td>6.625</td>
<td>10</td>
<td>500</td>
<td>Not rated</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ghana</td>
<td>2013</td>
<td>5.375</td>
<td>5</td>
<td>500</td>
<td>Not rated</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Mozambique</td>
<td>2013</td>
<td>8</td>
<td>10</td>
<td>750</td>
<td>B</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Gabon</td>
<td>2013</td>
<td>6.375</td>
<td>11</td>
<td>1500</td>
<td>BB-</td>
<td>USD</td>
<td>Sinkable</td>
<td>Fixed</td>
</tr>
<tr>
<td>Zambia</td>
<td>2014</td>
<td>8.625</td>
<td>10</td>
<td>1000</td>
<td>B+</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Kenya</td>
<td>2014</td>
<td>6.875</td>
<td>10</td>
<td>1500</td>
<td>B+</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Kenya</td>
<td>2014</td>
<td>5.875</td>
<td>5</td>
<td>500</td>
<td>B+</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td>2014</td>
<td>5.625</td>
<td>10</td>
<td>750</td>
<td>Not rated</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Senegal</td>
<td>2014</td>
<td>6.25</td>
<td>10</td>
<td>500</td>
<td>B+</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ghana</td>
<td>2014</td>
<td>8.125</td>
<td>12</td>
<td>1000</td>
<td>B</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>2014</td>
<td>6.625</td>
<td>10</td>
<td>1000</td>
<td>B</td>
<td>USD</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: Bloomberg, Dealogic, The Financial Times

Standard & Poor's Ratings Definitions

For long-term debt:

An obligation rated 'AAA' has the highest rating assigned by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.

An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.

An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.

An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

An obligation rated 'BB' is less vulnerable to non-payment than other speculative issues. However, it faces major on-going uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.

An obligation rated 'B' is more vulnerable to non-payment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.

An obligation rated 'CCC' is currently vulnerable to non-payment, and is dependent upon favourable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or...
economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.

An obligation rated 'CC' is currently highly vulnerable to non-payment.

A 'C' rating is assigned to obligations that are currently highly vulnerable to non-payment, obligations that have payment arrearages allowed by the terms of the documents, or obligations of an issuer that is the subject of a bankruptcy petition or similar action which have not experienced a payment default. Among others, the 'C' rating may be assigned to subordinated debt, preferred stock or other obligations on which cash payments have been suspended in accordance with the instrument's terms or when preferred stock is the subject of a distressed exchange offer, whereby some or all of the issue is either repurchased for an amount of cash or replaced by other instruments having a total value that is less than par.

An obligation rated 'D' is in payment default. The 'D' rating category is used when payments on an obligation are not made on the date due, unless Standard & Poor's believes that such payments will be made within five business days, irrespective of any grace period. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of similar action if payments on an obligation are jeopardized. An obligation's rating is lowered to 'D' upon completion of a distressed exchange offer, whereby some or all of the issue is either repurchased for an amount of cash or replaced by other instruments having a total value that is less than par.

This indicates that no rating has been requested, that there is insufficient information on which to base a rating, or that Standard & Poor's does not rate a particular obligation as a matter of policy.

*The ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.