



2017
Annual Country
Rankings and
Scores Report

THE AFRICAN BOND MARKET DEVELOPMENT INDEX





0.141

1.900

-1.970

12

0.500

-0.160
-7.857%

-0.011
-7.857%

-0.160
-7.857%

853.64

10K

19K

5.200M

700,000

100

100,000

100,000

100,000

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Introduction

Bond markets have long been a stable and reliable source of long term financing for both governments and corporates in the world, serving as a mechanism for the transformation of savings into financing for the real sector, thus constituting an alternative source of funding to bank financing.

Economic literature and experiences show that deep and liquid domestic bond markets ensure access to long-term local-currency debt that contributes to financing long-term investments and address the large and growing infrastructure development needs. This is crucial for Africa, as the continent lags behind other developing regions on most standard indicators on infrastructure development.

The issuance of local currency denominated bonds (LCBMs) by African governments offers an alternative source of funding to bridge the funding gap. Moreover, local currency bond markets will reduce debt-service costs over the

medium to long term and prevent currency mismatches that may ensue from external funding.

As of December 2016, the outstanding stock of African local currency government securities (T-bills and T-bonds) was estimated at USD 368 billion. Five countries (South Africa, Egypt, Nigeria, Morocco, and Kenya) account for 79.7% of this total. These countries and Angola are the only ones with outstanding amounts exceeding USD 10 billion. New issuances for 2016 were valued at USD 222 billion. The maturity profile of Africa's outstanding debt stock shows that the short-term and long-term ends of the yield curve is favoured. Including T-bills, and other instruments with a maturity account for 45% of the total, with maturities of 5Y to 10Y and over 10Y representing 10% and 45 %.

Launched in 2008 by the African Development Bank, African Financial Markets Initiative (AFMI) overarching objective is to promote the

development of LCBMs in Africa. This will enable African governments to improve the terms at which they borrow in the domestic financial markets while also reducing their dependence on foreign currency denominated debt. LCBMs also provide an avenue for the sustainable mobilization of long term financing for infrastructure.

The AFMI is implemented through two separate but complementary pillars namely:

- i. African Financial Markets Database (AFMD)
- ii. African Domestic Bond Fund (ADBF)

Access to accurate, reliable and quality financial data has always been a challenge for African market participants and development partners. The Bank, through the AFMI has developed a database (AFMD) to provide updated, reliable and complete information on African local currency debt instruments. Data collection began in 2009 with the collaboration of 18 Central Banks and Ministries of Finance and Debt Management Offices (through nominated



Liaison Officers). Since then, forty-three (43) countries have submitted data on regular basis for their bond market infrastructure and/or fixed-income instruments.

To increase visibility and availability of data on African debt markets and provide a channel through which to connect stakeholders with the AFMD, the AFMI website (www.africanbondmarkets.org), was launched in May 2013. This website provides access to the data portal for users, as well as other information on African domestic debt markets including: a snapshot of bond markets (market structure, instruments available and investment guidelines) across all African countries, research articles as well as current financial market news.

The African Bond Markets Development Index (ABMDI) is a ranking of African local bond markets established by the AFMI team/AfDB. In 2011, the Bank undertook a feasibility study which lay the groundwork for the development of the African index family. The study formed the

basis for the discussions with stakeholders in North, East, South, West and Central Africa in 2012 to determine the ABMDI inclusion criteria. These results have been discussed and reviewed with stakeholders and include their valuable input into the data model and the ranking shared in 2013. Furthermore, the ABMDI benefitted from the Diagnostic Framework¹ analysis issued by the G20 sub-working group on LCBMs. In fact, in November 2011 the G-20 endorsed an action plan to support the development of LCBM.

ABMDI reflects the recent developments of the LCBMs some of which have gained in strength in terms of liquidity and maturity profile using a common set of indicators (see the Diagnostic framework), including macroeconomics variables; market structure; and market liquidity. The ABMDI would reveal the factors contributing to African Local Currency Bond Markets structure, taking into account that most the African debt markets are still at the early stage of development. This index will provide

the basis for designing a strategy for African bond markets development and deepening, with appropriate sequencing of policy action and associated delivery of technical assistance (TA) where needed. The annual ABMDI report will be the barometer through which to identify the priority reform measures in each market segment.

This report is organized in two sections. Section 1 presents the 2017 ABMDI country rankings and scores based on 2016 data. Section 2 focuses on ABMDI weights and methodology.

¹International institutions were asked to draw on their experience to develop a diagnostic framework (DF) to identify general preconditions, key components, and constraints for successful LCBM development. The DF provides guidance on analyzing the money market, government and corporate bond markets, and the derivatives market. The key components of the diagnosis include: the macroeconomic policy framework, composition and needs of the issuer and investor bases, primary and secondary market structures and related market dynamics, regulatory and legal frameworks, and market infrastructure. However, it should be acknowledged that the degree of required and feasible local bond markets development will depend on the size of the economy, level of development, and the needs of the public and corporate sectors.

Section 1. 2017 ABMDI Country Rankings and Scores

1.1. 2017 Country rankings

Country	Rank	2017 Total Score	2016 Total Score	2015 Total Score	2014 Total Score	Economic conditions	Governance	Bond Market Infrastructure	Issuers, Issuing strategy and Market access	Domestic Investor Base	Active participation of Economic Agents
South Africa	1	65.92	79.38	79.77	69.05	32.32	51.90	93.75	80.02	85.00	56.00
Botswana	2	55.24	63.95	63.46	59.54	46.72	64.34	86.25	70.59	35.00	34.00
Egypt	3	54.98	65.45	68.45	56.38	33.29	33.84	100.00	70.34	35.00	48.00
Namibia	4	54.29	63.11	63.64	56.87	29.56	56.17	97.50	74.14	55.00	27.00
Mauritius	5	53.37	61.23	59.93	63.65	51.12	66.63	95.00	55.13	40.00	36.00
Nigeria	6	52.93	65.50	67.30	61.56	17.91	26.17	95.00	71.66	26.25	56.00
Kenya	7	52.61	60.80	63.06	58.57	29.46	36.52	93.75	68.87	27.50	47.00
Morocco	8	51.21	61.25	55.54	58.70	27.87	46.34	90.00	62.14	37.50	44.00
Ghana	9	45.96	56.06	57.64	53.91	27.68	46.93	97.50	41.64	13.75	54.00
Seychelles	10	42.64	51.51	53.06	49.45	75.13	56.98	93.75	30.99	20.00	20.00
Tunisia	11	42.37	50.50	45.99	51.36	27.58	42.94	93.75	48.12	13.75	35.00
Algeria	12	42.12	52.37	53.73	51.42	37.44	32.41	90.00	39.22	15.00	44.00
Uganda	13	41.89	48.91	50.39	48.41	22.18	38.74	97.50	51.89	13.75	32.00
Tanzania	14	39.71	47.49	50.95	50.83	26.80	40.84	97.50	34.94	16.25	39.00
Gabon	15	38.88	49.78	52.41	48.89	46.67	38.04	95.00	31.09	10.00	33.00
Rwanda	16	38.55	45.62	49.06	48.41	23.89	53.70	97.50	30.32	15.00	37.00
Zambia	17	38.37	50.99	52.95	52.75	24.76	43.37	93.75	34.82	12.50	37.00
Swaziland	18	38.04	41.95	40.45	48.23	22.89	40.45	93.75	43.12	25.00	23.00
Cote d'Ivoire	19	37.90	44.12	45.45	41.22	29.51	37.41	97.50	37.45	12.50	30.00
Cameroon	20	37.40	44.31	46.27	40.12	26.90	31.38	95.00	30.34	13.75	41.00
Burkina Faso	21	37.01	42.94	44.15	40.01	26.10	40.14	97.50	34.00	13.75	31.00
Cabo Verde	22	35.44	38.93	40.63	42.11	24.74	50.48	100.00	30.59	10.00	26.00
Senegal	23	34.89	44.00	45.95	42.81	17.32	45.63	97.50	30.75	10.00	31.00
Togo	24	34.59	40.79	39.63	37.22	25.42	36.27	97.50	27.99	12.50	31.00
Mozambique	25	32.67	40.21	43.58	46.42	13.68	32.04	93.75	31.80	10.00	30.00
Mali	26	32.58	39.12	36.84	34.50	26.17	31.70	97.50	24.94	10.00	29.00

Country	Rank	2017 Total Score	2016 Total Score	2015 Total Score	2014 Total Score	Economic conditions	Governance	Bond Market Infrastructure	Issuers, Issuing strategy and Market access	Domestic Investor Base	Active participation of Economic Agents
Benin	27	32.17	44.09	43.46	39.72	26.21	41.29	97.50	19.52	15.00	28.00
Malawi	28	31.67	39.57	33.89	23.75	18.88	38.95	95.00	23.98	15.00	27.00
Equatorial Guinea	29	31.14	46.33	44.40	38.95	44.55	25.07	95.00	17.34	10.00	25.00
Lesotho	30	29.71	34.59	31.96	30.55	21.40	43.43	100.00	23.03	10.00	17.00
Niger	31	29.70	38.02	39.61	37.21	22.12	35.46	97.50	16.96	10.00	28.00
Congo, Rep	32	28.62	39.55	40.06	35.93	25.98	29.69	95.00	12.50	10.00	30.00
Chad	33	27.95	38.31	37.31	34.46	15.24	22.94	95.00	19.58	10.00	28.00
Angola	34	27.83	33.77	39.42	28.45	27.66	30.32	25.00	24.66	12.50	38.00
Guinea-Bissau	35	26.13	29.48	29.87	23.44	25.66	24.31	97.50	12.85	10.00	21.00
Central African Rep	36	25.70	34.53	33.84	23.47	24.18	17.79	95.00	9.32	10.00	28.00
Madagascar	37	24.36	28.72	31.27	25.30	24.26	34.43	60.00	10.91	10.00	28.00
Gambia, The	38	23.12	25.64	25.88	27.92	21.27	36.33	62.50	11.83	10.00	22.00
Ethiopia	39	21.14	23.20	22.26	16.69	25.40	33.43	1.25	22.03	10.00	25.00
Burundi	40	17.09	20.65	25.08	26.67	17.07	22.51	22.50	14.28	10.00	19.00
Sudan	41	17.00	24.00	22.32	16.89	29.06	17.38	36.25	7.58	10.00	16.00
Mauritania	42	16.30	21.12	23.63	20.04	17.88	34.62	20.00	8.84	10.00	18.00
Guinea	43	15.40	14.45	16.71	19.40	23.23	31.95	1.25	6.97	10.00	22.00
Zimbabwe	44	14.79	17.60	21.47	14.13	7.36	25.61	18.75	0.00	20.00	29.00
Sierra Leone	45	14.29	17.48	18.92	18.03	23.14	34.43	3.75	0.00	10.00	24.00
Sao Tome & Principe	46	12.98	16.54	17.17	14.51	24.43	41.95	1.25	0.00	10.00	16.00
Djibouti	47	12.36	18.24	17.59	14.82	22.00	34.31	1.25	0.00	10.00	18.00
Comoros	48	12.25	15.14	15.58	15.82	24.16	32.49	1.25	0.00	10.00	17.00
Congo, Dem. Rep.	49	11.95	15.18	15.06	13.96	19.27	18.11	1.25	6.25	10.00	17.00
Libya	50	9.75	20.38	19.89	20.19	12.00	10.75	1.25	0.00	15.00	21.00
Eritrea	51	9.52	13.22	13.43	11.70	20.75	20.35	1.25	0.00	10.00	13.00
Liberia	52	9.38	14.21	13.44	13.08	13.71	32.02	1.25	0.00	10.00	12.00
Somalia	53	5.34	8.63	8.26	7.16	3.63	6.66	1.25	0.00	10.00	12.00
South Sudan	54	5.28	10.20	10.91	9.35	0.50	10.79	1.25	0.00	10.00	12.00

1.2. Top Ten Bond Markets

Country	2017 Ranking	2016 Ranking	Move
South Africa	1	1	Stable
Botswana	2	4	↗ +2
Egypt	3	3	Stable
Namibia	4	5	↗ +1
Mauritius	5	7	↗ +2
Nigeria	6	2	↘ -4
Kenya	7	8	↗ +1
Morocco	8	6	↘ -2
Ghana	9	9	Stable
Seychelles	10	11	↗ +1



1. South Africa

South Africa maintains its lead in the ranking. South Africa remains the Benchmark for the African market owing to its sophisticated bond market coupled with efficient electronic trading and settlement processes. The country led again in the “Issuers, Issuing Strategy and Market Access” and “Domestic investor base” factors. However, the overall score is impacted by the macro and governance conditions.

2. Botswana

Botswana is the market that has progressed the most in the top ten ranking moving up 2 places. This is mainly due to a substantial improvement in the “Economic Condition” indicator (32%).

3. Egypt

Egypt maintains its 2016 position, despite an improvement of over 2% in the «Active participation of economic agents» indicator.

4. Namibia

Namibia is ranked 2nd in two indicators after South Africa, taking it up 1 place on its 2016 ranking to 4th place this year. The «Issuers, Issuing Strategy and Market Access» and «Domestic Investor Base» indicators contributed to an improvement ranking and reflect the structure of the Namibia bond market.

5. Mauritius

Mauritius moved up two places in 2017 Edition due mainly to the «Domestic Investors Base» and «Issuers, Issuing Strategy and Market Access» indicators. The former increased over 33% and the latter increased by 2% comparing to 2016.

6. Nigeria

Nigeria moved down four places in the 2017 ranking, the biggest fall in the top ten countries. The «Economic conditions» and «Active participation of Economic Agents» indicators fell by 43% and 38% respectively. Also, the country suffered from a 58% depreciation of the Naira in 2016. However, the country maintains its strengths due to a relatively well developed financial system.



7. Kenya

Kenya moved up one place in 2017 Edition. The country did see a slight increase (5%) in the «Economic condition» and the quasi-stability of the «Bond Market Infrastructure» and «Issuers, Issuing strategy and Market access» indicators. Kenya was the fifth largest bond market in Africa in 2016 and maintains its efforts to improve liquidity and deepen the bond markets.

8. Morocco

Morocco moved down two places in the ranking with a 16% drop in its score. Scores decreased “Economic conditions” and “Active participation of Economic Agents” factors which lost respectively 24% and 45% compared to 2016. However, the financial markets in Morocco remain well

developed with one of the deepest bond market on the continent.

9. Ghana

Ghana maintained its position on the ranking from 2016, despite an 8% improvement in the « Issuers, Issuing strategy and Market access» indicator.

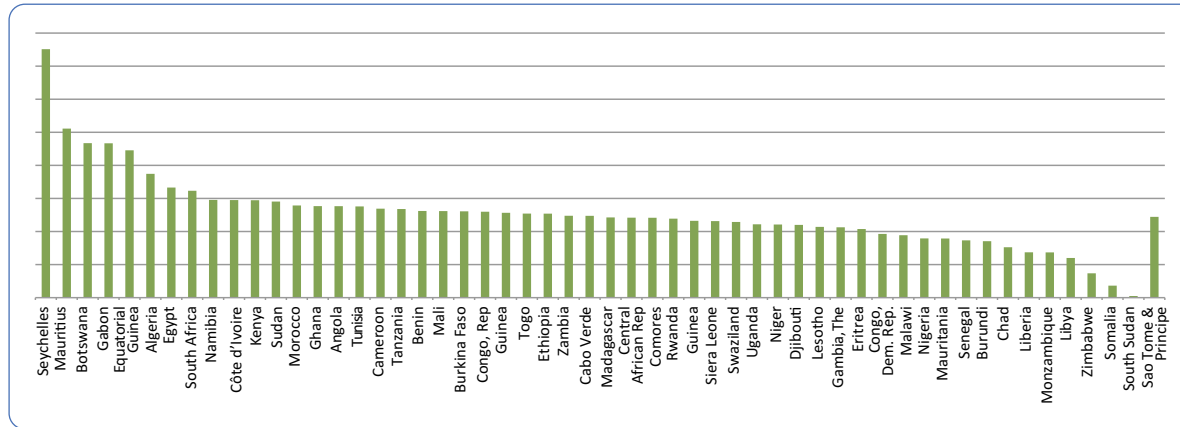
10. Seychelles

Seychelles was the latest entrant to the top ten after being ranked 11th in 2016 Edition. Improved macroeconomic conditions saw the country ranked 1st in this indicator. The country also benefited from an improvement of its score by 8% in the “Issuers, Issuing strategy and Market access” indicator.

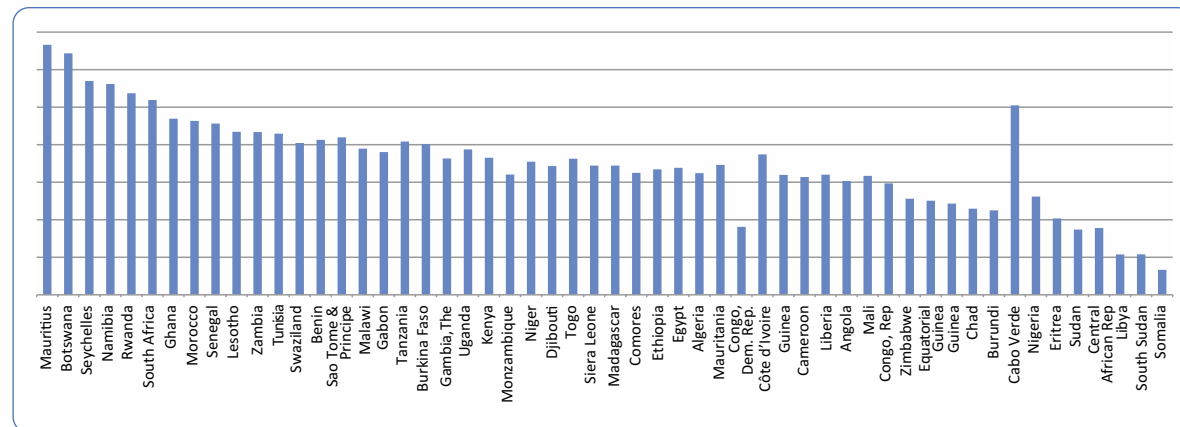


1.3. Graphical representation of scores by Factor

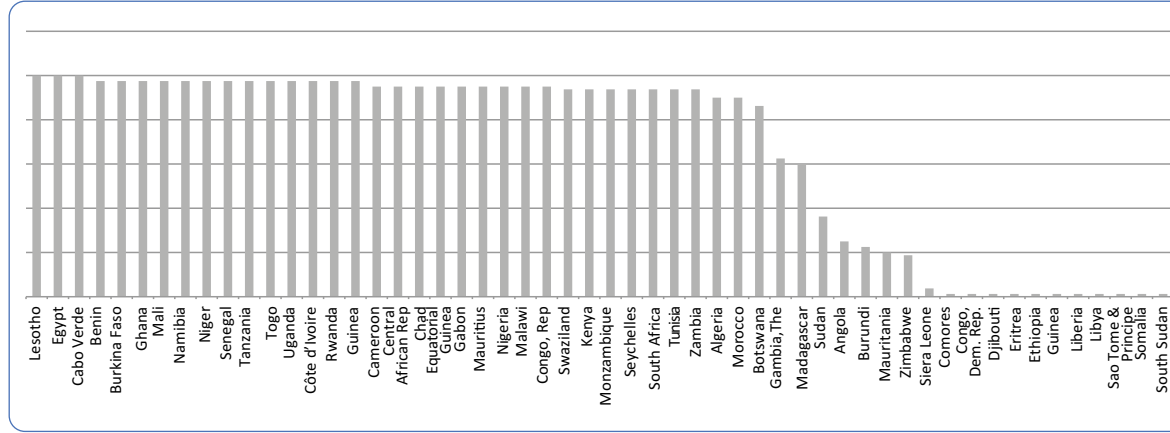
1. Macro-Economic conditions



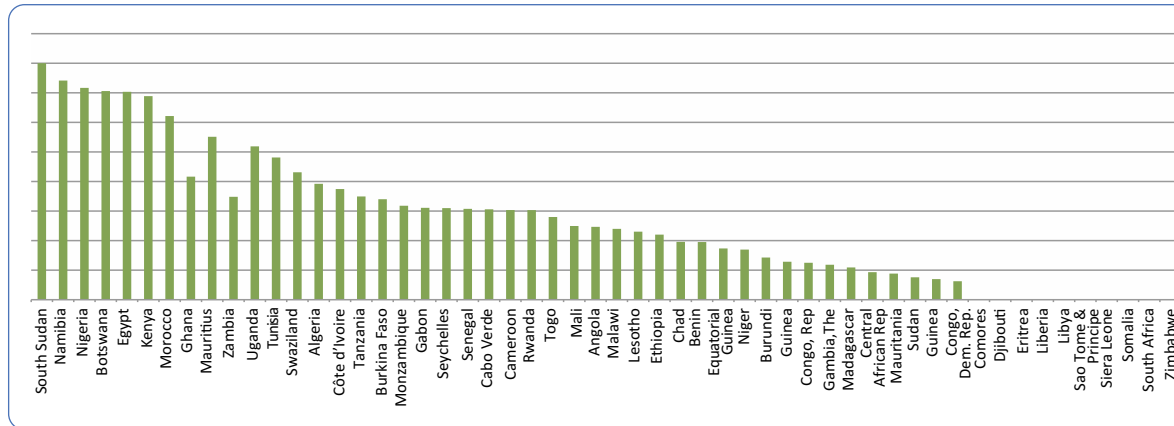
2. Governance



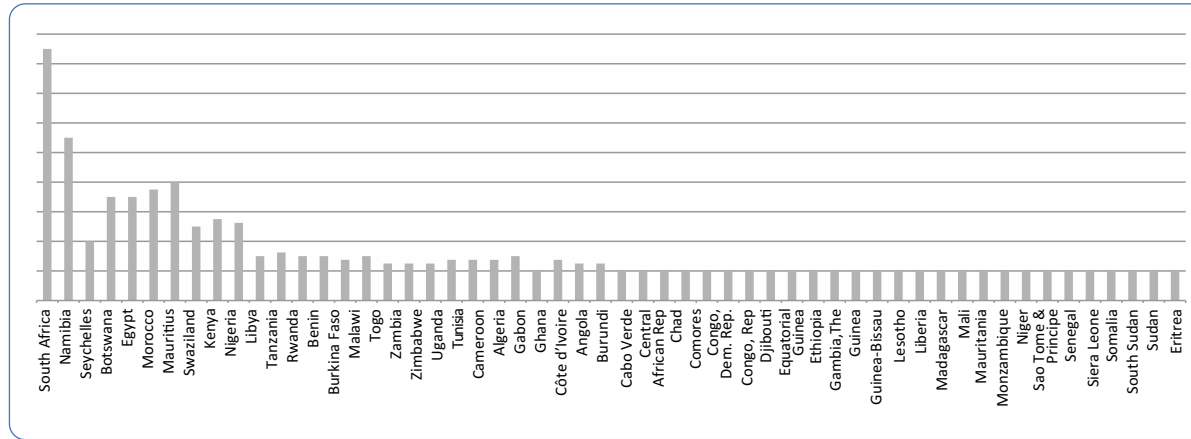
3. Bond Market Infrastructure



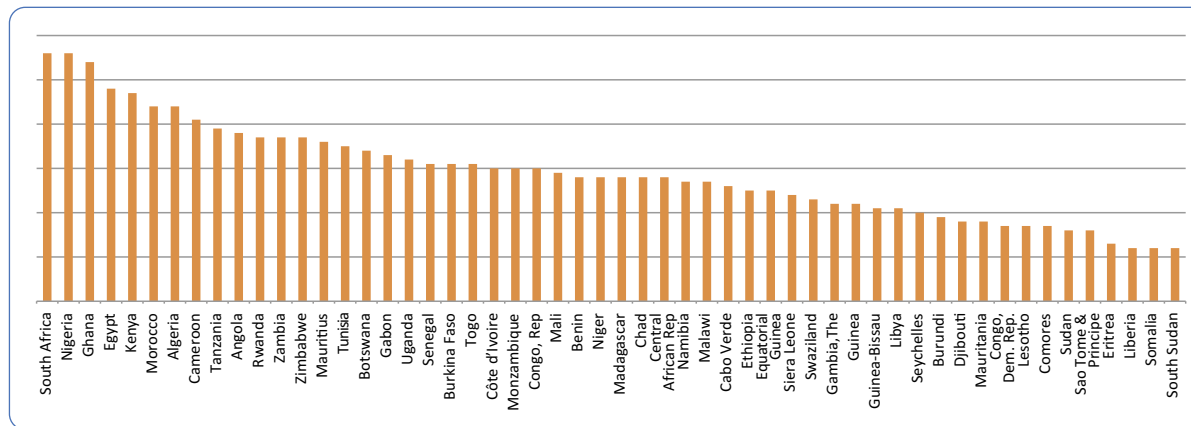
4. Issuers, Issuing Strategy and Market Access



5. Domestic Investor Base



6. Active participation of Economic Agents





Section 2. Methodology

The following six factors and weights are analysed in the construction of the ABMDI: (i) Macroeconomic (15%); (ii) Governance (10%); (iii) Bond Market Infrastructure (10%); (iv) Issuing Strategy and Market Access (30%); (v) Domestic Investors Base (10%) and; (vi) Active Participation of Economic Agents (25%).

2.1. Macro-Economic Score – factor weight 15%

The macro-economic environment of a country is an important consideration in determining the level of development of an economy. Various coincident and lagging factors help define the health of an economy. However, while the foregoing may be the case, this criterion in itself does not determine the level of sophistication of bond markets, The weight allocated to this criterion is therefore 15%. Four sub-factors are considered under the Macroeconomic score: (i) GDP per capita; (ii) real GDP growth; (iii) total debt outstanding as a percentage of GDP; and (iv) exchange rates.

Interpreting the overall score: The Macroeconomic score is intended to be an indicator of a country's ability to generate wealth, control inflation, debt levels and maintain or improve the value of its currency. Thus, it is a reflection of the quality of the macroeconomic and fiscal policy environment.

2.2. Governance Score – factor weight 10%

The existence of a legal framework and the rule of law, which ensure a structured approach to resolving conflicts is key to encouraging investor participation in any economy, as is a proper regulatory framework, which promotes good governance. The weight allocated to this criterion is 10%.

Each sub-factor was evaluated separately and the scores aggregated to a single overall score. All data was sourced from the World Bank Governance Indicators: (i) Political Stability; (ii) Government Effectiveness; (iii) Regulatory Quality; (iv) The rule of Law; and (v) Control of corruption.

Interpreting the overall score: The Governance score summarizes political, legislative, executive and judicial quality. These factors – and their long-term stability or improvement are important for investors.

2.3. Bond Market Infrastructure Score – factor weight 10 %.

A robust market infrastructure is essential for the proper and efficient functioning of bond markets. Further, the level market sophistication is highly





correlated to factors such as availability of automated trading and settlement platforms and settlement cycles. In developing a bond index, it is imperative that there is adequate infrastructure to support the frequent trading of bonds. Three sub-factors were considered under the Bond Market Infrastructure factor: (i) settlement cycle; (ii) availability of electronic trading platforms; and (iii) availability of clearing and settlement systems.

Interpreting the overall score: This indicator summarizes the Bond Market Infrastructure as follows:

2.4. Issuers, Issuing Strategy and Market Access Score – factor weight 30%:

This section evaluates the perception of sovereign borrowers by rating agencies, the value of the bonds outstanding, the amount of secondary market trading activity (liquidity), and whether there is any discernible issuing strategy by each country. Five sub-factors were considered under this factor: (i) country risk assessment; (ii) active and functioning Money Market; (iii) bonds in the markets; (iv) availability and quality of bond data and prices; and (v) issuing strategy and maturity structure.

Interpreting the overall score of the factor. This score summarizes the perception of international rating agencies of each country, the existence and functioning of the bond markets and the

government's success in implementing a bond issuing strategy. A higher score is an indication of a more active, defined and structured capital market.

2.5. Domestic Investor Base Score –factor weight 10%:

The Investor Base for each country was determined by combining the total assets held by pension funds, mutual funds and insurance companies. The country scores are comprised of: (i) the absolute value of the combined assets; (ii) the value of the combined assets relative to GDP; and (iii) the value of the combined assets in relations to population.

Interpreting the scores. The Investor Base score shows the size and strength of the domestic investor base. A higher score indicates a larger and stronger local investor base that can invest in local assets.

2.6. Active participation of Economic Agents Score – factor weight 25%:

The evaluation of this factor is based on scoring of two indicators. Each was evaluated and the scores have been aggregated to a single overall score. Two sub-factors were considered under this factor: (i) institutions and organizations relevant to the Financial Markets; and (ii) diversity of active participants.

Sources of Data and Information

1. Central Banks:

Algeria	www.bank-of-algeria.dz
Botswana	www.bankofbotswana.bw
Burundi	www.brb-bi.net
Cape Verde	www.bcv.cv
Congo, Dem. Rep.	www.bcc.cd
CEMAC	www.beac.int
Djibouti	www.banque-centrale.dj
Egypt, Arab Rep.	www.cbe.org.eg
Eritrea	www.boe.gov.er/
Ethiopia	www.nbe.gov.et
Gambia, The	www.cbg.gm
Ghana	www.bog.gov.gh
Guinea	www.bcr-guinee.org
Kenya	www.centralbank.go.ke
Lesotho	www.centralbank.org.ls
Liberia	www.cbl.org.lr
Libya	www.cbl.gov.ly
Madagascar	www.banque-centrale.mg
Malawi	www.rbm.mw
Mauritania	www.bcm.mr
Mauritius	http://bom.intnet.mu
Morocco	www.bkam.ma

Mozambique
Namibia
Nigeria
Rwanda
Seychelles
Sierra Leone

Somalia
South Africa
Sudan
Swaziland
Tanzania
Tunisia
Uganda
WAEMU
Zambia
Zimbabwe

www.bancomoc.mz
www.bon.com.na
www.cenbank.org
www.bnr.rw
www.cbs.sc/
www.bankofsierraleone-centralbank.org
www.somalbanca.org
www.reservebank.co.za
www.bankofsudan.org
www.centralbank.org.sz
www.bot-tz.org
www.bct.gov.tn
www.bou.or.ug
www.bceao.int
www.boz.zm
www.rbz.co.zw

2. Stock Exchanges:

Botswana Stock Exchange
Bolsa de Cabo Verde
Egypt Stock Exchange (EGX)

www.bse.co.bw
www.bvc.cv
www.egyptse.com

Ghana Stock Exchange	www.secghana.org
Nairobi Securities Exchange	www.nse.co.ke
Malawi Stock Exchange	www.mse.co.mw
Mauritius Stock Exchange	www.semdex.com
Casablanca Stock Exchange	www.casablanca-bourse.com
Namibia Stock Exchange	www.nsx.com.na
Nigerian Stock Exchange	www.nigerianstockexchange.com
Johannesburg Stock Exchange	www.jse.co.za
Khartoum Stock Exchange	www.khartoumstock.com
Swaziland Stock Exchange	www.ssx.org.sz
Dar Es Salam Stock Exchange	www.dse.co.tz
Bourse de Tunis	www.bvmt.com.tn
Lusaka Sock Exchange	www.luse.co.zm
Uganda Securities Exchange	www.use.or.ug
Zimbabwe Stock Exchange	http://www.zimbabwe-stock-exchange.com/

3. Regulators:

COSOB (Algeria) Securities and Exchange	www.cosob.com.dz
Commission Ghana Capital Markets Authority Kenya Mauritius	www.secghana.org www.cma.or.ke www.gov.mu
Conseil déontologique des valeurs mobilières Nigeria	www.cdvm.gov.ma www.secngr.org
Capital Markets Advisory Council Rwanda	www.cmac.org.rw
Seychelles International Business Authority	www.siba.net
Financial Services Board South Africa	www.fsb.co.za
Capital Markets & Securities Authority Tanzania	www.cmsa-tz.org/

Commission d'Organisation et de Surveillance des Opérations la Bourse (COSOB) - Algeria	www.cosob.org/
Commission Bancaire de l'Afrique Centrale - COBAC	www.beac.int/cobac
Capital Markets Authority of Uganda	www.cmauganda.co.ug

4. Data Providers:

African Development Bank (AfDB) BGL Pension Report 2010	www.afdb.org/ www.bglgroupng.com/docs/pension_report.pdf
Bloomberg Euler-Hermes Country risk assessment	www.bloomberg.com www.eulerhermes.com/en/country-risk/country-risk.html
Global Pension Study 2011 Watson Wyatt IFC paying taxes	www.towerswatson.com www.pwc.com/gx/en/paying-taxes
International Monetary Fund (IMF)	www.imf.org/external/data.htm
Investment Company Institute The Heritage Foundation Thomas Murray World Bank	www.ici.org www.heritage.org/Index/ www.thomasmurray.com http://data.worldbank.org

5. Further Resources:

African Financial Markets Initiative (AFMI)	http://www.africanbondmarkets.org/en/
African Securities Exchanges Association (ASEA)	www.africansea.org
International Country Risk Guide	www.prsgroup.com/icrg.aspx

Contact

African Development Bank

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