

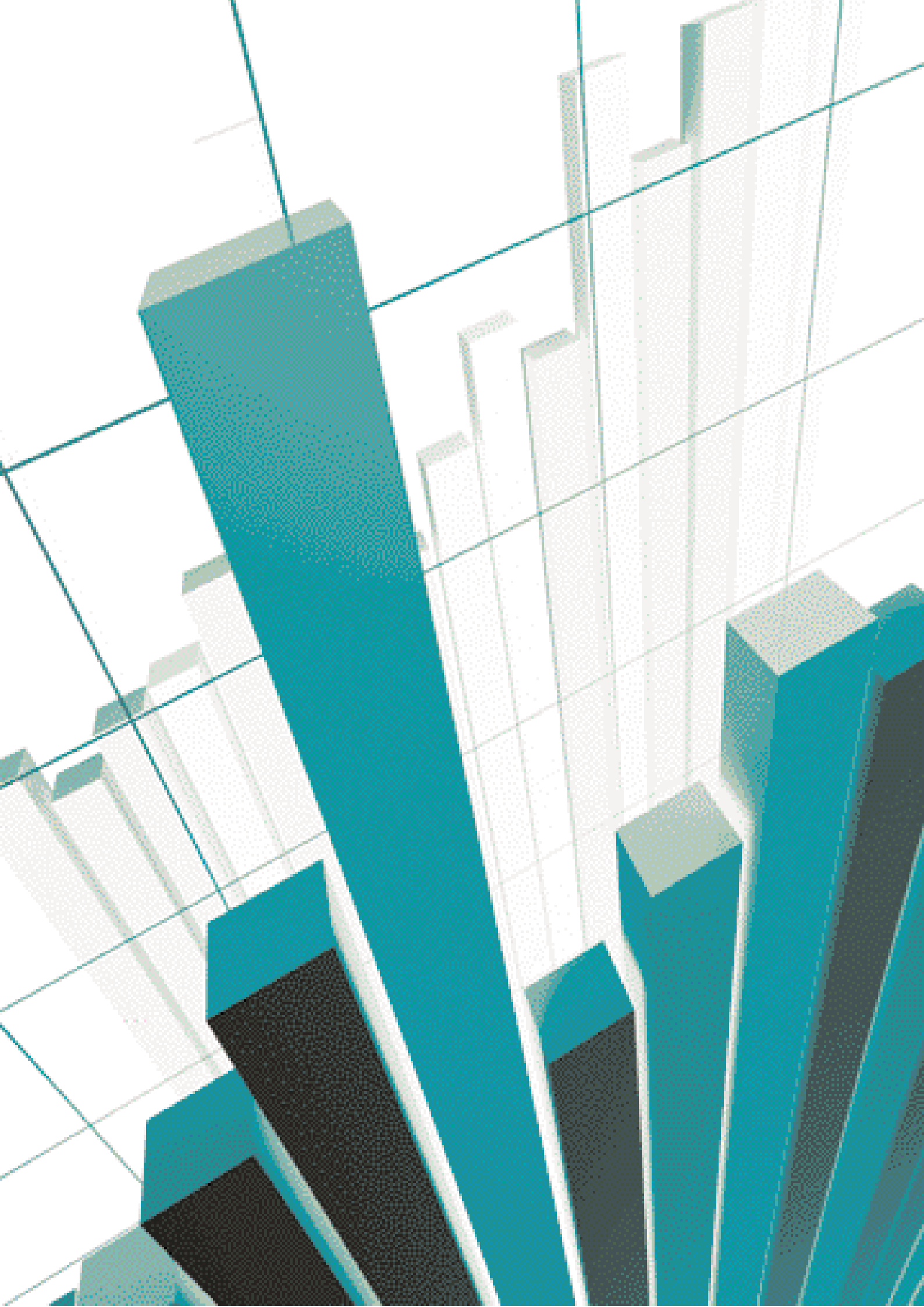
THE AFRICAN FUNDAMENTAL BOND INDEX

The 2016 Annual Country Rankings and Scores Report



AFMI

Your gateway to Africa's bond markets





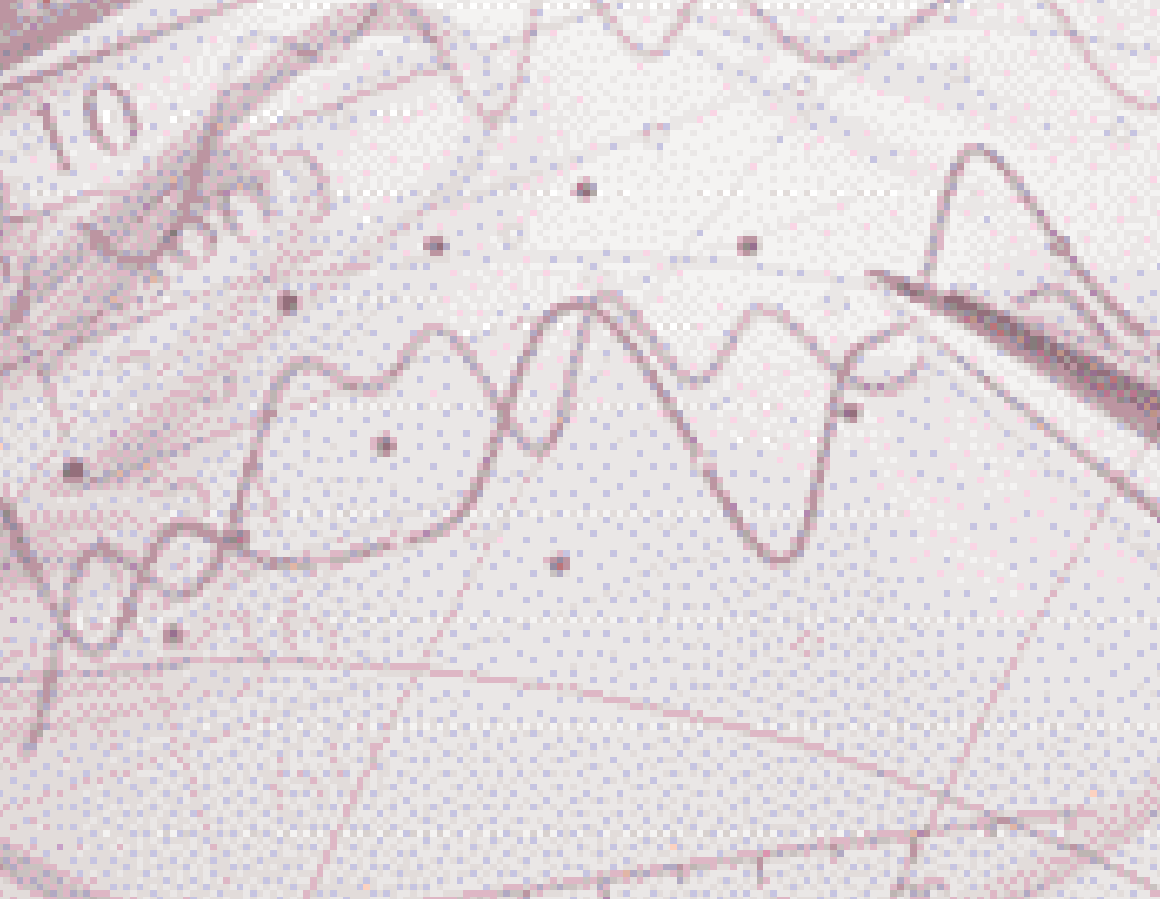
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Introduction

Over the last years, there has been a general trend of hard-currency bond issuances amongst African countries. However, with the US Federal Reserve on a path to gradually raise interest rate and a stronger US dollar, tapping into international debt markets have become costly to African Nations: spreads are widening and debt-servicing costs are increasing. The huge capital amount required by the continent could be raised more efficiently by looking at domestic markets.

Developing local debt markets will benefit the continent not only by expanding alternative sources of financing, but also by contributing to financial stability, decreasing the maturity mismatch between assets and liabilities which should enhance risk management.

Local currency bond markets in most African countries are still at a nascent stage of development or underdeveloped, with market capitalization of both government securities and corporate bonds typically much lower than those of other developing, emerging, and advanced economies. The local currency bond market is dominated by government securities.

As of Q1 2016, the outstanding stock of African local currency government securities (T-bills and T-bonds) was estimated at USD 452 billion. T-bills and bonds account for 29.82% and 70.18%. Five countries, South Africa, Kenya, Nigeria, Morocco, and Egypt account for 86% of the outstanding amount. These countries are the only ones with outstanding amounts exceeding USD 10 billion, while 15 countries have outstanding amounts between USD 1 billion and USD 10 billion.

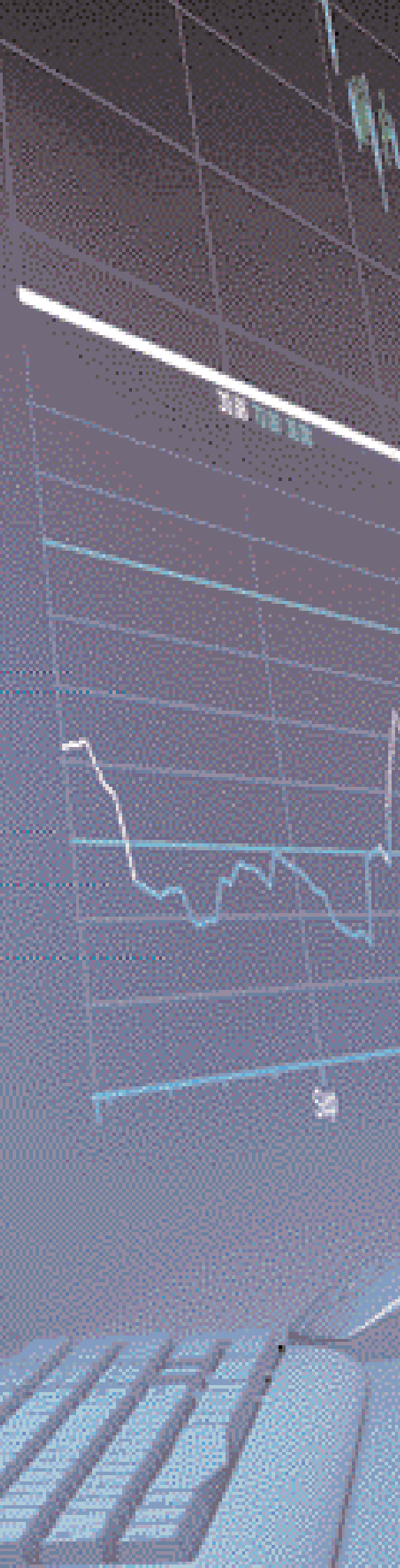
Issuances tend to be short-term: maturities less than 5-year account for 55% of the outstanding local government securities. Longer maturities are less represented: Tenors between 5 and 10-year were 18% of the securities in 2014 while tenors of 10-year and above accounted for 27% of the stock of African government securities as of Q1 2016.

All the regions are not at the same level of development. North and Southern Africa are the two most advanced regions, East Africa; Central and Western Africa lag further behind.

There is still a general lack of capital market expertise in many African countries. Local financial markets are underdeveloped and consequently the in-country knowledge and expertise needed to make informed decisions are often weak if not lacking.

The African Bond Market development Index (ABMDI) series are reflective of the recent developments of the local bond markets, some of which have gained in strength in terms of liquidity and maturity profile using a common set of indicators, including macroeconomics variables; market structure; and market liquidity. The ranking would reveal the factors contributing to African Local Currency Bond Markets structure, taking into account that most of the African debt markets are still at the early stage of development.

This report is organized around two sections. Section 1 will present the **2016 ABMDI country rankings and scores** built on 2015 data. Section 2 will present the ABMDI methodology and factor weights.



Section 1 2016 AFBI Country Rankings and Scores

1.1 2016 Country rankings

1.1 2015 Country rankings¹

Country	Rank	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	79.38	79.77	69.05	38.35	51.63	93.75	85.32	85.00	100.00
Nigeria	2	65.50	67.3	61.56	31.59	25.98	95.00	77.64	26.25	91.00
Egypt	3	65.45	68.45	56.38	34.10	34.15	97.50	69.75	45.00	87.00
Botswana	4	63.95	63.46	59.54	35.27	63.99	93.75	72.13	35.00	71.00
Namibia	5	63.11	63.64	56.87	39.99	55.16	97.50	74.99	55.00	55.40
Morocco	6	61.25	55.54	58.7	36.83	46.42	82.50	63.12	37.50	80.60
Mauritius	7	61.23	59.93	63.65	59.02	67.31	95.00	53.66	30.00	68.20
Kenya	8	60.80	63.06	58.57	28.20	36.50	93.75	69.07	27.50	80.30
Ghana	9	56.06	57.64	53.91	24.38	48.74	97.50	38.42	12.50	100.00
Algeria	10	52.37	53.73	51.42	41.76	33.06	97.50	38.50	15.00	80.00
Seychelles	11	51.51	53.06	49.45	87.75	58.47	93.75	28.60	35.00	44.20
Zambia	12	50.99	52.95	52.75	29.12	43.80	93.75	44.98	13.75	72.00
Tunisia	13	50.50	45.99	51.36	28.52	43.89	93.75	47.27	13.75	67.60
Gabon	14	49.78	52.41	48.89	60.50	39.21	95.00	29.62	11.25	69.10
Uganda	15	48.91	50.39	48.41	23.60	38.08	97.50	48.71	13.75	63.30
Tanzania	16	47.49	50.95	50.83	25.17	39.79	97.50	34.79	17.50	71.20
Equatorial Guinea	17	46.33	44.4	38.95	85.00	25.27	95.00	14.77	10.00	64.50
Rwanda	18	45.62	49.06	48.41	24.41	53.47	60.00	35.78	15.00	73.50
Cameroon	19	44.31	46.27	40.12	26.13	31.39	95.00	25.24	13.75	75.20
Cote d'Ivoire	20	44.12	45.45	41.22	26.77	37.74	97.50	33.26	12.50	61.40
Benin	21	44.09	43.46	39.72	24.12	40.53	97.50	35.38	15.00	58.20
Senegal	22	44.00	45.95	42.81	17.36	46.38	97.50	35.52	10.00	61.40
Burkina Faso	23	42.94	44.15	40.01	23.99	40.13	97.50	30.18	15.00	60.10
Swaziland	24	41.95	40.45	48.23	28.21	41.67	95.00	36.16	25.00	42.80
Togo	25	40.79	39.63	37.22	24.06	35.25	97.50	25.68	12.50	59.80
Mozambique	26	40.21	43.58	46.42	16.29	36.14	93.75	33.92	10.00	54.40
Malawi	27	39.57	33.89	23.75	21.24	39.38	95.00	31.82	15.00	47.60

¹ Countries which are part of monetary union, WAEMU (Benin, Burkina-Faso, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo) and CEMAC (Cameroon, Chad, Congo, Equatorial Guinea, Gabon, Republic of Central Africa) are sharing the same scores for some indicators as they are part of Monetary Union with common capital market.

Country	Rank	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
Congo, Rep	28	39.55	40.06	35.93	32.01	30.03	95.00	14.72	10.00	67.30
Mali	29	39.12	36.84	34.5	24.33	31.84	97.50	22.13	10.00	59.60
Cabo Verde	30	38.93	40.63	42.11	15.57	58.63	100.00	33.44	10.00	38.80
Chad	31	38.31	37.31	34.46	20.01	25.65	95.00	18.21	10.00	67.10
Niger	32	38.02	39.61	37.21	18.53	36.00	97.50	21.55	10.00	57.70
Lesotho	33	34.59	31.96	30.55	25.09	44.90	100.00	25.96	10.00	30.20
Central African Rep	34	34.53	33.84	23.47	22.71	16.59	95.00	9.40	10.00	64.60
Angola	35	33.77	39.42	28.45	39.84	30.09	18.75	22.44	10.00	60.70
Guinea-Bissau	36	29.48	29.87	23.44	23.61	26.02	57.50	11.62	10.00	52.40
Madagascar	37	28.72	31.27	25.3	22.75	34.38	60.00	10.39	10.00	47.00
Gambia, The	38	25.64	25.88	27.92	23.09	38.79	62.50	7.99	10.00	34.60
Sudan	39	24.00	22.32	16.89	32.12	18.65	36.25	9.81	10.00	39.00
Ethiopia	40	23.20	22.26	16.69	26.16	34.11	1.25	16.39	10.00	39.30
Mauritania	41	21.12	23.63	20.04	25.24	32.92	20.00	8.98	10.00	33.40
Burundi	42	20.65	25.08	26.67	13.09	26.51	22.50	13.79	10.00	34.60
Libya	43	20.38	19.89	20.19	33.27	11.94	1.25	2.22	20.00	45.60
Djibouti	44	18.24	17.59	14.82	28.65	35.73	1.25	2.22	10.00	34.30
Zimbabwe	45	17.60	21.47	14.13	10.44	25.97	18.75	2.22	15.00	37.60
Sierra Leone	46	17.48	18.92	18.03	15.19	34.39	3.75	2.22	10.00	38.90
Sao Tome & Principe	47	16.54	17.17	14.51	19.79	40.57	1.25	2.22	10.00	30.90
Congo, Dem. Rep.	48	15.18	15.06	13.96	24.88	18.22	1.25	0.00	10.00	34.00
Comoros	49	15.14	15.58	15.82	17.20	33.41	1.25	2.22	10.00	29.70
Guinea	50	14.45	16.71	19.4	15.74	31.64	1.25	3.17	10.00	27.40
Liberia	51	14.21	13.44	13.08	16.37	32.12	1.25	2.22	10.00	27.00
Eritrea	52	13.22	13.43	11.7	19.12	20.65	1.25	2.22	7.50	27.00
South Sudan	53	10.20	10.91	9.35	8.20	10.97	1.25	0.00	10.00	27.00
Somalia	54	8.63	8.26	7.16	0.50	6.79	1.25	0.00	10.00	27.00

1.2 Top Ten Bond Markets

	2016 Ranking	2015 Ranking	Move	
South Africa	1	1	Stable	
Nigeria	2	2		+1
Egypt	3	3		-1
Botswana	4	4		+1
Namibia	5	5		-1
Morocco	6	6		-3
Mauritius	7	7	Stable	
Kenya	8	8		-2
Ghana	9	9		-1
Algeria	10	10	Stable	

1) South Africa

South Africa maintains first position of the ranking. South Africa remains the Benchmark in 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 “Active participation of the economic agents” factors.

2) Nigeria

Nigeria’s ranking improved of one place compared to its 2015 ranking. Nigeria performed well in the “Issuers, Issuing Strategy and Market Access” and “Active participation of the economic agents” factors.

3) Egypt

The Egyptian lost one place from second to third in this 2016 ranking due mainly to the indicator “Issuers, Issuing Strategy and Market Access” which has decreased by 14%.

4) Botswana

Botswana overall score is almost unchanged from the 2015 ranking but the country moves up one place. This improvement is explained by the «Issuers, Issuing Strategy and Market access» which is the indicator that has increased the most; up by 14%.

5) Namibia

Namibia’s fell one place in the ranking, due to a decline in the score for the indicator « Issuers, Issuing strategy and Market access ». The other key indicators for Namibia including macroeconomic conditions and governance remained unchanged.

6) Morocco

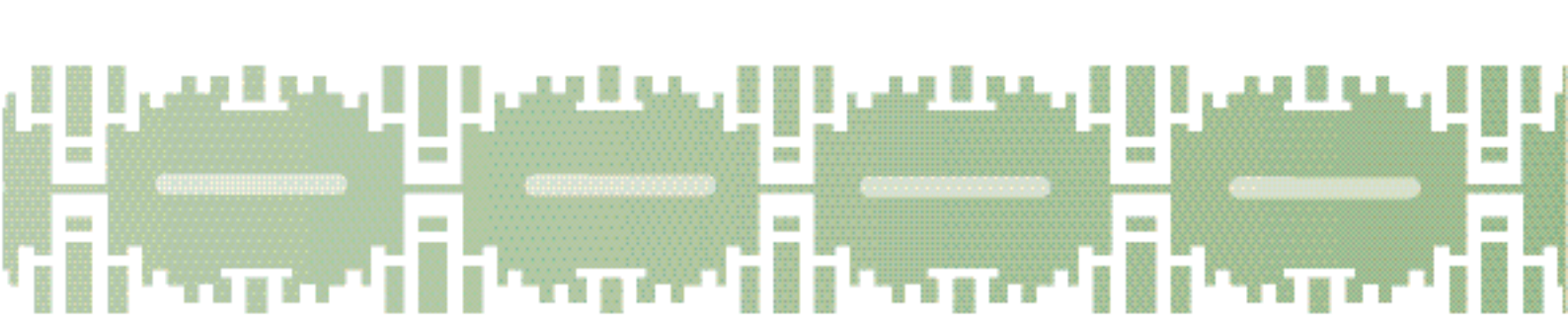
Morocco moved three places upward in the ranking with an increase in its score by 10%. There were increases in the scores for the following factors including “Issuers, Issuing Strategy and Market access” and “Domestic Investor Base” which respectively 32% and 25% compared to 2015. The financial markets in Morocco is well developed with one of the most active bond market on the continent

7) Mauritius

Mauritius maintained its position on the ranking from 2015, despite of an improvement in the indicators «Domestic Investor Base».

8) Kenya

Kenya moved two places downward with a drop in its score by 3.5%. There were decrease in four factors, mainly the Issuers, Issuing strategy and Market access where a drop of nearly 7% was observed.



9) Ghana

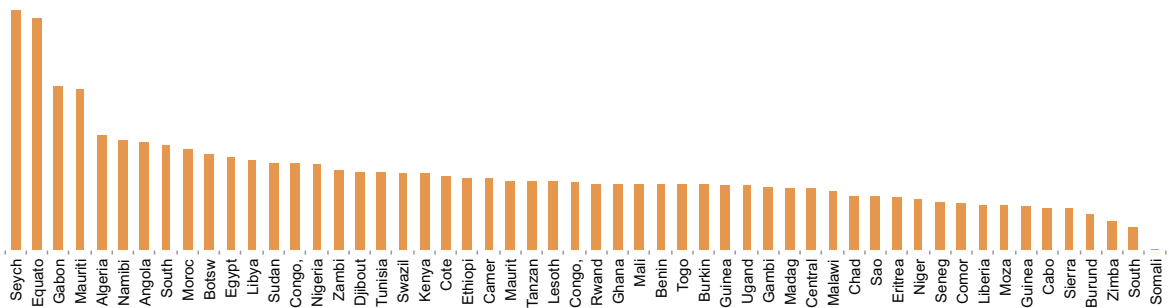
Ghana moved down the ranking by one place. The total score decreased by nearly 3% compared to 2015. Despite the increase in governance by 2.7%, Ghana recorded major decrease in macroeconomic condition (-3.4%) and on the indicator “Issuers, Issuing Strategy and Market Access” (-9.5%).

10) Algeria

Algeria, which entered the top ten ranking in 2015, maintained its position this year despite a slight decrease in the macroeconomic conditions.

1.3 Graphical representation of scores by Factor

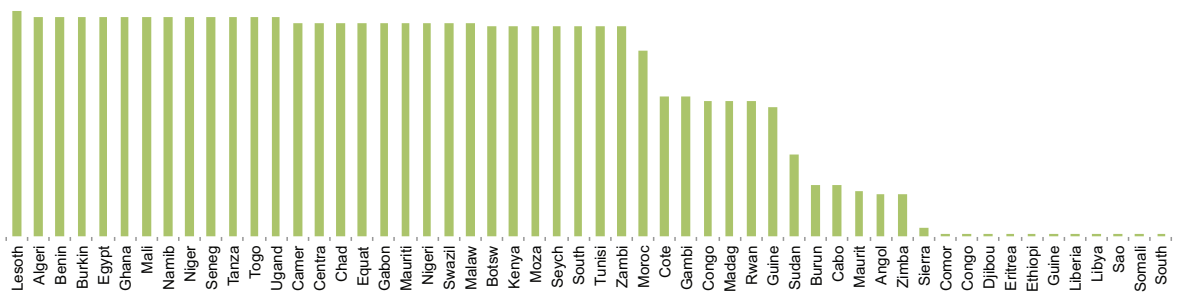
1. Macro-Economic conditions



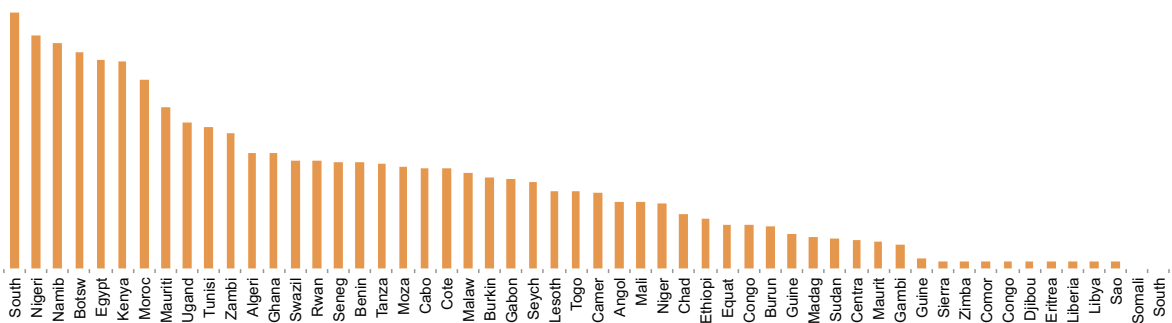
2. Governance



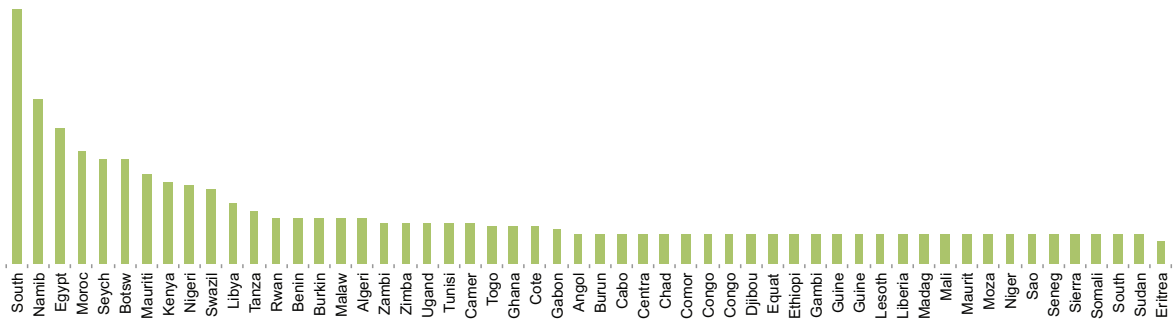
3. Bond Market Infrastructure



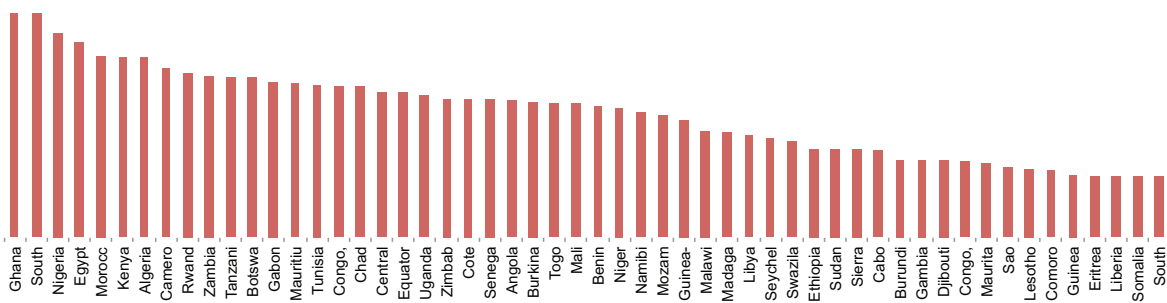
4. Issuers, Issuing Strategy and Market Access



5. Domestic Investor Base



6. Active participation of Economic Agents



Section 2: Methodology

In the construction of the ABMDI, the following six factors and weights are used for analysis: (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 – Overall factor weight 15%

The macro-economic environment of a country is a very 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 the bond markets in an economy. Therefore, the weight allocated to this criterion is at 15%. Four sub-factors were 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 management.

- Scores above 80 are indicative of countries that are high performers

- Scores between 60 – 80 are above average performers
- Scores between 50- 60 are average performers
- Score below 50 are underperformers

2.2. Governance – Overall factor weight 10%

Key to encouraging increased investor participation in any economy is the availability of a legal framework and the rule of law, which ensure a structured approach to resolving conflicts. Coupled with this 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.

- Scores above 80 are indicative of countries that are high performers
- Scores between 60 – 80 are above average performers
- Scores between 50- 60 are average performers
- Score below 50 are underperformers

2.3. Bond Market Infrastructure score – Overall factor weight 10 %:

A sound and robust bond market infrastructure is essential for the proper and efficient functioning of a bond market. Further, the level of sophistication of the bond market is highly correlated to factors such as availability of automated trading and settlement platforms and settlement cycles. In coming up with 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 follow:

- Scores above 80 are indicative of countries that are high performers
- Scores between 60 – 80 are above average performers
- Scores between 50- 60 are average performers
- Score below 50 are underperformers

2.4. Issuers, Issuing Strategy and Market Access score - Overall 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.

- Scores above 80 are indicative of countries that are high performers
- Scores between 60 - 80 are above average performers
- Scores between 50 - 60 are average performers
- Score below 50 are underperformers

2.5. Domestic Investor Base score – Overall factor weight 10%

The Investor Base for each country was determined by identifying 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.

- Scores above 80 are indicative of countries with a very substantial domestic investor base
- Scores between 60 – 80 have an above averagedomestic investor base
- Scores between 50- 60 have an average investor base
- Score below 50 have a small or insignificant investor base

2.6. Active participation of Economic Agents – Overall 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.

Interpreting the overall score: The Active Participation of Economic Agents Score shows the plurality and the diversity of the bond market participant. A higher score indicates that numerous actors are present on the market and there is a large diversity between these market players:

- Scores above 80 are indicative of countries with a very substantial active participation of economic agents.
- Scores between 60 -80 are indicative of countries with an above average active participation of economic agents
- Scores between 40-60 are indicative of countrieswith an above average active participation of economic agents
- Scores between 20-40 are indicative of countries with an average active participation of economic agents
- Scores below 20 are indicative of countries with a small or insignificant active participation of economic agents



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.centralbank.org.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	www.bancomoc.mz
Namibia	www.bon.com.na
Nigeria	www.cenbank.org
Rwanda	www.bnr.rw
Seychelles	www.cbs.sc/
Sierra Leone	www.bankofsierraleone-centralbank.org
Somalia	www.somalbanca.org
South Africa	www.reservebank.co.za
Sudan	www.bankofsudan.org
Swaziland	www.centralbank.org.sz
Tanzania	www.bot-tz.org
Tunisia	www.bct.gov.tn
Uganda	www.bou.or.ug
WAEMU	www.bceao.int
Zambia	www.boz.zm
Zimbabwe	www.rbz.co.zw

2. Stock Exchanges

Botswana Stock Exchange	www.bse.co.bw
Bolsa de Cabo Verde	www.bvc.cv
Egypt Stock Exchange (EGX)	www.egyptse.com
Ghana Stock Exchange	www.secghana.org
Ghana Stock Exchange	www.secghana.org
Nairobi Securities Exchange	www.nse.co.ke
Malawi Stock Exchange	www.mse.co.mw
Mauritius Stock Exchange	www.semex.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)	www.cosob.com.dz
Securities and Exchange Commission Ghana	www.secghana.org
Capital Markets Authority Kenya	www.cma.or.ke
Mauritius	www.gov.mu
Conseil déontologique des valeurs mobilières	www.cdvm.gov.ma
Nigeria	www.secng.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)	www.afdb.org/
allafrica.com	www.allafrica.com
BGL Pension Report 2010	www.bglgroupng.com/docs/pension_report.pdf
Bloomberg	www.bloomberg.com/
Euler-Hermes Country risk assessment	www.eulerhermes.com/en/country-risk/country-risk.html
Global Pension Study 2011 Watson Wyatt	www.towerswatson.com/
IFC paying taxes	www.pwc.com/gx/en/paying-taxes
International Monetary Fund (IMF)	www.imf.org/external/data.htm
Investment Company Institute	www.ici.org
MBendi Information Services	www.mbedi.com
The Heritage Foundation	www.heritage.org/Index/
Thomas Murray	www.thomasmurray.com/
World Bank	http://data.worldbank.org/

5. Further Sources

AfDB Fixed Income Guidebook	www.afdb.org/en/documents/publications/african-fixed-income-guidebook/
African Financial Markets Initiative (AFMI)	www.afdb.org/en/topics-and-sectors/initiatives-partnerships/african-financial-markets-initiative-afmi/
African Securities Exchanges Association (ASEA)	www.africansea.org
Ambrosi, Monica; The Development of African Debt Markets; The South African experience & key findings	www.cma.gov.om/.../ba7f3548-ba14-40f0-9e76-d58e3433abf7.doc
International Country Risk Guide	www.prsgroup.com/icrg.aspx
MAROCLEAR - Dépositaire Central des titres au Maroc	www.maroclear.com
STICODEVAM (Société Tunisienne Interprofessionnelle pour la Compensation et le Dépôt des Valeurs Mobilières)	www.sticodevam.com/site/fr/index.php

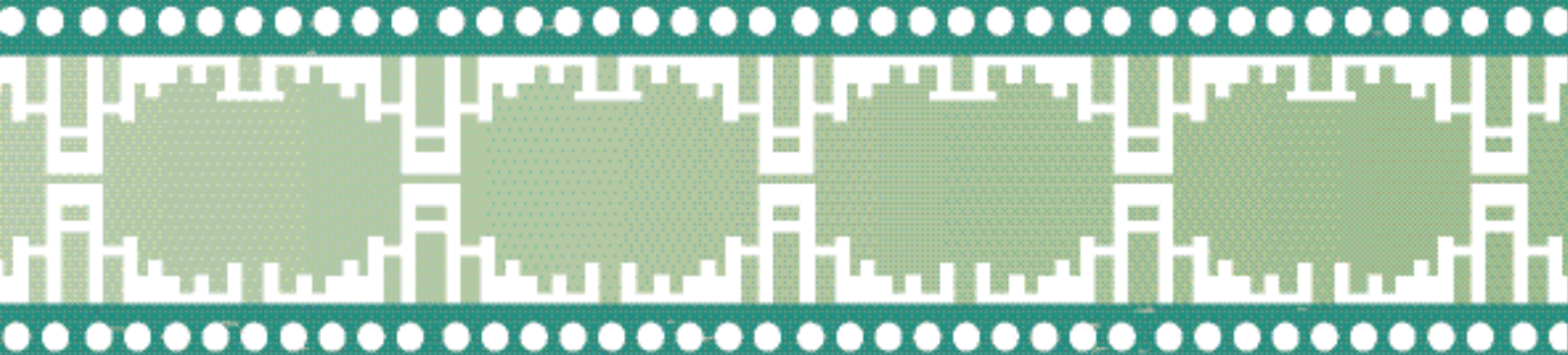




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