RESEARCH REPORT FIXED INCOME

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Attijari Global Research S&P Dow Jones Indices



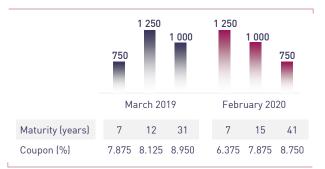


GHANA : THE ISSUING OF AN « UNPRECEDENTED » EUROBOND

The international debt markets continue to be favourable for Eurobond issuance. For this Q2-2021, it is Ghana's turn to raise significant funds of \$ 3.0 Bn. This 9th Eurobond for this country is "unique". Structured in 4 tranches, the 1st one is amounting \$ 525 Mn, is denominated at zero coupon over 4 years. While the 2nd, 3rd and 4th tranches, with longer maturities, are denominated at interest rates ranging from 7.75% to 8.875%.

Successful through a Demand equivalent to 2x the Offer, this Eurobond issue from Ghana is the first from an African country denominated, although partially, at zero coupon. Still, general economic conditions call for greater caution, including moving away from a rapid dissipation of the Covid-19 pandemic combined with more volatile market conditions. However, persistent liquidity in the debt market and the interesting yield levels have supported investment in debt securities in Africa.

COMPARATIVE OF LATEST EUROBONDS (IN \$ MN)

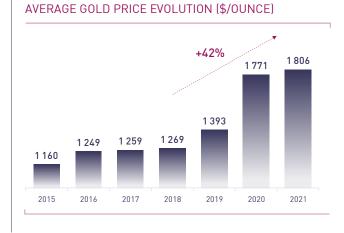


TECHNICAL RESULTS OF THE EUROBOND ISSUE APR-21

Issue Date		April 2021			
Issue amount (\$ Mn)	525	1 000	1 000	500	
Maturity (years)	4	7	12	20	
Coupon (%)	zéro	7.750	8.625	8.875	
S&P Rating		B⁻			
Subscribed amount (\$ Mn)		6 000			
Subscription rate		2.0x			

It should be noted that Ghana has several assets to promote to investors, in particular:

- \Rightarrow The positive trend in international commodity prices, namely Gold, Cocoa and even hydrocarbons ;
- \Rightarrow The stability in the Ghana cedi/US dollar exchange rate in the face of the economic shock of Covid-19;
- ⇒ A favourable business climate. Indeed, Ghana has enjoyed for two decades political stability (democratic alternation) and security propelling it as an example of democracy in Africa.



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AVERAGE BRENT PRICE EVOLUTION (\$/BARREL)



Sources : IMF, Bloomberg, AGR Computations

GHANA : THE ISSUING OF AN « UNPRECEDENTED » EUROBOND

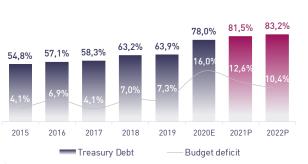
In terms of economic growth, Ghana should be among the few countries in Sub-Saharan Africa to show positive growth in 2020 (*see: <u>Sub saharan Africa economies: What behavior toward covid shock</u>). Admittedly limited to 0.4% against 6.5% a year earlier, it finds its origin in the rise of world commodity prices in particular Gold and Cocoa, the exploitation of new oil fields and the new industrial and agricultural dynamic. Although the overexposure to commodity prices is still a point of vigilance for the country.*

On the fiscal level, the situation is more tense with a fiscal deficit expected at 16% of GDP in 2020 against an average level of 7.1% in 2018-2019 due to a considerable drop in revenue from natural resources, combined with increased spending related to the Covid-19 pandemic.

GDP GROWTH VS. INFLATION



FISCAL DEFICIT Vs. TREASURY DEBT



Thus, in order to curb the increase in indebtedness which accelerated to 14 pts of GDP in 2020 against an only 1 pt in 2019, Ghana is counting on a gradual restoration of revenues, in parallel with the introduction of new taxes and the increase in VAT rate by 2 points.

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Sources IMF, AGR computations

RESULTS' SUMMARY FOR Q2-21

In this 10th edition, we analysed the AGR Africa Bond Index evolution during Q2-21. The main findings are as follows :

- The value of the AGR ABI index stands at 104.4 pts against 101.9 pts in the last edition, i.e. an increase of 2.4 pts ;
- The deposit outstanding enhanced from \$ 97.5 Bn to over \$ 104.0 Bn. This is the result of the increase in the number of lines meeting the eligibility criteria of our index, going from 77 in Q1-21 to 82 in Q2-21. This change is mainly due to a scope effect after the inclusion of 5 Eurobonds lines in the index. On the one hand, Ghana issued an aggregate amount of more than \$ 3.0 Bn subdivided into four tranches with different maturities: 4 years, 7 years, 12 years and 20 years. On the other hand, Kenya has realized a Eurobond of \$ 1.0 Bn for a maturity of 12 years ;
- The AGR Africa Bond Index is still represented by 6 African countries like the previous edition. Indeed, the latter is composed by Egypt, South Africa and recently Ghana which are largely representative in this benchmark. These 3 countries monopolize nearly 60% of the deposit outstanding while Nigeria, Morocco and Kenya share the remaining 40% ;
- The observation of the current index breakdown by S&P rating agency shows the strong contribution of B- rated bonds which monopolize almost 36% of AGR ABI. Furthermore, this latter is composed for 75% of residual maturities strictly superior to 5 years.



RESULTS' DETAIL FOR Q2-21

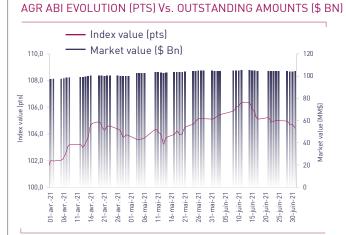
Since our last report related to Q1-21, the scope changed following the two "rebalancing" of the AGR Africa Bond Index which occurred at the end of April and June 2021. Since then, 2 new Eurobond issued by two countries have been included in the deposit. In chronological order, (1) Ghana (four lines for an aggregate amount of \$ 3.0 Bn) and (2) Kenya (one line worth \$ 1.0 Bn). The results of this new scope are as follows:

• An increase in AGR ABI value

The AGR Africa Bond Index rose by 2.4%, from 101.9 pts in April 2021 to 104.4 pts in July 2021. This positive performance was by a significant increase in the number of constituents of the AGR Africa Bond Index, which represent now 82 bond lines at the end of Q2-21 compared to 77 a quarter earlier. This has contributed to a significant improvement in the total size of the index deposit which exceeds actually \$ 104 Bn.

• A near stagnation in residual maturity

The weighted residual maturity of the AGR Africa Bond Index stood at 12.2 years after the last rebalancing. This appears to be almost stable compared to the level observed in Q1-21, i.e. 12.3 years. At that date, the AGR ABI index consisted of 46.5% of Eurobonds with a residual maturity of between 5 and 12 years, against 47.6% currently.

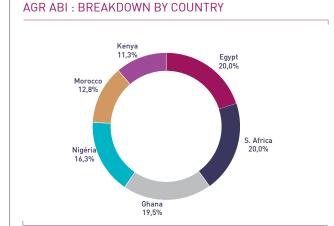


EVOLUTION OF THE RESIDUAL MATURITY (YEARS)



Following the integration of its new bond issue, Ghana entered the top 3 of the most representative countries in terms of outstanding loans. At the top of the ranking, we find Egypt and South Africa, which preserved a high in this benchmark. Indeed, these 3 countries represent nearly 60% of the capitalization while Nigeria, Morocco and Kenya share the remaining 40%.

In terms of issuances' number, among the current 82 constituents of the AGR ABI, the former three countries together account for 58 bond issuances, i.e. nearly 71% of our index.



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AGR ABI : ISIN OF THE 8 MAIN ISSUANCES (1)



(1) Representing 19.2% of AGR ABI

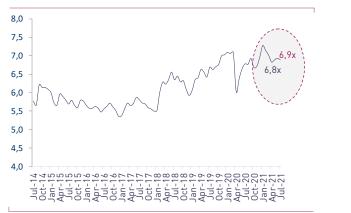
Sources : S&P Dow Jones Indices, AGR Computations

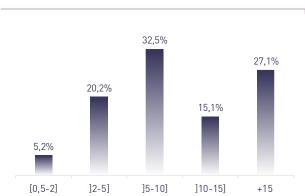
RESULTS' DETAIL FOR Q2-21

The modified duration⁽¹⁾ of the AGR ABI index is characterised by continuity. The change in scope slightly impacted its level. It currently has a multiple of 6.9x against 6.8x a quarter before.

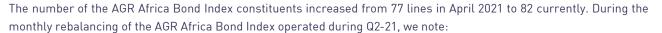
The bond securities eligible for this index can be subdivided into five categories associated with five intervals of residual maturities (0.5-2 years, 2-5 years, 5-10 years, 10-15 years and more than 15 years). In this edition, we note that the AGR ABI index is composed for 75% of residual maturities superior to 5 years.

AGR ABI : EVOLUTION OF THE MODIFIED DURATION





AGR ABI : BREAKDOWN BY MATURITIES^[2] (YEARS)



- The integration of 2 new Eurobond issues: These are, in chronological order, (1) Ghana (four lines for an aggregate amount of more than \$ 3.0 Bn) and (2) Kenya (a single line worth \$ 1.0 Bn);
- The observation of the current index breakdown by S&P's rating shows the strong contribution of bonds rated B and B⁻ rated which concentrate 67% of the AGR ABI index. At the same time, sovereign bonds rated BB- and BB+ represent 20.0% and 13% of the index respectively.

Country	Code ISIN	Description	Weight in the index			
Entrées						
Ghana	XS2325742166	GHGV 04/07/25 MTN	0.61%			
	XS2325747397	GHGV 8.625 04/07/34 MTN	1.54%			
	XS2325747637	GHGV 8.875 05/07/42 MTN	0.75%			
	XS2325748106	GHGV 7.750 04/07/29 MTN	1.51%			
Kenya	XS2354781614	KEGV 6.300 01/23/34	1.44%			

06

ENTRIES AND/OR EXITS OF LINES IN THE AGR ABI

INDEX BREAKDOWN BY S&P'S RATING



(1) Modified duration : expressed in multiple (x), represents the change in the price of a bond following a 1% change in the discount rate. This notion takes into account the lines' weight with respect to their market value.
 (2) Residual maturity

AGR AFRICA BOND INDEX PRESENTATION

As a part of its mission to represent a high profile Research Center based in Africa and dedicated to African markets, Attijari Global Research has launched in March 2019 a new index called **AGR Africa Bond Index** « Code Bloomberg AGRAFBDT ».

Being the intellectual owner of the index, AGR joins forces with S&P Dow Jones Indices, world leader in indices computations and conception.

AGR Africa Bond Index represents a Total Return Index denominated in USD. Its starting universe is sovereign Eurobonds in Africa. In order to get closer to the economic reality across the continent, a series of eligibility criteria have been selected for the filters, particularly in terms of size, liquidity and rating.

This index aims to follow the outstanding amount of sovereign debts issued by African countries and denominated in foreign currencies. It thus allows to:

- \Rightarrow Analyze debt behavior in the Continent ;
- \Rightarrow Track a profitable funding vehicle in full expansion in Africa ;
- ⇒ Present an investment benchmark which could be replicated in respect of investment, size and diversification standards.

Through this new publication, AGR is gradually strengthening its coverage of African markets in a particular context where African economies express a more pronounced appetite for debt issuances, particularly Eurobonds (Cf. « Africa: Eurobonds, an acclaimed tool for an expanding debt » published on March 15th, 2019).

The role of S&P Dow Jones Indices revolves around the index calculation according to international standards and in accordance with criteria defined by AGR. Computed on a daily basis, this index is released on the Bloomberg platform. AGR ensures the edition and the publication of this document on a quarterly basis. This release provides a detailed analysis of the index evolution and its main characteristics.



AGR ABI TECHNICAL SPECIFICATIONS

CHARACTERISTICS

Characteristics :

- Return type : Total Return
- Base date : 30 juin 2014
- Index Currency : US Dollars
- Base Value : 100 pts

METHODOLOGY

- Starting Universe : All African countries to which we apply selection criteria of S&P AFRICA HARD CURRENCY SOVEREIGN BOND INDEX which leads to 13 countries, including :

 Botswana
 Kenya
 Namibia
 Tanzania Zambia
 Egypt
 Mauritius
 Nigeria
 Tunisia
 Ghana
 Morocco
 South Africa
 Uganda.
- Weighting : 20% per country of risk.
- Selection criteria :
 - ⇒ Residual maturity is 6 months meaning that a bond is only added into the index only if its residual maturity is strictly inferior to 6 months and is from the index if its residual maturity is superior or equal to 6 months ;
 - \Rightarrow Only include EUR and USD dominated bonds ;
 - $_{
 m inimum}$ Minimum outstanding amount will be set for \$ 500 Mn for USD bonds and \in 500 Mn for EUR bonds ;
 - ⇒ Only include fixed coupons bonds ;
 - ⇒ Only include bullet/at maturity type ;
 - \Rightarrow Only include bond rating superior or equal to B3/B- per S&P rating ;
 - \Rightarrow Only include 144A* ISIN issues.
- Custom Index Calculation :

Follows « S&P Fixed Income Index Mathematics Methodology » and all S&P standardized calculation approaches, precisely interest payments and principle prepayments are kept in cash until next rebalance date and Bids are used as pricing input for the calculation.

- **Rebalance** : The Custom Index is rebalanced on a Monthly basis after the close of the last business day of the month.
- Rebalance Proforma schedule : T-3 to T, T being the previous trading day of rebalance effective date.
- Selection : S&P will perform the constituent selection and weighting at each rebalance.
- Calculation frequency : End of The Day (EOD).
- Calculation date : Monday to Friday.
- History : since June 30th 2014.

* Reg 144A : regulatory framework of the Securities and Exchange Commission dealing with access conditions of foreign issuers to US financial markets.



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