

EMERGING MARKETS RATINGS

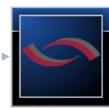
RATINGS IN AFRICA

FUTURE NEEDS AND OPPORTUNITIES

Gummbersbach 13 March 2012

TABLE OF CONTENTS

I. COVERAGE	3
II. VALUE FOR MONEY	18
III. CHALLENGES	22





SECTION I - COVERAGE

RATING SCALES, METHODOLOGIES, LINES OF BUSINESS

Coverage – Rating scales

- Local Currency Vs Foreign Currency: African issuers need to be rated not only using Foreign Currency (FC) rating scales but also using Local Currency (LC) rating scales.
- Objective: the aim is for an African rating agency to accompany the development of a vibrant local and regional bond/fixed income market, and to facilitate the pricing of local/regional bond issuance with a fair, independent and professional measure of credit risk.
- Local Vs regional rating scales: in our view, the proper rating scale is a regional one, not a multitude of local rating scales. Indeed, the African economy is largely regionalized, with often common currencies and monetary unions. Therefore, credit risk should be measured and analyzed using regional benchmarks, not national ones.
- Regional rating scales are more granular: a regional rating scale (from D to AAA in LC) is capped by its FC corresponding value; therefore, it is by definition more granular, and consequently more precise.



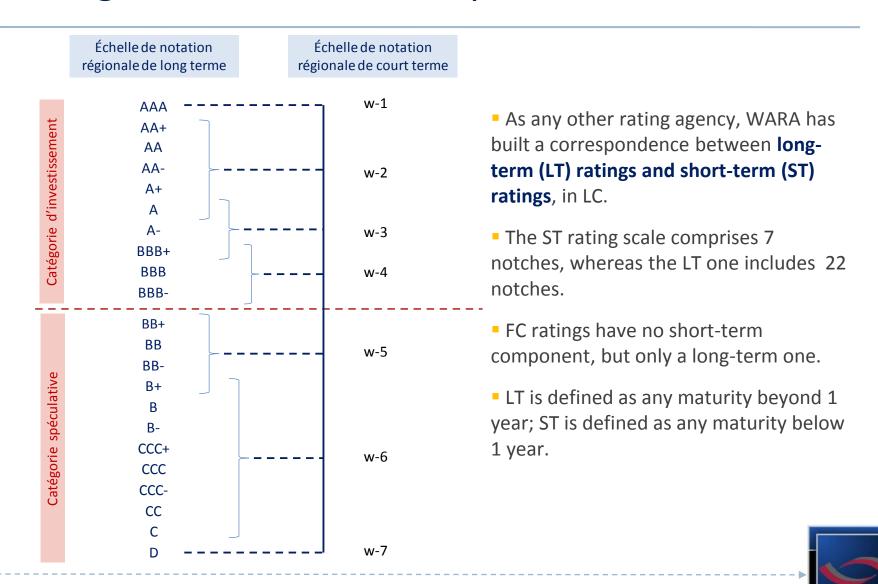
Rating scales – WARA's response

Échelle régionale	Échelle internationale			
AAA	iBBB			
AAA	iBBB-			
AA+	iBB+			
AA+				
AA	iBB			
AA-				
A+	iBB-			
А	IDD-			
A-	iB+			
BBB+	IDT			
ВВВ	iB- iCCC+			
BBB-				
BB+				
ВВ				
BB-	iCCC			
B+				
В	iCCC-			
B-	iccc-			
CCC+	iCC			
CCC	icc			
CCC-	iC			
CC				
С	iD			
D				

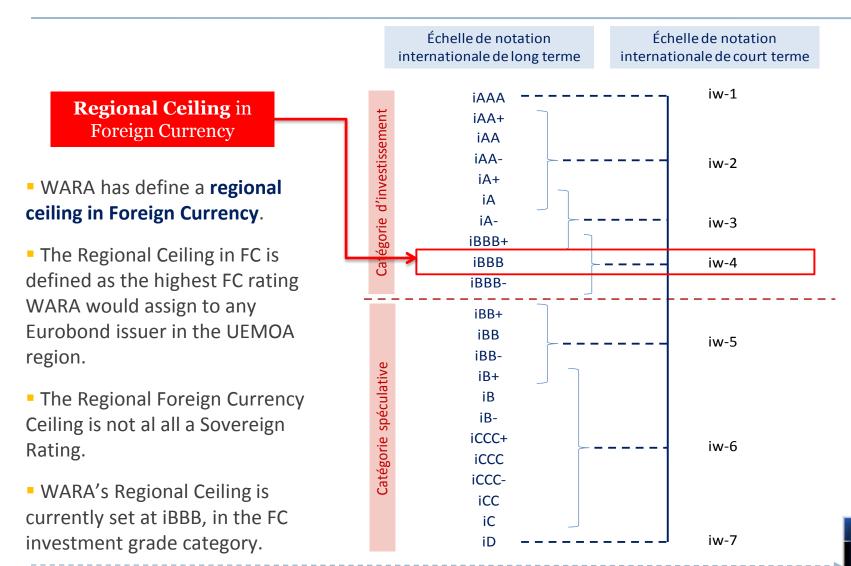
- WARA's rating scale is by construction a regional rating scale. This means that WARA, by default, rates all categories of debt (including of course bonds) issued by counterparts in the UEMOA monetary zone, denominated in regional currency, i.e. the CFA Franc.
- WARA would of course rate all other debts denominated in FC (i.e.
 Eurobonds); in which case, WARA ratings will explicitly refer to its international rating scale, using the letter « i » (e.g.: AA- equiv. to iBB).
- Unsollicited ratings will be identified with the letters « ns. » for « non-sollicited ». E.g.: ns.BBB equiv. to ns.iB-



Rating scales – WARA's response



Rating scales – WARA's response





Coverage – Methodologies

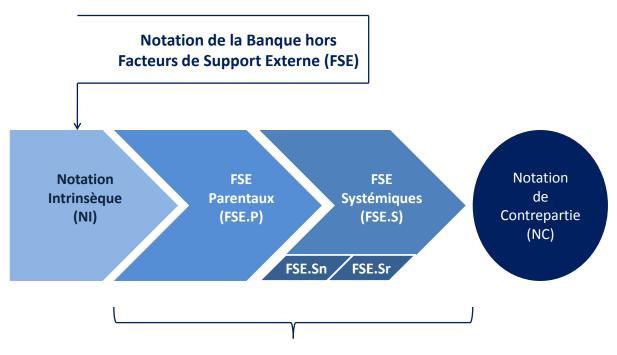
Types de notation	Classes d'émetteurs et d'émissions	Offre de WARA	
	Banques	✓	
	Compagnies d'assurance	✓	
Fondamentale	Entreprises industrielles	✓	
rondamentale	Souverains	✓	
	Collectivités locales	✓	
	Financement de projets		
Financements structurés	Transactions de titrisation		
rindicements structures	Obligations sécurisées	\checkmark	Missing
	Qualité de gestion		
Hors-crédit	Volatilité		
	Performance		
	Liquidité		

- Fundamental Ratings Vs. Structured Finance Ratings: at this stage, what's available in Africa is mainly a series of Funcamental Ratings. Structured Finance Ratings (i.e. those pertaining to securitization transactions) are scarce, if not absent.
- Fund Ratings: this kind of ratings has nothing to do with credit risk assessment, but rather is an opinion on the volatility, performance and/or liquidity of mutual funds.



Methodologies – WARA's response

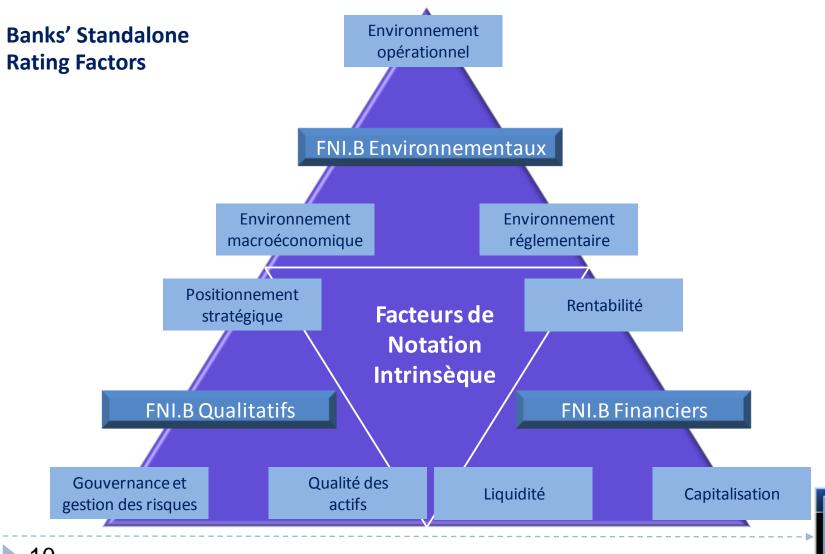
Example: Banks' Ratings Approach at WARA



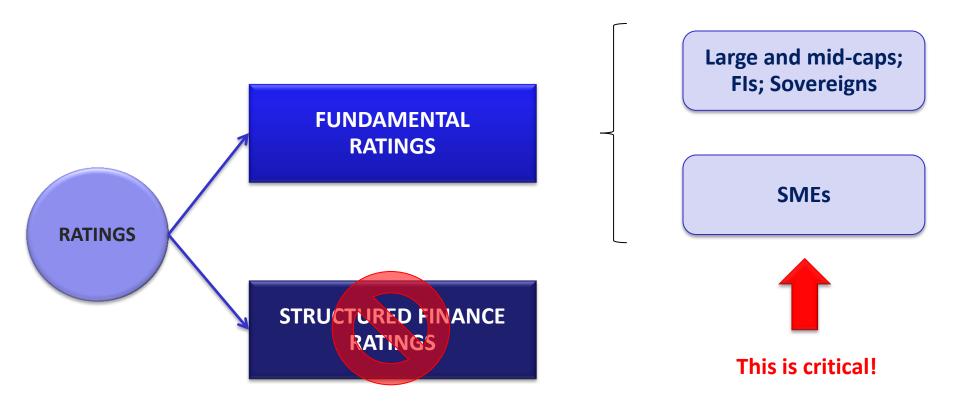




Methodologies – WARA's response

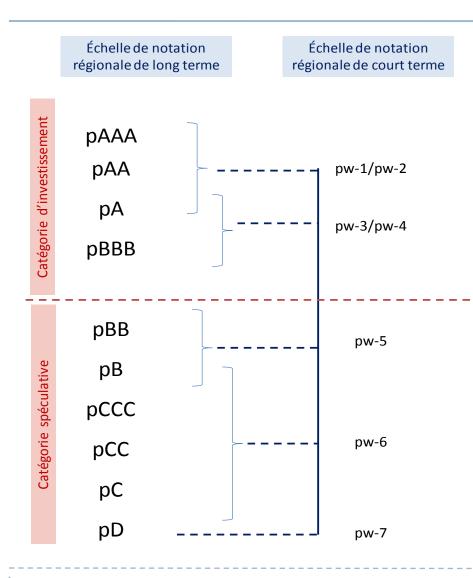


Coverage – Lines of Business





SMEs – WARA's response



- As far as methodology is concerned, SMEs are rated using the same approach as for any other Corporate entity. SMEs are defined as companies with annual turnover of €20 million or less.
- That said, WARA believes that it's difficult, within a given rating category (say « BB ») to clearly distinguish between SMEs rated « BB- » and those rated « BB+ ».
- The amount and quality of financial information provided by rated SMEs are usually weaker, imperfect and characterized by lower reliability.
- Consequently, WARA assigns Category Ratings to SMEs, following the Simplified SME Rating Scale on the left, using the letter « p » to explicitly refer to the SME status of the rated company.
- By definition, WARA's Simplified SME Rating scale is a regional, LC scale.

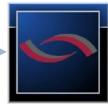
Coverage – Using ratings and guarantees

- Let's assume a **Garantor**, as well as an **Entity** which debt is guaranteed by the Garantor.
- P(G) is the Probability that the Garantor defaults; P(E) is the Probability that the Entity default. In other words, « G » is the event « the Garantor defaults », whereas « E » is the event « the Entity defaults ».
- What's of interest to us, is the investor's risk given the fact there's support « S » from the Garantor to the Entity, which can be formalized as:

$$P(E \text{ and } G \mid S) = (1 - S) \times P(E) + S \times P(E \text{ and } G)$$

■ That said, the event « E and G », i.e. « the Garantor AND the Entity dafault at the same time » depends on the level of Dependence « D » (or Correlation) between the Garantor and the Entity:

$$P(E \text{ and } G) = D \times P(G) + (1 - D) \times P(E) \times P(G)$$



Coverage – Using ratings and guarantees (ctd.)

- P(G): Probability that Garantor defaults
- P(E): Probability that the Entity defaults
- S: Support (as a %) provided by the Garantor to the Entity
- P(E and G): Probability that the Garantor AND the Entity default simultaneously
- D: Dependence Rate (as a %) between the Garantor and the Entity

P(E and G | S) =
$$(1 - S) \times P(E) + S \times [D \times P(G) + (1 - D) \times P(E) \times P(G)]$$



Ratings and guarantees – Example

		RATING	PD	
		AAA	0.00%	P(E) = 18.13%
		AA+	0.02%	P(G) = 0.35%
		AA	0.05%	1 (3) = 0.3370
		AA-	0.10%	S = 50%
		A+	0.19%	D 000/
Garantor		А	0.35%	D = 80%
		A-	0.54%	$P(E \text{ and } G) = D \times P(G) + (1 - D) \times P(E) \times P(G)$
		BBB+	0.83%	
		BBB	1.20%	$= 0.8 \times 0.35\% + 0.2 \times 18.13\% \times 0.35\%$
		BBB-	2.38%	= 0.29%
		BB+	4.20%	0.2370
		ВВ	6.80%	$P(E \text{ et } G \mid S) = (1 - S) \times P(E) + S \times P(E \text{ et } G)$
		BB-	9.79%	= 0.5 x 18.13% + 0.5 x 0.29%
		B+	13.85%	- 0.3 x 18.13% + 0.3 x 0.29%
Entity		В	18.13%	= 9.21%
		B-	24.04%	
		CCC+	32.86%	Which corresponds to a « BB- » rating.
		ССС	43.88%	To reach BBB-, an 85% guarantee must be provided
		CCC-	66.24%	and the provided



Ratings and guarantees – Example

If **D= 1**,
$$P(E \text{ and } G \mid S) = (1 - S) \times P(E) + S \times D \times P(G) = (1 - S) \times P(E) + S \times P(G)$$

Given P(E) and P(G), what amount of support S is needed to reach investment grade, i.e. P(E and G \mid S)=2.38% (equiv. to a BBB-)?

The following table provides the answer:

P(G)

D=1	BBB-	BBB	BBB+	A-	Α	A+	AA-	AA	AA+	AAA
BB+	51%	31%	27%	25%	24%	23%	23%	22%	22%	22%
BB	80%	63%	59%	56%	55%	54%	53%	52%	52%	52%
BB-	88%	76%	73%	71%	69%	68%	68%	67%	67%	67%
B+	93%	84%	82%	80%	79%	78%	77%	77%	77%	77%
В	95%	88%	86%	85%	84%	83%	83%	83%	82%	82%
B-	96%	91%	90%	89%	88%	87%	87%	87%	87%	87%
CCC+	97%	94%	93%	92%	91%	91%	91%	91%	91%	90%
CCC	98%	96%	95%	94%	94%	93%	93%	93%	93%	93%
CCC-	99%	97%	97%	96%	96%	96%	96%	96%	96%	96%





Ratings and guarantees – Example

If **D= 0.2**,
$$P(E \text{ et } G \mid S) = (1 - S) \times P(E) + S \times [0.2 \times P(G) + 0.8 \times P(E) \times P(G)]$$

Given P(E) and P(G), what amount of support S is needed to reach investment grade, i.e. P(E and G \mid S)=2.38% (equiv. to a BBB-)?

The following table provides the answer:

P(G)

D=0.2	BBB-	BBB	BBB+	A-	Α	A+	AA-	AA	AA+	AAA
BB+	25%	24%	23%	23%	22%	22%	22%	22%	22%	22%
ВВ	57%	55%	54%	53%	53%	52%	52%	52%	52%	52%
BB-	72%	69%	68%	68%	68%	67%	67%	67%	67%	67%
B+	81%	79%	78%	78%	77%	77%	77%	77%	77%	77%
В	86%	84%	84%	83%	83%	83%	82%	82%	82%	82%
B-	90%	89%	88%	88%	87%	87%	87%	87%	87%	87%
CCC+	94%	92%	92%	91%	91%	91%	91%	91%	90%	90%
CCC	96%	94%	94%	94%	93%	93%	93%	93%	93%	93%
CCC-	98%	97%	96%	96%	96%	96%	96%	96%	96%	96%







SECTION II – VALUE FOR MONEY

WHAT'S THERE FOR ISSUERS AND INVESTORS?

Proximity and Specialization

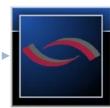
- The major difference between us and Global Rating Agencies is that we are CLOSE to both regional issuers and regional investors
- We sit ON THE GROUND.
- We are REGULATED ON A REGIONAL BASIS.
- As SPECIALISTS, we know and understand our regional markets, their peculiarities, specific features and key characteristics.
- In a nutshell, WE SPEAK THE REGION'S LANGUAGE.
- Being regionally based (Dakar + Abidjan), WE CAN CURB COSTS.
- Consequently, our ratings will be far LESS EXPENSIVE than those of global credit rating firms, with a level of QUALITY and DELIVERY that would be COMPETITIVE.
- Our actions will be TIMELY thanks to PROXIMITY.



What's expected from a rating agency anyway?

As any other **REGULATED** rating agency, our features are:

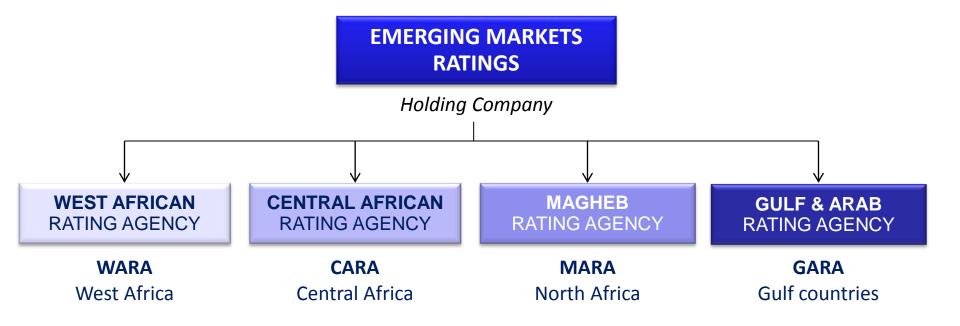
	INDEPENDENCE	\checkmark
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Comparability

Geographic expansion will, at a point in time, be expected, beyond one single region.

WARA has a strategy for **expanding geographic coverage**...







SECTION III – CHALLENGES

HOW CAN RATING AGENCIES HELP... BEYOND RATINGS?

Ratings & Banking Regulation

- Ratings have received the blessing of global regulators.
- Indeed the Basel II and Basel III Capital Accords use ratings for the computation of regulatory capital charges for Credit Risk, using an Asymptotic Single-Factor Value-at-Risk Model (Merton, 74) where the single factor is the Probability of Default (PD) approximated by internal or external ratings.
- **Basel II and III will be implemented across African countries**, thus the necessity to "industrialize" the use of external/internal ratings by banks.
- Rating agencies can help produce such ratings and/or accompany banks in developing their own internal ratings. Obviously, when it comes to advisory services, this LoB should be kept strictly segregated from the tradition credit rating business.
- For importing and exporting African companies, ratings are useful for counterparts to assess relative credit risk in Africa and **better price trade finance transactions**. As Africa increasingly opens up to global trade, this service carries tremendous value.
- This is the reason why rating assignments may be sponsored and/or subsidized, in the early days, by multilateral development institutions, provided the rating agency is properly regulated domestically.

Helping credit bureaus & securitization emerge

- Rating agencies understand and master credit risk assessment and measurement.
- This unique competence can be made available to **National Credit Bureaus**, which mandate is to collect information about credit events (i.e. defaults) across the banking system and the financial sector at large.
- Credit bureaus are essential for collecting default statistics across a wider range of counterparties: they are very useful to rating agencies; conversely, rating agencies can make their methodologies and techniques available to credit bureaus.
 Cooperation between these two groups of stakeholders is a win-win situation.
- Credit data are the row material for **securitization**. This is probably the most powerful financial innovation of the past 30 years. Securitization is: i) a funding tool; ii) a risk management tool; iii) a means to liquefy illiquid asset classes (i.e. credit exposures). Without proper credit event statistics, proper use of securitization is simply impossible. Securitization and ratings go hand in hand.
- This is a prerequisite for the development of an active and vibrant desintermediated fixed-income market to capture savings outside the banking system.



Beyond all technical benefits, insufflating a credit culture

Regional Credit Rating Agencies will ultimately contribute to:

- Improve issuers' and counterpart's financial transparency;
- Regionally accommodate best practices in terms of financial communication;
- Incrementally address persistent issues as far as credit disclosure is concerned;
- Improve the quality and reach of independent credit, sectoral and economic research;
- improve the quality and availability of financial analysis across a wider range of companies;
- develop a more liquid and better priced bond market on the Continent.

This is all about insufflating a more robust CREDIT CULTURE at the end of the day.



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