



Contents lists available at ScienceDirect

# Research in International Business and Finance

journal homepage: [www.elsevier.com/locate/ribaf](http://www.elsevier.com/locate/ribaf)

## The fixed income securities market in the West African Economic and Monetary zone: Are credit spread abnormally low?

Mohamed Lamine Mbengue<sup>a,\*</sup>, Eric Paget-Blanc<sup>b</sup><sup>a</sup> Université Gaston Berger de Saint-Louis, Senegal<sup>b</sup> Université d'Evry – Val d'Essonne, France

### 1. Introduction

In 2011, the State of Côte D'Ivoire, after defaulting on its international bond, has been unable to honour on time the service of the treasury bills (T-Bills) it had issued on the regional debt market. Strangely, the substantial political risk of Côte d'Ivoire, which went through a civil war in 2010 and 2011, was not reflected in the credit spread of its T-Bills, which offered a rate of 5.64% in December 2010, only slightly higher than that of other West African Economic Monetary Union (WAEMU) states. The case of Côte d'Ivoire illustrates the inefficiency of the fixed income market in WAEMU, characterised by abnormally low pricing of risk.

This paper aims at providing evidence of the abnormally low level of bond spreads in the WAEMU debt market, and proposing explanations for the mispricing of risk in this region. This will first necessitate a presentation of the fixed income market in the WAEMU, in which we will attempt to identify its key features, and understand what makes it different from markets in developed countries. The yields of the bonds traded in the WAEMU bond market will then be analysed, with the objective of measuring observed spreads in light of the credit risk of the issuers. We will then identify the link between spreads and credit risk and compare it with the relation which can be observed between spreads and credit ratings on international financial markets.

We will finally attempt to provide explanation for the mispricing of risk on the local WAEMU market. Our hypothesis is that the over-liquidity of the banking sector creates a large demand for government securities, which is not satisfied by the actual level of corporate and government fixed income issues; this disequilibrium in turn generates a downward pressure on bond yields, and hence on credit spreads.

### 2. The fixed income securities market in WAEMU

The WAEMU is a monetary zone with a common currency comprising eight countries: Benin, Burkina Faso, Cote d'Ivoire, guinea Bissau, Mali, Niger, Senegal, and Togo. In 1998, the authorities have encouraged the creation of a local financial market the “Bourse Régionale des Valeurs Mobilières” (BRVM) based in Abidjan (Côte d'Ivoire), with an architecture similar to markets of developed countries. The authorities of the Union initiated the creation of the agency WAMU securities. The purpose of the agency is to assist governments in the mobilisation in the capital markets of resources to finance their economic development policies at controlled costs. (Banque de France, 2013).

The growth in public debt issuance in the WAEMU accelerated in the early 2000s. A very dynamic segment of the financial sector in recent years has been the government securities market. According to the IMF report, “the amount of annual securities issuances increased almost 60 times in nominal value since 2011 (Table 1).

However, the financial markets in WAEMU remain underdeveloped compared to many other Anglo-Saxon countries.

It thus appeared, in WAEMU, that the implementation of a public debt market securities had become a necessity. The WAEMU followed this route in 2001, when the WAEMU Council of Ministers introduced the system of issuance of T-Bills through auctions at

\* Corresponding author..

E-mail addresses: [laminemb@gmail.com](mailto:laminemb@gmail.com) (M.L. Mbengue), [epagetblanc@yahoo.fr](mailto:epagetblanc@yahoo.fr) (E. Paget-Blanc).

**Table 1**  
WAEMU: issuances of Government Securities 2010–15 (in Billions of FCFA).

	2010	2011	2012	2013	2014	2015
T-bills	1946	881	1052	1412	1336	1127
Bonds	250	809	583	861	1129	2177
Total	2196	1690	1635	2272	2465	3304

Source: BCEAO (2015).

the central bank to promote a regional securities market, and decided to gradually phase out statutory advances from BCEAO to the states with the objective of totally eliminating them in 2010.

Hence, the debt securities market in WAEMU comprises two separate markets operating independently. The Treasury bills and bond market, issued via auctions and managed by the BCEAO, and the bonds listed on the BRVM and regulated by the CREPMF, issued via syndication.

The WAEMU T-Bills market is also characterised by the strong concentration of issuers, in 2016 (IMF, 2016) on the buyers' side, financial institutions in Côte d'Ivoire, Senegal, Burkina Faso and Mali bought 75% of the securities. The secondary market remains quasi inexistent and foreign participation marginal. As stated in the IMF report (2016), lack of appetite from investors may be explained by relatively low volumes, lack of country and maturity differentiation and a flat yield curve. The market managed by BRVM includes public offering and private placement issuances. Its progression has been less rapid than the BCEAO run Treasury bills and bond market.

### 3. The fixed income market inefficiencies

Low liquidity is another feature of the secondary debt market in the region: the quasi totality of securities purchased by investors are held to maturity. Due to the absence of transactions, no price can be quoted. Besides, securities are generally offered at par. Hence, the yield of securities is equal to the coupon rate, and this rate does not change during the life of the bond. This is a feature often encountered in poor countries, where capital markets are at an early stage of development.

On international debt markets, bond spreads are representative of the credit risk to which the holder of the bond is exposed, and that can be measured by the credit rating of the issuer. In fact, it has been demonstrated that bond spreads include a credit risk component, equal to the expected loss on the bond, plus a risk premium, representative of unexpected loss (Remonola, Scatigna and Wu, 2007).

The relationship between bond spreads and the credit rating is easily observable and has been demonstrated by a number of empirical studies (Munves and Hamilton, 2011; Jaramillo and Tejada, 2011). The relationship between spreads and ratings also applies to sovereign bonds issued by emerging countries. A study from Jaramillo and Tejada (2011) clearly established a link between spreads on emerging countries' sovereign bonds and the rating assigned by the three major credit rating agencies. Their findings are summarised in the graph below, which shows the average spreads obtained by sovereign issuers on international bond issues for ratings ranging from A to CCC (Fig. 1).

To make pertinent comparisons between yields on international and local issues, spreads on local bonds have to be obtained; for that, a local benchmark issuer needs to be identified first. Two highly rated international financial institutions launched issues on the WAEMU debt market with a view of establishing a benchmark: the International Finance Corporation (IFC) cent) and the "Agence Française de développement". These two institutions are rated AAA.

The study covers all fixed income instruments issued in the WAEMU, i.e. corporates and sovereign bonds, issued between 1999 and 2015. The spreads were obtained by the difference between coupon rates of bonds and the interest rates of the two benchmark issuers on the local market, IFC and AFD.

The two benchmark issues cover only two maturities: 2011 for the IFC bond and 2016 for the AFD bond. This considerably limits the number of bonds for which spreads can be computed.

To avoid biases associated with differing maturities, we had to limit the population of bonds observed in this study to those which had the same maturity as either the IFC Benchmark (2011) or the AFD Benchmark (2016). However, as the maturity–spread

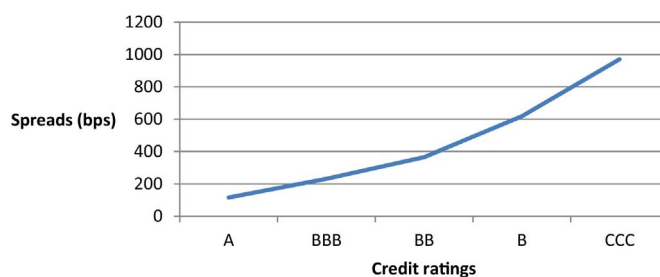


Fig. 1. Emerging sovereign spreads and ratings.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات