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The Analysis Of The Bond Market In Rwanda (Case Study: Rwanda Stock Exchange-RSE)

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Abstract:
The study was about analysis of bond market performance in Rwanda. It dealt with the period of six months from October 2012 to February 2013. The bonds floated on the Rwanda stock exchange are both treasury bonds and corporate bonds. For the four treasury bonds issued in 2010 and 2011, it is only RW000A1GQRQ1 issued in 2010 that has generate sales of 99, 900,000 RWF and non for BCR corporate bond. This could be attributed to terms on YTM, coupon rates, and the maturity period for the bonds. The bond market is still poor in Rwanda and not attractive.

Key words: Yield to maturity (YTM), floatation, issue, coupon rate, and bond market

List Of Abbreviations

- YTM-Yield to maturity
- BNR-National bank of Rwanda
- BCR-Commercial bank of Rwanda
- RSE-Rwanda stock exchange
- MINICOFIN-Ministry of finance and economic planning
- CMAC-Capital markets advisory council

1.Introduction

The bond market in Rwanda has been undergoing evolution and it is managed and regulated by the capital markets authority of Rwanda established by Act of parliament (RSE, 2012 and Murgatroyd et al, 2007). The bond market in Rwanda has been developed and supported by the government of Rwanda to provide long term financing in Rwanda. The bonds are projected to yield between 20-40 percent of the entire debt (Murgatroyd et al, 2007). The problem however is that even when the bond market has been opened in Rwanda and issuance being done through the Rwanda stock exchange (RSE), the yield seems to be still low to the satisfaction of the borrowers (RSE, 2012). This calls for a need to find ways of how this equity market can be improved to the benefit of the economic growth of the country as argued by Fink, et al (2003).

2.Review Of Literature

This section looks at past academic studies on the bond market and its importance on realizing economic growth. The study by Edwards et al (2005) reveals that a well functioning bond market is vital in improving liquidity of a market. It is crucial that transactional costs are kept at a minimum not to make it very difficult for firms and other institutions intending to issue bonds as also argued by Bloomfield and O'Hara (1999). This study aims to build on the rationale of a well developed bond market in providing long term financing in Rwanda and assess how it how performed in Rwanda. ECB (2001) argues that the success of securities in an economy depends on its level of economic development as it was argued that securities are less adopted in some European countries as opposed to the United states where there are very predominant. It can be appreciated that financial securities like bonds do produce good yield especially if issued by reputable companies or the government though this is always not the case. According to RSE (2012), it is only the government of Rwanda through BNR and BCR that have managed to issue bonds on the Rwanda stock exchange and the market reception has not been good and the yields have remained unchanged for quite a long time (RSE, 2012).

Neaime and Paschakis (2002) in their survey found out that bonds are very attractive source of financing depending on the conditions attached to the financial instrument. The integration of the capital market is very crucial since the market will have expanded for instance Fink and Fenz (2002) contend that with the European markets integration, most firms are able to issue bonds and they are able to generate the required funding and this has also been facilitated by the use of a euro single currency. This research builds on these findings to advise accordingly on improving bond market returns and how the market integration for example through east African community and use of a sing currency can help improve returns from bond issuance by corporations in Rwanda.

Bond markets have proven to be a very good source of long term financing in countries such as the US especially for domestic firms financing especially when it faced the financial crisis resulting from Latin American debt crisis of 1980 and the 1990 real estate crisis (Jiang et al, 2001). In Hong Kong according to World Bank and IMF (2001) shows that most of funds are got through banks and equities. The bond market can only function well if there is macroeconomic stability and investors then can develop confidence to start investing in the bonds as argued by Jiang et al, (2001), and McGee (1998). The point here is that developing countries like Rwanda need to tighten their macroeconomic policies and educate investors on the advantages of investing in bonds as in most cases they tend to provide stable yields for the investors. There is great deal to find out why investors in Rwanda are not particularly so much investing in bonds as evidenced on the bonds that have been issued on the Rwanda stock exchange so far by the government and BCR and the deals (sales) have remained unchanged at 99,900,000 RWF for the government treasury bonds since according to RSE (2012). This bond is a three year bond issued in 2010 and matures in 2013. The corporate bond issued by BCR has been silent and has not attracted sales. This bond matures in the year 2018 and it pays a coupon rate of 1%. Here the challenge is not only on the investors in Rwanda but also it seems like corporations are not willing to issue bonds. This research has to find out the myth behind the performance of bond market in Rwanda.

3.Importance Of The Study

Rwanda is a country that has shown tremendous growth since 1994 to date. The country's economy has been growing and the financial sector particularly has been resilient to volatilities and other external shocks (MINICOFIN, 2012). The continued growth of an economy depends on investments leading to industrialization. This can be achieved if there is liquidity in the market to provide short and long term capital (BNR, 2007). The banking sector is doing well though they are not able to provide enough funds that may be needed by corporations for new projects or normal refinancing. Capital markets are a good source of financing for businesses. The government of Rwanda has created the CMAC and Rwanda stock exchange for this function. The statistics from RSE shows that the equities are doing well whereas the bonds are not doing well (RSE, 2012). This research is instrumental in analyzing why this sector is not doing well. Also appropriate advice will be given according based on the findings.

4.Statement Of The Problem

The bonds issued on the Rwanda stock exchange seems to be very few and it also seems like the lack of interest is with issuers and investors. The preliminary findings show that only one corporate firm has issued a bond on the RSE in addition to the bonds issued by the government through BNR (RSE, 2012). There seems to be some researchable issues as to why there is no appetite for bonds by investors in Rwanda. This research explores all the possible causes for this trend and how the market has been functioning overtime.

4.1.Objectives

- Assess the performance of the bond market in Rwanda
- Advise how the bond market performance can be improved in Rwanda

4.2.Hypotheses

- The bond market in Rwanda performs badly because of lack interest by investors caused by unattractive yields offered by listed financial instruments.
- The bonds listed on the Rwanda stock exchange offer returns after a long period of time and thus investors may not want to tie their funds for a long period of time.

5.Research Methodology

The methodology for this study was designed in way that would ensure reliable information is attained based on the hypotheses set. A quantitative and qualitative approached were adopted for this study. As argued by McMillan and Schumacher (1993), triangulation is very effective in finding reliable findings about the study problems. The study about performance of bond market in Rwanda looked at the performance of two institutions that have bond instruments listed on the Rwanda stock exchange. These institutions are; the Government of Rwanda that has had treasury bonds issued on the RSE, and the corporate bond issued by BCR. The period considered for this study stretched for six months from October 2012 to February 2013. This period was considered because all the bonds were issued in the years 2010 and 2011 and it was crucial to observe their performance in the market stretching for the period mentioned. This allowed it time to get to the market such that analysis can be done after at least a year's period of floatation on the capital market in Rwanda.

The instruments used in the study are the observation and review of daily bond trading reports issued by Rwanda stock exchange. The observation of the bond market performance was done from October 1, 2012 to February 28, 2013. Daily stock market reports were also reviewed for a period of six months. These research instruments were chosen due to their reliability in collection of data needed for the hypotheses set for this research study. Westbrook (1994) supports my take on this that these instruments as mentioned for this study can be effective in generating reliable findings.

Tabulation has been used to set research findings and thereafter explanation of tables has been made to ensure clarity of findings. All the information about the instruments was presented in the table about especially all the figures obtained from the study. It was very crucial to ensure that research findings are reliable and can be generalized. Therefore, great care was taken to ensure that the research captures correct information from the bond daily trading in Rwanda. It is vital to ensure that correct information is used in research (Woken, n.d). This increases its reliability and dependability. The study results were however looked at on monthly basis in the tabulation. This helped in the analysis especially in terms of recording realizations made monthly for the six months period of bond trading.

Reliability and validity of study findings is important and this study provided evidence for this. The market performance was observed for a relatively adequate period of six months. The daily trading reports were official reports issued by Rwanda stock exchange. Clearly the research ensured that the observation and review of the documents were done meticulously to ensure that there was no vagueness in the findings. Creswell & Miller (2000) and Mathison (1998) contend that provided, the right study is being done with the right study instruments and sources of information, it is most likely that the study findings would be valid and reliable.

6.Results And Discussion

This section looks at the research results about the bond market performance for the period under consideration of six months from October 2012 – February 2012. It looks at generally the bond market from the perspective as set in the study objectives and the set hypotheses. A general situation of the bond market in Rwanda has been given and assessing whether or not the bonds listed on the Rwanda stock market offer the best or bad yields that would attract the attention of the local and international investors.

7.Bond Market In Rwanda

The findings from the study shows that the bond market of Rwanda is young and could have the potential of growth as investors develop the confidence in these long term debt securities issued by government and corporations. It was clear from this research that only two institutions have issued and floated their bonds on the Rwanda stock exchange. These institutions are the government of the republic of Rwanda through its central bank (BNR) and commercial bank of Rwanda (BCR). They all have maturity periods ranging from 3-6 years according to (RSE, 2013). Tables 1 and two show clearly the status of the bonds realization since they were listed.

7.1.Observation Of Bond Market Performance Since October 2012-Febuary 2013

This study concentrated on this period since it is when there was most trading activity on the Rwanda stock exchange and although these bonds were floated in the years 2010 and 2011, it was vital to give them time and then assess their performance thereafter some time. This is a reason as to why this period was chosen and reliable information has been generated from the study.

The treasury bonds that have been floated by government to get long term financing shows that they are four, where two code named RW000A1GQRQ1 issued in 2010 with the maturity of 3 years and paying a fixed coupon rate of 9.75 percent is the one that was able to sale and generate 99, 900,000 RWF and this has been a static status since October 2012-February 2013. Bond RW000A1GQRS7 floated in 2010 with a maturity of 5 years and a fixed coupon rate of 11 raised no sales for the whole study period under consideration for this research. In the year 2011, the government still issued treasury bonds named code named RW000A1GWE23 with five years maturity and YTM of 11.15 percent, RW000A1GQRP3 with three years maturity period and YTM of 10.425 percent. These bonds have attracted no offers and zero sales since they were listed on the stock market of Rwanda. These findings leads one to believe that, the Rwanda bond market is generally weak and really performing very poorly and the reasons could be that investors in Rwanda could be lacking confidence to commit their funds for a long time in such instruments and secondly, the instruments are not offering attractive coupon rates and YTM and one could also argue that generally have no enough money to invest in securities and again, there could also be an argument that investors are not well educated on the benefits of investing in bonds.

ISIN - CODE	**Security**	**Maturity**	**Coupon Rate**	**Clos. Price 12/10/2011**	**YTM**	**Prev. Price**	**Bid**	**Offer(Ask)**	**Sales(Rwf)**
RW000A1GWE23	FXD2/2011/5yr	30/09/2016	11.25 fixed	100.317	11.15	-	99.53	-	-
RW000A1GQRP3	FXD1/2011/3yr	21/02/2014	10.5 fixed	100.129	10.425	-	-	-	-
RW000A1GQRQ1	FXD2/2010/3yr	25/04/2013	9.75 fixed	99.7	10	-	-	-	99, 900,000
RW000A1GQRS7	FXD4/2010/5yr	19/11/2015	11 fixed	99.53	11.13	99.545	-	-	-

Table 1: Treasury Bonds – Bonds issued by the Government
Source: Rwanda stock exchange, 2013

ISIN – CODE	**Bond**	**Rate (TB)**	**Maturity**	**Closing Price**	**Prev. Price**	**Bid**	**Offer**	**Sales(Rwf)**
RW000A1GQRL2	**BCR**	FXD1/2010+1%	25/01/2018	102.25	102.25	-	100.5	-

Table 2: Corporate Bond issued by BCR
Source: Rwanda stock exchange, 2013

The table above shows that, there is only one corporation in Rwanda that has bonds floated on the Rwanda stock exchange. This organization is commercial bank of Rwanda. It issued a bond code named RW000A1GQRL2 in the year 2010 with a maturity period of 8 years, with no coupon rate and YTM stated clearly for the investor's information, and it has since floatation of this bond realized no sales and this is a bad sign that probably investors lack confidence in the organization and it could also be that lack of complete information could deter investors from making offers and finally make a sale and buy deal. This observation is based on the study period of six months from October 2012.

8.Bonds And Their Yields To Maturity

This section looks at the relationship between the bonds issued with their associated terms and what has actually been realized over the study period of six months under consideration. An analysis has been made on what can be done to improve the performance of the Rwanda bond market especially the yields from the floated instruments. This has been done looking at month by month performance.

ISIN -CODE	October - 2012. Sales	November-2012. Sales	December-2012. Sales	January-2013. Sales	February-2013. Sales
RW000A1GWE23	-	-	-	-	-
RW000A1GQRP3	-	-	-	-	-
RW000A1GQRQ1	99, 900,000 RWF	99, 900,000 RWF	99, 900,000 RWF	99, 900,000 RWF	99, 900,000 RWF
RW000A1GQRS7	-	-	-	-	-

Table 3: Treasury Bonds bond sales from October 2012-February 2013
Source: Researcher

Table 3 above shows that, only government Treasury bond RW000A1GQRQ1 has been able generate some long term capital requirement for the government. The rest of the bonds as in the table have generated no sales for the six months as mentioned in table 3 above. The dilemma could be that even the 99, 900,000 RWF generated may not be near to the funds that the government could be expecting from the floatation. If the YTM rates are put up a bit, this would potentially attract a lot of potential investors. They are at the moment low as shown in table 1. The bond maturity periods need to be made short and with improved YTM rates; this would improve the bond sales situation on the capital market in Rwanda.

ISIN -CODE	October - offers	November-offers	December-offers	January-offers	February-offers
RW000A1GQRL2	100.5 RWF	100.5 RWF	100.5 RWF	100.5 RWF	100.5 RWF

Table 4: Corporate Bonds sales from October 2012-February
Source: Researcher

As regards corporate bonds as in table 4, it is not encouraging to see, that out of the whole number of corporations in Rwanda, it is only one that floated its bonds on the market. This organization is called BCR and once still is that under the period of this study, it has recorded no deals and what have been seen are only offers of 100.5 RWF. The information provided in the daily trading reports from the Rwanda stock exchange gives no details about the coupon rate and YTM. These are crucial pieces of information needed by investors. Bond RW000A1GQRL2 has a maturity period of 8 years and the other information about this BCR instrument is Rate (TB) of FXD1/2010+1%, this kind of information is not good enough for the investors to make investment decisions.

9.Analysis Of Findings

Research results revealed poor performance of the bond market in Rwanda. Rwanda is growing and its continued growth will depend on the development of its capital market. Investors in most cases, they need assurance that they can get their financing needs locally because, it is a cost effective option. The Zero sales from the BCR bond since its issue on the stock market is not a good manifestation on the investing public. The public ought to realize that investing in bonds is safe and more so corporations and government could start issuing bonds that pay coupons semi-annually such that investors are not seen to be tying their investments for a long period of time. This could trigger some appetite from the undecided investors. As regards the yields and the bond maturity periods, these should be made attractive for the investors especially the YTM. Investors like high yielding investments and this is what the bonds should be able to offer. This is the home work that organizations intending to issue bonds in Rwanda should do well and vigorously. It could be argued that, the longer the maturity period, the more unattractive the financial instruments become and this could be manifested with the BCR bond in table 2. The performance of this market would depend on how survey the investors are in the country. Investment attitude in bonds in the country could change with improved education from the capital markets advisory council of Rwanda, and Rwanda stock exchange and its partners.

10.CONCLUSION

Rwanda capital market has seen tremendous growth with some companies cross listing on the Rwanda stock exchange (RSE, 2012). The bond market remains under developed and a lot of resources need to be invested by RSE to educate the investing public about bonds and their potential as a long term financial instruments for both the borrowing and the lending public. This needs to come with concerted efforts from all the partners in the capital market.

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