



BOTSWANA BOND MARKET DEVELOPMENT

STRATEGY PAPER¹

¹ The inputs to this strategy paper were collected in 2010 and 2011.

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1. Introduction

The Bond Market Association Steering Committee, comprising Botswana Stock Exchange (BSE) and market participants, was formed in 2010 to draft a strategy for the development of the bond market in Botswana and to establish an association for the bond market participants. The association was formally registered in September 2013 with the Registrar of Societies in Botswana as the Botswana Bond Market Association (BBMA). The Association is guided by a Constitution and its key mandate is to resolve structural issues impeding bond market development in Botswana.

In its formative year, the Steering Committee and the BSE solicited contributions from market participants and stakeholders with regards to the issues facing the development of the domestic bond market, and the recommendations thereto.

The purpose of this paper is to summarise the identified issues and recommendations. While the issues herein identified contain their implicit prescriptions of solutions, we believe that their ultimate solutions can be achieved with a collective effort of different stakeholders (including Government and regulatory authorities). As such, each stakeholder is challenged to play their role in order to develop the bond market. The issues are enumerated below.

2. Need to build a robust yield curve

2.1 Government bond curve

The risk-free yield curve (Government bond yield curve) is the building block of the domestic bond market (see Appendix 1 for benefits of having the yield curve). Notwithstanding the progress made since the first issuance of Government bonds in the early 2000s, we believe that there is more scope to further develop a robust risk-free yield curve. Having more tenors and issuance across different maturity points will allow help the market derive a more useful yield curve and facilitate the pricing of other products such as corporate bonds. The risk-free yield curve currently has some wide gaps therefore there is need to consider issuing 2years, 3years, 5years, 7years, 10years, 15years bonds, 20years and beyond. Further, it is ideal that such issuances across key points be maintained and be recurring.

2.2 Introduction of benchmark bond

The introduction of a long dated (20years, 25years or 30years) benchmark bond is welcome and will be instrumental in matching long dated liabilities of pension and insurance assets.

3. Frequency of Government bonds and T-bill issuance

3.1 Move away from the 6 monthly auctions

Introduce regular issuance of Treasury Bills of 3Months, 6Months, 9Months and 1Year T-bill, which are open to all financial institutions and corporates. Regular auctions would increase liquidity and interest. It also encourages PDs and other market participants to designate specialists to bond markets.

The market is used to Bank of Botswana coming to market at these intervals, and goes to sleep in the interim periods. The only real activity that happens in the Botswana bond market is around auction times.

A move from the 6-month frequency to 3 months for the T-bill and Government bonds will inject more liquidity into the market. It will also help the market to better manage risk, which has exposure limits to banks and interval of six months allows sometimes unnecessary counterparty concentration. Frequency of issuance allows price discovery, confirmation and formation. More frequency may somewhat deal with some of the buy and hold syndromes in the market. Introduction of a 3 month T-Bill with continuous issuance will establish a benchmark rate that can be used in establishment of a derivative market.

3.2 Plan to replace BoBCs with Treasury Bills

Implement an immediate plan to replace outstanding BoBCs with treasury bills. The co-existence of budget deficit and (excess) liquidity in the market is an opportunity for both Government and the central bank to issue more Government securities, decrease the amount of BoBCs, develop the market and decrease the extent of the segmentation of the market.

4. Liquidity of the bond market/pricing Issues/rating of bond issues

The liquidity of the corporate bond market is low. There are pricing issues, which sometimes are due to the terms and conditions of the bonds.

4.1 Inadequate bond documentation

The bond placing documents are not easily available (in one source) and the books closed dates are not advertised – these dates are crucial for pricing in the ex-interest period. Some of the terms and conditions have no clear defined books closing periods, therefore pricing the bonds without knowing those present risks to investors. The book closing period is not uniform: some issues have one month while Government bonds have 10-day book close period. To price and trade them in the market, one must be aware of them.

4.2 Lack of bond rating

None of the bonds issued in the domestic market are rated. While a credit research and recommendation form initially the basis of first buying the bond, subsequent secondary trade will be hampered if the bond is not rated. As the same research and due diligence find its way if the bond has to be traded in the secondary market and more so if you do not have that bond. Ratings of the domestic issues will help in developing the bond market. Issuers may be encouraged to rate their issues.

5. Regular update and publishing of a benchmark index or bond Index

The establishment of a benchmark index that is independent, clearly defined index rules and methodology, replicable and produced timely is crucial for the development of the bond market. The benchmark is also crucial in performance reporting. Refer to Appendix 1 for further details.

6. Market data dissemination, transparency and information systems

6.1 Market data and information systems

Market data compilation and dissemination needs to improve. Publications of BSE, Bank of Botswana, and benchmark index should be provided to investors on a timely basis. To develop the local market, the domestic market information on Reuters should be provided on Bloomberg. Some of the markets participants may either choose to buy Reuters or Bloomberg and some fixed income traders may lean towards Bloomberg. The Central Bank and the market, in particular primary dealers, should be requested to provide the same information on both Reuters and Bloomberg on the local markets.

6.2 Transparency of the market

Botswana has a better credit rating and should be able to attract more capital flow. In order to do that there is a need to be transparent about exactly how the market works. Therefore, it is important to develop well defined specifications and processes that are publicly available. The Botswana bond market has already gone through some key stages of development yet there is confusion with respect to how the market works. For example:

Trading is for settlement T+3 according to the brokers, yet some stakeholders believe it is T+4.

The bond pricing formula (vanilla bonds and FRNs) is not advertised and no formal calculator is available by the exchange in the event of a dispute.

The whole operations of trading, clearing and settlement processes are not advertised publicly. The listings requirements, the listings process (e.g. book build) and estimated costs of listing need to be published. Ideally this should be contrasted against equities listing showing advantages and disadvantages of each.

6.3 Lack of fair values for listed bonds

There is lack of fair values for listed bonds in line with the International Accounting Standards, at the end of each financial year bonds have to be recorded at their fair values in the balance sheet. This is normally a challenge because this information is not readily available in the market and at the end we use the last trading price.

There is limited valuation of bond values published on a daily basis (along with delta, modified duration etc.). As a result there is no formal yield curve (par curve and bootstrapped zero curve) published by the exchange. It is from this curve that we can derive forward rates which are required to value FRNs if the Exchange is to publish FRN valuations. Furthermore, formal bond market valuations are required in order to generate a bond index.

7. Code of conduct for the market

7.1 Code of conduct

The market should have a code of conduct, which will enable acceptable conduct in the market as far as fixed income is concerned. Each participant should have a copy of the code of conduct.

7.2 Introduce market ethics

The primary dealers agreements need to be overhauled and some kind of market etiquette dealing ethics introduced to the market, as well as updated skills. This will address the current challenges of price duplications and delayed pricing in PDs market. Stockbrokers can play a big part in this development, and if they position themselves correctly, stand to make good income from this market.

8. Trading and Settlement

It is natural to want to implement the proposed Automated Trading System (ATS) for bonds in Botswana; the ATS will not generate liquidity on its own. Bond markets globally have not taken off with ATS; instead many markets still use Inter Dealer Broker (IDBs). Currently quoted rates on Reuters are not necessarily tradable and live price; therefore IDBs would be able to solve this problem.

Another key issue that needs to be pointed out is that the market is relatively disjointed in that trades with primary dealers are OTC and reported through the Central Bank to the BSE whereas trades conducted by brokers are conducted on the exchange. It is quite important that the BSE pushes to have the trades captured into a central capture point. This information can be then published to the market as statistics and sold to vendors as income.

Finally, bonds need to be settled on a DVP process through the CSD. Bonds should be dematerialized. Many international fund managers will not be prepared to trade unless the G30 recommendations are met.

8.1 Increase the Primary Dealer P2 Mn minimum firm bid

Firm bids for up to P10Mn would increase liquidity and ability to exit positions. Primary dealers are expected to be the market makers in the market for all other institutions. Most trade sizes we see from asset managers' range from 5-20Mn but the market makers refuse to do firm orders for these amounts. This discourages position taking in the market.

8.2 The 20bp spread quote too wide

Reduce spread to 8bp for 0-5Mn firm, 14bp for 5-10Mn firm and 20bp indicative for 10Mn would reduce cost of trading and encourage trading. Reduction of the spread would reduce the cost of trading and would allow PDs to be willing to sit on both sides of the market at all times vs taking a side as is the case now.

9. Introduce bonds for long term infrastructure projects

Introduce infrastructure bonds for long term projects in addition to issuing normal long bonds. Government should consider introducing infrastructure bonds for

financing specific projects; this would allow investors to consider the bond as an alternative to our normal bonds. This would therefore increase product diversity.

10. Brokerage fees

A ceiling for bond fees should be set. Some local brokers suggested 5bps to 10bps with a minimum of 5bps. Currently some of the international brokers are paid 3bps.

11. Lack of skilled manpower

There is lack of skilled manpower locally to structure transactions resulting in over reliance on the South African service providers. This overreliance creates a number of challenges that include but are not limited to:

- a) Inflated prices because both parties have to make some money out of the deal
- b) Role clarity and coordination issues – the contract is normally signed with the local company while the duties are executed by the South African counterpart.
- c) Reconciliation of the differing regulations locally and in South Africa – this ends up frustrating the issuer because the service provider will be using his experiences in South Africa which might not be relevant to Botswana based Issuer. There are instances where the information required in the supplementary programme memorandum might take a while to consolidate due to these differences.

The Botswana Bond Market Association should lobby the local participants to develop local skill.

There must be skills upliftment by most of the local market participants like Brokers, PDs, Asset Managers and legal practitioners.

11.1 Clarity in roles of structuring entities

Role clarity between the various players (legal advisor, arranger, broker) – this lack of clarity frustrates the whole process and might hinder further development of the bond market in Botswana. May be, there are too many players and limited roles to be played.

12. Issues relating to taxation

To attract offshore participants, Withholding Taxes on foreign participants should be removed.

13. Test foreign bond market

Test the foreign bond market at current levels. A USD Botswana Global bond might fly under the current low offshore interest rate scenario, and the country has USD income to repay in the future.

This might also draw some attention to the local market by these foreign portfolios. This would give a big jolt to the local primary dealers, who seem warm and comfortable in their positions at the moment.

14. Education and road shows

Education of the market stakeholders and participants is crucial to the efficient operation of the bond market. Since Geometric Progression and the Botswana Stock Exchange have already started offering courses, we are already moving towards this target.

APPENDIX 1: INDICES AND YIELD CURVES

Benefits of having a proper yield curve are:

Indices and curves are crucial to the vital operation of an efficient bond market. The benefits of curves are:

- A yield curve provides a description of the bond market at any point in time.
- It indicates the cost of funds to an issuer associated with different maturities.
- Reciprocally, it shows the required rates of return by investors for different maturities.
- The yield curve also shows the relationship between interest rates e.g. the relationship between the long end of the curve and the short end. By comparing curves from different dates, you can see how these relationships change.
- The yield curve is used to set the interest rate levels for new bond issuances.
- From the bootstrapped zero curve we can derive the forward curve. This required for the valuation of FRNs, SWAPS and FRAs.
- The comparison of the credit curves to the treasury curve is studied extensively by economists (in particular from central banks) as it is often seen as an indicator of business cycles.
- The curves shows the relative value between bonds of similar maturity i.e. whether they are expensive or cheap in relation to each other.
- The yield curve is a good indication of market sentiment i.e. whether interest rates are going to go up, down or remain the same in the future.

The benefits of an index are:

- It forms a barometer of daily aggregate movement in the bond market.
- It becomes the benchmark for fund managers' performance and is typically referenced in mandates. In relative value funds (the majority), fund managers who outperform the index are often receive "bonuses", likewise, those who don't often lose the mandate!
- It is referenced against other asset classes for performance as well as for comparisons internationally.
- It can be used as an index for reference with respect to futures contracts.
- It is vital for the comparison of risk return characteristics of market portfolios against the index.
- It can be used as an approximation for Beta

APPENDIX 2: PROGRESS UPDATE ON STRATEGY ITEMS²

Below is the progress update on the issues highlighted in this paper. It is worth noting that the accomplishment of these initiatives is a collective effort of the Government, BoB, BSE, Regulatory Bodies, Market Participants and the Botswana Bond Market Association and its Committee.

Strategic Initiative	Progress
1. Government bond curve	The current risk free curve comprises maturities of 1.3 years, 2.8 years, 4.8 years, 9.3 years, 15.8 years and 24.6 years. Government has however issued bonds of 3 years, 5.5 years, 10 years, 10.5 years, 15 years, 18 years and 25 years. Increase issuance has helped close up some of the gaps. Perhaps, there has to be consistent issuance along key maturity points to maintain a robust yield curve.
2. Introduce a benchmark bond	This speaks to the introduction of a long dated government bond. And this is particularly vital for pricing and matching both pension and insurance assets given their long dated nature. Government issued 15 years, 18 years and 25 years bonds in 2010, 2013 and 2015.
3. Move away from the 6monthly auctions	Currently, Government issues bonds and bills quarterly.
4. Plan to replace BoBCs with T-Bills	Treasury Bills have always been issued but the frequency is now quarterly.
5. Inadequate bond documentation	The BSE market participants developed bond pricing conventions and formulae that will ensure consistency. Also the debt listings rules are being reviewed and this will help address concerns highlighted under this item.
6. Lack of bond rating	No action at the moment. However, in 2015 the BSE included, in a proposal for funding development of SADC debt market development by the Africa Financial Markets Initiative, the need for the development of credit ratings for the purposes outlined in this document. Initiatives around this item also include an envisaged conference on credit ratings by some players in the market.
7. Publishing a bond index	Completed. BSE computes and published 3 bond indices daily; the Govt, Corpl and BBI composite.
8. Market data and information dissemination	Completed. The indices are available through Reuters, Bloomberg and INET BFA.
9. Transparency of the market	The BSE and market participants developed bond pricing conventions and formulae that will ensure consistency in pricing several types of bonds. The conventions have been adopted by the market but are yet to obtain consent of other regulatory bodies in the market. Built into the ATS, these will facilitate the trading of bonds through the ATS.
10. Lack of fair values for listed bonds	Completed. Published within a comprehensive index sheet.
11. Code of conduct	Conduct still being regulated through the existing BSE regulatory frameworks in respect of brokers and issuers and financial markets frameworks in respect of primary dealers.

² As at 2 December 2015

12. Introduce market ethics	Not formally done.
13. Trading and settlement	ATS was implemented in 2012 and is integrated with the CSD which was implemented in 2008. This set up also builds a strong case for optimization of this infrastructure by way of centralizing trading, clearing and settlement of all bonds at the BSE. This is a key initiative that the BSE is currently pursuing.
14. Increase the primary dealer P2Mn min firm bid	No information on this.
15. The 20bp spread quote too wide	No information on this.
16. Introduce bonds for long term infrastructure projects	This seems to be the trend in peer markets and given its fiscal implication it remains a credible option for Government to consider. At several forums in the country this topic is being discussed in the affirmative.
17. Brokerage fees	The BSE has proposed a revised fee structure for bonds and this was benchmarked with several African markets.
18. Lack of skilled manpower	This is being addressed through one of many ways – debt market courses for all market participants. In this respect, the BSE conduct 3 courses a year at a minimum ranging from Introduction to Financial Markets, Introduction to Money Markets and Bonds, Money Markets and Bond Valuation, Yield Curves and Swap Spreads Analysis. We are yet to see less dependency on South African service providers in respect of arranging, structuring etc. There has to be skills transfer in such areas between parent and subsidiaries this side.
19. Clarity of roles of structuring entities	Not a burning issue.
20. Issues related to taxation	Not done. In several markets, Government has taken an initiative of providing tax incentives in order to stimulate activity in the bond market and has contributed tremendously to growth in many markets. This conversation has to be initiated in Botswana with an aim of achieving the same.
21. Test foreign bond market	The dynamics might have changed significantly to build a similar documented case. However, the expectations issuance of sovereign bonds will contribute to diversity and improve visibility of local markets.
22. Education and road shows	The BBMA Committee has articulated the need to take road shows education the public extensively about bonds. This can also be achieved through blogs, a separate website for the BBMA and publications and research papers on the local debt market. In 2016, the BBMA intends to hold its inaugural Fixed Income Conference and plans are currently underway to achieve this.