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An evaluation of the use of the bond market by individual investors in Botswana

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Dissertation submitted in partial fulfilment of the requirements for the degree of Master of Business Administration

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DECLARATION

I, Ndashiko Tacheba declare that this dissertation is the result of my own independent work, except where otherwise stated. Sources used have been acknowledged by precise references. The contents of this dissertation have not been submitted for any other degree or award at this or another university or place of learning, nor being submitted concurrently for any degree or other award. The views expressed in this dissertation are my own and do not reflect the views of the University of Botswana.

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CERTIFICATION BY SUPERVISORS

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ABSTRACT

To encourage investment the government of the republic of Botswana formally established Botswana Stock Exchange (BSE) in 1989 which is Botswana's national stock exchange given the responsibility to operate and regulate the equities and fixed interest securities market. The BSE continues to be pivotal to Botswana's financial system, and in particular the capital market, as an avenue on which government, quasi-government and the private sector can raise debt and equity capital. The extents to which the individual investors participate in the bond market are not clear and require assessment. This research seeks to establish the reasons why there are few individual investors to bond market as compared to other institutional investors such as banks, pension funds and the stock market in Botswana. The study used a survey with a respondents sample size consisting of four hundred (400) participants using judgmental sampling. Data was collected by administering a questionnaire. Statistical Package for Social Sciences (SPSS) was used to analyze the primary data to achieve the objectives, and presented the data in tables, graphs and charts.

The results indicated that most individual investors do not participate in the bond market when compared to other investment vehicles like Mutual funds, stocks, options, futures, forex, real estate and bank deposits. This is due to the bonds being in larger denominations which are beyond the reach of a common man. Bond markets encompass both government and corporate bonds. Municipal and Government bonds are issued to finance budget deficits and they are sometimes tied to specific public sector development projects, moreover they depend on government financing needs as well as access to other sources of finance (e.g. donor funds). Even where both government and corporate bond markets exist, government bonds generally the of both market account majority capitalization and trading activity (www.slideshare.net/econsultbw/2009).

This dissertation concludes that economic factors like bond price volatility, due to interest rate fluctuations, and inflation which in most cases affect long-term bonds may increase when government debt reaches an unsustainably high level.

The implications is that the investors who want to achieve automatic diversification of their bond investments for less than it would cost to construct a portfolio of individual bonds can consider

investing in mutual funds, unit investment trusts or exchange-traded funds. These vehicles each have specific investment objectives like reliability, risk, return, liquidity, safety and characteristics to match individual needs.

Keywords: Bond Market, Investor, Investment, Botswana Stock Exchange, Stock Market.

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LIST OF ACE	RONYMS	
APQC		American Productivity & Quality Center
BESA		Bond Exchange of South Africa
BSE		Botswana Stock Exchange
CDS		Central Depository System
DPCF		Debt Participation Capital Fund
GDP		Gross Domestic Product
GNP		Gross National Product
IMF		International Monetary Fund
MFDP		Ministry of Finance and Development Planning
NBIFIRA		Non-Bank Financial Institutions Regulatory Authority
PD		Primary Dealer
SADC		Southern Africa Development Community
SA		South Africa
SSA		Sub-Saharan Africa

United States Dollar

USD

CHAPTER 1

1.0 Introduction

This chapter introduces the study. The chapter presents background of the study, statement of the problem, objectives of the study and significance of the study, the research questions, and the scope of the study.

1.1 Background of the study

Investment is the sacrifice of certain present value for the uncertain future reward. It involves arriving at numerous decisions such as type, mix, amount, timing, grade etc of investment and disinvestments. Further such decisions making has not only to be continuous but rational too. Instead of keeping the savings idle you may like to use savings in order to get return on it in the future, which is known as investment. There are various investment avenues such as Equity, Bonds, Insurance, and Bank Deposit etc.

The capital market in Botswana is still developing with a number of financing options coming into play. The data obtained from BSE database indicates that there were bonds issued on the Botswana Market over the period under review (2008-2013) hence a full list of the bonds which were listed as shown in annexure appendix B on page 97 and 98 retrieved from Botswana Stock Exchange website on Monday 16 June 2014 and Monday 22nd September 2014 respectively showed that over the years corporate bonds have been steadily growing with 70% as compared to 20% and 10 % respectively for government and quasi-government bonds hence showing that no individual investors took part because of the nominal value attached to it. The bond market of GDP) and has stumpy liquidity (7% of fairly small Botswana is (www.slideshare.net/econsultbw/2009). There are concerns about whether the primary dealer system for government bonds is working effectively, and whether the brokers have sufficient incentive and capacity to undertake bond trading. The distinguishing feature of the Botswana bond market is the large number of non-government bonds (comprising bonds issued by corporates, parastatals and other quasi-government institutions). Capitalization of these bonds exceeds those of government bonds, although secondary market activity is dominated by government bonds and liquidity in non-government bonds is virtually non-existent. Issuance of non-government bonds was stimulated by the issuance of government bonds which was purely for market development purposes and the establishment of a risk-free yield curve. There is a

large institutional investor sector, with recent growth stimulated by the establishment of a funded, defined-contribution pension scheme for public sector employees; pension funds are required to invest a minimum of 30% of their assets locally. (www.bse.co.bw).

The observation above clearly shows that bond market in most Botswana remain underdeveloped and one of the reasons underpinning the inadequacy of this market is the lack of institutional and operational infrastructure which in turn leads to low levels of liquidity, a narrow investor base, short maturities on the bonds issued and high borrowing costs. This impacts ultimately the competitiveness and breadth of financial products available to corporate, retail sectors and individual investors of the economy.

This study is to contribute to the debate by examining some issues concerning the individual investment on Bond market hence analysing the individual investor's low eminence on bond market in Botswana. This study also tries to identify the individual investors' awareness and their risk taking ability while investing in Bond market

1.1.1 Investment Vehicles

Generally companies raise capital by either borrowing or issuing stock or both. Borrowing can be loan financing from banks or bonds. Stock represents ownership by investor while bonds are a borrowing. Corporate bonds are debt obligations issued by private and public way of companies. When someone buys a bond, he/she is lending money to a corporation which has issued the bond (Sifma, 2008). Bodie, Kane, Marcus, (2004) define corporate bonds as long term debt issued by private corporations typically paying semi annual coupons and returning the face value of the bond at maturity. "A corporate bond is also defined as a long term debt instrument running between the obligor and the bondholder, secured by trust indenture, and having a definite coupon rate, maturity date and principal amount" (Kamanga, 2009, p 2). Some corporate bonds called convertible bonds have an additional feature of allowing the holder to convert them into specified number of shares (stock) before maturity. This feature makes convertible bonds more desirable to prospective purchasers than ordinary bonds. The feature also allows the corporation to reduce its interest payment because these bonds can increase in value if the price of the stock appreciates sufficiently. At their most basic, convertibles provide a sort of security blanket for investors wishing to participate in the growth of a particular company they're unsure of (Mishkin, 2009).

The interest payments one receives from corporate bonds are taxable and do not give an investor an ownership interest in the issuing company. Corporate bonds are means by which corporations borrow money directly from the public. Where they differ most importantly from treasury bonds is in risk. Default risk is a real consideration in the purchase of corporate bonds. Other options attached in the corporate bonds are callable bonds which give the firm the option to repurchase the bonds from the holder at a stipulated price (Bodie, Kane, Marcus, 2004).

While investors can benefit from a rather higher interest rate than bank accounts or government gilts, there is no special bonus if the company is doing better than expected. However if the company underperforms, they may not be able to honour their debts payments. The asymmetric nature of credit risk means it is very important to diversify exposure. Yield is a critical concept in bond investing, because it is the tool one uses to measure the return of the bond against each other. It enables the investor to make informed decisions about which bond to buy. In essence, yield is the rate of return on bond investment. However it is not fixed, like a bond's stated interest rate, it changes to reflect the price movements in a bond caused by fluctuating interest rates (Sifma, 2008). Although much investor attention has focused on African equities, few have noticed the growth of African debt as an asset class. The same factors that are bolstering African equities- notably an economic boom fuelled by rising commodity prices - are boosting the bond market too. In December 2007, Gabon issued a BWP 8.5 billion bond to repay its official debt. In the same month the Republic of Congo also restructured just under BWP 2.4 billion of debt. And in September Ghana had a BWP 6 375 billion bond issue which was four times oversubscribed (www.fundstrategy.co.uk). Nigeria, one of the biggest African economies, also completed a government debt issue in October 2007 that was several times oversubscribed (www.fundstrategy.co.uk). It is likely that international investors would have an appetite for more Nigerian debt but at present the country has no need to issue it because the debt to GDP ratio is 21 per cent which is the lowest for a country of their profile worldwide hence reasonable. According to a report by Wakeman-Linn and Nagy (2008) of the International Monetary Fund (IMF, 2012) African Department, stated that the bond sales are the logical outcome of the growing interest of international investors in Africa, and in emerging and developing countries worldwide (www.fundstrategy.co.uk). Pittius (2014) of Investec Asset Management takes a similarly upbeat line and stated that the economic situation of sub-Saharan African countries has improved markedly, collectively experiencing the highest growth and lowest inflation for 30 years as an emerging market (www.fundstrategy.co.uk). The author posits that the trend is going to continue as the market is positive for both local markets and foreign investors hence they were some risks involved for example bond funds are subject to interest rate risk, which is the chance bond prices overall will decline because of rising interest rates, and credit risk, which is the chance a bond issuer will fail to pay interest and principal in a timely manner or that negative perceptions of the issuer's ability to make such payments will cause the price of that bond to decline.

The next bond issue was expected to be from Kenya but it has been shelved following the violence hence the biggest risk is that commodity prices are going into reverse for some reason and if this happens the world will be in trouble as eluded by Pittius (www.fundstrategy.co.uk).

1.1.2 Historical development of Bond Market in Botswana

The existence of bond market in Botswana can be traced back to 1994 when the Botswana Stock Exchange (BSE) was established. The development of the bond market was further identified in 1997 with the issue of a P50 million bond by Botswana Development Corporation (Madisha, 2008). In 2003 the government issued three bonds: a two-year, a 5-year and a 12-year bond of P750 million, P850 million and P900 million respectively (Madisha, 2008). Although the bond market in Botswana started at a snail pace, it is evident that this market is now growing (Madisha, 2008).

There is generally very limited awareness of bond market issues amongst the general public and even amongst the broking public and potential issuers. Hence the BSE has embarked upon an awareness-raising strategy, commencing with a seminar on Bond Market Development and a seminar on credit rating in October 2008 in Botswana.

Key institutions involved in bond market development in Botswana are the BSE (which is driving the development of the corporate bond market), the Bank of Botswana and the Ministry of Finance & Development Planning (MFDP), which are driving the development of the government bond market. The MFDP also provides resources to the BSE, both for recurrent costs and for infrastructural development such as the establishment of the central securities depository (CSD). The Non-Bank Financial Institutions Regulatory Authority (NBIFIRA), which as its name implies is the regulator for all non-bank financial institutions including the BSE,

pension funds, and asset managers etc., was only established in April 2008, and is yet to play an active role in bond market development.

In 2011, Moody's credit rating agency upgraded Botswana's rating from negative to stable, and retained the A2 rating for foreign and domestic bonds (Madisha, 2008). The upgrade reversed Moody's decision in February 2010 to assign a negative outlook following the deterioration of Botswana's net asset position as a result of the global economic slowdown. Currently there are thirty five (35) bonds listed at the Botswana Stock Exchange with a maturity periods of more than twelve months (www.bse.co.bw). However, from those bonds listed with the BSE, most are dominated by institutional investors, with relatively small holdings by the banks (primary dealers) for their own account. The Botswana bonds market is characterized by buy and hold strategies on the part of local institutions, such as pension funds and life insurance companies (www.state.gov). Botswana's Letlole Saving Certificate (the equivalent of a U.S. Treasury bond) can be purchased by citizens and non-citizens of Botswana. It is also notable however that those individual investors of about 80% at the BSE have invested in the stock market compared to bond market (www.bse.co.bw). This is an indication that, when Batswana investors are faced with a decision to choose between the two investment opportunities of either investing in stock or bond, it can be assumed that there would be an 80% probability of investing in stock thus leaving 20% for bonds (www.bse.co.bw). This observation has influenced this research to investigate the reasons for such situation. The author has also seen that there is a research gap as no one so far carried out similar research in Botswana.

1.2 Problem statement

The statement of the problem under study is to analyze the individual investor's low eminence on bond market in Botswana. This problem tries to identify the individual investors' awareness and their risk taking ability while investing in Bond market. Bond market development in Africa has been on the rise in several countries, albeit being small and inactive. Critical factors undermining the development of bond markets in Africa include, but are not limited to; lack of institutional and operating infrastructure, low levels of liquidity, narrow investor base, narrow issuer base, short maturities and high borrowing costs. In 2008 the total traded bonds in the World stood at USD 2 416 Trillion in which South Africa traded USD 2319 billion. (Research, Policy Analysis and Planning Department, 2010)

"African bond market have not yet been efficiently and effectively tapped into with regards to unleashing their enormous potential in deepening capital markets as well as contributing to economic growth. This should be an area of special focus for policy makers in stimulating and sustaining their development hence observable that in Botswana, given the main two capital markets instruments: bonds and stocks, individual investors invest their funds in the stock market than they do in the bond market" (Mokgatla, 2008 mmegi pp113).

There are quite a few structural reasons for that, though overall it's been a complex interaction of issues that have had that effect. According to Mokgatla (2008) first, issuance has decreased significantly represented by 11.9% due to a decrease in Government's borrowing requirements, owing to a considerable degree to greatly improved tax collection from both companies and individuals. Secondly, Botswana is sitting at historically scrawny in bonds represented by 1% as a result of the fact that until recently the government always had fiscal surpluses. However, this is contrary to financial analysts and writers like Mishkin and Eakins, (2006) who stated that bonds are lower risk than stocks because they have a higher priority of payments. Compared to the return on equity, bonds yield less return, adding to that a fixed return, hence investors hesitate to go for bonds as it is a good tool for corporations by way of representing loans made by investors to companies that have issued the bonds to attract capital without giving up managing control.

Developed capital markets inclusive of equity and bonds can offer substantial benefits to their governments and individuals hence the behavior of investors at the BSE is contrary to above statement in Botswana thus prompted this research. Therefore the main research question for this study is: why there are few individual investors in the bond market in Botswana?

1.3 Brief literature review.

Investment is the sacrifice of certain present value for the uncertain future reward. It involves arriving at numerous decisions such as type, mix, amount, timing, grade etc of investment and disinvestments. Further such decisions making has not only to be continuous but rational too. Instead of keeping the savings idle you may like to use savings in order to get return on it in the future, which is known as investment. There are various investment avenues such as Equity,

Bonds, Insurance, and Bank Deposit etc. A Portfolio is a combination of different investment assets mixed and matched for the purpose of achieving an investor's goal. There are various factors which affects investors' portfolio such as annual income, government policy, natural calamities, economical changes etc.

1.3.1 What is Investment?

Investment is the employment of funds with the aim of achieving additional income or growth in value. The essential quality of income is that, it involves waiting for a reward. It involves the commitment of resources which have been saved or put away from current consumption in the hope that some benefits will occur in future. The term 'investment' does not appear to be a simple as it has been defined. Investment has been categorized by financial experts and economists. It has also often been confused with the term speculation.

> Financial and Economic Meaning of Investment

Investment is the allocation of monetary resources to assets that expected to yield some gain or positive return over a given period of time. These assets range from safety investment to risky investments. Investments in this form are also called 'Financial Investments'. To the economists, 'Investment' means the net additions to the economy's capital stock which consists of goods and services that are used in the production of other goods and services. In this context the term investment implies the information of new and productive capital in the form of new construction, new producers' durable equipment such as plant and equipment. Inventories and human capital are included in the economist's definition of investment. In simple words investment means buying securities or other monetary or paper (financial) assets in the money markets or capital markets, or in fairly liquid real assets, such as gold as an investment, real estate, or collectibles. Valuation is the method for assessing whether a potential investment is worth its price. Types of financial investments include shares or other equity investment, and bonds (including bonds denominated in foreign currencies). These investments assets are then expected to provide income or positive future cash flows, but may increase or decrease in value giving the investor capital gains or losses.

❖ Features of an investment programme.

In choosing specific investments, investors will need definite ideas regarding features, which their investment avenue should possess. These features should be consistent with the investors' general objectives and in addition, should afford them all the incidental conveniences and advantages, which are possible under the circumstances. The following are the suggested features as the ingredients from which many successful investors compound their selection policies.

> Safety of principal

The investor, to be certain of the safety of principal, should carefully review the economic and industry trends before choosing the types of investment. Errors are avoidable and therefore, to ensure safety of principal, the investor should consider diversification of assets. Adequate diversification involves mixing investment commitments by industry, geographically, by management, by financial type and maturities. A proper combination of these factors would reduce losses.

> Liquidity

Even investor requires a minimum liquidity in his investment to meet emergencies. Liquidity will be ensured if the investor buys a proportion of readily saleable securities out of his total portfolio. He may therefore, keep a small proportion of cash, fixed deposits and units which can be immediately made liquid investments like stocks and property or real estate cannot ensure immediate liquidity.

> Income stability

Regularity of income at a consistent rate is necessary in any investment pattern. Not only stability, it is also important to see that income is adequate after taxes. It is possible to find out some good securities, which pay particularly all their earnings in dividends.

> Appreciation and purchasing power stability

Investors should balance their portfolios to fight against any purchasing power stability. Investors should judge price level inflation, explore their possibility of gain and loss in the investments available to them, limitations of personal and family considerations. The investor

should also try and forecast which securities will possibly appreciate. A purchase of property at the right time will lead to appreciation in time. Growth stock will also appreciate over time. These, however, should be done thoughtfully and not in a manner of speculation.

> Legality and freedom from care

All investments should be approved by law. Law relating to minors, estates, trusts, shares and insurance will bring out many problems for the investor. The management of securities is then left to the care of the Trust who diversifies the investments according to safety, stability and liquidity with the consideration of their investment policy. The identity of legal securities and investments in such securities also help the investor in avoiding many problems.

> Tangibility

Intangible securities have many times lost their values due to price level inflation, confiscatory laws or social collapse. Some investor prefers to keep a part of their wealth invested in tangible properties like building, machinery and land. It may, however, be considered that tangible property does not yield an income apart from direct satisfaction of possession or property.

Investment Analysis.

When an individual has arranged a logical of the types of the investments that he requires on his portfolio, the next step is to analyse the securities available for investment. An investor must make a comparative analysis of the type of the industry, industry of security and fixed vs. variable securities. The primary concern at this stage would be to form beliefs regarding future behavior or prices and stocks, the expected returns and associated risk.

Table 1.1 Features of investment avenues

Features of investment avenues

PARTICULARS	RISK	RETURN	CAPITAL APPRECTION	LIQUIDITY/MARKETABILITY	Tax benefits
Debenture/Bond	Low	High	Very low	Very low	Nil
Equity shares	High	Low	High	High	High

Bank Deposit	Low	Low	Nil	High	Nil
Life insurance Policies	Nil	Nil	Low	Low	Moderate
Real estate	Low	Low	High in long term	Moderate	Changes according to rules

The factors which affect the investment decisions as an economic entity;

Risk Tolerance: Risk refers to the volatility of portfolio's value. The amount of risk the investor is willing to take on is an extremely important factor.

Return Needs: This refers to whether the investor needs to emphasize growth or income.

Investment Horizon: The time horizon starts when the investment portfolio is implemented and ends when the investor will need to take the money out.

Tax Exposure: Investors in higher tax brackets prefer such investments where the return is tax exempt, others will have no such preference.

Market Trends: Investor need to understand how various asset classes have performed in the past before planning their finances.

Investment Needs: How much money do investors need at the time of maturity?

Risk Coverage: A type of insurance coverage that can exclude only risks that have been specifically outlined in the contract.

Dependents: People who relies on another person, especially a family member, for financial support.

As stated by Mokgatla, (2008) African bond markets are not well developed. Firms may be financing the acquisition of long-term assets by incurring short term debts. As a result their

investment policies may be biased in favor of short term projects and an approach from entrepreneurial ventures.

In regards to financing sub-Saharan Africa has been heavily dependent on external grants and concessional loans for funding capital spending and government deficits. Only a small number of countries have limited access to global capital markets. Moreover, western donors are currently facing substantial fiscal challenges and consequently donor flows to sub-Saharan Africa may be scaled back expressively. Without access to alternative sources of finance, including bond markets, many African countries could find it difficult to finance critical needs (www.imf.org).

Well-functioning bond markets help sustain economic stability. The African Development Bank recently announced that it plans to launch a new bond program for infrastructure to rise up to BWP 360 billion for investments in projects such as ports and airports, underscoring the growing role for bond markets in financing development in sub-Saharan Africa (www.imf.org). Yet bond markets in these countries are at a nascent stage of development and there is a strong need to promote their development. The Asian experience supports this point. Since the 1997 Asian financial crisis, many Asian economies have made significant progress in strengthening bond market development. This has in turn helped these Asian economies weather the recent global financial crisis because deeper financial markets generated valuable funding sources for these countries to finance fiscal stimulus packages (Research, Policy Analysis and Planning Department, 2010).

The development of bond markets in sub-Saharan Africa can improve the intermediation of savings. While Africa needs money, Africa is a net capital exporter to the rest of the world (www.imf.org). This is mainly because there is a lack of effective intermediate channels to absorb this capital. Bond markets are an effective way to intermediate capital savers with capital users.

Promoting bond market development in Sub-Saharan Africa can improve the structure of the African financial system. The African financial sector is dominated by banks. The nonbanking sector and bond markets, both public and private, are still in their infancy. Bond markets and bank finance are complementary rather than incompatible. While banks tend to be more adept at providing short-term (working) capital, bond markets enjoy a comparative

advantage in financing government deficits and infrastructure investment, and providing longer-term capital to companies for growth.

Deeper bond markets will enable central banks in sub-Saharan Africa to conduct monetary policy more effectively. At present, many banks have few domestic fixed-income instruments to use for sterilization other than short-term government debt. Cavernous bond markets would provide a wider, more operative range of instruments for monetary policy execution, hence it is observed that majority of investors in Sub —Saharan Africa are shy (reluctant) to invest their savings in the Bond market (www.imf.org). The above issues are also applicable to Botswana which is located in Sub-Saharan Africa.

1.4 Objectives of this research

The purpose of this research is to contribute to the debate by examining some issues concerning the individual investment attributed to bond market. These issues have not been examined so far for the Botswana bond market, so this paper attempts to fill that gap by addressing the following objectives described in three interrelated phases

- > To study the investment decisions of different social class investors (in term of age gender, occupation in the bond market of Botswana.
- > To establish the reasons why there are few individual investors in the bond market than in other investment institutions like banks, pension funds and stock market.
- > To find out what the Botswana Stock Exchange is doing to encourage growth of bond market in Botswana.

The study will be descriptive and analytical in nature. It will be descriptive as it will describe the existing secondary markets (bonds pattern) available in the market. It is analytical as it analyses the perception of the investors which provides understanding to readers about the various factors which should be kept in mind at the time of investment. The study will be useful to financial institutions and markets in providing the understanding about the investors' perception to devise the suitable product/marketing strategies, which would help them in making their policies or strategies in order to attract investors.

1.5 Research Questions

In addition the following allied questions will be investigated.

- How do the individual investors perceive their risk taking ability while investing in bonds market in Botswana?
- ❖ How have the bonds issued in Botswana performed?
- ❖ How can the bonds market be enhanced by Botswana Stock Exchange?

1.6 Significance of the research in context of Botswana

Depending on the outcome of this research it will be used as a yard stick to measure the economy since corporate bond market capitalization impacts the financial markets institutions and thereby the economy of the country. Also considering that no known study on individual investors in bond market in Botswana has been undertaken, the outcome will also sensitize banks, insurance companies and other financial institutions who can afford to buy bonds which are denominated in larger quantities to purchase them and sell them in smaller Pula units to individual investors in Botswana in order for them to be able to participate in the bond market of Botswana just like it is done by financial institutions in other continents like the United States of America hence allowing more individuals participating in the market to increase effectiveness and efficiency of the market.

Since it is evident from the background information of this paper that the government of Botswana first issued her first bond in 2003 whilst the inception of the bond market in Botswana dates back to 1997, it shows that the country is at a nascent stage of development and there is a strong need to promote development of the bond market in Botswana. Researchers and academics will benefit from this research which may form part of their reference material.

1.7 Scope of the study (Geographical Time & Subject scope)

This study was done in Gaborone and Francistown which are major towns in Botswana with participants being Batswana investors aged 18 and above. In terms of literacy, this study involved all people of different education background, different occupations, having different income level served as the respondents of the study. Some vital information was sourced from

Botswana Stock Exchange covering the five year period from 2008-2013 for fairness and reliability of the outcome. As literature review show factors play more significant role in deciding pattern of investment. So analyzing the factors that affect investment pattern of investors and other investment criteria provide the valuable insights.

1.8 Conceptual clarification

The following terms were used in this paper and read in the context explained below.

Bond:

Bond is the written evidence of debt, bearing a stated rate or stated rates of interest, or stating a formula for determining that rate, and maturing on a date certain, on which date and upon presentation a fixed sum of money plus interest (usually represented by interest coupons attached to the bond) is payable to the holder or owner. A municipal bond issue is usually comprised of many bonds that mature over a period of years; For purposes of computations tied in to "per bond," a BWP 1,000 increment of an issue (no matter what the actual denominations are); Bonds are also long-term securities with a maturity of greater than one year (Mishkin , F., Eakins,G. (2006).

BSE:

BSE shall refer to Botswana Stock Exchange established by an Act of parliament in 1993.

Callable Bonds:

Bonds are subject to payment of the principal amount (and accrued interest) prior to the stated maturity date, with or without payment of a call premium. Bonds can be callable under a number of different circumstances, including at the option of the issuer, or on a mandatory or extraordinary basis (Mishkin, F., Eakins, G., 2006).

Discount Bond: A	bond sold	at less tha	n par (Mishkin	, F.,	Eakins,	G.,	2006).

Face value: The par value of a security, as distinct from its market value (Mishkin, F., Eakins., G, 2006).

Fixed: Rate Bond: A long-term bond with an interest rate fixed to maturity ((Mishkin, F., Eakins, G., 2006).

Interest: The compensation paid or to be paid for the use of money, usually expressed as an annual percentage rate (Mishkin, F., Eakins, G., 2006).

Interest Rate: Interest rates change in response to a number of things including revised expectations about inflation, and such changes in the prevailing level of interest rates affects the value of all outstanding bonds (Mishkin, F., Eakins, G., 2006).

Investors(s) in this study shall refer to individual investors unless stated otherwise (Mishkin, F., Eakins, G., 2006).

Liquidity: The ability to trade bonds efficiently without causing any major changes in their prices (Mishkin, F., Eakins, G., 2006).

Loita Capital partners Limited: An investment banking firm founded in 1992 by a group of international bankers focused on Africa with the ability to bridge the gap between the objectives of regional and international financial institutions (Mishkin, F., Eakins, G., 2006).

Maturity Date: The date when the principal amount of a security becomes due and payable, if not subject to prior call or redemption (Mishkin, F., Eakins, G., 2006).

New-Issue Market: Market for new issues of bonds and notes (Mishkin, F., Eakins, G., 2006).

Non-Callable Bond: A bond that cannot be called for redemption at the option of the issuer before its specified maturity date (Mishkin, F., Eakins, G., 2006).

Par Price equal to the face amount of a security; 100% (Mishkin, F., Eakins, G., 2006).

Par amount: The principal amount of a bond or note due at maturity. Also known as par value.

parity debt (Mishkin, F., Eakins, G., 2006).

Premium or Discount Price: When the Pula price of a bond is above its face value, it is said to be selling at a premium. When the Pula price is below face value, it is said to be selling at a discount (Mishkin, F., Eakins, G., 2006).

Pula: The currency used in Botswana. As on to-day (16.11.2014 to secure one US dollar one has to pay P 9.311 or one Pula equals to 0.1074 US \$ cents.

Recession: A downturn in economic activity on a large scale ie two or more quarters of decline in output, as measured by Gross National Product (GNP) or Gross Domestic Product (GDP) (BSE, 2014).

Registered Bond: A bond whose owner is registered with the issuer or its agent, either as to both principal and interest, or as to principal only. Transfer of ownership can only be accomplished when the securities are properly endorsed by the registered owner (Mishkin, F., Eakins, G., 2006).

Credit risk: The risk that the obligor on the bonds will be unable to make debt service payments due to a weakening of their credit (Mishkin, F., Eakins, G., 2006).

Market risk:Potential price fluctuations in a bond due to changes in the general level of interest rates (Mishkin, F., Eakins, G., 2006).

Term Bonds: Bonds of an issue that have a single stated maturity date. Mandatory redemption provisions require the issuer to call or purchase a certain amount of the term bonds using money set aside in a sinking fund at regular intervals before the stated maturity date (Mishkin, F., Eakins, G., 2006).

Underwriter: The securities dealer who purchases a bond or note issue from an issuer and resells it to investors. If a syndicate or selling group is formed, the underwriter who coordinates the financing and runs the group is called the senior or lead manager (Mishkin, F., Eakins, G., 2006).

Unsecured Bond: A bond that is not secured by collateral (Mishkin, F., Eakins, G., 2006).

USD: United States Dollar (Mishkin, F., Eakins, G., 2006).

Variable Rate Bond: A long-term bond the interest rate of which is adjusted periodically, typically based upon specific market indicators (Mishkin, F., Eakins, G., 2006).

Volatility: A statistical measure of the variance of price or yield over time. Volatility is low if the price does not change very much over a short period of time, and high if there is a greater change (Mishkin, F., Eakins, G., 2006).

Yield to Maturity: A yield on a security calculated by assuming that interest payments will be made until the final maturity date, at which point the principal will be repaid by the issuer. Yield to maturity is essentially the discount rate at which the present value of future payments (investment income and return of principal) equals the price of the security (Mishkin, F., Eakins, G., 2006).

Zero-Coupon Bond: A bond for which no periodic interest payments are made. The investor receives one payment at maturity equal to the principal invested plus interest earned compounded semiannually at the original interest rate to maturity (Mishkin , F., Eakins, G., 2006).

1.9 Structure of the dissertation

Chapter 1 of this dissertation contains information on the background study on bond investment in Africa narrowing it to Botswana context while chapter 2 presents the literature review for developing sharper, more insightful and focused research questions about the researcher's topic hence leading to justified research objectives and questions. Research methodology was discussed in chapter 3 where sources of data, research population and the statistical method applied in the data analysis were outlined. After coming up with the methodology of data analysis in chapter 3, data analysis, presentation and findings were discussed in chapter 4 with chapter 5 presenting conclusion and recommendations. The dissertation ended with references, appendix, tables and figures.

2.0 Conclusion

This chapter presented the introduction about the bond market in Botswana, the background information on bond investment in Africa with view to Botswana context. The chapter also included the investment vehicles, historical development of Bond market in Botswana, problem statement, brief literature review, investment as a term, factors and features which affect investment as an economic entity, objectives of the research, research questions, significance of the research in Botswana context, scope, conceptual clarification and structure of the research hence conclusion. Due to limitation in regards to bonds Individual investor research carried out in Botswana, the literature review used was broadly widened to development and status of different Bond market in some selected African continents with some discussion put into context on investment patterns, characteristics found in financial markets. After encompassing all the necessary elements in this chapter the scholar proceeds on to chapter 2 literatures review.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

Chapter one presented the background information, research problem, research objectives and research questions and short literature review of this study. The chapter outlined what corporate bonds are and the market development in Botswana and other African countries. This chapter will be focusing on the existing literature review regarding corporate bonds development. Due to limitation in regards to bonds Individual investor research carried out in Botswana, the literature review will be broadly widened to development and status of different Bond with some discussion put into context on investment patterns, characteristics found in financial markets and the performance especially on individual investors on some selected continents around the world narrowing it to Botswana context.

There are numerous good motives for developing a bond market. The most fundamental reason is to make financial and capital market more complete by generating market interest rates that reflect the opportunity cost of funds at each maturity. This is essential for efficient investment and financing decisions for corporations and individuals. Moreover the existence of tradable instruments helps risks management in portfolio diversification. Further use of financial guarantees and other types of underwing is becoming increasingly common in corporate debt market as financing deals become more complex. If borrowers have financial guarantees available to them only a narrow range of instruments in terms of maturity, currency then they can be exposed to significant mismatches between their assets and their liabilities. The risks entailed by such mismatches have to be managed and the ability to do so will often depend on whether certain exposures can be adequately hedged. Liquid markets help capital market participants to hedge their exposures (http://www.loita.com).

2.1 Development of Bond markets.

The research on African financial sector development is growing. Most of the literature has so far focused on financial development of the banking sector and stock markets (Detragiache et al., 2005; McDonald and Schumacher, 2007; Yartey and Adjasi, 2007; Andrianaivo and Yartey, 2009 Kablan, 2010; and Beck et al., 2011). Relatively in researcher's view little attention has been focused on development of public and private bond markets.

A number of studies have scrutinized the determinants of bond markets in more developed economies (www.imf.org). Eichengreen and Luengnaruemitchai (2004) considered a broad set of determinants of bond market development, using panel data from 1990 to 2001, with a sample of 41 developing and developed countries, by focusing on emerging Asia. They regressed several measures of domestic currency bond market capitalization on various explanatory variables; they concluded that market size matters; poor accounting standards hindered development of private debt markets, along with corruption and low bureaucratic quality. Well-capitalized bank systems promoted bond markets. Stability of exchange rates encouraged bond market development, and an absence of need for public financing discouraged public bond markets. Capital controls also discouraged bond market development.

Eichengreen, Panizza, and Borensztein (2008) extended this analysis, using panel data on a range of developing and developed countries, with a focus on Latin America. They constructed separate measures of the dependent variable for government bonds, private bonds (corporate plus financial), corporate bonds, and financial bonds. In line with Eichengreen and Luengnaruemithai, (2004) in regard to measurement of dependent variables for government bonds, private bonds, corporate bonds and financial bonds they found that country size, GDP per capita was positive and significant, with a concave relationship. The domestic interest rate was negative and significant only for government bonds. Interest rate volatility was positively correlated with the private bond market and negatively with the government bond market. Domestic credit was positively and concavely related to financial bonds. The interest rate spread was positively correlated with the corporate but not public bond market. The opposite was found for financial bonds. Stricter capital controls were correlated with large public bond markets, but did not influence private bond markets. Larger public debt was linked to large public bond markets but was not significant with regard to private bond market determinants. They found counterintuitive results regarding some of the institutional and corporate governance variables. For instance, they found that stronger creditor rights result in smaller private bond markets. Countries with legal codes of French origin had larger bond markets and those with German and Scandinavian legal codes had the largest bond markets.

They concluded that a limited number of policy variables and country characteristics explained the difference in private bond capitalization between Latin America and advanced economies. Country size and level of development were critical along with development of the financial

system and historical and geographical factors. Policy variables such as macroeconomic stability, openness, investor protection, cost of contract enforcement, and pension privatization also had some explanatory power (Eichengreen and Luengnaruemithai, 2004).

Burger and Warnock (2006) used a cross section of up to 49 countries and examined the determinants of public and private bond markets (bond's issue size and age). They found similar determinants for the two. Countries with better inflation performance and stronger rule of law had larger sovereign and corporate bond markets. The main difference between the two was fiscal policy. Larger fiscal deficits were associated with larger government bond markets. They explored robustness to possible endogeneity of inflation, because of the critical interaction between inflation and bond market development. One approach employed lagged inflation and alternatively, they used an instrumental variables approach, where for private bond markets, the instrument for inflation with a measure of central bank independence and fiscal balance. With this extension, they nonetheless found that higher inflation leads to smaller domestic currency bond markets.

Claessens, Klingebiel, and Schmukler (2007) focused on public bond market development. Their data covered developing and developed countries, over the 1993–2000 period and they incorporated a range of explanatory variables (economic, financial and political) covering macroeconomic and institutional factors. In contrast to the other studies, they specified the dependent variable in logarithms and address potential endogeneity of some of the explanatory variables through use of lagged or initial values. They found that economies that were larger and have greater domestic investor bases, measured by the size of the financial system, had a larger domestic bond markets. Less flexible exchange regimes were associated with less domestic debt relative to foreign borrowing. Other relevant variables included inflation, fiscal burden, legal origin, and capital account openness. Similarly, Jeanne and Guscina, (2006) constructed a data set on public domestic debt in 19 emerging economies, over the 1980–2002 period. They found that a country's history of high inflation has had a strong influence on the level of domestic currency debt.

More recently, Bae (2012) examined the determinants of bond market development of which are the size of an economy, the stage of economic development, the openness of an economy, the exchange rate variability, the size of the banking system, and interest rate variability, using data from 43 developing and developed countries over the 1990–2009 period, with a focus on China. Their study distinguished public, private, and financial bond markets. The main findings were that the degree of economic development, measured by GDP per capita, was the most important variable. In government bond markets, the fiscal balance was robust, with higher deficits leading to larger bond markets. In financial bond markets, no variable was robust, except GDP per capita. In corporate bond markets, low interest rates, a large banking sector, and well-developed government bond markets were conducive to market development. Institutional quality did not seem important.

Adelegan and Radzewicz-Bak (2009) identified that the private debt stocks on various determinants, using generalized least squares, with correction for heteroscedasticity and autocorrelation found that exchange rate variability, no capital controls, and the fiscal balance have a greater positive impact and significant while the quality of the bureaucracy and the interest rate spread were negative and significant. For the private debt stock, they found that domestic bank credit, exchange rate variability, no capital controls, and the fiscal balance were positive and significant while GDP per capita and interest rate variability were negative and significant. Their sample size was limited, especially for the corporate bond market estimation, possibly compromising the robustness of the results.

The endogeneity of the explanatory variables have not generally been sufficiently addressed in the relevant literature. The assumption that explanatory variables were exogenous to bond market development may not be valid, making problematic the task of identifying determinants. For example, the fiscal balance drives debt stocks but the interest on an existing debt stock may drive the fiscal balance, especially if the debt stock is significant.

Thus fiscal balance might be endogenous in the model. Similarly, they expected that the interest rate volatility and spread may be endogenous in a model explaining the debt stock. As such, the existing research is helpful, but further examination of the influence of accounting for potential endogeneity of some key explanatory variables would be warranted. Their empirical specification draws upon Eichengreen and Luengnaruemitchai (2004), Eichengreen, Panizza, and

Borensztein (2008), Adelegan and Radzewicz-Bak, (2009), and Bae, (2012). Thus their study made several contributions relative to this literature such as:

First, it carefully distinguished in its measurement of government securities market capitalization, marketable from non-marketable central bank debt. Debt associated with extension of lending to government by the central bank may constitute a significant proportion of domestic government debt in African countries, yet may not provide an indication of the development of the domestic currency bond market. Second, it provided a much more complete coverage of sub-Saharan African domestic government securities and corporate debt. The empirical investigation involved a large sample of observations, with 36 countries covered over the period 1980 to 2010. Also, a database for corporate debt was developed for sub-Saharan Africa, which included 24 countries that had active corporate bond markets over the period 1980 to 2010. Moreover, the intention was that the database they created provided the groundwork for a fuller database in the future, which may be expanded regularly over time and as more countries become active within the corporate debt market. Third, their study contributed by employing a wide array of variables drawn from the existing literature. Fourth, it confronted the issue of endogeneity by using generalized method of moment's estimation.

2.2 Conclusion

This part provided a literature review and an overview of the government securities and corporate bond markets. Developing the bond market have benefits which include adding value to the existing financial system and offers more investment opportunities for both individual and institutional investors, thus helping deepen the financial markets associated with other instruments such as equity, derivatives etc. Bond market can also help to provide alternative source of financing and investment as it reduces concentration of intermediation in banks.

2.3 Current situation of government securities and corporate bond markets in Asia, Central European East Africa, Sub-Saharan Africa and South Africa.

For the para below, refer to appendix A page 87-96

Local currency bond markets in sub-Saharan African countries are still at a nascent stage of development with market capitalization of both government securities and corporate bonds typically much lower than those of other developing, emerging, and advanced economies as a percentage of GDP (fig 1 of appendix A, page 87). The government securities market

capitalization as a percent of GDP was 14.8 percent in 2010 in sub-Saharan Africa. In contrast, Asian and Central European countries surpassed the measure with 85.2% and generally speaking most Latin American countries did as well represented by 80% excluding Argentina and Chile which performed poorly with only 20%.

This disparity was even greater for corporate bonds. On average, the capitalization of corporate bonds was 1.8 percent of GDP in 2010 for these countries (Asian and Central European countries), whereas this figure was generally much larger for other developing and emerging economies, with the exception of Poland. Moreover, the low level of development of the bond market was particularly apparent upon comparison with the capitalization of more advanced economies, and, in the case of the economic size, countries with smaller economic size were less likely to have well developed bond markets because they would tend to lack the scale efficiencies required for deep and liquid markets. The typical amount of capital raised from issuance may be too small to attract multinational companies and foreign investors, for instance, and to justify inclusion by leading investment banks in global bond markets indices, in which case there would be no demand by investors to hold local securities in order to track the index (Eichengreen and Luengnaruemitchai, 2004). In addition, infrequent buying and selling would tend to lead to greater price volatility and discourage risk-average investors. GDP at purchasing power parity was employed as a suitable proxy for economic size and a country's area in squared kilometers as a proxy for geographic size.

It was argued that more open economies encourage securities market development because established interests may not be able to insist on policies that suppress competing sources of supply when the economy is exposed to international competition (Rajan and Zingales, 2003). However, it may also be the case that countries which were less integrated with external economies had more incentive to develop domestic bond markets in order to meet their financing needs (Adelegan and Radzewicz-Bak, 2009). Following Eichengreen and Luengnaruemitchai (2004), trade openness was measured as the total exports of goods and services as a percentage of GDP. Their explanation was that corporations in more closed economies may face external financing constraints that prompted greater domestic market development.

Issues regarding the banking sector size, greater development of bank lending may discourage bond finance because in some ways the two are competitors. On the other hand, banks may seek bond markets to place surplus funds. And banks serve as dealers and market makers thus foster development of a liquid and well-functioning bond market (Harwood, 2000 and Hawkins, 2002). As such, bank and bond finance could either be complements or substitutes.

In regard to bank lending spread, it is important to bond market development because interest rates, being the cost of debt, would be integrally linked to the willingness to borrow through debt issuance. Higher interest rates would discourage bond issuance. However, the bank lending spread, in contrast to the interest rate itself, could reflect the degree of competition and efficiency in the bank sector and thus, a higher spread could encourage the bond market, if it is associated with greater inefficiency (Eichengreen, Panizza, and Borensztein, 2008). The bank lending spread is measured by the bank signature lending rate minus London Inter Bank Offered Rate. Interest rate variability could be important if investors have different degrees of risk aversion. Interest rate variability may reduce the attractiveness of holding bonds for a risk-averse investor and a high degree of variability, with fixed-rate assets, would tend to preclude development of longer-term issues. Interest rate variability may also reflect a thin market. In their studies (Eichengreen, Panizza, and Borensztein, 2008) the standard deviation of interbank interest rates was employed as a proxy for interest rate variability. Since the variability may change over the sample, their measure was calculated as the logarithm of the standard deviation over 10-year periods. In addition, where the interbank rate was not available, as is the case for a number of countries, the Treasury bill rate was used instead.

In their findings (Eichengreen, Panizza, and Borensztein, 2008) identified that volatility seemed to discourage corporate debt but may appear to have less influence on government debt markets. This was likely because corporate bonds were driven more by market forces while governments often tend to enjoy caped investor base in underdeveloped financial markets such as Africa. Similarly, exchange rate variability could be relevant to participants in financial markets, with several countervailing effects on bond market development. On the one hand, pegged or relatively fixed exchange rates may encourage foreign investors to demand for bonds, which would encourage bond market development but could on the other hand lead some to underestimate the risk of lending to banks and corporations and the resulting foreign competition may slow the development of domestic intermediation (Goldstein, 1998). To measure the exchange rate variability, the standard deviation of the change in the logarithm of the nominal

exchange rate was calculated. As for the case of interest rate variability (appendix A, page 42-43), the calculation of the standard deviation was over 10-year period to account for changes in volatility over the sample period. Thus exchange rate volatility seemed not implausibly to encourage domestic debt markets.

In case of capital account openness (appendix A, page 91), it may also be relevant to bond market development. On the one hand, some studies by Adelegan and Radzewicz-Bak (2009) have suggested that openness to foreign portfolio investment enhances governance quality of local corporations and access of domestic debt to foreigner investors. On the other hand, capital controls may provide an incentive for governments and firms to source finance from local rather than external capital markets. The Chinn-Ito Index, developed by Chinn and Ito (2006), was employed to proxy for capital account openness. This measure was based on the binary dummy variables that codified the tabulation of restrictions on cross-border financial transactions reported in the IMF (2010) *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER), including indications of the presence of multiple exchange rate regimes, current account transactions, capital account transactions, and the requirement of the surrender of export proceeds (a higher number indicating a more closed account). While containing variation over time and referring to the intensity of capital controls, the index has a relevant coverage of countries and time period for the study.

In fiscal balance (appendix A, page 92) fiscal policy can affect bond market development in several ways. On one hand a well-developed government securities market may indirectly promote the development of a corporate bond market in that it "helps promote a class of dynamic, profitable fixed-income dealers", (Harwood, 2000). On the other hand, a large supply of government debt securities may crowd out private debt securities, slowing corporate bond market development. Therefore, according to these arguments the relationship is theoretically ambiguous. The measure of fiscal balance in their study was calculated as a three-year moving average of past budget balances. As has been noted in the literature, the moving average of past budget balances is preferable to many alternative measures, especially a single year, because the budget balance in a single year may be dominated by transient factors (Eichengreen and Luengnaruemitchai, 2004).

In economic development, there were a number of reasons why economic development fostered bond market development. For example, less developed countries had volatile investment environments and governments were typically heavily involved in commercial activity. They often had weak creditor rights, inadequate transparency, and poor corporate governance. For instance, LaPorta et al. (1998) argue that the rule of law varies as a function of GDP per capita. Therefore, GDP per capita could be thought of as capturing these aspects of under development in the event that they are not fully captured by other explanatory variables.

La Porta et al. (1998) located that common law system in the British tradition, which are thought to offer stronger investor protection than systems in the French civil law tradition, should promote the development of financial markets. Furthermore, countries with English legal systems are more likely to have market-based financial systems while countries with legal systems based on civil law are more likely to have bank based financial systems (Levine and Demirguc-Kunt, 1999). To proxy for strength of the legal system, two measures were employed. First, a dummy variable was constructed, indicating whether a country's legal origin is English, based on data published in the CIA World Factbook (English origin took value 1 and non-English origin a value of 0). Second, the International Country Risk Guide's (ICRG's) index of law and order was employed, which is based on the aggregation of two separate assessments for law and order, with each sub-component comprising zero to three points. The law subcomponent was an assessment of the strength and impartiality of the legal system, while the order sub-component was an assessment of popular observance of the law. Thus, a country enjoyed a score of 6, which equates to a very high level of law and order, or a rating of 0, which indicates instead a very low level. The advantage of the ICRG measure over the dummy variable approach was that it provided annually and on a country-by-country basis, hence it also contained information on the evolution of law and order, while distinguishing between countries which have the same legal traditions.

Corruption is also a threat to investment since it distorts the economic and financial environment and introduces instability into the political sphere hence making it more difficult to conduct business effectively, and could force the withdrawal or withholding of investment, whereas corruption may also undermine law enforcement.

In Investment profile, bonds are a way for investors to limit risk, since entities issuing bonds are generally of higher credit quality than those issuing equity claims (Harwood, 2000). It may not always be the case, however, that there are sufficient high quality issuers with sound business models and records of financial prudence.

If bureaucracy, governance, and regulation are weak, investors will be reluctant to take positions in markets characterized by opportunistic participants and delivery risk. Moreover, elements of an adequate regulatory framework include disclosure standards, penalties for accountants and auditors providing false information, and sanctions for insider trading and market manipulation, whereas a clear and consistent implementation of regulations may also be important.

Country size also plays an important role whereby countries that are larger may achieve significant economies of scale in domestic markets and thus would tend to have more developed markets for a range of goods and services, including financial services.

The comp risk variable is a composite of law and order, corruption, investment profile, and bureaucracy variables. It is the sum of the index value and because all the variables are defined with the better outcome as a higher number, the higher the value of this variable, the better the quality of institutions or the lower the risk.

On issues of endogeneity, the government has the capacity to influence market rates. Hence the supply of bonds could drive interest rates and thus there is reverse causality from bonds to interest rates. Focusing on the fiscal balance, in Africa, many governments are constrained in their ability to borrow. Hence the size of the fiscal deficit may be driven by the availability of debt finance.

Africa is a continent with significant problems on the one hand and great potential on the other. The larger denomination existing in the bond market act as a barrier to entry regarding individual investors in the bond investment. In sum, over recent years the corporate bonds is increasingly as important component of bond market and as a source of financing to some countries. The poor liquidity of these bonds, coupled with the risks associated with corporate bonds, means investors demand a premium to hold these bonds.

2.4 Corporate Bond Market Development in East Africa.

One inference often drawn from developed market experience is that a key criterion for the development of a corporate bond market is the presence of some form of independent credit risk assessment (www.loita.com). The question for the policymakers is "can independent credit rating be reconciled with provisions that allow some regulators of institutional investors" i.e Central Bank, Commissioner of Insurance, Retirement Benefits Authority (RBA) etc to themselves determine credit ratings of the debt instruments 'their" firms can invest in. Central bank of Kenya has multiple interests in the development of bond markets. At a fundamental level the government Treasury bond helps to fund budget deficits. It is important to note that Central Bank of Kenya has increased its issuance of long term Treasury bonds currently with 12 year tenure thus increasing the maturity of government debt. Central bank acts as agents for the government in various aspects of the management of government debt (www.loita.com). They oversee clearance and settlement system and they are responsible for the stability of the financial system often directly supervising banks. This multiplicity of interest means that the policy issues that arise are very diverse. Though Kenya's financial sector is dominated by ten largest commercial banks, which accounts for over 77% of all deposits held by banking institutions. Insurance and banking sector are quiet competitive, but need to be restructured so that there is a competitive bidding for government Treasury bills auction. The assertion is that 'limiting' participation in the Treasury bill auction to only few players would restrict competition and consequently the result obtained will not be market driven. A developed Treasury bond market has a direct impact on the capital market.

Without a functioning bond market firms lack clear measure of the opportunity cost of funds. They will rely on commercial banks for debt financing. The same constraint that prevents the development of bond markets also leads banks to prefer short term credit which implies higher risks for business. The government massive infrastructure development i.e. Reconstruction of dilapidated roads network can be privately funded. Often in such cases the commercial feasibility depends on the funding structure that minimizes considerably risks, of which debt of this nature can be provided by a liquid traded bond. It is equally important to note that the limited role of corporate bond market is a function of how companies have been financing their investment projects especially medium to long term fixed investments. The yield of a bond has to compensate an investor for the opportunity cost of funds, default and liquidity risk. If a return of

the bond is distorted among clients and there is no active secondary market, investors will be reluctant to participate in the development of the corporate bond market.

2.5 Bond Market Development in Sub-Saharan Africa

The link between domestic financial market development and economic growth has been comprehensively covered in the literature (www.fondad.org). It is generally agreed that there is a positive relationship between economic growth and financial sector development, although there may not always be agreement on the direction of causation, (Kahn (2005). Livine (1996) and UI Hague (2002) are of opinion that modern functional approaches emphasize the point that financial sector performs more functions than simply being a conduit for the mobilization of saving. These approaches highlight that policies should move beyond simply encouraging the growth of commercial banking. It is also established (Montiel, 2003) that financial markets develop as per capita income increases. As the process of development proceeds, financial markets expand, although the nature of these markets may differ from country to country, depending on the policy, regulatory and legal infrastructure. In general, commercial banks dominate the financial markets in developing countries (UI Hague, 2002).

Financial crises are often caused by weakness in a country's financial system. It is argued that central to this is the question of "original sin", that is the inability of developing countries to borrow abroad in domestic currency. This in turn results in excessive foreign borrowing which increases vulnerability in the face of a crisis. Eichengreen, Hausmann and Panizza, (2003) question the ability of developing countries to escape from original sin without an international solution. This gloomy prognosis has been challenged by Goldstein and Turner, (2004) who argue that the problem of currency mismatch is likely to become less severe as countries develop. The argument underlines the need to develop domestic financial markets, particularly domestic bond markets. They argue that a range of domestic policies can be implemented to overcome this problem.

Although domestic bond markets have developed quickly in recent years in a number of emerging markets, particularly in Asia, bond markets remain rudimentary in Sub Saharan Africa, apart from South Africa, where domestic bond market development has more recently included the significant expansion of the corporate bond market. The lack of a developed bond market not only has implications for the issue of currency mismatch, but also for the efficacy of fiscal

policy. It is also argued however that the development of domestic financial markets does not completely insulate countries from foreign exchange crises. Although the problem of currency mismatch is reduced, extensive foreign participation in domestic bond markets can make the currency vulnerable when risk perceptions change (Kahn,2005).

Originally, the term (domestic original sin) was used to include not only the difficulty of borrowing abroad, but also the difficulty faced by countries in borrowing at home at long maturities. This is the notion that was also used in a number of other studies (Bordo, Meissner and Redish, 2003). Countries suffering from both aspects of original sin would be particularly at risk in coping with adverse shocks. If the currency depreciates in response to the shock, the country will be hurt by the balance sheet effects of the aggregate currency mismatch. But attempts to support the currency by raising interest rates will harm the financial position of firm as a result of the rise in the short-term interest rate, given the absence of long term, fixed-rate debt, (Kahn, 2005).

In Eichengreen, Hausmann and Panizza, (2003), the definition was narrowed to exclude domestic original sin on the grounds that a growing number of countries are showing an ability to borrow long-term in domestic currencies. They note that Chile, Hungary, India and Thailand amongst others are now able to borrow on domestic markets at a fixed rates without exchange rate indexing of their bonds. However their ability to borrow abroad remains limited. They point to the fact local corporate bond issues in emerging markets grew by a factor of ten between 1997-99 and 2000-2001 and that local bond markets have been the dominant source of funding for the public sector in emerging markets. Similarly in Latin America, local bond issues were almost as large as international issues of bonds, equities and syndicated lending in 1997-2001. Eichengreen, Hausmann and Panizza, (2003), played down the role of factors such as the level of development, macroeconomic credibility and quality of institutions as the sole explanations for original sin, although they concede that these factors may have some limited role. But they argued that even those emerging markets that have improved their policies and institutions have made relatively little in roads into solving mismatch problem. If bond markets are to be developed in other emerging markets, the role of the state become critical, as a range of policies would be required. At the domestic level, it requires appropriate macroeconomic policies,

including fiscal and monetary discipline to promote a virtuous cycle in bond market development. Default risk and high inflation are important impediments.

2.6 The development of the South African and other countries Corporate Bonds

Subsequently the pioneering issue of the SA Breweries bond in the early 1990s, the SA corporate bond market shrunk, wedged in by an avalanche of government paper on one flank, low supply from corporates on the other side, and buys –and-hold investor attitude in the middle. In the 24 months to June, 2001, the corpse had stirred, with increased activity in both the OTC and the listed market (www.oecd.org). A feeling of cautious optimism has been fed by increased corporate bond in Australia, certain other emerging markets and, above all, in Europe. Perhaps most important, for the first time ever in South Africa, both issuers and investors have compelling reasons to consider corporate bonds, these are; Vigorous and dependable income—the yield available from corporate bonds can provide an attractive and steady income stream.

Diversification— the different return profile of corporate bonds relative to other major asset classes, such as equities and government bonds can help investors achieve a greater gradation of diversification in a portfolio

A broad investable universe— the large, liquid investment universe of companies issuing bonds worldwide provides opportunity for active managers to add value. (Rand Merchant bank, 2001).

Corporate bond markets are finally taking off the Euro Zone and Australia. Banks have maintained their funding dominance over bonds and equities in virtually all emerging economies. Unlike many African and emerging-market countries, South Africa relies more on its domestic bond market than on international borrowing. This is partly due to historical reasons, but also due to the preferences of the current government. In the 1970s and 1980s, sanctions were progressively imposed on South Africa, and the country was effectively denied access to international financial markets, at the same time, the government of the day ran large deficits, at times as high as six percent of GDP. This, of course, was at times imprudent fiscal policy, but it had at least the one benefit of contributing to the development of the domestic bond market. The government had no option but to fund its growing budget deficits in the domestic bond market.

Against the backdrop of exchange control regulations and prescribed asset requirements, the large non-financial institutions provided a ready demand for these bonds, (Mboweni, 2006).

The Bond Exchange of South Africa Limited (BESA) is an independent, licensed exchange operating and regulating debt securities and interest-rate derivatives in the South Africa capital market. BESA provides a number of tools to assess performance and provide benchmarks for asset managers and traders, example APQC's Rapid Performance Assessment, a fully automated tool that compares specific processes, performance, and efficiency with relevant peer assemblies. According to the statutory regulator, a self-regulatory organization must efficiently and effectively supervise and oversee the operation of the market using expert knowledge and available resources. It is also empowered to create rules in line with the statutory requirements set by its regulator and to amend and enforce these rules with respect to the entities that supervises and regulates.

2.7 The Botswana bond market

The Botswana bond market has been slightly developing in SADC region, with a range of government, quasi-government and corporate bonds. However, bond market development is relatively recent. For several years it was mired by the lack of government bonds in issue; the Botswana government generally runs a budget surplus, and with substantial accumulated financial balances has no fiscal need to borrow (www.slideshare.net/econsultbw/2009). Nevertheless, the Government was persuaded that it was necessary to issue bonds in order to stimulate market development, and in 2003 it issued the first sovereign domestic debt, with maturities of 2, 5 and 10 years. In 2004, the Government also issued a range of quasi-government bonds through a parastatal entity (Debt Participation Capital Funding), with maturities up to 21 years. In 2008, the Government also issued a Treasury Bill, and committed to undertake regular bond issuance. While the initial impact of government bond issuance was good, the fact there were no further government bond issues until 2008 weakened the market.

The issuance of government and quasi-government bonds helped to establish a risk-free yield curve extending out to 20+ years maturity, which in turn has underpinned the issuance of bonds by other entities. The commercial banks have been particularly active issuers, taking the opportunity to strengthen their balance sheets through the issue of bonds which qualify as Tier II capital (and which therefore contribute to capital adequacy requirements under Basle rules).

Other active issuers include parastatal (government-owned) financial institutions and utility companies. Capitalisation on the bond market was around US\$850million at the end of 2008 (P6 305 million), with government accounting for 37%, quasi-government & parastatal issuers 29%, corporates 25%, and non-resident issuers 11%. Even now, with newer bond issues, the market remains small. The market for bonds is, however, dwarfed by the market for central bank paper (with maturities of up to 364 days). Bank of Botswana Certificates are issued for monetary policy purposes, and are restricted to Botswana-registered commercial banks only; foreign participation is not allowed (www.bse.co.bw).

Turnover in the bond market is relatively low, with liquidity (turnover/market capitalisation) of 5.2% in 2008. The majority of trading was in government bonds, accounting for 90% of total turnover, with liquidity of 12.8%; relative to their level of capitalization, quasi-government and corporate bonds saw low levels of trading.

Trading is sporadic; for instance, in 2007 there were ten months of the year with no trading in government bonds, while in 2008 there were four months with no trades. While the issuance of government/quasi-government bonds helped to establish a yield curve, trading on the secondary market remains generally thin, and hence the yield curve is not very responsive to changing economic conditions. In other words, points on the yield curve are market-determined at the time of primary bond issuance but not at other times. Since 2008, government bond auctions have been scheduled at six-monthly intervals (i.e., there is now a regular bond issuance programme, but auctions remain infrequent). Holdings of government bonds are dominated by institutional investors, with relatively small holdings by the banks (primary dealers) for their own account. The bond market (and indeed much of the equity market) is characterized by "buy and hold" strategies on the part of local institutions such as pension funds and life insurance companies. There is substantial excess demand for bonds, especially government bonds, and institutions are concerned that if they actively trade bonds they may be unable to re-establish their positions. A much larger government bond issue programme is needed to balance supply and demand, and hence promote liquidity (www.bse.co.bw).

2.8 Corporate Bond Performance

One of the most useful measures of investor experience is obtained by comparing the difference between the promised yields at offering with the yield realized to extinguishment. Other measures include default rates and average promised yields, realized yields and loss rates, Hickman, (1958).

Yield is a critical concept in bond investing, because it is the tool we use to measure the return of one bond against another. It enables us to make informed decisions about which bond to buy. In essence, yield is the rate of return on investor bond investment. However, it is not fixed, like a bond's stated interest rate. It changes to reflect the price movements in a bond caused by fluctuating rates (Sifma, 2008). Bond yields are quoted using a variety of convections, depending on both the type of issue and the market. Pliota (2008) examined the current yield calculation that is commonly used for long term debt hence the formula is

ic= C/P whereic is the current yield,C is the coupon payment,P is price.

He noted that bond pricing is, in theory, no different than pricing any set of known cash flows. Once the cash flows have been identified, they should be discounted to time zero at an appropriate discount rate. Bhanot (2004) is of opinion that the commonly used indices of corporate bond yields, such as those produced by Moody's are constructed to track the yields on corporate bonds. The difference between the yield on a given index of corporate bonds and a comparable maturity treasury bond is an important input in test of asset pricing models. From a practical perspective, there is a demand for a wide variety of financial products whose payoff is linked to the credit spread of a particular ratings or class of bonds. The credit spread is also an important economic indicator of investor sentiments that is useful for forecasting future economic activity. Therefore an understanding of the behavior of credit spread is of utmost importance for both academic and practical reasons.

Evidence at the individual bond level reveals that idiosyncratic demand and supply shocks and liquidity related effects are important factors that determine yield and changes at short horizons (Shultz, 2005, Chakraarty and Sarkar, 1999.

O'Brien and Morgan, (2004) reports that the mean-variance approach to asset allocation stresses to relativel expected returns and their correlations. The proper bond allocation under this framework is very sensitive to the assumed correlation between stock and bond returns. This correlation was positive over much of the 40 years to 2004, contributing to the conventional wisdom that bonds and equities are portfolio substitutes.

Dittimar and Yuan, (2007) analyzed the impact of emerging markets sovereign bonds on emerging-market corporate bonds by examining their spanning enhancement, price, discovery and issuance effects. They found the effect of spanning enhancement is positive and large; over one-fifth of the information in corporate yield spreads is traced to innovations in sovereign bonds; and most of these effects are due to discovery and spanning of systematic risks. Further, issuance of sovereign bonds, controlling for endogeneity of market-timing decisions, lowers corporate yield and bid-ask spreads. Their results indicated that sovereign securities act as benchmarks and suggest they promote a vibrant corporate bond market.

Corporation in emerging market countries, large or small, typically do not depend on bond markets to raise capital because emerging bond markets are extremely underdeveloped. To increase these corporations access to external capital and to facilitate growth of the bond market, many emerging market governments believe that they first need to establish an active sovereign bond market. Their argument is that sovereign bonds provide benchmarks against which to value corporate bonds, and hence serve as catalysts for the development of the country's corporate bond market (Fabella and Madhur, 2003).

Lumby and Jones, (2000) stated that in the United States, the US treasury has a Treasury Direct program to sell treasury securities to individual investors, but the main holders of treasury bonds are large institutions, Pension funds and Insurance companies hold bonds for investment purposes while investment banks often purchase bonds then resell them to smaller investors. However Melicher and Norton, (2007) state that corporate bonds sales are mainly intended for

large institutional investors who can purchase millions of dollars of bonds at a time giving note that in recent years, innovative firms like IBM, UPS, Caterpillar and GE Capital initiated programs to sell \$ 1000 par value bonds directly to individual investors. These bonds are called Smart Notes, medium-term notes, or direct access notes. These sales programs target small investors who have thousands rather than millions to invest in bonds.

2.9 Factors to consider for a bond investor.

Hirschey and Nofsinger, (2008) advocated that too many investors know too little about fixed income securities. Very interestingly, these authors mentioned that bond types, risk characteristics, bond trading dynamics are important considerations for the knowledgeable investor. Informed investors are also familiar with important fixed income-concepts, such as duration and convexity.

Credibility of the Issuer

One of the most important assessment factors when buying a bond is who the issuer is. Just as an investor would assess any potential borrower before lending money, The assessment is needed for repayment capacity of the issuer too.

Stability of the issuer is the first thing to be looked at. Companies that have been around for decades have strong financials and a sound business strategy are not likely to close shop in the next economic downturn. Bonds issued by these companies are a good investment option.

Another good way to determine if a company will remain successful for a long period is to look at the market that it operates in. If the company offers essential services like telecom or manufactures critical products like medical equipment then its business will remain somewhat insulated from economic downturns. This lower market risk will also be reflected in bond prices.

Credit Rating

To help investor compare risk with various bond offerings, credit rating agencies come up with ratings of bonds. Ratings issued by agencies like Moody's, Standard & Poor's and Fitch can tell investor how a particular bond is expected to perform and how much risk is associated with it. The rating denotes the credit quality and represents the likelihood of timely and full repayment.

A bond which has been rated 'AAA' is among the best in the market. 'AA' bonds are also a very safe investment. Bonds with the lowest rating (typically C or D) should be avoided if an investor is risk averse.

2.10 Reasons why few individuals invest in Bonds.

An interesting journal article by Martin Feldstein stated that the reasons why investors less prefer investing in bonds are that:, (1) Bond offer no hedge against inflation, this causes interest rates to raise which then causes bond prices to fall, (2) Bonds over the long run have lower returns than stocks and (3) Bond prices may swing 20% or more if selling bonds before maturity. Speculators might see this as an opportunity but conservative investors will need to ignore price changes if planning to hold to maturity (Martin and Charles, 1980).

2.11 Behavioral problems faced by bond market investors

Bond market investors just like stock market investors must overcome a variety of behavioral biases in order to be successful (Wall Street online 2014). Chasing high prior returns, underestimating risk, displaying an inefficient reluctance to realize losses and failing to adjust predictions with new information are common behavioral problems faced by bond market investors. In the US for example, data from the mutual fund industry showed that individual investors started selling bond mutual funds in 2000 after bonds had earned a poor relative rate of return during the late 1990's. Then after relative strong performance by the bond market in 2001, individual investors started switching tens of billions of dollars from stock funds back to bond funds in 2002 and 2003. In other words, suffering from representativeness bias, individual investors sold bonds to buy stocks during stock market peak of 2000. Then after the stock market crash of 2000-2002, investors returned to bonds.

Gebhardt, Soeren and Swaminathan (2005) stated that bond investors seek attractive means for explaining expected returns and risk in bond market. According to this financial analysts and writers, two primary risks in the corporate bond market are a bond's sensitive to interest rate changes and the likelihood of default. Two factors are related to these risks, one is the term structure of interest rates while the second one measures the default risk premium as a difference between the long term yield on investment grade corporate bonds and the yield on long term Treasury bonds.

Trading of bonds.

Individuals and institutional investors have an enormous variety of individual securities from among which they can make their bond investment selection, stating that most individual bonds are bought and sold in the over the counter (OTC) market, but some corporate bonds are also listed on the New York Stock Exchange (NYSE). Like OTC stock market, OTC bond market includes hundreds of dealers who trade with individual and institutional investors by phone or electronically (www.money markets). Bond mutual funds like stock funds, offer professional selection and management of diversified portfolio of securities. Thus this allows investors to diversify risks across broad range of issues and they offer a number of other conveniences, such as option of having interest payments re-invested. With conventional mutual funds, bond investors are able to buy or sell fund shares at any time.

Making bond market more liquid.

Sole (2006), from his case study in Japan, stated that in order to enhance the variety of investors, less restrictions should be applied to foreign entry. This, according to him, would widen and deepen the investor base as well as bring additional expertise. A large international presence would also make markets more liquid, as different types of investors are less likely to adjust their portfolios in the same direction and at the same time. Furthermore, Sole (2006), argues that opening the bond market to foreign investors would result in increased pressure to constantly modernize the market infrastructure and to maintain high transparency standards. He calls for more listing of bonds in the market, arguing that this would accomplish two important goals to promote the bond market; first it would provide a valuable safeguard for small investors and secondly it would promote the standardization and flow of information through disclosure requirements which in turn would enhance the price discovery process. In Botswana the government bond issue established a low risk yield curve that serves as a benchmark for other domestic bond issues, both from corporate and semi-government issuers.

2.12 Conclusion

The literature of both investing in corporate bonds and bond development in Europe, Asia, Africa (mostly Sub Saharan Africa) was reviewed contributing to the understanding of sub-Saharan African government securities and corporate bond markets. While African countries have trusted on government securities for financing fiscal deficits, domestic (in some African

countries) securities markets remain underdeveloped and most countries are excessively dependent on foreign borrowing and bank borrowing, a few still from their central banks. Corporate bond markets remain at a nascent stage of development in most sub-Saharan African countries and, with the immunity of South Africa, are small. In recent years, nevertheless, corporate bond markets have begun growing steadily and look set to become ever more imperative as a source of finance in the future, as African countries endeavor to close the infrastructure and development gap with more radical economies. The next chapter reflects the methodology and research design used to conduct the study.

CHAPTER 3

METHODOLOGY

3.1 Introduction

Chapter two reviewed the literature of both investing in corporate bonds and bond development in Europe, Asia, Africa mostly Sub Saharan Africa and provided the framework which formed basis of methodology to be used in analyzing evaluation of the use of the bond market by individual investors in Botswana. This chapter reflects the methodology and research design which was used in the study. Institution (BSE) surveyed through the questionnaire is listed in Appendix C (pp.109), along with the questionnaire used. The following aspects will be dealt with; research approach; research design; data collection methods; target population; data analysis; procedures and quality assurance.

3.2 Research Questions

- ♦ How do the individual investors perceive their risk taking ability while investing in bonds market in Botswana?
- ♦ How have the bonds issued in Botswana performed?
- ❖ How can the bonds market be enhanced by Botswana Stock Exchange?

3.3 Research Philosophy

Research philosophy plays a vital role in selecting the appropriate research strategy. It has significant effect not only on what the researchers are doing but also helps them to understand what is being investigated (Saunders et al., 2009). There are two ways to study social world, positivism and interpretivism. Ryan et al (2002) mention that positivism has had a huge effect on the development of finance and accounting. Positivism came about as a result of observing and experiment and consequently coming up with laws. These laws, both in natural and social sciences, always make generalisation with natural sciences leading in such kind of laws (Ryan et al, 2002). In science, for example, there is the law that says whatever goes up will come down because of gravity while in economics (social science) the law of supply states that when prices go up, quantity supplied is increased in order to maximise profits. These laws came to existence as a result of beliefs that people had and consequently conducting research to support their beliefs. From a positivist's point of view, experiments or investigations carried around these

topics will always yield the same findings. Lakatos's (1970) belief as cited in Ryan et al (2002) depicts positivism as core terms which scientists deem undisputable and can only be confirmed through experiments and theoretical amendments can only be made to protect the underlying concepts.

Positivists argue that reality can be tested and defined objectively (Rossman and Rallis, 2011). With the positivist approach, the experience of the world is best understood in terms of the researcher's objective definitions (Rowlands, 2005). The researcher uses hypothesis testing, through experiments or correlations, to affirm a theory or speculation about the association between two or more variables (Rossman and Rallis, 2011). These authors also note that in a positivist research approach, participants are chosen by use of statistically determined methods.

Interpretivism uses a more involved researcher attempting to understand the complexities of the social world (Burrell & Morgan, 1979). The concept of interpretivism came as a result of critiquing positivism. In contrast to positivism, interpretivism articulates that reality is not objective and exterior but rather it is shaped and given meaning by human beings (Easterby-Smith et al, 2012). Berger and Luckman (1967)'s view of interpretivism as cited by Rowlands (2005) is centred on the concept that people socially and symbolically create their own realities. The paradigm follows the assumptions that people are the interpreters of the world and reality hence the experience of the world is shaped by individuals' subjective meanings (Rowlands, 2005).

This phenomena is understood through pursuance of a shared understanding of a situation by the researcher and the interviewee (Rowlands, 2005). The researcher would engage in a conversation with the interviewee in order to get an insight into their own views and opinions on a particular subject. As Rowlands explains, an interpretive approach focusses on human action brought about by interpretation, interventions and human decisions. Interpretive finance research allows social scientists to examine market behaviour from an ethical, cultural, political, and social issues point of view (Ardalan, 2003). In contrast to natural sciences, justification of models and theories in finance and accounting is not a technical problem of identifying some particular law of behaviour but it entails behavioural interpretations (Ryan et al, 2002).

This research adopted the positivistic research philosophy because bond trading has certain principles, for example, risks associated with investing in it are predictable from the financial markets where they are traded and there are very likely chances that this research ends in law-like generalization (Saunders et al., 2009).

The ontological principle is concerned with the nature of the reality. This is further classified into two categories; Objectivism, which states that "social entities exist in reality external to social actors concerned with their existence", and subjectivism that "holds that social phenomena are created from the perceptions and consequent actions of those social actors concerned with their existence" (Saunders et al., 2009). The scholar's ontological position in this research is the objectivism. In bond trading there are standard rules and regulations given in trading law which should ideally be followed. The scholar cannot influence or change these rules. The whole concept of Botswana capital markets is built on these fundamentals laws. Moreover there is standard procedure for issuance of bonds and the scholars examine their applicability in Botswana capital markets.

3.4 Research Design

A study by Brown, Askew, Baker, Denvir and Millett (2003), research design provides the glue that holds the research project together. A research design is used to structure the research, to show how all of the major parts of the project, which include the samples or groups, measures, treatments or programs, and methods of assignment work together to try to address the central research questions. The study will be based on the investigation method hence being descriptive and analytical in nature. It is descriptive as it describes the existing secondary markets (bonds pattern) available in the market. It is also analytical as it analyses the perception and attitudes of the investors which provides an understanding to readers about the various factors which should be kept in mind at the time of investment. The study is useful to financial institutions and markets in providing the understanding about the investors' perception to devise the suitable product/marketing strategies, which will help them in making their policies or strategies in order to attract investors. A self-administered questionnaire was used to collect data from individual investors.

3.5.1 Sample Population

The study seeks to know the investors perception in risk taking ability while investing in Bond market. Their awareness, knowledge regarding Bonds market and various factors at the time of the investment in the product will be analyzed. The population of the study encompassed all Batswana investors aged eighteen (18) and above as they are being considered a working class, hence also including population of all long term securities such as bonds, notes, debentures issued by the corporates that are being listed in BSE and are being traded on the Botswana market between 2008-2013.

3.5.2 Sample Size of respondents

The population of the study encompassed all Batswana investors aged eighteen (18) and above, but because it is not possible to cover all of them in the study due to limitations such as financial constraints and time constraints, a sample consisting of four hundred (400) participants was selected. This was considered adequate to represent the characteristics of the entire population. Therefore the sampling technique used for this research was judgmental sampling in terms of population of respondents as this was drawn from a range of sectors according to Statistics of Botswana investor's handbook for 2012. This is the techniques to increase the probability that the sample selected represents the population. Judgmental sampling was also used in terms of population of bonds and all other long term securities being traded on the Botswana market from 2008-2013. Judgmental sampling is non-probability sampling where the researcher selects the sample in believe that they can obtain a representative sample by using sound judgment, which will result in saving time and money. In this sampling the scholar believes that the sample they will select will meet the requirements of the study (Shiu, Hair, Bush & Ortinau, 2009).

3.5.3 Period Covered

The period covered was 2008 to 2013 due to the fact that some of the considerations examined relied on empirical evidence in identifying general trends in the bond market. Primary data for this research was collected using a self-administered questionnaire. A self-administered questionnaire was used since the level of understanding of the questions by the respondents expected to be relatively high. The questionnaire contained a covering letter describing the study and indicating the confidentiality of the information that may be given out by the respondents. Other secondary sources were also used. These included, but not limited to, the use of journals,

books and other scholarly or media publications. Questionnaires suited this study very well since the study aimed undertook an explanatory research. It enables the study to examine and explain relationships between key variables that comprise the risk profile of a bond such as bond price, interest rates, yield, maturity and default history. The questionnaires were hand delivered, completed and collected the same day. This eliminated problems of low response rate and allowed the study to further clarify questions to the respondents. Questions were designed in such a way that the respondents found them easy to understand hence less time consumed to respond.

3.5.5 Research Procedures

Structured and semi-structured questionnaire used to collect data was structured into two sections. Section I of the questionnaire consisted of items pertaining to profile of the respondents. Section II consisted of the BSE, its connection to the bond market, process of buying and selling and role of brokers as well as accessibility. Both sections were pertaining to the specific objectives of the study. Both open-ended and closed questions were used in these sections. For piloting, Lackey and Wingate (1998), as cited by Kingston et al (2009), recommends a sample size of 10% or more of the major study hence the questionnaire for this study was piloted among 200 people. This was done to determine the appropriateness, reliability and validity of the questionnaire for this study. The purpose of the pilot testing was to ensure that the questionnaire was understood in its correct perspective, in order to meet the research objectives. The procedure that was used in collecting data was through distribution of the questionnaire that is, dropping and picking questionnaire from respondents at their most convenient time that was agreeable to both parties. Data pertaining to background information was collected using closed questions with alternative choices of possible responses from which the respondents were required to tick as appropriate. To assure respondents of secrecy a letter from the University of Botswana, where the researcher was studying, was attached to each questionnaire and distributed to participants confirming that the researcher has been authorised to carry out the research. The letter further gave respondents assurance that their responses are strictly going to be used for studying purposes and how their participation was important on the study. Once completed, the researcher collected the questionnaire from respondents.

3.5.6 Data analysis methods

According to Marshall and Rossman (2003), data analysis is the process of bringing order, structure and interpretation to the mass of collected data. After data collection, the collected raw data was edited to detect any errors and omissions that would have otherwise distorted the results. This was done to ensure that the quality standard of a good research is upheld. Data was then carefully coded and entered into the computer for processing; this was done to ensure the accuracy of data analysis.

The Statistical Package for Social Sciences (SPSS), Microsoft Excel, cross-tabulations, chisquare and MS-Word were used to analyze the data. Frequencies were used to determine the number of people in each age group, occupation and the number of males and females for the study. Cross-tabulations were used to get an insight into saving and investment habits per category (age, occupation, gender). The data pertaining to profile of the respondents was analyzed using content analysis. Cooper and Schindler (2005) state that content analysis may be used to analyze written data from experiments, observations, surveys and secondary sources. Content analysis is a research tool used to determine the presence of certain words or concepts within texts or sets of texts. Researchers quantify and analyze the presence, meanings and relationships of such words and concepts, then make inferences about the messages within the texts, the writer(s), the audience, and even the culture and time of which these are a part. Texts can be defined broadly as books, book chapters, essays, interviews, discussions, newspaper headlines and articles, historical documents, speeches, conversations, advertising, theater, informal conversation, or really any occurrence of communicative language. Data pertaining to the objectives of the study was analyzed by employing descriptive statistics. Descriptive statistics was used to describe the basic features of the data in the study. Descriptive statistics help to simplify large amounts of data in a sensible way. Each descriptive statistic reduces lots of data into a simpler summary. Descriptive statistics was used to determine extent to which the selected factors have contributed toward the individual investors in Bond market. Frequencies and percentages were used to determine the demographic profile of Bond investors Before inputting the data on SPSS questionnaires were checked to make sure that they were complete and in a usable state to the researcher. In analysing the data subgroups were created using demographic variables. The subgroups were created by gender, age and occupation. The importance of so doing was based on the fact that past findings for investors have shown that these variables have an impact on propensity to save or invest. The analyzed data was then

presented in tables, graphs and pie charts that gave a clear picture of the research at a glance to explain the findings of the study.

3.6 Reliability, validity.

The definitions of reliability and validity in quantitative research reveal two strands: Firstly, with regards to reliability and whether the result is replicable. In addition, with regards to validity, the worth of measurement are accurate and whether they are actually measuring what they are anticipated to measure. However, the concepts of reliability and validity are viewed differently by qualitative researchers who strongly consider these concepts defined in quantitative terms as inadequate. In other words, these terms as defined in quantitative terms may not apply to the qualitative research paradigm. The question of replicability in the results does not concern them (Glesne & Peshkin, 1992), but precision (Winter, 2000), credibility, and transferability (Hoepfl, 1997) provide the lenses of evaluating the findings of a qualitative research.

The main source of information in this research was primary data, which was collected using a questionnaire. The questionnaire was designed to find out how investors identify and evaluate different investment options, how factors including the length of time they have to invest, their ability to withstand short-term market volatility that may affect the value of their investment, feelings about investing and taking risks.. This profile helped build the base of information needed to establish the use of bond market by individual investors in Botswana.

The data obtained from respondents were selected using random sampling technique as stated above. The study made use of secondary data such as BSE reports, journal articles, relevant texts and the Internet. The need to perform reliable and validity was that each respondent would interpret the question in the same way and each respondent would have understood the question the way the researcher intended and Kaiser-Meyer-Olkin Measure of Sampling Adequacy was used for reliability. The 200 valid questionnaires were collected with the aim of carrying on a pilot study as it concerns the validity and reliability of the questionnaire which was designed for the working out of a Masters writing work. The supervisor, investors and the Master's student were requested to determine if the questions were clear, relevant and to determine whether there was need to adjust or change the questions and the responses. They were further asked to recommend any questions that they felt should be included in the study.

3.7 Ethical considerations

Ethical considerations are becoming increasingly important for investors who want to ensure their investments are in companies who act responsibly and whose activities are socially and environmentally beneficial. When making long-term investment decisions it is important to take a step back and look at the bigger picture and not focus on relatively short-term issues. There is a generally held view that companies which take seriously their wider social and environmental responsibilities should turn out to be better investments in the long-run, whether in terms of equity performance or the security of fixed income returns, (www.engagedinvestor.co.uk). This study used self-administered questionnaire to collect data from respondents hence the researcher came in contact with. However the ease of respondents returning the questionnaire was driven by explaining the purpose of this investigation to each recipient of a questionnaire. Simple and clear instructions was used to guide the respondents to go through the questionnaire hence spending less time to fill out the questionnaire. The anonymity and confidentiality of responses given by participants is very crucial in any survey. If not handled properly, it could impact negatively on the whole process. Confidentiality would be guaranteed if the method of data collection used does not identify respondents in any way, but for this study because of face to face with participants' identification was guaranteed.

3.8 Quality Control and Data Management

One of the quality control measures taken for this study included ensuring the questions were simple, straight-forward and understandable. This was done in order to ensure the understanding of the questions was not misconstrued given that respondents were filling the questionnaires on their own. To check for data entry errors, the researcher inputted the data twice and independently on excel as Smith (2015) suggests. This was done before finally capturing the data on SPSS. In managing the data that was collected, the researcher preserved the original data collected during the pilot and the main survey. The original questionnaires, data transformed on to Microsoft Excel and data captured on SPSS were preserved electronically in different places.

3.9 Conclusion

The chapter discussed and explained research approach, research philosophy, research method, data collection methods data such as questionnaire which included questions that elicited responses concerning investment in bonds from respondent and finally the truth criteria. In the next chapter the data analysis method outlined here are applied on data.

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND FINDINGS

4.1 Introduction

This chapter analyses the data that was collected to evaluate the use of the bond market by individual investors in Botswana. Tables, charts and qualitative analysis were used to explain the findings using the methodology as outlined in the previous chapter. Only relevant parts of the interviews are included. The chapter ends with findings in order to ease better understanding and flow of this dissertation.

4.1.1 Data collection, response rate and data cleaning

Response here refers to all data obtained either directly from respondents or from administrative data. All of the 400 questionnaires distributed were answered well because the questionnaire were simplified, not ambiguous and had clear instructions hence asked what is necessary. Editing and cleaning process for data was done as soon as results were received, this was minimal since the researcher's questionnaire contained few open ended questions of which only spelling errors were corrected.

4.2 Data Presentation and Analysis

In analysing the data subgroups were created using demographic variables. The subgroups were created by gender, age and occupation. The importance of so doing was based on the fact that past findings have shown that these variables have an impact on propensity to spend or save hence investing.

Bar charts, pie charts and tables were used to communicate some of the findings of the study. The following measures were used to analyse the data; frequencies and cross-tabulations. Frequencies were used to determine the number of people in each age group, the working class and the number of males and females for the study. Cross-tabulations were used to get an insight into spending and saving, hence investment habits per category (age, occupation, gender).

Table 4.1 Gender, Occupation and Age group

Gender, Occupation and Age group Crosstabulation

Gender			Occupation				Total	
			Student	Employed	Self-employed	Un-employed	Pensioner	
		20 and under	27.4%	1.9%				29.3%
		21-25	17.2%	24.8%	4.5%			46.5%
	Age	26-35	1.9%	8.3%	0.6%	1.3%		12.1%
MALE		36-45		7.0%	1.9%	1.3%		10.2%
		46 and over		0.6%			1.3%	1.9%
	Total		46.5%	42.7%	7.0%	2.5%	1.3%	100.0%
FEMALE		20 and under	0.4%					0.4%
		21-25	18.5%	9.5%	0.4%	0.4%		28.8%
	Age	26-35	7.0%	19.8%	10.3%	1.2%		38.3%
		36-45	1.6%	8.6%	8.2%	3.7%	3.3%	25.5%
		46 and over			0.8%	0.8%	5.3%	7.0%
	Total		27.6%	37.9%	19.8%	6.2%	8.6%	100.0%

Age of the respondents is one of the most important characteristics in understanding their views about the particular problems; by and large age indicates level of maturity of individuals in that sense age becomes more important to examine the response in spending and saving hence investment. Person's occupations do also have a bearing on individual personality and so also the ways of looking at the problem and opportunities before individual. The quality of life is also determined by an individual's occupation and the incomes the individual derives from it.

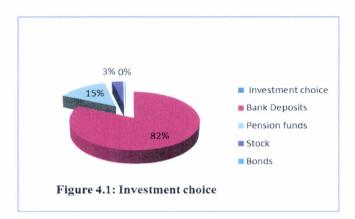
Interpretation:

Table (4.1) showed that most respondents were females aged between 21 and 45 with 90% of them either student or self-employed and 75% males aged between 20 and 25 either student or employed except those who were more than 46 and unemployed hence large number of respondents were females by gender in this study. This study answers the first objective and concludes that demographic factors like age, gender, occupations have major impact on investment decision of investors in Botswana.

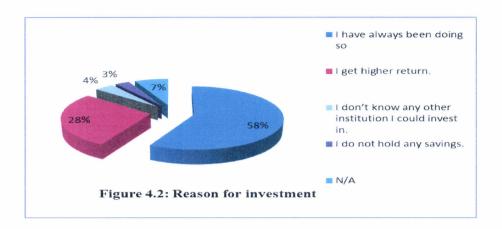
Savings and Investments

Savings earn interest and are source of investment to those with efficient profitable investment opportunities, respondents were asked to state whether they had any savings. The results showed that 88% of the respondents hold savings, with only 12% having no savings.

In response to the question on where do they invest their funds, it was found that 328 respondents (82%) invested their funds in bank deposit, while 58 (15%) invested in pension fund,13 respondents (3%) invested in stocks while no one invested in bonds as per the Figure 4.1 below. These results show that, majority of individual investors in Botswana hold bank deposit in their investment portfolios. This finding could be attributed to the fact of high value attached to the bond.



The study also wanted to know why the respondents had chosen to invest in the institution there were investing in, the results are summarized in the pie chart.



As shown in Figure 4.2, 58% of investors said they invest their funds in bank deposits, pension funds, and stock because they have always been doing so. Around 28% responded that they invest due to higher return. Only 4% respondents do not know where to invest their funds. Hence there is need for BSE and other financial institutions to increase investor education in order to enhance investors' knowledge and participation in the financial market.

4.3 Reliability Testing

The need to perform reliability testing was that each respondent had to interpret the question in the same way and each respondent had understood the question the way the researcher intended and Kaiser-Meyer-Olkin Measure of Sampling Adequacy was used to test reliability. Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability.

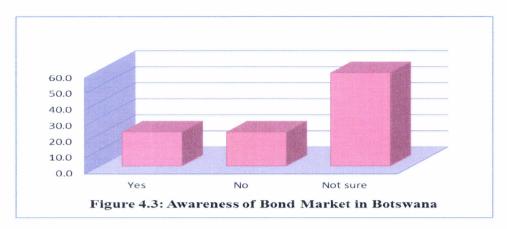
Table 4.3 Reliability Statistics

Cronbach's	N of Items
Alpha	
.749	15

The alpha coefficient for the 15 items in this study was found to be 0 .749 as shown on table 4.3 above, suggesting that the items had relatively high internal consistency. It is worth noting that a reliability coefficient of 0.70 or higher is considered "acceptable" in most social science research situations. The results show that there was an internal consistency in questionnaire.

Botswana Bond market and the importance of investing in Bonds.

Respondents' knowledge of the bond market in Botswana.



When respondents were asked if they know about the bond market in Botswana, it was found that only 84 (21%) of respondents said they knew about the bond market, and the same number of 84 (21%) of respondents said they had no idea about the bond market in Botswana Stock Exchange whilst 232 (58%) of respondents said they were not sure. The interpretation of these results is that most investors are not aware of the existence of bond market in Botswana resulting in low participation rate in the bond market. Respondents were further asked to indicate their knowledge of where to find information on bonds. This question explored the various sources of financial information that respondents use. The study asked how frequently they have obtained information about investing in bonds from a financial advisor; the Internet; TV programs; radio programs; classes or workshops; newspapers, magazines, newsletters, or books; investment clubs; friends or colleagues; their workplaces; or other sources. The results are shown in Table 4.4.

Table 4.4: Knowledge of where to find information on bonds.							
	Frequency Percent (%)						
Valid	Yes-State the place (BSE)/Media/Other	74	19				
	No	62	16				
	I am not sure	264	66				
	Total	400	100.0				

Majority of investors in Botswana (82%) are not sure where they can find information about bond market. This finding shows why there are few individual investors in the bond market because if investors say they do not know and not sure where to find information about the market there is no how they can invest. The above results interlink with those of figure three on awareness of bond market in Botswana.

Respondents were asked to indicate if they were to be given a choice between bonds and other investment opportunities like bank deposits, stocks etc, where would they invest their fund. Their responses are shown in table 4.5.

Table 4.5: Investment choices of the respondents.

		Frequency	Percent
Valid	Bonds	37	9.0
	Stocks	60	15.0
	Bank Deposits	232	58.0
	Other Financial Institutions.	71	18.0
	Total	400	100.0

It can be seen that the majority of respondents, 232 (58%) prefer bank deposits while 37 (9%) of respondents prefer bonds. These results imply that investors are not yet familiar with bond investment.

Respondents were asked to indicate (Table 4.6) what they considered to be the advantages of investing in bonds. 132 (33%) of respondents cited the fact that it provides them with constant income. However an almost equal number 171 (43%) said they are less risky compared to other investment opportunities like stocks. A few 97 (24%) cited the fact that there are bonds listed with Botswana Stock Exchange which provide them with this opportunity. Interpretation of these

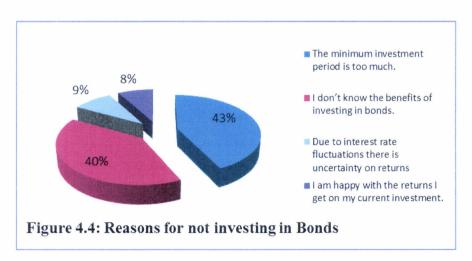
results would be that most investors perceive bonds as a major source of constant income, probably after retirement or in case one loses their job.

Table 4.6: Advantages of investing in Bonds

		Frequency	Percent
Valid	Provide a constant income.	132	33.0
	Less risky compared to other investment opportunities like stocks.	171	43.0
	Because of listing of Bonds at Botswana Stock Exchange as an alternative investment	97	24.0
	Total	400	100.0

In order to test the hypothesis which states that the reason why there are few individual investors in the bond market of Botswana, the researcher asked the respondents to give reasons for not investing in bonds. The results are summarized in figure 4.4.

Figure 4.4: Reasons for not investing in Bonds.



As shown in the figure 4.4 above, it has been proved to be true, that majority of individual investors (43%) have stated that the minimum requirement for investing in bonds is too much for them, 40% of respondents stated that they do not know the benefits of investing in bonds, whilst 9% of respondents said there is uncertainty on returns due to interest rate fluctuations hence only 8% said that they are happy with the return they get.

Botswana Stock Exchange (BSE), its connection to the bond market as well as it accessibility

The objective of this question was to find out if individual investors in Botswana are aware of the existence of the BSE since that is where bonds are listed. The results show that most respondents of about (87%) knew what BSE is and only (13%) did not know what BSE was. These results can be interpreted to show that the most investors are aware of the existence of the equity and little about bonds market in Botswana hence the reason for the inability for bond market growth in the current years. See Appendix B (page 97)

Respondents were also asked if they knew the connection between BSE and the bond market, Table 4.7 shows the results.

Table 4.7: Connection between BSE and the bond market

		Frequency	Percent
Valid	Aware of their connection	227	57.0
	Don't know their connection	93	23.0
	Not sure	80	20.0
	Total	400	100.0

The results shows that 227 (57%) percent know the connection between the BSE and the Bond Market of Botswana either on their own or through friends, the rest 173 (43%) did not have an idea or were not sure about the connection between the two.

When respondents were asked if they considered the bond market in Botswana to be accessible, the results showed that most respondents 370 (93%) said it was not accessible with only 30 (7%) saying it was accessible.

Table 4.8: Accessibility of the bond market to small investors in Botswana					
	Frequency	Percent			
Easily Accessible.	30	7.0			
Not accessible.	370	93.0			
Total	400	100.0			

Respondents were further asked to give their opinions as to why the bond market in Botswana is not as effective as it should be. Figure 4.5 depicts the results from the respondents.

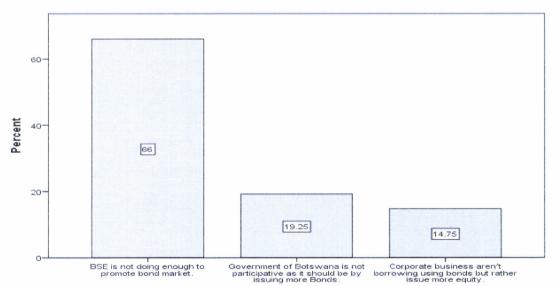


Figure 4.5: Reasons for ineffectiveness of the bond market

The results show that 66% of respondents have stated that BSE is not doing enough to promote the bond market in Botswana, 19% stating that government of Botswana should participate more in the bond market. These results also give an explanation to one of the objectives of this study which is to find out what BSE is doing to encourage growth of bond market in Botswana;

therefore interpretation of these results would be that BSE has not done enough to promote the bond market in Botswana.

Bond duration, process of buying & selling bonds and the role of brokers

The study asked respondents that if they were given a choice between investing in short-term (maturity of 1-4 years) and long-term bonds (maturity of 1-10 years), where they would invest their funds. The results are as follows in Table 4.9.

Table 4.9: Best choice between short-term and long-term bonds

		Frequency	Percent
Valid	Short term	303	75.8
	Long term	97	24.3
	Total	400	100.0

As shown by the Table 4.9 above, 76% of respondents said they would choose short-term bonds over long-term bonds (24%). The partial interpretation of these results is that long-term bonds hinder individual investors from investing in bonds because majority of respondents have shown that they prefer short-term bonds, whereas the period of Bond maturity in Botswana during the period covered was 10 years or more.

Respondents were also asked to state the reasons for investing in short-term bonds and the results are illustrated in Table 4.10.

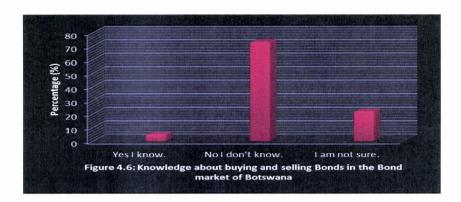
Table 4.10: Reasons for investing in short-term bonds

		Percent
	Frequency	(%)
ST bonds are generally much less volatile than LT bonds, especially in an unstable environment.	164	41.0
Bonds with shorter maturity period are less susceptible to the inflation risk.	115	29.0
Short term maturity has a negative impact on an issuer's liability to bond holders.	54	13.0
N/A	67	17.0
Total	400	100.0

The results show that majority of about 164 respondents represented by 41% said that the reason why they prefer short-term bonds to long term bonds is because short term bonds are generally much less volatile than long term bonds especially in an unstable environment, followed by 115 respondents represented by 29% which states that shorter maturity period are less susceptible to the inflation risk.

Buying and selling bonds in the bond market of Botswana

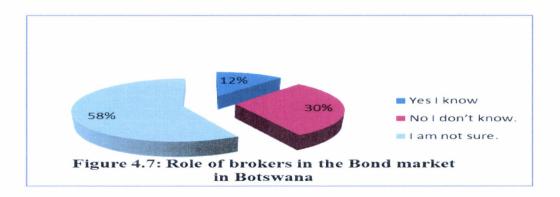
The study wanted to find out if the respondents knew how they can trade in the bond market because such knowledge is correlated to choice of investing in bonds or not. Figure 4.6 illustrates the results.



As seen above, 73% of individual investors have stated that they do not have any idea of how to buy and sell bonds, only 5% of respondents said they knew about the buying and selling process of bonds and the rest (22%) are not sure.

The role of brokers in the bond market

Respondents were also asked if they knew what role do brokers play in the bond market. Figure 4.7 shows the results.



The results show that just a few individual investors in Botswana (30%) have an idea on the existence and role of brokers in the bond market whilst majority (58%) totally have no idea what role brokers play in the bond market.

Respondents were asked to indicate if they knew how trading of bonds is being done in Botswana and this issue is important because participation in the bond market involves understanding of trading including the trading hours, bid and ask prices which must be understood by investors. Table 4.11 has highlighted the results.

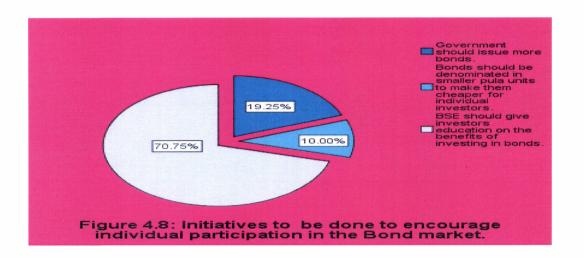
Table 4.11: Knowledge on Trading of Bonds

		Frequency	Percent
	Knowledge of bond trading	53	13
Valid	No knowledge of bond	94	24
	Not sure.	253	63
	Total	400	100.0

The results shows that only 53 (13%) of respondents have indicated that they know how bonds are traded in the bond market of Botswana, majority of investors 253 (63%) indicating that they are not sure how bonds are traded, the reason being that most investors on page 57 under table 4.7 earlier alluded that they learnt the connection of BSE and the bond market through friends and tertiary thus they couldn't be sure how trading is done. These results mean that there is so much that needs to be done if our bond market is to be more effective.

Encouragement of individual participation in the bond market of Botswana

In order to address the objective of this paper which is to establish the reason why there are fewer individual investors in the bond market than in other investment institutions like banks, pension funds and stock market, respondents were asked to indicate what they think should be done to encourage individual participation in the bond market. Figure 4.8 demonstrates the results.



The results show that majority of respondents (71%) think that in order for their participation to increase, bonds should be denominated in smaller Pula units and also a significant number (19%) saying the BSE should give investors education on the benefits of investing in bonds. These results have answered both the paper's objective and the hypothesis that states that most investors cannot invest in bonds due to their large denominations.

The future of the bond market in Botswana.

Respondents were asked if they believe that the bond market of Botswana in future will grow, in particular more individuals being able to participate in the market. Figure 4.9 indicates the results.

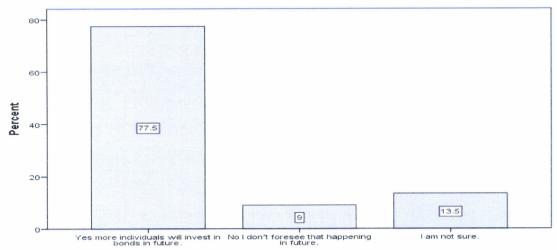


Figure 4.9: Future participation by individuals in the Bond in Botswana

From the results above,77% of respondents think that more individual investors will invest in bonds given the education that BSE would give to investors to increase bond market awareness, whilst 9% and 14% saying they do not foresee more individual investors in the market in future and not sure respectively.

A Comparative Study of Income Derived From Bonds and Equity (Period of 2008-2013) which answers the allied questions.

Lastly the scholar wanted to find out the role of income yield of bonds as compared to equity yield. For this study the scholar has used secondary data for the period of 2008-2013 from the domestic listed companies as showed in APPENDIX B (page 99) of which equity out performed bonds in total return but vice versa in yield over the years.

The data obtained from BSE database indicated that there were equity and bonds issued on some selected companies on the Botswana Market over the period under review (2008-2013) as shown on Tables 4.12 and 4..13 (sourced from Botswana Stock Exchange offices on Monday 22^{nd} September 2014). The results show that over the years shares have been floated and the bonds have been steadily growing with a total value of BWP 10 295 260 000.00 million in 2013, see appendix B (page 98) hence showing that no individual investors took part because of the nominal value attached to it.

Table 4.12: Details of Equity Issued on Botswana Market for the period under study

	2008	2009	2010	2011	2012	2013 AVG	
	1.43	1.35	2.66	5.94	4.48	1.75	2.9%
	5.81	7.82	5.47	6.77	6.38	1.95	5.7%
	6.13	10.00	9.77	5.96	8.37	8.08	8.1%
	9.55	5.75	10.91	4.00	3.73	5.12	6.5%
	4.35	3.23	3.26	7.55	4.64	4.59	4.6%
	2.35	1.94	1.75	1.67	2.13	1.95	2.0%
	6.73	7.91	8.65	7.80	6.03	6.03	7.2%
	5.00	4.69	8.96	5.52	4.77	7.67	6.1%
	5.12	5.76	4.34	2.90	5.36	2.60	4.3%
	0.54	0.01	0.01	9.10	6.00	9.39	4.2%
2007	2008	2009	2010	2011	2012	2013	
749	630			690			
1690	870	1,100	1,075	976	1,035	1,055	
430	310	210	260	220	255	805	
485	440	380	640	550	616	820	
270	200	250	221	265	280	403	
146	128	155	185	153	195	231	
1700	1,515	1,285	1,087	1,205	1,575	1,900	
140	148	143	270	281	326	675	
1875	1,800	1,600	806	915	1,000	1,170	
155	138	142	150	135	150	172	
	2000	2000	2010	2011	2042	2012 AVC	
							-4%
							-4%
							30%
							13%
							9%
						1170	
	-12%	21%	19%	-17%	27%	18%	9%
	-12% -11%	21% -15%	19% -15%	-17% 11%	27% 31%	18% 21%	9% 3%
	-11%	-15%	-15%	11%	31%	21%	3%
	-11% 6%	-15% -3%	-15% 89%	11% 4%	31% 16%	21% 107%	3% 36%
	-11%	-15%	-15%	11%	31%	21%	3%
	-11% 6% -4%	-15% -3% -11%	-15% 89% -50%	11% 4% 14%	31% 16% 9%	21% 107% 17%	3% 36% -4%
	-11% 6% -4%	-15% -3% -11%	-15% 89% -50%	11% 4% 14%	31% 16% 9%	21% 107% 17% 15%	3% 36% -4% 2%
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	-11% 6% -4% -11% 2008 -14.46%	-15% -3% -11% 3% 2009 7.22%	-15% 89% -50% 6%	11% 4% 14% -10%	31% 16% 9% 11%	21% 107% 17% 15%	3% 36% -4% 2% TOT RETURN
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	-11% 6% -4% -11% 2008 -14.46% -42.71% -21.78%	-15% -3% -11% 3% 2009 7.22% 34.25% -22.26%	-15% 89% -50% 6% 2010 -14.88% 3.20% 33.58%	11% 4% 14% -10% 2011 31.40% -2.44% -9.42%	31% 16% 9% 11% 2012 -0.59% 12.42% 24.28%	21% 107% 17% 15% 2013 AVG -14.43% 3.88% 223.76%	3% 36% -4% 2% TOT RETURN -1.0% 1.4% 38.0%
	-11% 6% -4% -11% 2008 -14.46% -42.71% -21.78% 0.27%	-15% -3% -11% 3% 2009 7.22% 34.25% -22.26% -7.88%	-15% 89% -50% 6% 2010 -14.88% 3.20% 33.58% 79.33%	11% 4% 14% -10% 2011 31.40% -2.44% -9.42% -10.06%	31% 16% 9% 11% 2012 -0.59% 12.42% 24.28% 15.73%	21% 107% 17% 15% 2013 AVG -14.43% 3.88% 223.76% 38.24%	3% 36% -4% 2% TOT RETURN -1.0% 1.4% 38.0% 19.3%
	-11% 6% -4% -11% 2008 -14.46% -42.71% -21.78% 0.27% -21.58%	-15% -3% -11% 3% 2009 7.22% 34.25% -22.26% -7.88% 28.23%	-15% 89% -50% 6% 2010 -14.88% 3.20% 33.58% 79.33% -8.34%	11% 4% 14% -10% 2011 31.40% -2.44% -9.42% -10.06% 27.46%	31% 16% 9% 11% 2012 -0.59% 12.42% 24.28% 15.73% 10.30%	21% 107% 17% 15% 2013 AVG -14.43% 3.88% 223.76% 38.24% 48.52%	3% 36% -4% 2% TOT RETURN -1.0% 1.4% 38.0% 19.3% 14.1%
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	-11% 6% -4% -11% 2008 -14.46% -42.71% -21.78% 0.27% -21.58% -9.98% -4.15%	-15% -3% -11% 3% 2009 7.22% 34.25% -22.26% -7.88% 28.23% 23.03% -7.27%	-15% 89% -50% 6% 2010 -14.88% 3.20% 33.58% 79.33% -8.34% 21.10% -6.76%	11% 4% 14% -10% 2011 31.40% -2.44% -9.42% -10.06% 27.46% -15.63% 18.65%	31% 16% 9% 11% 2012 -0.59% 12.42% 24.28% 15.73% 10.30% 29.58% 36.74%	21% 107% 17% 15% 2013 AVG -14.43% 3.88% 223.76% 38.24% 48.52% 20.41% 26.66%	3% 36% -4% 2% TOT RETURN -1.0% 1.4% 38.0% 19.3% 14.1% 11.4% 10.6%
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	749 1690 430 485 270 146 1700 140 1875	1.43 5.81 6.13 9.55 4.35 2.35 6.73 5.00 5.12 0.54 2007 2008 749 630 1690 870 430 310 485 440 270 200 146 128 1700 1,515 140 148 1875 1,800 155 138 2008 -16% -49% -28% -9% -26%	1.43 1.35 5.81 7.82 6.13 10.00 9.55 5.75 4.35 3.23 2.35 1.94 6.73 7.91 5.00 4.69 5.12 5.76 0.54 0.01 2007 2008 2009 749 630 667 1690 870 1,100 430 310 210 485 440 380 270 200 250 146 128 155 1700 1,515 1,285 140 148 143 1875 1,800 1,600 155 138 142 2008 2009 -16% 6% -49% 26% -28% -32% -9% -14% -26% 25%	1.43	1.43	1.43	1.43 1.35 2.66 5.94 4.48 1.75 5.81 7.82 5.47 6.77 6.38 1.95 6.13 10.00 9.77 5.96 8.37 8.08 9.55 5.75 10.91 4.00 3.73 5.12 4.35 3.23 3.26 7.55 4.64 4.59 2.35 1.94 1.75 1.67 2.13 1.95 6.73 7.91 8.65 7.80 6.03 6.03 5.00 4.69 8.96 5.52 4.77 7.67 5.12 5.76 4.34 2.90 5.36 2.60 0.54 0.01 0.01 9.10 6.00 9.39 2007 2008 2009 2010 2011 2012 2013 749 630 667 550 690 655 549 1690 870 1,100 1,075 976 1,035 1,055 <

Source: BSE

Table 4.13: Details of Bonds Issued on Botswana Market for the period under study.

Code	Issue	Expiry	Coupon	Tenure	Payment Convention	Amnt In Issue
	Date	Date	(%)	(years)		(BWP M)
	12-	12-Sep-			Semi Annual, 12 Mar & 12	
BW005	Mar-08	18	10.00%	10.5	Sep	1,233.00
	20-Dec-	20-Dec-			Semi Annually, 20 Jun &	
SCBB003	05	20	10.50%	15.0	20 Dec	50.00
	3-Jun-				Semi Annual, 3 Dec & 3	
DPCF004	04	2-Jun-16	10.45%	12.0	Jun	220.00
	15-Dec-	15-Dec-			Semi Annual, 15 Dec & 15	
BBS002	04	16	12.00%	12.0	Jun	115.00
	30-				Semi Annually, 01 Jun &	
SBBL003	Nov-05	1-Jun-17	10.50%	11.5	01 Dec	100.00
	1-Aug-				Semi Annually, 01 Feb &	
NDB001	07	1-Aug-17	11.25%	10.0	01 Aug	165.00
	7-May-				Semi annually, 7 May & 7	
BVI001	08	7-May-18	11.23%	10.0	Nov	70.00
	26-Jun-	-			Semi Annually, 26 Jun &	
WU001	08	26-Jun-18	10.65%	10.0	27 Dec	195.00
	3-Jun-				Semi Annual, 3 Dec & 3	
DPCF005	04	2-Jun-19	10.60%	15.0	Jun	100.00
	26-	26-Nov-			Semi Annual, 26 May &	
BBS004	Nov-07	19	11.10%	12.0	26 Nov	75.00
	3-Jun-				Semi Annual, 3 Dec & 3	
DPCF006	04	2-Jun-22	10.75%	18.0	Jun	55.00
	27-Jun-				Semi Annually, 27 Dec &	
SCBB008	12	27-Jun-22	8.20%	10.0	27 June	127.26

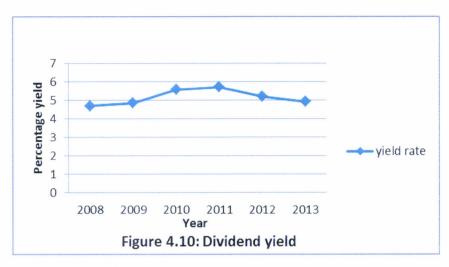
Avarage 11% 2,505.26

Source: BSE

The average total return for the period under review fluctuated between 0.2% and 42.5%. The best return was recorded in 2013 when it reached the peak, while the lowest was in 2008 (Table 4.12).

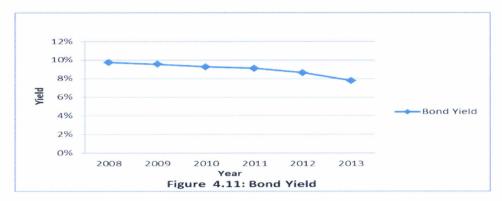
Dividend Yield- in some instances the stocks with the highest yield are issued by those companies that may be trying to keep up a good face despite financial setbacks. Sooner or later, however, if a company doesn't rebound, it may have to cut the dividend, reducing the yield. The share price may suffer as well. The dividends paid out by the company are funds that the company is not using to reinvest in its businesses. If the prices of the stock drops during the period the investor own it, and the investor have a loss instead of a profit, return may be negative if income from the investment hasn't offset the loss in value

In contrast, Table 4.14 on page 68 indicates the dividend yield computed for each year for the period 2008-2013 while figure 4.10 depicts the trend in dividend yield.



Source: (BSE, 2014)

As for the bonds the yield rate reduced drastically between 2008 and 2013 moving from 9.75% to 7.78% by close of 2013 see fig 4.11 below. As can be seen the trend indicates that better yield was obatained at the start of the year under observation(2008) posting the highest yield (return).



Source: (BSE, 2014)

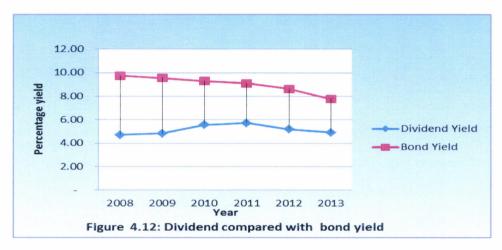
Comparison of dividend yield with bond yield is helpful in comprising return on stock investment with the return on bond investment assuming the investors hold their investment to maturity. An analysis of dividend and bond yield indicated that bond return was higher than the dividend return over the years as indicated on Table 4.14. This may be due to the fact that bonds consist mainly of periodic interest payments hence equity returns consist mainly capital gain when an investor sell and low dividend declaration.

Table 4.14: Dividend Yield Compared to Bond Yield

Year	Dividend Yield	Bond Yield
2008	4.70	9.7
2009	4.84	9.6
2010	5.58	9.3
2011	5.72	9.1
2012	5.19	8.6
2013	4.91	7.8
Average	5.16	9.02

Source: (BSE, 2014)

The spread between dividend yield and bond yield indicates that the corporate bonds return over the years has shown better performance in all the years with a widening spread between 2008 and 2013 as shown in figure 4.12.



Source: (BSE, 2014)

According to BSE data from 2008-2013, bonds has returned the total return of 11% as compared to 14.3% of stocks, however bond yield tend to outperform equity yield over the years. Bond returns tend to be less volatile than equity returns. In a nut shell these findings support hypothesis which states that total return on bonds is comparatively less than the income derived as dividends. It can be evidenced that performance on each bond was recorded on BBS002 bond

with 12% return whil	st in equity 42.5% v	was realized on	Sefalana as sho	wn in table 4.12	2 and 4.13
respectively.					
		(60)	ALL COMMING CONTRACTOR OF THE		
(Page 200) region and a second and a second and a second		69			

CHAPTER 5

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

Conclusions drawn from the analysis chapter are presented here based on the analysis of the data, literature review, and objectives. At the end, the scholar provide about recommendations and further study.

5.2 Summary of the research findings

These findings are based on data analysis and objectives of the study. For first objective demographic factors like age, gender, occupations have major impact on investment decision of investors in Botswana (Table 4.1). It was also established why there are very few individual investors in the bond market of Botswana. The study has revealed (Figure 4.3) that the possible explanation of this is partly explained by the fact that most investors do not know about the existence of bond market in Botswana. This research has also found that most individual investors do not participate as much in the bond market as in other investment opportunities like bank deposits and stocks because bonds are denominated in larger denominations (Table 4.5). According to respondents, BSE is not performing its duties enough to enhance the growth and development of the bond market in Botswana (Figure 4.5).

Furthermore, the study has located that most investors prefer short-term bonds as opposed to long-term bonds because short-term bonds are exposed to less inflation rate risk than long-term bonds (table 4.8 page 58). These findings are in line with those of Feldstein (1980) who has stated that bonds over the long run have lower returns since they do not hedge against inflation. Most respondents have also stated that there is need for increased government participation in the bond market in order to enhance its growth by issuing more bonds (Figure 4.8). Majority of investors in Botswana invest their funds in the form of bank deposits as opposed to bonds or any other investment opportunity (Table 4.5). This view is also supported by Melicher & Norton 2007 who has stated that there is need for government support particularly in developing nations to enhance bond markets by borrowing using debts (issue bonds).

Another finding from this study is that most investors think the bond market in Botswana is not accessible to individual investors which in part explain why there are few individual investors in the bond market of Botswana (Table 4.8 page 58). In order to increase accessibility of the bond market to individuals, Lumby and Jones (2000) stated that institutional investors should purchase large denominated bonds and sell them to individuals at affordable units.

The study has also found that most investors in Botswana are not aware of the role of BSE as well as its connection to the bond market of Botswana. Investors are also not aware of the procedures and activities carried out in the bond market in Botswana. It is also evident from the study that majority of investors in Botswana have faith in the bond market as they said they foresee more individuals participating in the bond market in future (Figure 4.9), say by 2016 which will be congruent with one of the vision 2016 pillars "an educated and well informed nation", given that more emphasis must be put on education on investors regarding the bond market.

The researcher's observation also in this research was the socialization processes that influence respondents below the age of 18 on investment behavior in particular. Socialization processes refer to interaction with parents and teachers at an early age as is influenced by the scholar in his childhood experiences related to investment and personal finances. For example the researcher inquired about parental conversations about money and investment, the persons who most influenced respondents' financial and investment behavior, how financially secure respondents' felt during their childhood, and specific sources for investment learning they used when growing up. Most participants, women as often as men, reported that their parents discussed money and money-related issues with them. This finding is supported by social learning theory (Bandura 1977), which asserts that an individual gains knowledge and develops behaviors through interaction within a social network. While women and men reported equal parental interactions regarding money management, they did not report equal parental influences. Women were more influenced by their mothers and men were more influenced by their fathers. Men also reported that teachers and other adults had an impact on their money management and investment decisions more often than women did. In most cases the scholar found that there was an influence at an early stage of which can be a base for a respondent to have taken an initiative to save and invest at a later stage.

5.3 Recommendations

Based on the result and experience resulting from this research, the following recommendations are made:

Botswana should cultivate well-functioning and resourceful domestic bond markets which will pledge greater diversification of long-term financing and advance resource allocation into domestic investments.

Bond markets are characterized by fragmented markets, high transaction costs, illiquidity and general dissatisfaction with the primary dealer system.

Banks, insurance companies and other financial institutions who can afford to buy bonds which are denominated in larger quantities should purchase them and sell them in smaller Pula units to individual investors in Botswana in order for them to be able to participate in the bond market of Botswana just like it is done by financial institutions in the United States of America (www.slideshare.net/econsultbw). In other words, this research paper recommends that financial institutions in Botswana should play an intermediary role in the bond market which will allow more individuals participating in the market hence increase effectiveness and efficiency of the market.

The researcher recommends that Botswana Stock Exchange (BSE) should educate individual investors about the importance of investing in bonds. This can be achieved through media like newspapers, television as well as radios and via hosting workshops in public areas like malls, bus rank and if possible visiting various workplaces and organize seminars and workshops to sensitize the public. By so doing, the bond market in Botswana will grow and more and more individual investors will participate in the bond market other things being constant hence the market will become more efficient and effective.

Furthermore the researcher recommends that Botswana government should increase its participation in the bond market by issuing lower denominated bonds. It is evident from the background information of this paper that the government of Botswana first issued her first bond in 2003 whilst the inception of the bond market in Botswana dates back to 1997. This could in part explain why the bond market is not as effective as it should be. The suggestion of this paper as to how the government can increase its participation is that: certain government projects

particularly local government (Municipality activities) projects like road construction projects, primary school construction projects should be financed by issuing debt (Municipal bonds) not borrowing from international financial bodies like World bank which is very costly. This recommendation is based on the findings that a significant number of investors (respondents) in Botswana said in order for the bond market to grow, government should increase its share participation in bond market in Botswana.

For bond markets to thrive, the macroeconomic environment must be conducive. This includes having a broad market-based economic system where prices provide appropriate signals and incentives, inflation is held at low to moderate levels, the exchange rate is not excessively over or under valued and fiscal policy is sustainable. Monetary policy should ensure that interest rates are neither too high nor excessively volatile.

Developing market institutions and infrastructure.

An operational bond market requires an array of institutions and market infrastructure (www.slideshare.net/econsultbw/2009). These include institutions that can handle primary issues and ensure that bonds offered for sale can find buyers at a reasonable price. But more importantly, for a fully developed bond market, secondary market trading should be active. An existing stock exchange with a network of brokers can play an important role here, especially when corporate bonds are available. For government bonds, primary dealers (PDs) typically play an important role in both primary and secondary markets. Primary dealers will typically play a crucial role in ensuring the success of primary government bond issues, and have responsibilities for market-making (in the secondary market) through having bonds available for sale and quoting two-way (buy and sell) prices. Other important components of market infrastructure include securities depositories (where records of ownership of bonds, which are usually dematerialized, are kept), and settlement and payment systems (for transmitting changes of ownership and related payments).

Developing legal and regulatory frameworks.

Bond markets are unlikely to develop unless there are certain legal and regulatory pre-requisites in place. Besides general requirements such as the rule of law and a (at least moderately) well-functioning legal system, there are certain specific requirements for bond markets to develop. These include laws that provide certainty as to the status of bondholders in the hierarchy of creditors in the event of default, and laws relating specifically to asset backed securities (where the general legal framework may not be clear). It is harmoniously vital to have a well-functioning regulatory system, linking to the licensing and supervision of securities markets (stock and bond markets), the licensing and supervision of market participants (such as brokers, pension funds, unit trusts, financial advisors, asset managers, primary dealers etc.), and the endorsement of bond issues (www.slideshare.net/econsultbw/2009). Regulators have to tread a fine line between ensuring that the regulatory framework protects investors (and issuers) and supports market integrity, while at the same time avoiding a regulatory framework that is so strict that market activity is discouraged and the market does not develop. Regulators and market participants will typically share market development and awareness-raising activities.

Developing an investor base.

A bond market cannot function without an effective investor base, both for primary issues and secondary market trading. The investor base comprises banks, institutional investors such as pension funds and insurance companies, foreign investors and retail investors. Developing an investor base is a long-term process, which depends on the development of the broader financial sector, as well as appropriate liberalisation and regulation. If the pension sector is dominated by statutory funds, the investor base is unlikely to contribute to a vibrant bond market unless fund management is contracted out to independent, competing asset managers. It is also unlikely that a vibrant bond market will develop without the active participation of foreign investors.

Developing skills and capacity.

Issuing and trading bonds (and related activities such as pricing) are highly specialised activities that require commensurate skills and capacity in both market participants (brokers, dealers, investors, financial advisors etc.) and regulators. The private sector will develop or hire such

skills given adequate financial incentives, but it is also important that the public sector provides sufficient resources for regulators.

Establishing a corporate bond market.

The issuance and trading of corporate bonds generally shadows once an effective market for government bonds has remained established. The latter provides a risk-free yield curve against which corporate bonds (and associated risks) can be priced, as well as stimulating the development of all of the above requirements for an effective market. Other pre-requisites include appropriate pricing of bonds vis-a-vis bank loans, a developed corporate finance advisory capacity, and awareness on the part of corporates of key issues around bond finance. The establishment of a credit rating system for corporates can also assist the development of the corporate bond market.

Building market liquidity, breadth and depth.

Once the above requirements are in place market development can focus on extending the market with a broader range of bond issues, and promoting liquidity to deepen the market through trading activity processes that reinforce each other in a virtuous circle and strengthen the role of the bond market as a vehicle for the deployment of savings and as a source of finance for investment, as well as being an important vehicle for the transmission of macroeconomic signals and the implementation of monetary policy.

5.4 Limitations of the study

The data the BSE presents on monthly, quarterly and yearly reports gives more information on government bonds over period under review hence very little information was publicly available on corporate bonds; this made respondents to have a tough time in completing the questionnaires therefore an interpretation of this study was based on the assumption that the respondents have given correct information. Besides, the study had limitations of time, place and resources.

5.5 Implications of the study to both theory and practice

In general, this research raises more questions than it produces answers. However, it is these questions that provide guidance in establishing a shared context for learning and a focus for exploring issues on investments. For instance:

Fewer men than women participated in this research. Does this reflect men's lack of access to financial information or is it due to a lack of confidence?

The assumption may be that women are in charge of daily money management than men hence long-term money management (investments) is more of a focus or interest for women.

Many respondents prefer short investments. Why? This needs to be explored in greater depth in a workshop on bond investment education. Is this due to women's more conservative approach to investing or due to a lack of understanding of how to respond? Curricular implications should include assessment strategies for low-participation in bond investments and appropriate, timely, and responsible responses to those investments.

Theoretically it must be argued that economic factors like bond price volatility due to interest rate fluctuations and inflation which in most cases affects long-term bonds hence a hazard from investing in Bonds than in other investment portfolios would counter balance the additional income and prevent the Bonds from being attractive than when it had more return, but more prior obligations. In practice the extra earnings from investing on equity are often regarded by investors as more than sufficient to serve as a premium for risk when the proportions of several investment portfolios are judiciously mixed.

5.6 Directions for further research

Since this research was carried out only in Gaborone and Francistown due to financial and time constraints, the scholar recommends for further research to be carried out on a similar topic but this time around the research should be done in wider areas of Botswana such as Ghanzi, Maun, Selibe-Phikwe, Serowe, Palapye, Orapa, Tsabong, Lobatse and Kgalagadi in order to make the results more conclusive. The results must cover the following areas;

Research

Determine how personal characteristics, such as age, marital status, education, employment status, occupation, job position, and environmental forces affect investment behavior and the investment decision-making process regarding bonds.

Provide empirical evidence to show that socialization and acculturalization play significant roles in the abilities and comfort of investors in making financial decisions, and explain how socialization and acculturalization impact the level of knowledge, information, experience, and confidence necessary to make investment decision regarding bonds.

Analyze whether, when, and to what extent investors make long-term financial decisions.

Describe the role that male partners play in investment decision-making;

Determine the factors (such as socialization, investment information/knowledge, experiences, and investor confidence) that may help explain why gender differences in investment behaviors exist.

Education

Explain how research results can guide investment education to be effective in influencing investment behavior and identify the learning environment that is conducive to enhance investment learning among investors.

Identify "teachable moments" and appropriate strategies to use those moments to effectively teach key bond investment topics;

Use the concept of transformative pedagogy to propose a new approach to bond investment education.

Develop inquiry-based educational, instructional, and learning materials and strategies, particularly to meet the needs of bond investors.

5.7. Final Conclusions

The following conclusions are based on the findings and addresses the hypothesis of the study as discussed in the previous chapters.

Bonds in Botswana are priced in large denominations which create access to rich people only hence leaving the bulk of people outside the business. This conclusion is based solely on the findings of this study and in part validates one of the hypotheses of this study which has stated that most individual investors cannot invest in bonds due to their large denomination. This

conclusion also addresses the problem statement of this study which seeks to find why there are few investors in the bond market of Botswana.

Another conclusion that is justified from this research is that most investors in Botswana lack knowledge of bonds as it was revealed by the findings of this study. This is evident from the paper because most investors have indicated that they do not know what bonds are, the importance of investing, as well as the role of brokers in the bond market.

Furthermore, the research has also supported that economic factors like bond price volatility due to interest rate fluctuations and inflation which in most cases affect long-term bonds partly explains why there are few individual investors in the bond market of Botswana. This conclusion therefore responds to the second objective of this paper and also validates the hypothesis of this study that says that the long maturity period of bonds is a hindrance for individual investors to invest in bonds. This conclusion is reached on the grounds that majority of investors have said that they prefer short-term bonds to long-term bonds because short term bonds are generally much less volatile than long term bonds, especially in an unstable environment, and that short-term bonds are less exposed to inflation risk.

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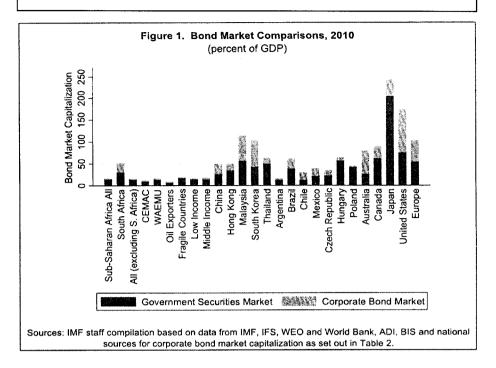
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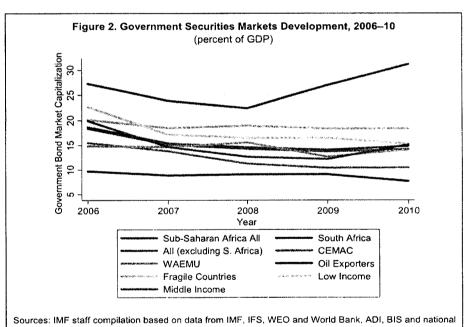
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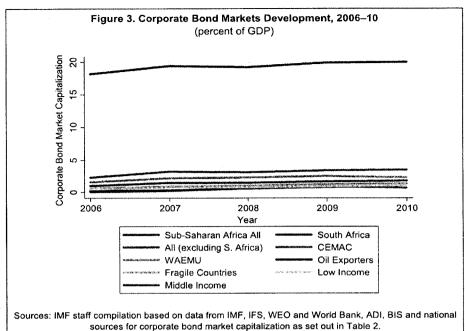
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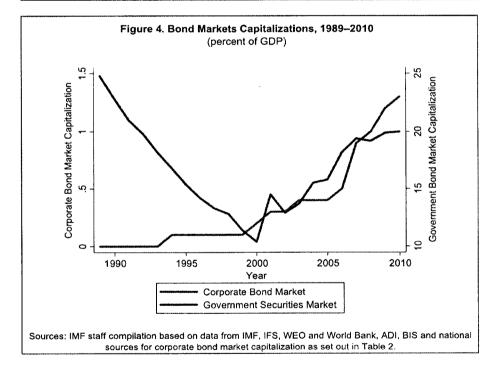


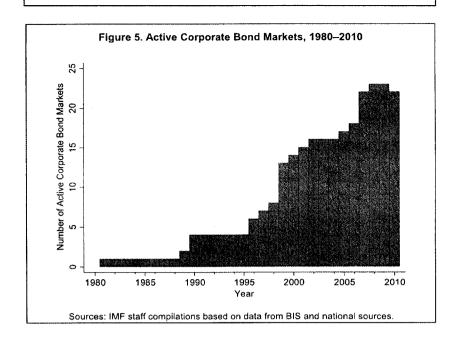


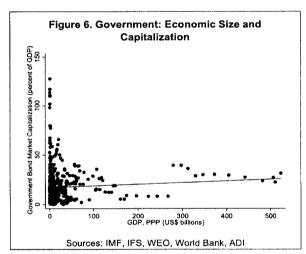
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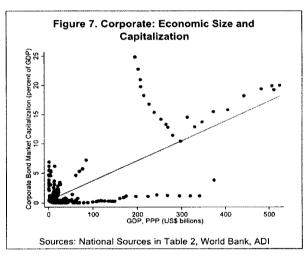


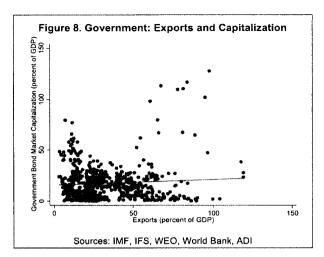
sources for corporate bond market capitalization as set out in Table 2.

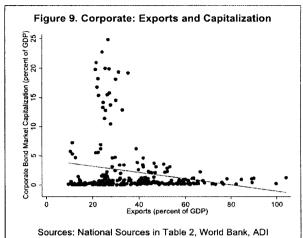


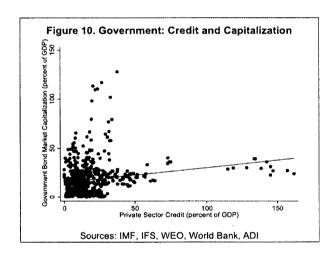


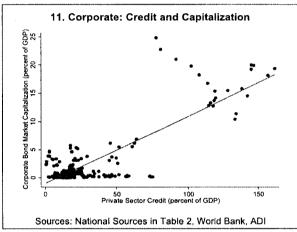


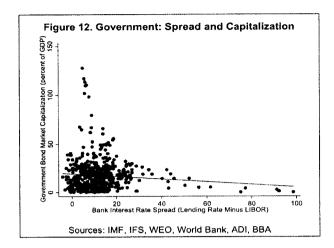


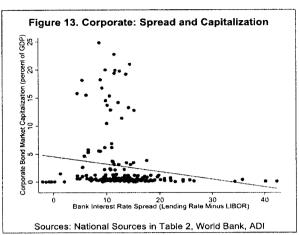


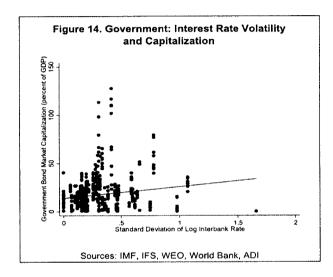


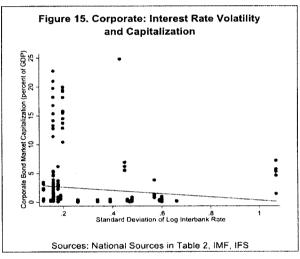


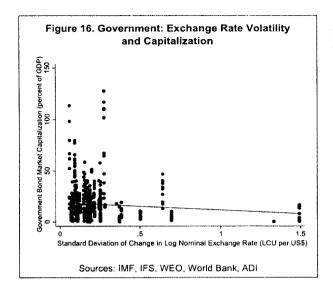


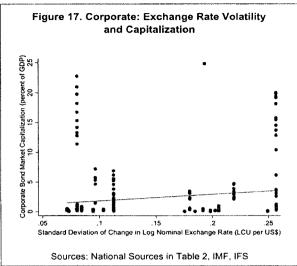


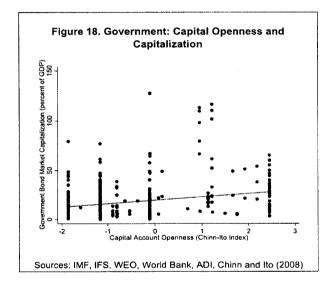


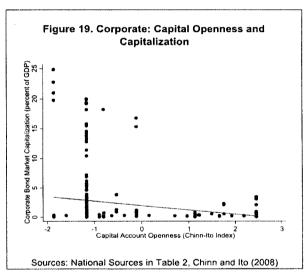


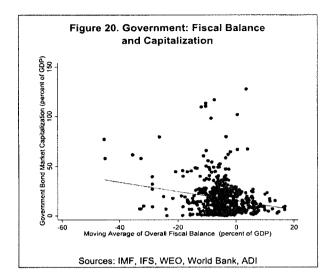


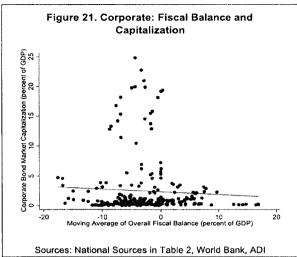


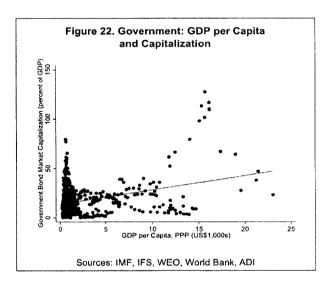












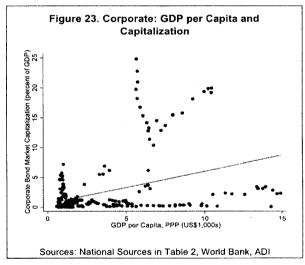


Table 10. Sample Sensitivity Analysis¹

	Government Securities Markets							Corporate	Bond Markets	
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)
Econsize	0.007	0.001	-0.004	0.014***	0.003	0.026***	0.008***	0.008***	0.001	0.008***
	(0.005)	(0.006)	(0.007)	(0.005)	(0.005)	(0.005)	(0.001)	(0.001)	(0.001)	(0.001)
Tradeopen	-0.107***	-0.075***	-0.083***	-0.124***	-0.072***	-0.312***	-0.039***	-0.040***	-0.036***	-0.045***
•	(0.016)	(0.020)	(0.018)	(0.017)	(0.017)	(0.028)	(0.010)	(0.007)	(0.005)	(0.011)
Gdpcap	-0.710***	-0.970***	-0.810***	-0.929***	-0.990***	-1.592***	0.312***	0.353***	0.273***	0.300***
	(0.092)	(0.110)	(0.098)	(0.094)	(0.096)	(0.161)	(0.048)	(0.032)	(0.022)	(0.048)
Credit	0.133***	0.233***	0.063**	0.124***	0.207***	0.027	0.087***	0.088***	-0.015**	0.084***
	(0.016)	(0.022)	(0.024)	(0.016)	(0.017)	(0.018)	(0.006)	(0.004)	(0.007)	(0.006)
Intvol	2.469	14.510***	5.739***	1.954	12.510***	-7.241***	0.732	2.677***	2.033***	-0.202
	(1.895)	(2.437)	(1.973)	(1.917)	(2.030)	(2.184)	(1.418)	(0.902)	(0.585)	(1.415)
Spread	-0.023	-0.0477	-0.049*	-0.034	-0.095***	0.021	-0.043	-0.051***	-0.009	-0.043
	(0.027)	(0.033)	(0.028)	(0.027)	(0.028)	(0.030)	(0.027)	(0.018)	(0.014)	(0.028)
Xrvol	-9.275***	-14.610***	-11.020***	-8.413***	-12.820***	8.925***	-3.749*	0.239	7.232***	-3.784*
	(2.452)	(3.841)	(2.531)	(2.483)	(2.589)	(2.815)	(2.017)	(1.183)	(1.239)	(2.041)
Fiscal	-0.416***	-0.127	-0.371***	-0.406***	-0.338***	-0.362***	-0.044	-0.058***	0.047***	-0.041
	(0.059)	(0.089)	(0.060)	(0.055)	(0.059)	(0.065)	(0.027)	(0.018)	(0.014)	(0.027)
Capopen	-2.529***	-1.492***	-2.069***	-2.284***	-2.229***	-2.540***	0.486***	0.425***	-0.467***	0.530***
	(0.352)	(0.441)	(0.352)	(0.337)	(0.374)	(0.383)	(0.162)	(0.110)	(0.087)	(0.165)
Area	-0.012***	-0.017***	-0.012***	-0.014***	-0.017***	-0.006***	0.002***	0.002***	0.000	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)
Legalorigin	4.977***	2.444***	5.019***	2.524***	2.427***	2.184***	-2.360***	-2.940***	1.686***	-2.309***
	(0.507)	(0.663)	(0.523)	(0.520)	(0.570)	(0.632)	(0.591)	(0.388)	(0.372)	(0.597)
Comprisk	0.179***	0.276***	0.234***	0.238***	0.277***	0.587***	-0.034*	-0.025*	-0.013	-0.038*
	(0.037)	(0.048)	(0.038)	(0.037)	(0.039)	(0.055)	(0.020)	(0.014)	(0.011)	(0.020)
_Cons	8.966***	1.422	6.019**	8.886***	2.831	-8.505**	3.079*	1.738	0.713	3.689**
_	(2.747)	(3.435)	(2.831)	(2.733)	(2.866)	(3.807)	(1.616)	(1.072)	(0.823)	(1.655)
N	328	262	316	300	309	246	128	124	106	126

Column Notes.

Source: IMF staff estimates.
***, **, * indicates 1%, 5% and 10% significance respectively.

⁽¹⁾ Full sample GMM estimation of B2 in Table 8b and 9b for government securities and corporate bond markets respectively.

⁽²⁾ Estimation based on period 1993-2010.

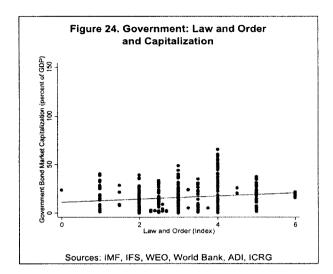
⁽³⁾ Estimation excludes South Africa.

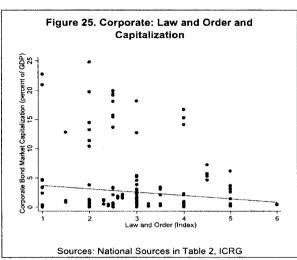
⁽⁴⁾ Estimation excludes Fragile Countries.

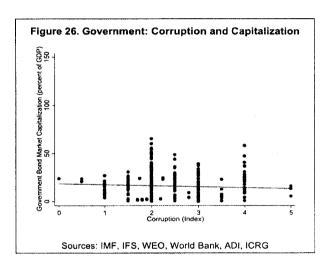
⁽⁵⁾ Estimation excludes WAEMU Member States.

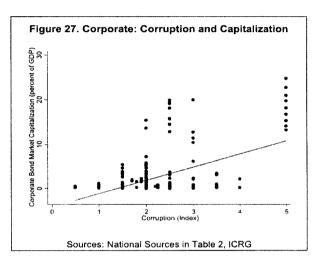
⁽⁶⁾ Estimation excludes CEMAC Member States.

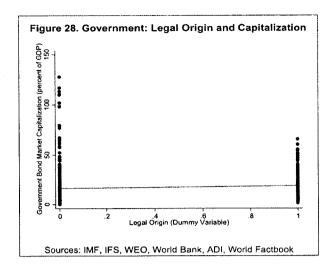
¹ Sensitivity analysis carried out with GMM estimation using specification B2 as in Tables 8b and 9b for government securities markets and corporate be

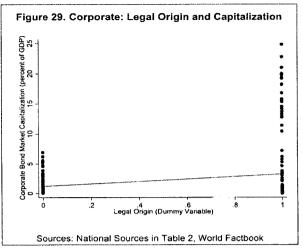


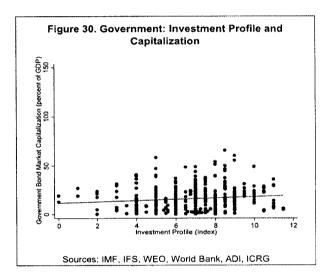


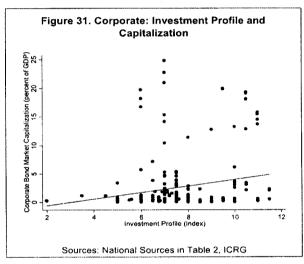




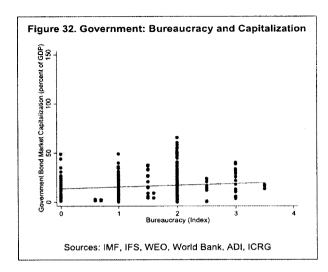


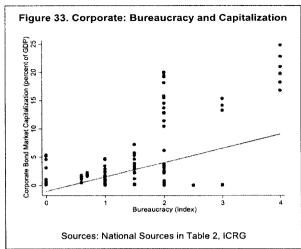


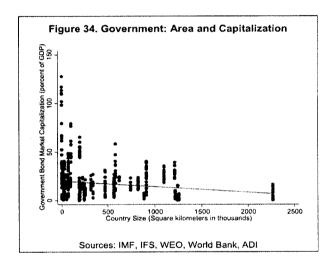


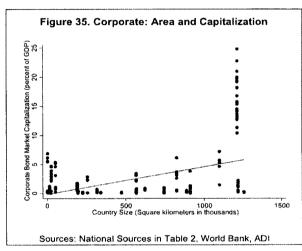


APPENDIX A









APPENDIX B

BONDS

Code.	issue Dake	Kpiry Date	Coupon (%)	Tenure	Payment Convention :	Amintantesue (SWP M
BW003	6-May-03	31-Oct-15	10.25%		Semi Annual, 30 Apr & 31 Oct	1,642.00
BW010	9-Sep-11	14-Mar-17	7.75%		Semi Annual, 14 Mar & 14 Sep	618.00
BW005	12-Mar-08	12-Sep-18	10.00%		Semi Annual, 12 Mar & 12 Sep	1,233.00
BW008	8-Sep-10	8-Sep-20	7.75%		Semi Annual, 8 Sep & 8 Mar	858.00
BW007	10-Mar-10	10-Mar-25	8.00%		Semi Annual, 10 Mar & 10 Sep	1,295.00
BW011	11-Sep-13	10-Sep-31	7.75%		Semi Annual, 11 Sep & 11 Mar	548.00
BDC002	30-Jun-04	1-Jun-11			Semi Annual, 1 Jun & 1 Dec (CPI+3.75	75.00
BDC003	30-Jun-04	1-Jun-11	11.00%		Semi Annual, 1 Jun & 1 Dec	125.00
SBBL047	11-Jun-08	11-Jun-11	11.00%		Semi Annual, 11 Jun & 11 Dec	70.00
DON001	28-Jan-08	3-Sep-11	13.20%		Semi Annual, 3 Mar & 3 Sep	50.00
SCBB002	20-Dec-05	20-Dec-12	10.30%		Semi Annually, 20 Jun & 20 Dec	50.00
DPCF003	3-Jun-04	2-Jun-13	10.31%		Semi Annual, 3 Dec & 3 Jun	225.00
BBB001	30-Oct-02	30-Oct-14			Semi Annual, 30 Apr & 30 Oct (BOBC+	100.00
SBBL048	11-Jun-08	11-Jun-15	10.70%		Semi Annually, 11 Jun & 11 Dec	175.00
FML015	12-Jul-10	12-Jul-15			Quarterly, 2 Oct, 2 Jan, 2 Apr & 2 Jul (50.00
BVI002	14-Jul-10	14-Jul-15			Semi annually, 13 Jan & 13 July (BOBC	50.00
SCBB003	20-Dec-05	20-Dec-20			Semi Annually, 20 Jun & 20 Dec	50.00
SCBB004	19-Dec-05	20-Dec-15			Quarterly, 20 Mar, 20 Jun, 20Sep & 20	50.00
SBBL006	1-Jun-06	1-Jun-16			Quarterly, 1 Dec,1 Mar,1 Jun,1 Sep (B	50.00
DPCF004	3-Jun-04	2-Jun-16	10.45%		Semi Annual, 3 Dec & 3 Jun	220.00
BBS002	15-Dec-04	15-Dec-16	12.00%		Semi Annual, 15 Dec & 15 Jun	115.00
SBBL003	30-Nov-05	1-Jun-17	10.50%		Semi Annually, 01 Jun & 01 Dec	100.00
NDB001	1-Aug-07	1-Aug-17	11.25%		Semi Annually, 01 Feb & 01 Aug	165.00
SCBB005	27-Nov-07	27-Nov-17			Quarterly, 15 Jan, 15 Apr, 15 Jul &15 O	75.00
BHC017	10-Dec-10	10-Dec-17			Quarterly, 10 Mar, 10 Jun, 10 Sep & 10	286.00
BVI001	7-May-08	7-May-18	11.23%		Semi annually, 7 May & 7 Nov	70.00
SBBL046	11-Jun-08	11-Jun-18			Quarterly, 11 Mar, 11 Jun, 11 Sep & 11	50.00
WU001	26-Jun-08	26-Jun-18			Semi Annually, 26 Jun & 27 Dec	195.00
BBS006	4-Aug-10	4-Aug-18			Semi Annual, 4 Feb & 4 Aug (BOBC+1.	110.00
SBBL049	13-Aug-08	13-Aug-18			Quarterly, 13 May, 13 Aug, 13 Nov & 13	50.00
SBBL052	17-Dec-08	17-Dec-18			Quarterly, 17 Mar, 17 Jun, 17 Sep, 17 D	50.00
DPCF005	3-Jun-04	2-Jun-19			Semi Annual, 3 Dec & 3 Jun	100.00
BBS004	26-Nov-07	26-Nov-19			Semi Annual, 26 May & 26 Nov	75.00
BHC020	10-Dec-10	10-Dec-20			Semi annually, 10 Jun & 10 Dec	103.00
SCBB006	12-May-11	12-May-21			Quarterly, 12 May, 12 Aug, 12 Nov,12	70.00
SBBL056	13-Jun-11	13-Jun-21			Quarterly, 13 Sep, 13 Dec, 13 Mar, 13 J	50.00
DPCF006	3-Jun-04	2-Jun-22			Semi Annual, 3 Dec & 3 Jun	55.00
SCBB007	27-Jun-12	27-Jun-22			Quarterly, 27 Dec, 27 Mar, 27 Jun & 2	50.00
SCBB008	27-Jun-12	27-Jun-22			Semi Annually, 27 Dec & 27 June	127.26
BBS005	3-Dec-08	3-Dec-23			Semi Annual, 3 Jun & 3 Dec	150.00
DPCF007	3-Jun-04	2-Jun-25	10.90%		Semi Annual, 3 Dec & 3 Jun	35.00
WU002	26-Jun-08	26-Jun-26			Semi Annually, 26 Jun & 27 Dec	205.00
LHL005	8-Nov-13	8-Nov-17	8.25%		Semi Annually, 8 May & 8 Nov	50.00
LHL006	8-Nov-13	8-Nov-23	10.50%		Semi Annually, 8 May & 8 Nov	200.00
LHL007	8-Nov-13	8-Nov-25	10.50%		Semi Annually, 8 May & 8 Nov	75.00
FML025	18-Oct-13	23-Oct-25	8.20%		Semi Annually, 23 Apr & 23 Oct	150.00
	Total	20 000 20	0.2070		123 Innissan, / 22 / 10/ 0/ 20 000	10,295.26

APPENDIX B EQUITY

DIVIDEND YIELDS	2008	2009	2010	2011	2012	2013 AVG
BARCLAYS	1.43	1.35	2.66	5.94	4.48	1.75 2.9%
BIHL	5.81	7.82	5.47	6.77	6.38	1.95 5.7%
CHOBE	6.13	10.00	9.77	5.96	8.37	8.08 8.1%
ENGEN	9.55	5.75	10.91	4.00	3.73	5.12 6.5%
FNBB	4.35	3.23	3.26	7.55	4.64	4.59 4.6%
LETSHEGO	2.35	1.94	1.75	1.67	2.13	1.95 2.0%
SECHABA	6.73	7.91	8.65	7.80	6.03	6.03 7.2%
SEFALANA	5.00	4.69	8.96	5.52	4.77	7.67 6.1%
STANCHART	5.12	5.76	4.34	2.90	5.36	2.60 4.3%
TURNSTAR	0.54	0.01	0.01	9.10	6.00	9.39 4.2%
	470	484	558	572	519	491
santana ara-						

PRICES (THEBE)	2007	2008	2009	2010	2011	2012	2013
BARCLAYS	749	630	667	550	690	655	549
BIHL	1690	870	1,100	1,075	976	1,035	1,055
CHOBE	430	310	210	260	220	255	805
ENGEN	485	440	380	640	550	616	820
FNBB	270	200	250	221	265	280	403
LETSHEGO	146	128	155	185	153	195	231
SECHABA	1700	1,515	1,285	1,087	1,205	1,575	1,900
SEFALANA	140	148	143	270	281	326	675
STANCHART	1875	1,800	1,600	806	915	1,000	1,170
TURNSTAR	155	138	142	150	135	150	172

CAPITAL APPRECIATION	2008	2009	2010	2011	2012	2013 AVG	
BARCLAYS	-16%	6%	-18%	25%	-5%	-16%	-4%
BIHL	-49%	26%	-2%	-9%	6%	2%	-4%
CHOBE	-28%	-32%	24%	-15%	16%	216%	30%
ENGEN	-9%	-14%	68%	-14%	12%	33%	13%
FNBB	-26%	25%	-12%	20%	6%	44%	9%
LETSHEGO	-12%	21%	19%	-17%	27%	18%	9%
SECHABA	-11%	-15%	-15%	11%	31%	21%	3%
SEFALANA	6%	-3%	89%	4%	16%	107%	36%
STANCHART	-4%	-11%	-50%	14%	9%	17%	-4%
TURNSTAR	-11%	3%	6%	-10%	11%	15%	2%

TOTAL RETURN	2008	2009	2010	2011	2012	2013 A\	/G TOT RETURN
BARCLAYS	-14.46%	7.22%	-14.88%	31.40%	-0.59%	-14.43%	-1.0%
BIHL	-42.71%	34.25%	3.20%	-2.44%	12.42%	3.88%	1.4%
CHOBE	-21.78%	-22.26%	33.58%	-9.42%	24.28%	223.76%	38.0%
ENGEN	0.27%	-7.88%	79.33%	-10.06%	15.73%	38.24%	19.3%
FNBB	-21.58%	28.23%	-8.34%	27.46%	10.30%	48.52%	14.1%
LETSHEGO	-9.98%	23.03%	21.10%	-15.63%	29.58%	20.41%	11.4%
SECHABA	-4.15%	-7.27%	-6.76%	18.65%	36.74%	26.66%	10.6%
SEFALANA	10.71%	1.31%	97.77%	9.59%	20.78%	114.73%	42.5%
STANCHART	1.12%	-5.35%	-45.29%	16.43%	14.65%	19.60%	0.2%
TURNSTAR	-10.42%	2.90%	5.64%	-0.90%	17.11%	24.05%	6.4%
				**			0.14

BONDS

APPENDIX B

		Sipiny Date (S	Compara (26)	Tenure (yea) a g	Promonencial Designation of the Control of the Cont	罗斯马拉拉拉斯 亚马克
BW003	6-May-03	31-Oct-15	10.25%	12.5	Semi Annual, 30 Apr & 31 Oct	1,642.00
BW010	9-Sep-11	14-Mar-17	7.75%	5.5	Semi Annual, 14 Mar & 14 Sep	618.00
BW005	12-Mar-08	12-Sep-18	10.00%	10.5	Semi Annual, 12 Mar & 12 Sep	1,233.00
BW008	8-Sep-10	8-Sep-20	7.75%	10.0	Semi Annual, 8 Sep & 8 Mar	858.00
BW007	10-Mar-10	10-Mar-25	8.00%	15.0	Semi Annual, 10 Mar & 10 Sep	1,295.00
BW011	11-Sep-13	10-Sep-31	7.75%		Semi Annual, 11 Sep & 11 Mar	548.00
BDC002	30-Jun-04	1-Jun-11			Semi Annual, 1 Jun & 1 Dec (CPI+3.75%)	75.00
BDC003	30-Jun-04	1-Jun-11	11.00%	6.9	Semi Annual, 1 Jun & 1 Dec	125.00
SBBL047	11-Jun-08	11-Jun-11	11.00%	3.0	Semi Annual, 11 Jun & 11 Dec	70.00
DON001	28-Jan-08	3-Sep-11	13.20%	3.6	Semi Annual, 3 Mar & 3 Sep	50.00
SCBB002	20-Dec-05	20-Dec-12	10.30%		Semi Annually, 20 Jun & 20 Dec	50.00
DPCF003	3-Jun-04	2-Jun-13	10.31%		Semi Annual, 3 Dec & 3 Jun	225.00
BBB001	30-Oct-02	30-Oct-14			Semi Annual, 30 Apr & 30 Oct (BOBC+0.8	100.00
SBBL048	11-Jun-08	11-Jun-15			Semi Annually, 11 Jun & 11 Dec	175.00
FML015	12-Jul-10	12-Jul-15		 	Quarterly, 2 Oct,2 Jan, 2 Apr & 2 Jul (BOB	50.00
BVI002	14-Jul-10	14-Jul-15			Semi annually, 13 Jan & 13 July (BOBC+1.	50.00
SCBB003	20-Dec-05	20-Dec-20			Semi Annually, 20 Jun & 20 Dec	50.00
SCBB004	19-Dec-05	20-Dec-15			Quarterly, 20 Mar, 20 Jun, 20Sep & 20 Dec	50.00
SBBL006	1-Jun-06	1-Jun-16			Quarterly, 1 Dec,1 Mar,1 Jun,1 Sep (BOBC	50.00
DPCF004	3-Jun-04	2-Jun-16			Semi Annual, 3 Dec & 3 Jun	220.00
BBS002	15-Dec-04	15-Dec-16			Semi Annual, 15 Dec & 15 Jun	115.00
SBBL003	30-Nov-05	1-Jun-17	10.50%		Semi Annually, 01 Jun & 01 Dec	100.00
NDB001	1-Aug-07	1-Aug-17	11.25%		Semi Annually, 01 Feb & 01 Aug	165.00
SC8B005	27-Nov-07	27-Nov-17			Quarterly, 15 Jan, 15 Apr, 15 Jul &15 Oct (B	75.00
BHC017	10-Dec-10	10-Dec-17			Quarterly, 10 Mar, 10 Jun, 10 Sep & 10 Dec	286.00
BVI001	7-May-08				Semi annually, 7 May & 7 Nov	70.00
SBBL046	11-Jun-08	11-Jun-18			Quarterly, 11 Mar,11 Jun,11 Sep & 11 Dec	50.00
WU001	26-Jun-08	26-Jun-18		-	Semi Annually, 26 Jun & 27 Dec	195.00
BBS006	4-Aug-10	4-Aug-18			Semi Annual, 4 Feb & 4 Aug (BOBC+1.509	110.00
SBBL049	13-Aug-08	13-Aug-18			Quarterly, 13 May, 13 Aug, 13 Nov & 13 Feb	50.00
SBBL052	17-Dec-08	17-Dec-18			Quarterly, 17 Mar, 17 Jun, 17 Sep, 17 Dec (6	50.00
DPCF005	3-Jun-04	2-Jun-19	· · · · · · · · · · · · · · · · · · ·		Semi Annual, 3 Dec & 3 Jun	100.00
BBS004	26-Nov-07	26-Nov-19			Semi Annual, 26 May & 26 Nov	75.00
BHC020	10-Dec-10				Semi annually, 10 Jun & 10 Dec	103.00
SCB8006	12-May-11	12-May-21			Quarterly, 12 May, 12 Aug, 12 Nov,12 Feb	70.00
SBBL056	13-Jun-11	13-Jun-21			Quarterly,13 Sep, 13 Dec,13 Mar, 13 Jun (50.00
DPCF006	3-Jun-04	2-Jun-22			Semi Annual, 3 Dec & 3 Jun	55.00
SCBB007	27-Jun-12	27-Jun-22			Quarterly, 27 Dec, 27 Mar, 27 Jun & 27 Se	50.00
SCBB007	27-Jun-12	27-Jun-22			Semi Annually, 27 Dec & 27 June	127.26
BBS005	3-Dec-08				Semi Annual, 3 Jun & 3 Dec	150.00
DPCF007	3-Jun-04				Semi Annual, 3 Dec & 3 Jun	35.00
WU002	26-Jun-08				Semi Annually, 26 Jun & 27 Dec	205.00
LHL005	8-Nov-13				Semi Annually, 8 May & 8 Nov	50.00
LHL006	8-Nov-13			1	Semi Annually, 8 May & 8 Nov	200.00
LHL007	8-Nov-13	1			Semi Annually, 8 May & 8 Nov	75.00
FML025	18-Oct-13				Semi Annually, 23 Apr & 23 Oct	150.00
[FPILU25	10-001-13	23-001-23	0.2070	12.0	America Considerable Programme Contraction	

| 18-Oct-13 | 23-Oct-25 | 8.20% | 12.0|Semi Annually, 23 Apr & 23 Oct | 150.00

Total | 10,295.26



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Revised BSE Listing Fee Structure for 2011

About BSE Listed Companies Brokers/Participants Markets/Statistics Guidelines to Listing Regulatory Framework CSD Web Links News STA 89 ENGEN 1000 FNBB 360 FSG 235 FURNMART 230 G4S 375 LETLOLE 213 LETSHEGO 270 NAP 212 OI

Listed Bonds

Barclays Bank of Botswana

Market Info: (Prices in Thebe)

Description	BBB001	
Issue Date	2002-10-30	
Amount (Million Pula) Price	100	
Redemption Date	2014-10-30	ap
BSE	BBB001	
ISIN Number	BW 000 000 0348	0.4875
Interest Coupon Rient	Reference Rate + 0.85% (1st 7 Yrs) then + 1.5%	95 Kd
Reference Rate	91 BoBC	
Interest Payable	Semi annually; 30 Apr & 30 Oct	
Security	Unsecured	
Denomination (Pula)	10,000 lut 8500 /year	
Denomination (Pula) Pal	5.35x (500)	energia en estado en electrica en escentra que que esta esta esta destinaciones en escala en esta en esta entre

Botswana Building Society

Description	BBS002 12% p.a 2016
Issue Date	2004-12-15
Amount (Million Pula)	115
Redemption Date	2016-12-15
BSE	BBS002 12% p.a 2016
ISIN Number	BW 000 000 0546
Interest Coupon	12%
Reference Rate	N/A
Interest Payable	Semi annually; 15 Dec & 15 Jun
Security	Unsecured
Denomination (Pula)	10000

Botswana Building Society

Description	BBS004 11.1% p.a 2019			
Issue Date	2007-11-26			
Amount (Million Pula)	75			
Redemption Date	2019-11-26			
BSE	BBS004 11.1% p.a 2019			
ISIN Number	BW 000 000 0611			
Interest Coupon	11.1%			
Reference Rate	N/A			
Interest Payable	Semi annually; 26 May & 26 Nov			
Security	Unsecured			
Denomination (Pula)	10000			

Botswana Building Society

Description	BBS005 11.2% p.a 2023
Issue Date	2008-12-03
Amount (Million Pula)	150
Redemption Date	2023-12-03
BSE	BBS005 11.2% p.a 2023
ISIN Number	BW 000 000 0819
Interest Coupon	11.20%
Reference Rate	N/A
Interest Payable	Semi annually; 3 Jun& 3 Dec

Company Announcements

DISCOVERY METALS SEDGMAN SETTLEMENT UPDATE

02/10/14
AFR
New issue announcement, application for quotation of additional securities and agreement

02/10/14 AFR Change of Director's Interest Notice

02/10/14
AFR
NOTICE OF CHANGE IN
SUBSTANTIAL SHAREHOLDINGS

Market Report and Publications

- Daily Market Report
 Dividends Declared
 BSE 2010 Annual Report
 Non-Trading Days

Security	Unsecured
Denomination (Pula)	10000

Botswana Building Society

Description	BBS006
Issue Date	2010-08-04
Amount (Million Pula)	110
Redemption Date	2018-08-04
BSE	BBS006
ISIN Number	BW000000926
Interest Coupon	Reference rate + 1.5% P.A
Reference Rate	91-Day BOBC
Interest Payable	Semi annually; 4 Feb & 4 Aug
Security	Unsecured
Denomination (Pula)	1000

Botswana Housing Corporation

Description	BHC017
Issue Date	2010-12-10
Amount (Million Pula)	286
Redemption Date	2017-12-10
BSE	BHC017
ISIN Number	BW000000983
Interest Coupon	Reference +1.7%
Reference Rate	91 BOBC
Interest Payable	Quarterly, 10 Mar, 10 Jun, 10 Sep, 10 Dec
Security	Unsecured
Denomination (Pula)	25000

Botswana Housing Corporation

Description	BHC020 10.1% p.a 2020
Issue Date	2010-12-10
Amount (Million Pula)	103
Redemption Date	2020-12-10
BSE	BHC020 10.1% p.a 2020
ISIN Number	BW000000975
Interest Coupon	10.1%
Reference Rate	N/A
Interest Payable	Semi annually; 10 Jun & 10 Dec
Security	Unsecured
Denomination (Pula)	25000

Botswana Vaccine Institute Limited

Description	BVI001 11.23% p.a 2018
Issue Date	2008-05-07
Amount (Million Pula)	70
Redemption Date	2018-05-07
BSE	BVI001 11.23% p.a 2018
ISIN Number	BW 000 000 0678
Interest Coupon	11.23%
Reference Rate	N/A
Interest Payable	Semi annually; 7 May & 7 Nov
Security	Unsecured
Denomination (Pula)	1000

Botswana Vaccine Institute

Description	BVI002 2015
Issue Date	2010-07-14
Amount (Million Pula)	50

Redemption Date	2015-07-14
BSE	BVI002 2015
ISIN Number	BW000000918
Interest Coupon	Reference rate + 1.5% P.A
Reference Rate	91Day BOBC
Interest Payable	Semi annually; 13 Jan & 13 July
Security	Unsecured
Denomination (Pula)	1000

Government Bonds

Description	BW003 10.25% p.a 2015
Issue Date	2008-03-12
Amount (Million Pula)	1642
Redemption Date	2015-10-31
BSE	BW003 10.25% p.a 2015
ISIN Number	BW 000 000 0389
Interest Coupon	10.25%
Reference Rate	N/A
Interest Payable	Semi annually; 30 Apr & 31 Oct
Security	Secured
Denomination (Pula)	25000

Government Bonds

Description	BW005 10% p.a 2018
Issue Date	2008-03-12
Amount (Million Pula)	1233
Redemption Date	2018-09-12
BSE	BW005 10% p.a 2018
ISIN Number	BW 000 000 0645
Interest Coupon	10%
Reference Rate	N/A
Interest Payable	Semi annually; 12 Mar & 12 Sept
Security	Secured
Denomination (Pula)	25000

Government Bond

Description	BW007 8% 2025
Issue Date	2010-03-10
Amount (Million Pula)	1295
Redemption Date	2025-03-10
BSE	BW007 8% 2025
ISIN Number	BW 000 000 0876
Interest Coupon	8
Reference Rate	N/A
Interest Payable	Semi annually; 10 Mar & 10 Sep
Security	Secured
Denomination (Pula)	25000

Government Bonds

Description	BW008 7.75% p.a 2020
Issue Date	2008-03-04
Amount (Million Pula)	883
Redemption Date	2020-09-08
BSE	BW008 7.75% p.a 2020
ISIN Number	BW 000 000 0934
Interest Coupon	7.75%
Reference Rate	N/A
Interest Payable	Semi annually; 8 Sep & 8 Mar
Security	Secured
Denomination (Pula)	25000

Government Bonds

Description	BW010 7.75% p.a 2017
Issue Date	2011-09-09
Amount (Million Pula)	618
Redemption Date	2017-03-14
BSE	BW010 7.75% p.a 2017
ISIN Number	BW000001056
Interest Coupon	7.75%
Reference Rate	N/A
Interest Payable	Semi annually; 14 Mar & 14 Sep
Security	Secured
Denomination (Pula)	1e+06

Government Bonds

Description	BW011 7.75% 2031
Issue Date	2013-09-06
Amount (Million Pula)	548
Redemption Date	2031-09-10
BSE	BW011 7.75% 2031
ISIN Number	BW0000001213
Interest Coupon	7,75%
Reference Rate	NA
Interest Payable	Semi Annually; 10 Mar& 10 Sep
Security	UNSECURED
Denomination (Pula)	25000

Debt Participation Capital Funding Limited

Description	DPCF004 10.45% p.a 2016
Issue Date	2004-06-03
Amount (Million Pula)	220
Redemption Date	2016-06-02
BSE	DPCF004 10.45% p.a 2016
ISIN Number	BW 000 000 0454
Interest Coupon	10.45%
Reference Rate	N/A
Interest Payable	Semi annually; 03 Dec & 03 Jun
Security	Unsecured
Denomination (Pula)	10000

Debt Participation Capital Funding Limited

Description	DPCF005 10.6% p.a 2019
Issue Date	2004-06-03
Amount (Million Pula)	100
Redemption Date	2019-06-02
BSE	DPCF005 10.6% p.a 2019
ISIN Number	BW 000 000 0462
Interest Coupon	10.6%
Reference Rate	N/A
Interest Payable	Semi annually; 03 Dec & 03 Jun
Security	Unsecured
Denomination (Pula)	10000

Debt Participation Capital Funding Limited

Description	DPCF006 10.75% p.a 2022
Issue Date	2004-06-03
Amount (Million Pula)	55
Redemption Date	2022-06-02
BSE	DPCF006 10.75% p.a 2022
ISIN Number	BW 000 000 0470

Interest Coupon	10.75%
Reference Rate	N/A
Interest Payable	Semi annually; 03 Dec & 03 Jun
Security	Unsecured
Denomination (Pula)	10000

Debt Participation Capital Funding Limited

Description	DPCF007 10.9% p.a 2025
Issue Date	2004-06-03
Amount (Million Pula)	35
Redemption Date	2025-06-02
BSE	DPCF007 10.9% p.a 2025
ISIN Number	BW 000 000 0488
Interest Coupon	10.9%
Reference Rate	N/A
Interest Payable	Semi annually; 03 Dec & 03 Jun
Security	Unsecured
Denomination (Pula)	10000

Furnmart Limited

Description	FML015
Issue Date	2010-07-07
Amount (Million Pula)	50
Redemption Date	2015-07-12
BSE	FML015
ISIN Number	BW 000 000 0900
Interest Coupon	Reference rate + 1.6% P.A
Reference Rate	91 BoBC
Interest Payable	Quarterly; 2 Oct, 2 Jan, 2 Apr, 2 Jul
Security	Unsecured
Denomination (Pula)	100000

Furnmart Limited

Description	FML025 8.20% p.a 2025
Issue Date	2013-10-18
Amount (Million Pula)	150
Redemption Date	2025-10-23
BSE	FML025 8.20% p.a 2025
ISIN Number	BW000001221
Interest Coupon	8.2%
Reference Rate	N/A
Interest Payable	Semi Annually; 23 Apr & 23 Oct
Security	UNSECURED
Denomination (Pula)	100000

Letshego Holdings Limited

Description	LHL05 8.25% 2017
Issue Date	2013-11-08
Amount (Million Pula)	50
Redemption Date	2017-11-08
BSE	LHL05 8.25% 2017
ISIN Number	BW000001247
Interest Coupon	8.25%
Reference Rate	N/A
Interest Payable	Semi Annually; 08 May & 08 Nov
Security	UNSECURED
Denomination (Pula)	10000

Letshego Holdings Limited

Description	LHL06 10.5% 2023
Issue Date	2013-11-08
Amount (Million Pula)	200
Redemption Date	2023-11-08
BSE	LHL06 10.5% 2023
ISIN Number	BW000001254
Interest Coupon	10.5%
Reference Rate	N/A
Interest Payable	Semi Annually; 08 May & 08 Nov
Security	UNSECURED
Denomination (Pula)	10000

Letshego Holdings Limited

Description	LHL07 10.50% 2025
Issue Date	2013-11-08
Amount (Million Pula)	75
Redemption Date	2025-11-08
BSE	LHL07 10.50% 2025
ISIN Number	BW000001262
Interest Coupon	10.5%
Reference Rate	N/A
Interest Payable	Semi Annually; 08 May & 08 Nov
Security	UNSECURED
Denomination (Pula)	10000

Letshego Holdings Limited

Description	LHL08 11% 2027
Issue Date	2013-11-08
Amount (Million Pula)	25
Redemption Date	2027-11-08
BSE	LHL08 11% 2027
ISIN Number	BW000001270
Interest Coupon	11%
Reference Rate	N/A
Interest Payable	Semi Annually; 08 May & 08 Nov
Security	UNSECURED
Denomination (Pula)	10000

National Development Bank

Description	NDB001 11.25% p.a 2017
Issue Date	2007-08-01
Amount (Million Pula)	165
Redemption Date	2017-08-01
BSE	NDB001 11.25% p.a 2017
ISIN Number	BW 000 000 0652
Interest Coupon	11.25%
Reference Rate	NA
Interest Payable	Semi annually; 01 Feb & 01 Aug
Security	Unsecured
Denomination (Pula)	1000

Stanbic Bank Botswana Limited

Description	SBBL003 10.50% p.a 2017
Issue Date	2005-11-30
Amount (Million Pula)	100
Redemption Date	2017-06-01
BSE	SBBL003 10.50% p.a 2017
ISIN Number	BW 000 000 0561
Interest Coupon	10.50%
Reference Rate	N/A
Interest Payable	Semi annually; 01 Jun & 01 Dec

Security	Unsecured
Denomination (Pula)	1000

Stanbic Bank Botswana Limited

Description	SBBL048 10.70% p.a 2015			
Issue Date	2008-06-11			
Amount (Million Pula)	175			
Redemption Date	2015-06-11			
BSE	SBBL048 10.70% p.a 2015			
ISIN Number	BW 000 000 0702			
Interest Coupon	10.70%			
Reference Rate	N/A			
Interest Payable	Semi annually; 11 Jun & 11 Dec			
Security	Unsecured			
Denomination (Pula)	1000			

Stanbic Bank Botswana Limited

Description	SBBL056
Issue Date	2011-06-13
Amount (Million Pula)	50
Redemption Date	2021-06-13
BSE	SBBL056
ISIN Number	BW 000 000 1031
Interest Coupon	Reference Rate +1.3% pa
Reference Rate	91 80BC
Interest Payable	Quarterly; 13 Jun, 13 Sep, 13 Dec & 13 Mar
Security	Unsecured
Denomination (Pula)	100000

Standard Chartered Bank of Botswana

Description	SCBB003 10.50% p.a 2015			
Issue Date	2005-12-20			
Amount (Million Pula)	50			
Redemption Date	2020-12-20			
BSE	SCBB003 10.50% p.a 2015			
ISIN Number	BW 000 000 0587			
Interest Coupon	10.50%			
Reference Rate	N/A			
Interest Payable	Semi annually; 20 Jun & 20 Dec			
Security	Unsecured			
Denomination (Pula)	10000			

Stancdard Chartered Bank Botswana Limited

Description	SCBB006			
Issue Date	2011-05-12			
Amount (Million Pula)	70			
Redemption Date	2021-05-12			
BSE	SCBB006			
ISIN Number	BW000001023			
Interest Coupon	Reference rate + 1.30% p.a			
Reference Rate	91-Day BOBC			
Interest Payable	Quarterly, 12 May, 12 Aug, 12 Nov,12 Feb			
Security	Unsecured			
Denomination (Pula)	10000			

Standard Chartered Bank Botswana Limited

ĺ	Description	SCBB007
1	Issue Date	2012-06-27
	Amount (Million Pula)	50

Redemption Date	2022-06-27			
BSE	SCBB007			
ISIN Number	BW000001106			
Interest Coupon	Reference Rate + 150bp per annum			
Reference Rate	91 Day BoBC			
Interest Payable	Quarterly 27 Jun, 27 Sept, 27 Dec, 27 Mar			
Security	Unsecured			
Denomination (Pula)	100			

Standard Chartered Bank Botswana Limited

Description	SCBB008 8.2% p.a 2022			
Issue Date	2012-06-27			
Amount (Million Pula)	127			
Redemption Date	2022-06-27			
BSE	SCBB008 8.2% p.a 2022			
ISIN Number	BW000001114			
Interest Coupon	8.2%			
Reference Rate	N/A			
Interest Payable	Semi Annually 27 Dec, 27 Jun			
Security	Unsecured			
Denomination (Pula)	100			

Water Utilities Corporation

Description	WUC001 10.65% p.a 2018			
Issue Date	2008-06-25			
Amount (Million Pula)	195			
Redemption Date	2018-06-26			
BSE	WUC001 10.65% p.a 2018			
ISIN Number	BW 000 000 0728			
Interest Coupon	10.65%			
Reference Rate	N/A			
Interest Payable	Semi annually; 26 Jun & 27 Dec			
Security	Unsecured			
Denomination (Pula)	1000			

Water Utilities Corporation

Description	WUC002 10.60% p.a 2026			
Issue Date	2008-06-26			
Amount (Million Pula)	205			
Redemption Date	2026-06-26			
BSE	WUC002 10.60% p.a 2026			
ISIN Number	BW 000 000 0736			
Interest Coupon	10.60 %			
Reference Rate	N/A			
Interest Payable	Semi annually; 26 Jun & 27 Dec			
Security	Unsecured			
Denomination (Pula)	1000			

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APPENDIX C



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Botswana

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MEMORANDUM

17 April. 2014

Dear Sir/Madam

Re: MBA Research Project: MR. TACHEBA, N. # ID 200001028

This is to introduce **MR. TACHEBA**, **N. # ID 200001028 who** is a MBA student in the Department of Accounting and Finance, Faculty of Business, University of Botswana. As a partial requirement for MBA students, He is required to conduct research in an area of his interest and write a report that is evaluated as part of his MBA program. He has been doing research on the topic "An Evaluation of the use of the Bond by Individual Investors in Botswana"

Through this letter, therefore, I am requesting your good office to assist the above mentioned by providing him the necessary data/documentation and other form of information that will enable him complete this important assignment.

The information so obtained will be used solely for academic purposes and confidentiality will be observed.

Your cooperation in this endeavour will be highly appreciated.

Thank you.

Yours sincerely,

CHIEF SUPERVISOR

Prof. B.N. Swami, PhD, FCMA, FCA Professor in Accounting and Finance

www.ub.bw

In partial fulfillment of the MBA qualification at the University of Botswana I Ndashiko Tacheba I am required to conduct a research in an area of my interest and write a report that is evaluated as a part of my MBA program. I am doing a research on the topic "An Evaluation of the use of the Bond by Individual Investors in Botswana" hence a request for you to fill the questionnaire for me to complete this important assignment.

INVESTOR QUESTIONNAIRE-FOR PRIVATE INDIVIDUALS

Please answer all the following questions. Please, mark with an "X" as appropriate.

1. Gender \	2			
Male	Fema	ale		
2. What is you \\ 20 and under	r age? -2 21-25	ૈ 26-35	44 36-45	46 and over
20 4714 471461				

3. Occupation		3	4	5
Student	Employed	Self-employed	Un-employed	Pensioner

4. Do you have any savings?

	ı	<i>L</i>	
Yes		No	

5. Where do you invest your invest your funds?

1	2	3	
Bank Deposits	Pension funds	Stock	Bonds

6. Reason for investmen	nt.	3	4	5
I have always been doing so.	I get higher return.	I don't know any other institution I could invest in.	I do not hold any savings	N/A
	l			

7. Are you aware of Bond Market in Botswana?

1	2	3
Yes	No	Not sure

8. Indicate your knowledge of where to find information on bonds.

1	2	3	
Yes-State the place	No	I am not sure	

9. If you were to be given a choice between bonds and other investment opportunities like bank deposits, stocks etc, where you would invest your fund?

1	2	3	Ly .
Bonds	Stocks	Bank Deposits	Other Financial Institutions

X	,
1	

10. Advantages of investing in Bonds

10. Advantages of inve	-	3
	Less risky compared to other investment opportunities like stocks.	Because of listing of Bonds at Botswana Stock Exchange as an alternative investment.
	<u> </u>	

11. Give reasons for not investing in bonds.

11. Give reasons	for not investing in bonds.	3	4
The minimum investment period is too much.	I don't know the benefits of investing in bonds.	Due to interest rate fluctuations there is uncertainty on returns.	I am happy with the returns I get on my current investment.

Botswana Stock Exchange (BSE), its connection to the bond market as well as it accessibility

12. Knowledge of the BSE

1	2	
Yes	No	

13. Do you know any connection between BSE and the bond market?

)	A	
Yes I know their connection.	I don't know their connection.	I am not sure.

14. If yes where have you learnt about the connection?

1	7	.3	Ť
Tertiary	Friend	Investment work shops	Electronic media

15. Accessibility of the bond market to small investors in Botswana

1	2
Easily Accessible	Not accessible

16. Reasons for ineffectiveness of the bond market

16. R	leasons for ineffectiveness of	the bond market	3
	s not doing enough to promote market.	Government of Botswana is not participative as it should be by issuing more Bonds.	Corporate business aren't borrowing using bonds but rather issue more equity.
 			

Bond duration, process of buying & selling bonds and the role of brokers

17. Best choice between short-term and long-term bonds

1	2	,
Short term	Long term	_
	1	1

18. Reasons for investing in short-term bonds

1	2	3	7
Short-term bonds are generally much less volatile than long-term bonds, especially in an unstable interest rate environment.	Bonds with shorter maturity period are less susceptible to the inflation risk.	When bonds take shorter time to mature, there is less time for a variety of factors to have a negative impact on an issuer's ability to bond holders.	NA

19. Knowledge about buying and selling bonds in the bond market of Botsw

J	2	3
Yes I know	No I don't know	I am not sure

20. Do you know the role of brokers in the bond market in Botswana?

1	2	3
Yes I know	No I don't know	I am not sure

21. If yes what are the roles do they play.	1,2
REASON 1 N/A	2

AAAAA 400 400 500 600 000 600 000 000 000 000 000 0	***************************************

22. Do you know how bonds are traded in BSE?

2	3
No I don't know how bond trading is done.	I am not sure
	know how bond trading is

23. Indicate what do you think should be done to encourage individual participation in the

Government should issue more bonds. Bonds should be denominated in smaller pula units to make then of investing in bonds. Cheaper to Individual Investors.

24. Do you believe that there will be growth in bond market of Botswana in future, in particular more individuals being able to participate in the market?

1	2	3	
Yes more individuals will invest in bonds in future.	No I don't foresee that happening in future.	I am not sure.	

Thank you for your time.