The Bond Market and the Nigerian Economy

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ABSTRACT

This study therefore seeks to investigate and determine the size and growth of the bond market determinants on the development of the bond market in Nigerian economy. Descriptive research design was adopted for the study. The study was conducted in Akwa Ibom State, Nigeria. The population of the study comprised all the annual data of all the variables for the period of ten (10) years. The total number of data which will constitute the population in this study is fifty (50). Convenience sampling technique was used to select 10 respondents which constituted the sample size for the study. The Main Instrument used in this study was a questionnaire titled "Bond Market and the Nigeria Economy Questionnaire" (BMNEQ)". Face and content validation of the instrument was carried out to ensure that the instrument has the accuracy, appropriateness, completeness and the language of the study under consideration. Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.84 and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical techniques such as descriptive statistics and simple regression. The test for significance was done at 0.05 alpha levels. Hence, the study concluded that bank size, money supply and external debt are seen to be the most important and significant drivers of total bond market size in Nigeria. Also, level of economic development, budget deficit and bank size are significant determinants of government bond market size in Nigeria. It was recommended that the developing the capacity of the banking sector to provide more qualitative and productive credit, channeling a substantial part of the existing pension funds towards investing in bonds, balancing bank finance and bond markets, and restricting finance raised through external borrowing to infrastructural projects.

KEYWORDS: Bond market, Size and growth, Nigeria Economy

Introduction

The capital market is the market where medium and long term funds are sourced. The market performs a triple role in an economy, (1) as a financial information market, (2) a financial security market and (3) as a capital allocation market. The three roles serve as a necessary condition for industrialization and development in any nation. To perform these roles effectively, the market must be efficient and information must flow freely and on time (Adelegan, 2004). According to Ajayi (2013), a bond is a debt instrument issued by a government or a corporate entity to raise fund to finance budget or projects respectively. It is usually issued for a period of time more than one year. Governments and corporate bodies can borrow money through bonds to expand their businesses, modernize their production lines, increase their capital base, execute projects and provide infrastructures. Kapoor and Pope (2011) averred that companies issue bonds called corporate bonds and sell them to the

public at various interest rates, and investors buy with the full knowledge that the company will repay the original principal with interest at the maturity date. There are different types of bonds in the bond market Castillo (2014). Bonds may be secured or unsecured bonds. A secured bond is backed by collateral, meaning it has the money or physical assets that a bond issuer must give to investors if the bond defaults. Unsecured bonds (sometimes called debentures) are not backed by any collateral instead the issuer promises that the lenders will be repaid. Bonds can also be classified into Fixed Rate and Floating Rate Bonds. A bond whose interest rate stays the same over its lifespan is referred to as a fixed interest bond. A bond whose interest rate varies periodically over its life span is referred to as a floating interest bond.

According to Oteh, (2014), the market provides a platform for the funding of public and private expenditures on a medium and long term basis. All information about a bond is contained in a document called "The Trust Deed". Such information may include the terms and conditions, pay-back date, and the coupon. The annual coupon on a bond is referred to as the yield. In Nigeria, bonds issuing started in 1946 according to the Nigerian Stock Exchange report (2010) when the federal government raised funds and was channeling the proceeds to finance construction projects. This continued until 1960, when the Nigeria Stock Exchange (NSE) was established and became fully operational in 1961. Ajayi (2013) reported that the Federal Ministry of Finance (FMoF) and the Central Bank of Nigeria (CBN) were the managers of the country's debts and the CBN was the main issuer of government debt securities. After a restructuring of the domestic debt markets, the Debt Management Office (DMO), which was originally established in 2000 to centrally coordinate the management of Nigeria's debt, resumed the issuance of longer tenured bonds in 2003, thereby resuscitating the bond market, while the CBN was mandated to act as the Issuing House and the Registrar (Ajayi 2013).

As at 2014, the domestic bond market capitalization was about NGN 5.90 trillion (USD 36.42 billion) comprising FGN, State and Corporate bonds which is about 7.2% of the Gross Domestic Product (GDP) of the country (Oteh, 2014). Between 2001 and 2016, the Federal Government has issued 23 bonds while the States and Local Governments have issued 30 new bonds and Corporate Organizations have issued 18 bonds (SEC Annual Report 2016). The DMO annual reports (2016) states that the stock of FGN bonds increased progressively from N250.83 billion in 2005 to N1,445.60 billion in 2008 and N1,974.93 billion in 2009. The size of the Nigerian domestic bonds market, in terms of face value was N6, 515.62 billion as at the end of December, 2015, compared to N5, 683.46 billion as at end of December, 2014, which represented an increase of N832.16 billion or 14.64 percent. Thus, the market contributes towards financial system diversification, reduces the concentration of risk in the banking system while promoting long-term savings (Soludo, 2005).

Statement of problem

In spite of the development in the Nigerian bond market since 2003, the size of the market is still small and its contribution to GDP is also small. The Nigerian bond market is flustered with the problems on how the bond market can be developed in order to contribute more to the GDP and compete with other countries across the world. Also, in Nigeria, the literature is scanty on the relative contribution of the bond market towards GDP growth. The absence of an evidence-based research showing a relationship between a growth in the bond market and simultaneous growth in GDP in Nigeria is also observed as one of the major problem of this study. Hence, this research intends to make contribution to the body of existing knowledge. Thus, the study sought to determine the size of the bond market in Nigeria from 2007 to 2016

Research Question

What is the size of the bond market in Nigeria from 2007 to 2016?

Research Hypotheses

There is no significant relationship between size of the bond market in Nigeria and real GDP in Nigeria.

Literature Review

Size of the Bond Market in Nigeria

The size of the market and economy can be appreciated by its level of economic activities, or its level of development in terms of whether it is under-developing, developing or developed. Nigeria tends to have a vibrant economy, but needs to be further developed to accommodate a vibrant market that would encourage more investors. The calibre of players or participants in the market could determine the direction of bond market activities and may eventually take its turn on the level of bond liquidity in an economy Evidence provided by Claessens, Klin Gebiel, and Schmukler (2003), as well as Burger and Warnock (2005) established that the main determinant of the size of the bond market is the protection of creditor rights in a country. This implies that there is a strong need setting up institutional structures, as well as providing a framework for investors protection. Nwaiodo and Deekor (2013) examined how the size and growth of domestic bond market and foreign participation in the same market function to impact the development and growth of the Nigeria capital market and enhance financial stability and they discovered that the level of foreign participation in the domestic bond market contributes very little or nothing to the liquidity in the Nigeria domestic bond market, and does not affect national yield curve.

As in many developing countries, the bond market in Nigeria is mainly government dominated with the Central Bank of Nigeria (CBN) acting as sole issuing house until recently (Soludo, 2005). From the inception of the bond market in 1986, the bond market was fully dominated by Federal Government Development Stocks. Following the restructuring of the economy (due to SAP), the Federal Government withdrew this particular Stocks in the market in order to enable the financial sector develop a well-defined capital (or stock market) which is not based on the public sector investment. The federal Government of Nigeria (FGN) bond market reopened in 2003. According to VETIVA (2010), "since the reopening of the FGN Bond market in 2003, the debt management office (DMO) has offered FGN bonds worth N2.51trillion which have attracted subscriptions of N4.55trillion while N2.52trillion had been allotted".

The share of bonds in the Nigerian capital market as against the equity market indicates that bonds issuance rose after 2003, but it has since then fallen to a very low level when compared with the other instruments in the capital market. The same issue has occurred in terms of the purchasing structure of instruments in the market. These factors have led to the consideration of the Nigerian bonds market as being underdeveloped. The conditions in the Nigerian bond market that portray it to be underdeveloped are (VETIVA, 2010):

- (i) Inadequate Market Infrastructure
- (ii) Absence of Institutional Investors
- (iii) Non-availability of an active secondary bond market
- (iv) Absence of Credit Rating Agencies.

In the money market, the issuance of bonds has however been high in terms of patronage. Since the FGN bonds dominate the market, most of the bonds purchases have been made in this sector.

The Nigerian Bond Market Review - The Primary Market

The Nigerian primary bond market as a subunit of the Nigerian capital market is relatively small when compared to similar markets in the developed economies. Nevertheless, the market has experienced rapid transformation. Market capitalization was N3.02 trillion as at May 2011 compared to N108.5bnas at 2009. In September 2011, the total market turnover of the Nigerian domestic bond market is given as N4.55 trillion though much less than the turnovers in similar markets of the developed economies. The domestic bond market grew by 106 percent to N4.55 trillion between January 2010 and April 2011. Though it more than tripled the level issued in 2009, the supply of FGN Bonds has lagged sharply behind in relation to the surging demand during the year. For instance, the Debt Management Office (DMO) offered a total of N396.50bn of FGN Bonds as at the end of first half of the year (HY1 2011). This is about 13.80 percent lower than, and contrasts with the N460bn offered in HY1 of 2010 (BUSINESSDAY, 2011).

The Nigerian Bond Market Overview – The Secondary Market

Until recent developments, Pandey (2008) asserts that "Nigeria did not have a primary dealer/market for government bonds. Currently over the counter (OTC) market exists in the Nigerian bond market. Market capitalization stood at N3.02 (BUSINESSDAY, 2011 30 June). Market size grew from 3.93 billion units in 2007 to 13.75 billion units in 2010. In the past two years long term issues characterised the Nigerian bond market, accounting for some 43 percent of total issues in 2010 from 23 percent in 2008. By the second half of 2010, the Yield Curve, a measure of the return on fixed income securities and the secondary bond market performance was fairly low in the Nigerian domestic bond market. The yield curve is simply "a graph showing bond yields on the vertical axis and different maturities lengths of any type of debt instrument such as government bonds and notes on the horizontal axis". One explanation is that bond investors are exposed to higher interest rate fluctuations; this higher rate of return when used to discount a bond's cash flow reduces the price (Pandey, 2008).

Available data from Nigeria's Debt Management Office (2014) indicates that bond market capitalization reached N7.63 trillion made up of Federal Government of Nigeria bonds and treasury bills N7.03trillion, while state bond is N595.5billion. The size of the Nigerian domestic bond market is still small when compared to South Africa with \$184bn. The size of capital market of the country should be relative to the size of the economy if real economic progress is to be achieved by the operations of the market, since this market moves resources from people who have it to organizations that need it for productive purposes which critically smoothes the growth of the economy. Sanda, Mikailu and Garba (2005) in examining the operating environment of the Nigerian Stock Exchange, gave an account of the small size of the Exchange by revealing its market capitalisation statistics to be only 2%, 1%, and 0.9%, of the Malaysian, South African and South Korean stock exchanges as at 1999.

Methodology

Descriptive research design was adopted for the study. The study was conducted in Akwa Ibom State, Nigeria. The population of the study comprised all the annual data of all the variables for the period of ten (10) years. The total number of data which will constitute the population in this study is fifty (50). Convenience sampling technique was used to select 10

respondents which constituted the sample size for the study. The Main Instrument used in this study was a questionnaire titled "Bond Market and the Nigeria Economy Questionnaire" (BMNEQ)". Face and content validation of the instrument was carried out to ensure that the instrument has the accuracy, appropriateness, completeness and the language of the study under consideration. Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.84 and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical techniques such as descriptive statistics and simple regression. The test for significance was done at 0.05 alpha levels.

Results and Discussion

Hypothesis one

The null hypothesis states that there is no significant relationship between size of the bond market in Nigeria and real GDP in Nigeria. In order to test the hypothesis, regression analysis was performed on the data, (see table 1).

TABLE 1: Regression Analysis of the relationship between size of the bond market in Nigeria and real GDP in Nigeria

Model	R	R-Square	Adjusted R	Std. error of the	R Square	
			Square	Estimate	Change	
1	0.93a	0.87	0.86	102.77	0.87	

^{*}Significant at 0.05 level; df= 8; N= 10; critical R-value = 0.707

The table shows that the calculated R-value 0.93 was greater than the critical R-value of 0.707 at 0.5 alpha level with 8 degree of freedom. The R-Square value of 0.87 predicts 87% of the relationship between size of the bond market in Nigeria and real GDP in Nigeria. It was also deemed necessary to find out the extent of the variance of each case of independent variable as responded by each respondent (see table 2).

TABLE 2: Analysis of variance of the relationship between size of the bond market in Nigeria and real GDP in Nigeria

1,1901.m min 10m 021 m 1,1901.m								
Model	Sum of Squares	Df	Mean Square	F	Sig.			
Regression	579807.57	1	579807.57	54.90	.000 ^b			
Residual	84496.44	8	10562.06					
Total	664304.01	9						

The above table presents the calculated F-value as (54.90) and the P-value as (000). Being that the P-value (000) is below the probability level of 0.05, the result therefore means that there is significant relationship between size of the bond market in Nigeria and real GDP in Nigeria. The result therefore is cognate to the research findings of Claessens, Klin Gebiel, and Schmukler (2003), the size of the market and economy can be appreciated by its level of economic activities, or its level of development in terms of whether it is under-developing,

developing or developed. Nigeria tends to have a vibrant economy, but needs to be further developed to accommodate a vibrant market that would encourage more investors. The main determinant of the size of the bond market is the protection of creditor rights in a country (Burger and Warnock, 2005). The size and growth of domestic bond market and foreign participation in the same market function to impact the development and growth of the Nigeria capital market and enhance financial stability (Nwaiodo and Deekor, 2013). The significance of the cause the null hypothesis to be rejected while the alternative one was retained.

Conclusion

It is now evident that although a regional perspective on determinants of bond market development is essential, a study of country-specific determinants may reveal a new set of variables and raise new issues for further empirical inquiry and diagnosis. In the case of Nigeria, evidence from this study indicates that the size of the banking sector remains very critical in developing policies for bond market development. Furthermore, money supply as a percentage of GDP, budget deficit as a percentage of GDP, and the composition of external debt to GDP are germane in shaping Nigeria's bond market development. Also, the bond market remains the vital avenue for effective financing of projects in financial crisis ridden economy. This makes it necessary for considering the crucial role played by the bond market in the entire capital structure of an economy.

Recommendation

There is need for government to increase its budgetary allocation on education, health and youth empowerment schemes which will improve Human Capital Development in Nigeria and developing the capacity of the banking sector to provide more qualitative and productive credit, channeling a substantial part of the existing pension funds towards investing in bonds, balancing bank finance and bond markets, and restricting finance raised through external borrowing to infrastructural projects.

REFERENCES

- Adelegan, O. J. (2004) "Can a Regional Approach Accelerate Stock Market Development? Empirical Evidence from Sub-Saharan Africa," IMF Working Paper 08/281 (Washington: International Monetary Fund).
- Ajayi, O.I. (2013). *The Nigerians bond market*. Understanding monetary policy series No. 31.
 - Retrieved from www.cbn.gov.ng/out/2016/mpd/understanding%20monetary.
- Burger, J. & Warnock, F. (2005). Local currency bond markets. *IMF Staff Papers*, 53(1), 133–146.
- Castillo, J. (2014). Research Population. Available from: http://www
- Claessens, S.D.K & Sergio S. (2003). Government Bonds in Domestic and Foreign Currency: The Role of Macroeconomic and Institutional Factors. CEPR Discussion Paper no. 3789
- Kapoor P. & Pope, S. (2011) Diagnosis and management of Waldenstrom macroglobulinemia: Mayo stratification of macroglobulinemia and risk-adapted therapy (mSMART) guidelines 2016. *JAMA Oncol.*, 3(9): 1257–1265.
- Nwiado, D. & Deekor, L. N. (2013). The domestic bond market and the development of Nigeria capital market: An Empirical analysis, *Journal of Economics and Sustainable Development*, 4(7), 21-29.
- OTEH (2014) Preuzeto sa http://www.vti.mod.gov.rs/oteh/index.htm
- Pandey, I. M. (2008). *Financial Management* (9th Ed.). New-Delhi: Vikas Publishing House PVT Ltd.
- Sanda, A., Mikailu, A.S., & Garba, T. (2005). *Corporate Governance Mechanisms and Firm Financial Performance in Nigeria*. African Economic Research. Kenya. The Regal Press.
- Soludo, Charles C. (2005). "Macroeconomic, Monetary and Financial Sector Developments in Nigeria". CBN website: www.cenbank.org.