An Evaluation of the Contribution of the Bond Market to the Nigeria Economy

BY

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ABSTRACT

This study sought to assess the contribution of the Bond Market to the Nigeria Economy. Descriptive research design was adopted for the study. The study was conducted in Akwa Ibom State. 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 constituted the population in this study was 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 Contribution to the Nigeria Economy Questionnaire" (BMCNEQ)". 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. However, the study concluded that bond market holds a lot of positive prospect for the economy through its alternative financing role, diversification of risks, stimulation of capital investments and mitigation of bank's financial crises through its alternative financing function and stimulating infrastructural development amongst others. Also, that there is significant influence of contribution of the bond market on the GDP of the country. One of the recommendations was that federal government should make concerted efforts to position the Nigeria bond market as the pivot of socio economic development of the country.

KEYWORDS: Bond Market, Nigeria, Economy, Contribution

Introduction

The bond market according to Oteh, (2014) is similar to other markets in the financial system. Like other markets, the bond market comprises of the primary market where new debts are issued to participants, and secondary markets-where new and existing participants can buy and sell existing debt securities. The activities in the bond market provide opportunities for savings in the economy and also facilitate the movement of such savings into the promotion of business expansions, investments and project execution. Also, the market provides a platform for the funding of public and private expenditures on a medium and long-term basis (Oteh, 2014). The relevance of the financial sector as both a push-factor and catalyst for economic growth and general development pursuit has been well acknowledged both by researchers and policy makers. Without financial resources, no business enterprise and government can function, and economic activities will stagnate, while overall development will be impaired. Apparently therefore, an economy with adequate financial resources has the tendency to grow and develop economically (Levine, 1997).

Statement of Problem

There are several studies from developed countries that document the impact of bond market development on economic growth but the direction of causality is still an open question in the academia. In Nigeria, the literature is scanty on the relative contribution of the bond market towards GDP growth. Also, paucity of literature exists on the direction and magnitude of causality between bond market development and real GDP (economic growth), aggregate savings and Investments. This is a gap that this research intends to make contribution to the body of existing knowledge. The problem of this study is the absence of an evidence-based research showing a relationship between a growth in the bond market and simultaneous growth in GDP in Nigeria. Therefore, this study is set to determine the contribution of the bond market to GDP of the country.

Objectives of the Study

- To evaluate the contribution of the bond market to the GDP of Nigeria.

Research Question

- What is the contribution of the bond market to the GDP of Nigeria?

Hypothesis

- There is no significant influence of the contribution of bond market on the GDP of Nigeria.

Theoretical Framework

Endogenous Growth Theory- Paul Romer (1980)

Endogenous growth theory or new growth theory was developed in the 1980s by Paul Romer. The theory holds that economic growth is primarily the result of endogenous and not external forces. Endogenous growth theory holds that investment in human capital, innovation, and knowledge are significant contributors to economic growth. The theory also focuses on positive externalities and spillover effects of a knowledge-based economy which will lead to economic development. The endogenous growth theory primarily holds that the long run growth rate of an economy depends on policy measures. For example, subsidies for research and development or education increase the growth rate in some endogenous growth models by increasing the incentive for innovation. Paul Romer uncovered several alternative (and more realistic) ways of linearizing the growth theory to accommodate more of the "stylized facts" of growth. The stylized facts in question are as follows (Romer, 1994): (1) market systems involve many firms; (2) discoveries are public knowledge (non-rival goods); (3) physical activities are replicable, whence the aggregate production function must be homogeneous of degree one in all inputs that can be owned and exchanged (i.e. they are rival goods); (4) technological progress is a consequence of human activity; (5) competition is imperfect.

Pagano (1993) asserts that in traditional growth theory, the growth rate is a positive function of exogenous technical progress. However, financial development is not related to economic growth, but to physical capital per worker. On the other hand, endogenous growth models show that economic growth performance is related to financial development, technology and income distribution. Greenwood and Jovanovic (1990) argued that income per capita helps determine membership in an information processing intermediacy that in turn improves investment decisions and economic growth. They incorporated the role of financial factors in models of endogenous growth to formalize the interactions between financial markets and economic growth. Due to the advances in the endogenous growth literature, recent models have been trying to identify the mechanism through which financial markets influence economic growth. Various channels have been suggested, firstly, financial markets can affect economic growth through efficient resource allocation. King and Levine (1993) proposed a model in which innovation activities serve as the engine of growth. A higher rate of successful innovations results in a higher growth rate of productivity. In the absence of financial markets, one might invest in projects that can be promptly liquidated, instead of investing in assets that are more productive but financially illiquid. Markets can provide individuals with less risky and liquid productive investments. Secondly, financial markets can influence economic growth through the information channel. Paul Romer state that the main objective of the endogenous growth theory is to make the technological progress an endogenous variable to be explained within the model, hence the name endogenous growth theory.

The implication of the theory to the study is that the rate of growth depends on the type of capital a country invests in. Policies that embrace openness, competition, change and innovation will promote growth. Also, the accumulation of financial assets triggers economic growth. The major consensus is that finance positively influences real economic performance. If a corporation has to rely on external funds, debt capital is cheaper, since it is less undervalued than shares. If external funds become necessary, debt capital is most favourable, followed by hybrid forms of financing, such as convertible bonds.

Contribution of Bond Market to GDP of the Country

According to Koka (2012), the bond market holds a lot of positive prospect for the economy through its alternative financing role, diversification of risks, stimulation of capital investments, mitigation of bank's financial crises through its alternative financing function and stimulating infrastructural development amongst others. A well-functioning and developed bond market provides a secure and flexible investment outlet for investors as well as stimulates economic activities through provision of appropriate long-term finance for both government and non-governmental borrowers. Thus, the market contributes towards financial system diversification, reduces the concentration of risk in the banking system while promoting long-term savings (Soludo, 2005).

The importance of a strong and viable domestic bond market as an alternative source of finance in emerging economies as is in Nigeria was critically exposed by the global financial crisis of 2007-2009. World Bank (2014) reports that when the market for short term funds failed, the bond markets played a crucial role in bridging the funding gaps that resulted from the near total freeze in global credit flow as borrowers in less developed economies were forced to look to domestic markets in the bid to meet their medium to long term capital needs. Over the years, the huge fiscal deficits incurred by governments for executing developmental projects with long gestation period have majorly been financed through borrowing from banks (money market) and printing of currency as last resort. These activities have generated huge inflationary consequences for the economy with adverse effects on capital formation and further investment prospect for the domestic economy. Sourcing of fund from banks to finance long term projects is to effect a financial mismatch funding strategy. Commercial banks majorly provide short term finances, the huge financial intermediation burden placed on banks have further worsened their financial crisis.

Bond markets as transferable debt securities have increased substantially in the last decades in Nigeria. Available statistics indicates that Bond market development reached $1.8 trillion in 2012, from $1.2 trillion in 2011. It is expected that it will increase to about $3.0 trillion in 2016 (CBN 2013). Bond market development in Nigeria has surpassed other debt instruments like bank credit and equities market both in absolute terms and as a percentage of GDP (Debt Management Office, 2013). Financial development have been receiving research attention from both people in academics and policy makers since the seminal work of Gurley and Shaw, (1953) and till date the debate is still inconclusive. This unending debate is due to several empirical evidences suggesting that financial market development (including bond market) is an important ingredient to economic growth. Said (2013) observed that bond market contributes significantly to economic growth but Fink, Haiss and Hristoforova (2003) posits that real economic activity influences the development of bond market. Although, several empirical studies prove finance to be an important ingredient of economic growth, the direction of causality is still inconclusive in financial economics literature.

Economic growth is measured by the gross domestic product (GDP) which according to the World Bank (2014) measures the total output of goods and services for final use occurring within the domestic territory of a given country, regardless of the allocation to domestic and foreign claims. Gross domestic product at purchaser values (market prices) is the sum of gross value added by all resident and nonresident producers in the economy plus any taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. The channels of transmission to economic growth are the accumulation of capital and the factor productivity. According to Wachtel (2001), the transmission channel of factor productivity is more important than the transmission channel of capital accumulation. He shows that countries with comparable amounts of capital invested show partly significant differences in economic growth. These differences can to some extent be explained by the abilities of the financial sector to effect rises in factor productivity. Bond markets and share markets are only part of the financial sector. Apart from them, banks are acting as financial intermediaries.

Okereke-Onyiuke (2008) asserts that the capital market is the segment of the financial system which facilitates the channeling of long-term funds from surplus to deficit economic units thereby stimulating capital formation and socio-economic development. The capital market does not only serve as a source of finance for the government and industries but provide a wide range of socio-economic benefits to any country. By mobilizing funds for channeling into productive investments, the market brings together those who have and those who need funds at usually competitive prices and conditions acceptable to both parties, thereby ensuring efficient resource allocation while promoting economic growth. In the absence of capital market, industrial growth would be hampered, as the money market is not designed to provide such funds. The availability of the secondary market such as the stock market for instance is an important aspect of the capital market, as investors are much more disposed to placing funds in such primary market if their holdings are easily convertible into cash. Hence, the stock exchange is the core of capital market development in any society (Okereke-Onyiuke, 2008).

Nwankwo, (2006) stated that capital market offers access to a variety of financial instruments that enable economic agents to pool, price, and exchange risk. Through assets with attractive yields, liquidity and risk characteristics, it encourages savings in financial form. This is very essential for government and other institutions in need of long-term funds and for suppliers of long-term funds. Based on its importance in accelerating economic growth and development, government of most nations tend to have keen interest in the performance of its capital market. The concern is for sustained confidence in the market and for a strong investor's protection arrangement. Nigeria Securities and Exchange Commission (NSEC) is the government agency responsible for developing and regulating the Nigeria capital market. It was created by Act No. 71 of 1979 and re-acted as Securities and Exchange Commission Decree No. 29 of 1988. The NSEC purses its objectives by registering all market operators based on capital adequacy, competence and solvency as criteria. Economic growth is generally agreed to indicate development of an economy, because it transforms a country from a five percent saver to a fifteen percent saver. Thus, it is argued that for capital market to contribute to economic growth and development in Nigeria, it must operate efficiently. Most often, where the market operate efficiently, confidence will be generated in the minds of the public and investors will be willing to part with hard earned funds and invest them in securities with the hope that in future they will recoup their investment.

Capital markets are significant drivers of economic growth which is measured by the relevant indicators. Growth in this market could fuel a long-term increase in the growth rate of the economy. Capital market support economic growth by providing new sources of funding for long term investment and facilitates the improvement in corporate governance. The different components of capital markets help to accelerate growth of the economy. According to Nigerian Capital Market Statistical Bulletin (2010), some of the selected African stock market indicators were number of listed companies, market capitalization, global equity indices and turnover ratio. There has been difficulty in getting data in most of these indicators due to their inexistence at the inception of Nigeria Stock Market within the 1980's. However, data from this establishment between 2006 and 2010 showed that Nigeria had 202, 212, 213, 214, 215 number of listed companies respectively. Market capitalization within the above stated period had 32,819.36, 86,346.84, 49,802.82, 33,324.90, and 50,882.97 correspondingly. Turnover ratio also recorded 13.6, 28.2, 29.3, 11.0, 12.5, 34.0, 108.3, -35.4 and 20.3 in that same order with the exception of 2008 where no record was found in this statistical book.

In 2016, market capitalization dropped to the tune of over N1trillion due to lack of investors' confidence. However, most stakeholders attributed the prolonged lull in the equities market and economy in general to tight macroeconomic policies, falling crude oil prices which thwarted stakeholders expectations and led to the exit of foreign investors. Statistics revealed that despite the planned market recovery supported by the capital market regulators, the Nigerian stock exchange market closed for the year as one of the worst performing markets across the globe, due largely to sell pressure by panicky foreign and local investors. At the last count, monthly foreign inflows outpaced outflows as foreign inflows decreased by 23.51 per cent from N24.41

billion in September to N18.67 billion in October 2016. Also, foreign outflows as of October 2016 amounted to N12.57 billion as against N19.18 billion in September, representing a decrease of 34.46 per cent. The total transactions at the nation's bourse decreased significantly by 32.44 per cent from N94.77 billion recorded in September 2016 to N64.03 billion (about 0.21 billion dollars) in October 2016. Similarly, total transactions from January to October 2016 decreased significantly by 40.55 per cent from N1.67 trillion recorded within the same period in 2015 to N991.11 billion in 2016. The nation's market scenario, according to analysts, pointed to the need for increased participation of domestic investors, especially institutional investors as well as introduction of new tradable products to deepen the market. Records of trading on Nigeria capital market (2010) showed that the equity market dipped by over seven per cent year to date due to massive sell-off due to the disappearance of investors' confidence. Specifically, the All-Share Index which opened trading for the year at 28,642.25 shed 2,156.23 or 7.53 per cent to close trading on Dec. 23, 2016 at 26,486.02. Also, the market capitalization lost N737 billion or 7.48 per cent to close trading in the same period under review at N9.113 trillion against N9.850 trillion posted on Dec. 31, 2015.

Patara and Yoonbai (2007) investigated the role of the bond market in economic growth. For the years 1989-2003, they employed the bond market data for 38 countries and the procedure that can better handle the econometric problems such as simultaneity, omitted variables or unobserved country-specific effects. They also considered simultaneously the three major financial instruments and markets: bank credits, bonds, and stocks. Their estimation results indicated that the development in the financial sector in general has a positive impact on economic growth. Both banking development and stock market development help promote economic growth. However, in the case of the bond market, only government bonds are strongly positively related to growth while the effects of private bonds are positive but insignificant.

Patrick (2005) carried out a study on the impact of the Nigerian capital market on the Nigerian economy. The study seeks to determine the trend of capital market over the years, examine the relationship between capital market and economic growth, and to proffer recommendations based on the research findings. The secondary data source was used for the study regression analysis and correlation analyses were used to present the data and to find the significance and relationships between the different variables chosen. The result shows that there has been a steady rise in the macro economic variables considered i.e. gross domestic product, market capitalization, total shares traded, public capital expenditure, gross capital formation, openness (export plus import divided by GDP) and foreign direct investment. Also, the R-squared value of 96% implies the total variation in Real GDP is being explained by the explanatory variables (i.e. MKT CAP, TST, PCE, GCF, OP and FDI). However, only openness and GCF are the significant factors contributing to Real GDP. Also, correlation analysis shows a positive and significant relationship between Real GDP, market capitalization and total shares traded and are also significant at 1% level of probability. The policy implication of this is that gross capital formation and openness are veritable variables that will have impact on the Nigerian economy growth and development (GDP being used as a proxy for economic growth).

Methodology

Descriptive research design was adopted for the study. The study was conducted in Akwa Ibom State, Nigeria. The population of the study for the secondary data therefore is made up of all the banks and insurance companies that are listed on the Nigerian Stock Exchange (NSE) from 2007 to 2011. The total population of the study is 17 banks and 30 insurance companies. The population of the study comprised all the annual data of all the variables for the period of ten (10) years. 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 Contribution to the Nigeria Economy Questionnaire" (BMCNEQ)". 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

Hypothesis Testing

The null hypothesis states that there is no significant influence of contribution of the bond market on the GDP of the country. In order to test the hypothesis regression analysis was performed on the data, (see table 1).

TABLE 1: Simple Regression Analysis of the influence of contribution of the bond market on the GDP of the country

Model	R	R-Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.94[a]	0.89	0.88	94.78	0.89

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

The above table 1 shows that the calculated R-value 0.94 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 0.89 predicts 89% of the influence of contribution of the bond market on the GDP of the country. This rate of percentage is highly positive and therefore means that there is significant influence of contribution of the bond market on the GDP of the country. 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 influence of contribution of the bond market on the GDP of the country

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	592435.26	1	592435.26	65.95	.000[b]
Residual	71868.75	8	8983.59		
Total	664304.01	9			

a. Dependent Variable: GDP
b. Predictors: (Constant), bond market

The above table presents the calculated F-value as (65.95) 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 influence of contribution of the bond market on the GDP of the country. The result therefore was in agreement with the research findings of Koka (2012) who asserted that the bond market holds a lot of positive prospect for the economy through its alternative financing role, diversification of risks, stimulation of capital investments, mitigation of bank's financial crises through its alternative financing function and stimulating infrastructural development amongst others. A well-functioning and developed bond market provides a secure and flexible investment outlet for investors as well as stimulates economic activities through provision of appropriate long-term finance for both government and non-governmental borrowers. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Conclusion

Bond market is similar to other markets in the financial system. The activities in the bond market provide opportunities for savings in the economy and also facilitate the movement of such savings into the promotion of business expansions, investments and project execution. The bond market holds a lot of positive prospect for the economy through its alternative financing role, diversification of risks, stimulation of capital investments and mitigation of bank's financial crises through its alternative financing function and stimulating infrastructural development amongst others. Thus, the bond market contributes towards financial system diversification, reduces the concentration of risk in the banking system while promoting long-term savings. Therefore, the study reveals that there is significant influence of contribution of the bond market on the GDP of the country.

Recommendations

1. Federal Government should make concerted efforts to position the Nigeria bond market as the pivot of socio economic development of the country. These efforts must embrace all aspects of bond market development e.g. trading mechanics, regulation, infrastructure incentives, legislation and other market fundamentals.
2. Government should improve the presence of corporate in the bonds market to achieve activities that enhance human development index in the economy. This can be achieved via reduced public quotation cost, less stringent requirement, improved communication and information cost.

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