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Bond Market and Economic Growth in Nigeria

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ABSTRACT

Prompted by the need to assess the influence of bond market on the Nigeria's economy , this study examines the nature of the interrelationships between Nigeria's gross domestic product and various bond market components over the period 1981-2021. The study employs stationarity test, co-integration test, error correction (ECM) and Granger causality test. All the variables were stationary at first difference; the co-integration test reveals a significant relationship between the study variables. The ECM results show that corporate bonds (CBOND) and federal government Bond(FGNBOND) are significantly related to Nigeria's gross domestic product while the Granger causality tests indicates that all the independent variables support and promote growth of Nigeria's economy. The study concluded that all the bond types are valuable in predicting Nigeria's economic growth. It is recommended that Nigeria's government should encourage or promote the study bond types in order to create a more viable business which will promote more confidence in the investing public.

KEYWORDS:

Economic Growth, Federal Government Bond, Corporate Bond and External Bond.

1. INTRODUCTION

Bond market plays a vital role in any economy but more importantly in a developing country like Nigeria. Bond market is that part of the financial market where long term funds are raised for investment via the capital market. Mu, Phelps and Stotsky (2013) observed that bond market is a channel through which the economic savers and borrowers interact for investment purposes in the process of economic development, business expansion and sustainability.Ogilo (2014) acknowledged that a bond instrument indicates the debt obligation with respect to the principal and interest within a defined time as issued by the borrower. Oke, Dada & Aremo (2021) argued that bond market developments facilitate the process and efficient supply of operation of long-term funds. King and Levine for (1993) asserted that the financial system of any nation indicates the level of its capital accumulation, productivity and development. Bondmarket encouragesthe government to shift from short-term financing to long tern funding.Nnamdi (2015) ascertained that long-term financing through bond market predicts economic growth in Nigeria. Kin (2000) discovered that bond market intermediates between the demand and supply unit and enhance corporate governance standards of any nation. The nature of the bond market provides streams of income to corporate firms while it assists the government to boost development and production. However, it benefits both the borrower and issuer in the area of saving, financial flows and risk minimization. There is no doubt thatthe bond marketfacilitates the foundation for economic growth in a less developed economy like Nigeria.The Nigerian bond market howeverwitnessed a slow growth in 2020 as investors sentiment dampened because of the ravaging coronavirus pandemic (DMO 2020).

In a developing country like Nigeria, the capital market is argued to have great growth prospects. Alajekwuand Achugbu (2012) argued that Nigeria's financial market has the capacity to mobilise savings from surplus economic agentsand efficiently allocate same to productive units where the funds can effectively be utilised for significant economic purpose.Therefore bond markets as part of any capital market could be a vital pointer in economic growth in a developing country through proper allocation of funds to lucrative sectors .The channelling of such funds to needy sectors could translate to growth of Nigeria's economy. At the macro level, bond market forms the mechanism that transforms funds supplied by the savings units to medium and long-term investments in the economy.The Nigerian bond market is made up of various types of bonds such as government bond, corporate bond,sukuk bond ,supernatural bond ,green bond and sovereign bond. The trend in the bond market shows that the federal government is increasing her sources of funds through bond market as a result of persistent increase in budget deficit fuelled by falling oil prices as well as the COVID'19 .that affected the whole world including Nigeria. Alajekwu and Ezeabasili (2012) noted that investing in bond market reduces investors risk and also gives them the window to diversify their portfolio.Harvey (1989) poised that bond market is capable of predicting the economic growth in US,while Chidi-okeke,Ogbonnaand Okeke(2020) argued that bond market, interest rate, inflation rate do not predict human development index in Nigeria in the long run . In the same vein, the relationship between bond capitalisation and economic growth is positive and significant in promoting economic growth (Ogboi, etal. 2016; Kapingura and Makhetha-Kosi2014;Nnamdi,2015). Olaniyan and Ekundayo(2019)noted that issuance of more government bonds to the public will trigger the efficiency of the capital market. Herring and Chatusripitak(2001) observed that weak bond market impedes access to capital formation.Mailafia (2014) noted that lack of financial and market re-engineering, risk management, illiquidity shallow market and low coupon rates could impede bond market growth and expansion.In the same direction. Aman, Naimand Isa(2019a) also confirmed that unstable environment sidelined foreign investors from injecting funds into a country's local market. Frankel (1993) observed that infrastructural development can be distorted in the absence of a bond market.Most of the studies cited above failed to analyze the extent to which Nigeria's economy is

sensitive in the long-run to a fully decomposed structure of the bond market as well as the extent to which they do promote or support Nigeria's economic growth process. An articulation of the above therefore, constitutes the core problem of this study in country's local market. The outcome of this study will be beneficial to government and investors in the market so as to equip them with the choices of funds in the bond market. Having provided a general review of the subject, the rest of this study is divided into four sections. Section 2 provides the theoretical framework and review of previous studies.Section 3, offers the methodology adopted for the study, while section 4 presents the analysis and results. Finally section 5 provides the discussions, conclusions and recommendations.

2. THEORETICAL FRAMEWORK AND REVIEW OF REVIEW OF PREVIOUS STUDIES:

The theoretical and empirical underpinnings of this study are discussed under the following sub-headings:

2.1 THEORY OF FINANCIAL INTERMEDATION

Financial intermediation is the channel through which productive sectors of the economy access fundsin thecapital marketwhich bond market is part of Nnamdi(2015)acknowledged that financial markets intermediate to ensure efficient mobilisations of resource from surplus savings units and allocates strictly to deficit economic units for productive purposes .Bond market plays a role in allocation of resources by connecting the borrowers and savers directly. Coase (1960) argued that it is the real economic growth that facilitates the emergency of financial instruments and markets. This reinforces Robison (1952) positionthat enterprises motivates financial development. The studies of (Mckinnom1973; Shaw 1973,Patrick 1976) support the supply leading pattern, which maintains that accumulation of financial assets triggers productivity. The indication is that financial markets induce enterprises through the provision of funds.

2.2 Empirical Review

Ogboi, Njogu and Nwankwo (2016) studied the effects of bond market trading on economic growth of Nigeria from 1982-2014. The study utilized generalized method of moment (GMM-IV) instrumental variables estimator and granger causality test for dataanalysis. Results from the study revealed that although bond market has positive influence on the Nigeria economy but there were no significant relationship.

Chidi-Okeke,Ogbonna and Okeke(2020)adopted ARDLtechniques in evaluating bothlong run and short-run influences of bond market development on economic development in Nigeria. The study employed time series data covering a period of thirty three year(33)year which was sourced from CBN statistical bulletin .Further data were sourced from the Debt Management Office (DMO)and online version of World Bank economic development indicators. The findings of the study revealed that government bond and corporate bond do not increase Human development index in Nigeria. In the study of Fink, Haiss, and Hristoforova,(2003) examined the casual relationship between bond markets development and real GDP in developed countries like USA, UK, Switzerland,Germany, Austria, Netherlands,France,Portugal,Sweden and Spain,Japan,Finland,Italy from 1950-2000.The findings revealed that the financial market plays supply –leading roles and supports economic growth of USA,UK, Switzerland, Germany, Austria, Netherlands and Spain. The results of Japan, Finland and Italy revealed that the bond market capitalization growth and real output growth support themselves in the growth process.

Onaolapo and Oluwafemi (2010) applied short-termestimation (OLS regression) in analysing the relationship between bond market development and Nigeria's economy. The study revealed that a

positive and significant relationship exist between bond market size, liquidity and economic growth in Nigeria.Nkwede(2020) examined the macroeconomic determinants of bond market development in Nigeria for period spanning 32years(1981-2013) using ordinary least square regression technique. The revelations of the study are that exchange rate, interest rate; inflation rate and banking sector development have negative and significant influence on the Nigerian bond market capitalization.

Eke ,Adetiloye, Adegbite and Okoye (2017) appraised the relationship between interest rate spread and corporate bond market development in thirteen African economies comprising of Botswana, Egypt Mauritius Nigeria, Tunisia, Cameroon, Kenya, Morocco, South Africa, Cote d'Ivorie,Ghana ,Namibia, Tanzania from 2004 – 2014.They employed the fully modified ordinary least square (FMOLS) in an auto regressive distributive lag (ARDL) framework. The results of the short and long term tests showed that interest rate negatively influenced the performance of corporate bond. The results they argued are in line with the group interest theorem which they claim to prevail in these African economies thereby, leading to a hindrance in a competitive financial development.

Usman and Daniel (2020) examined the role of capital market in economic development in Nigeria for the period of 2010-2019.The study utilized GMM estimator and Granger Causality tests in data analysis.The results showed that market capitalization significantly related with Nigeria's gross domestic Product.

Oke,Dada and Aremo(2021) employed unit root and Autoregressive Distribution Lag(ARDL) tests to evaluate the impact of bond market development on Nigeria economy from 1986-2018.The variables used for the study are corporate bonds, government bonds,bond yield and value of bond traded (VBTD) and Economic growth was proxied by real gross domestic product. The empirical findings showed that corporate bonds and value of bonds traded predict output growth in Nigeria. Government bond revealed positive and insignificant relationship with Nigeria's real gross domestic product, while bond yield indicated reverse relationship with output level.

Omodero and Alege(2021) examined the influence of government bonds on capital market growth in Nigeria from 2003–2019. Total Market Capitalization were employed to represent criterion variable while FGN bonds, Treasure bonds (TRB), Bond/Debt ratio and inflation rates stood as predictor variables. The study utilized ordinary least square method, Pairwise Granger Causality Test as well as heteroskedasticity test. The findings reveal that the Federal Government of Nigeria's (FGN) bond significantly predicts Nigeria's capital market growth. Further findings showed that Treasury Bond (TRB), inflation Rates, Bond/Debt ratio were insignificant in influencing the growth of Nigeria capital market. The causality test revealed that only Federal government Bond Support Total market capitalization. In the same direction,Ndinda (2012) employed regression techniques in evaluating the relationship between the issuance of treasury/regime bonds and Kenya's economic growth for the period of 9years(2003-2011).The empirical evidence indicated that Kenya government bonds significantly and positively predicted their output growth.

Olaniyan and Ekundayo(2019) studied the impact of government bonds on the growth of the Nigerian capital market from 2010 to 2017. The study employed the Generalised Method of Moments (GMM) regression estimator. The empirical findings revealed that the value and the number of listed government bonds' positively and significantly affected capital market growth in Nigeria. Further findings showed that Market capitalization of government bond (MCGD) and NSE All-Share Index are negatively correlated and insignificant.

YaryetandAndriannaivo (2010) applied ordinary least square regression (OLS) estimation technique in analysing the growth of African financial market.The results indicated that the protection of

creditor rights, level of income, political risk, and financial repression are main determinants of banking sector development in Africa.Domestic savings, banking sector development, political risk, stock market liquidity and liberalisation of the capital account are determinants for the development of the financial market.

Eriki and Okafor (2008) employed Ordinary Least Square regression (OLS) method to examine the impact of government bonds on growth and development of the Nigerian capital market over the period 1970- 2003.The results of the study showed that government bond irrespective of its positive relationship with capital market performance indicated no significant effect.

Nwiado and Deekor (2013) examined the ways foreign participation and the growth of the domestic bond market function to influence the growth and development of the Nigeria capital market. Through the Vector Autoregressive (VAR) model, the study discovered that the participation of expatriates in the domestic bond market adds nothing or rather minimally to liquidity in Nigeria's domestic bond market.

Nnamdi (2015) employed Augmented Dickey-fuller (ADF), Johansen's Co–integration, Error correction model (ECM) and Granger causality tests in examining the prevailing relationships between financial market funds and Nigeria's economic growth for the period of 31years(1981-2011). The empirical finding showed that outstanding bond and gross domestic product had a negative but significant long run relationship while the Granger causality tests indicate that bonds and equity markets are promoted by growth in Nigeria's GDP.

Nnamdi, Umar and Omotayo (2017)examined the capacity of Nigeria's financial markets to continuously provide both short and long term funds required by the manufacturing sector in an economy from 1981-2015. The study utilised secondary data from the Statistical Bulletin of Central Bank of Nigeria and employed statistical tools such as multi-regression, stationary test, Johansen co-integration, Error correction tests and Granger causality. The findings revealed a convincing short and long-run significant relationships between contributions of the manufacturing sector to gross domestic product and bank credits to the private sectors, government securities, equity and bond.

Amadeo (2013) findings indicated that capital markets serves as an avenue and platform for trading in stocks, bonds, commodities, foreign exchange as well as derivatives for the aim of raising cash for businesses, projects and maximizing firms market value.

In South Africa, Kapingura and Makhetha (2014) examined the causal relationships that prevailed between bond market development and economic growth in Africa over the period 1995-2012. Adopting the Engle-GrangerCo-integration and the pairwise Granger causality tests, the results showed a significant longrun association and support between the bond market capitalization and economic activity. However, The study concluded that African governments should lay emphasis on policies which would ensure the development of the bond market as a way to mobilize domestic resources for bond market investment. These would in the long run, promote economic growth.

Burger, Warnock and Warnock (2015) evaluatedthe role of bond markets in financial systems. The study compared the salient features of bond market development in developing Asia and other regions using 2011 data from World Bank. The empirical findings revealed that macroeconomic volatility posed a serious threat to development of bond market in Asia economy.

Eichengreen and Luengnaruemitchai(2006) studied on bond market and economic growth of Asia and found that bond market capitalisation significantly relates to economic growth in a more competitive financial sector environment and less macro-economicinstability .

Burger, Warnock, and Warnock (2012) estimated the size of local currency bond markets in 2008 and found out that emerging market economy (EMEs) with lower inflation volatility and stronger legal rights positively predict the development of bond market.

Kibet (2015) examined the effect of government bonds on capital market growth in Kenya over the period 2004-2014. Using regression analysis, the study found that the issuance of government bonds and the level of capital market growth are positively correlated. In addition, it was concluded that the supply-leading hypothesis (SLH) of capital market growth prevailedin Kenya for the period under review.

Pradhan, Zaki, Maradana, Dash, Jayakumar and Chatterjee (2015)studied the causality relationship between bond market development and economic growth of developing countries (G-20) from 1990-2011.Domestic private debt securities, domestic public debt securities, international private debt securities, and international public debt securities were employed as variables of the study and vector autoregressive (VAR) for data analysis employed. The results indicated that bond market development and economic growth support andpromote each other inthe growth process of G-20 countries.

Thumrongvit,Kim and Pyun(2013) examined bond markets in African countries. The variables used for data analysis are government securities market as well as corporate bond market capitalization. The findings showed that government securities market capitalization is directly related to better institutions and interest rate volatility, and inversely related to smaller fiscal deficits, higher interest rate spreads, exchange rate volatility, current and capital account openness. Corporate bond market capitalization is directly linked to economic size, the level of development of the economy and financial markets, better institutions and interest rate volatility while inversely related to higher interest rate spreads and current account openness.

3.0 Methodology:

The set of analyses for this study begins with stationarity test to test the order of integration.This test served as a guide on the appropriate estimation techniques suitable for the analysis. Annual time series data of gross domestic product and bond market variables were generated from the Central Bank of Nigeria Statistical Bulletin. The study covered1981–2021.

3.1. Model Specification

The study formulated its model to include gross domestic product (GDP) made as a function of government bond (GBOND), corporatebond (CBOND) and external bond (EXBOND). In a more specific form, the model can be expressed as:

$$GDP = f(GBOND, CBOND, EXBOND) \quad (1)$$

For estimation purposes, equation (1)

Re-written as follows;

$$GDP=\beta_0+\beta_1 GBOND+\beta_2 CBOND+\beta_3 EXBOND+\mu i \quad (2)$$

where:

GDP-Gross DomesticProduct,

GB – Government Bond,

CB – Corporate Bond,

EXB –External bond

F – Functional Notation,

μ_i – error term, β_0 – intercept,

β_1 .....β_3 = coefficients of GB, CB and EB respectively.

On aprioriβ 1>0 β 2>0 β 3>0

Method of Data Analysis

The main aim of this study is to evaluate the nature of relationships prevailing among bond market components and economic growth in Nigeria .The prevailing causal relationships among the variables is explored also in order to determine the extent to which these study variables tend to promote Nigeria's economic growth.

Stationarity test:The stationarity test is conducted in o order to determine the order of co-integration .If the unit root test differentiate at levels and achieve the same order1(0) then there is no need for further analysis and ordinary regression is sufficient . If stationarity is achieved at first and second differencing, then co-integration will come in. If not ARDL will be employed where there is fractional integration.

Johansen's co-integration test: This test will be utilized to ascertain the extent and level of long-run equilibrium relationship between employed study variables (Awe 2012).The decision rule is based on significance at 0.05level, of the co-integrating equation through the trace and /or maximum eigen values.

Error Correction Model: Brooks (2009) observed that error correction estimates tend to evaluates the long run sensitivities of dependent variable to variations in each of the explanatory variables

Granger Causality Test.

For the purpose of determining the extent to which the dependent variables and each of the explanatory variable do support or promote themselves in the growth process ,granger causality will be executed to determine whether the variation in one variable (X) is caused by variation in another variable(y).Also to ascertain the extent to which they significantly support or promote each other in the economic growth process in the light of the inclusion of lag of the time series (Eagle and Granger, 1987).

3.1 Description ofvariables

Gross domestic product (Gdp): This variable measures the economic value of a country in relation to the output level of goods and servicesproduce in a particular period.

Government Bond (GBond): this represents the size of the bond market captured by the outstanding amount of debt securities issued by the apex bank of Nigeria It captures bonds issued by government and municipal bonds.

Corporate Bond (CBond): This represents the bond issued by companies to raise funds for the expansion of their business.

External Bond (IB): This comprise Eurobond and diaspora bond issued to the country for capital development.

Table 4.1.1: Unit Root Output (Augmented Dickey Fuller)

Variable	ADF T-statistics	Test Critical Values			Probability Level	Order of Integration
	1st diff	1%	5%	10%		
GDP	-4.582198	-3.610453	2.038087	2.607932	0.0010	1(1)
CBOND	-5.842336	-3.621023	-2.943427	-2.610263	0.0000	1(1)
EXBOND	-4.453198	-3.670170	-2.963972	-2.621007	0.0000	1(1)
FGBOND	-4.294436	-3.610453	-2.938987	-2.607932	0.0023	1(1)

Source: Extracted from Eview-10

From the result of the stationarity test in table 4.1.0, it can be deduced that all the variables employed are stationary at first difference indicating the existence of integration amongst the variables. Therefore there is need to carryout co-integration test.The probability values are less than 5% level of significant indicating the rejection of the null hypothesis and accepting the alternate hypothesis.

Table 4.1.2: Co-integration Test (Johansen Co-integration)

Date: 03/09/22 Time: 06:19
Sample (adjusted): 1981-2021
Included observations: 39 after adjustments
Trend assumption: Linear deterministic trend
Series: CBOND EXTERNAL_BOND FGNBOND GDP
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.813492	138.3179	47.85613	0.0000
At most 1 *	0.693821	72.82595	29.79707	0.0000
At most 2 *	0.330526	26.66616	15.49471	0.0007
At most 3 *	0.246092	11.01691	3.841466	0.0009
Trace test indicates 4 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.813492	65.49192	27.58434	0.0000
At most 1 *	0.693821	46.15979	21.13162	0.0000
At most 2 *	0.330526	15.64925	14.26460	0.0300
At most 3 *	0.246092	11.01691	3.841466	0.0009
Max-eigenvalue test indicates 4 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Source: Extracted from Eview-10

From table 4.1.2, the trace output shows 4 integrating equations at 0.05 level of significant judging by the probability level. This shows that there is evidence of long run relationship amongst the variables of study.

Table 4.1.3: Error Correction Model

Dependent Variable: GDP				
Method: Least Squares				
Date: 03/9/22 Time: 20:15				
Sample (adjusted): 1981-2021				
Included observations: 40 after adjustments				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	3757.481	958.7631	3.919092	0.0004
CBOND	5.668391	2.539541	2.232053	0.0321
EXBOND	-5.316403	1.482708	-3.585604	0.0010
FGNBOND	14.26178	0.549308	25.96316	0.0000
ECM(-1)	-0.681078	0.140850	4.835473	0.0000
R-squared	0.992154	Mean dependent var		38155.95
Adjusted R-squared	0.991258	S.D. dependent var		49832.39
S.E. of regression	4659.371	Akaike info criterion		19.84762
Sum squared resid	7.60E+08	Schwarz criterion		20.05873
Log likelihood	-391.9523	Hannan-Quinn criter.		19.92395
F-statistic	1106.503	Durbin-Watson stat		1.340803
Prob(F-statistic)	0.000000			

Source: Extracted from Eview-10

The result from table 4.1.4 revealed how long run can redress the precariousness in the short-run. The F-statistics with likelihood level of 0.0000 indicate that the model is fit and good for prediction.The also revealed all the predictor (explanatory) variables jointly explain 99.21% of variation in Nigeria's GDP. Furthermore, the resultof corporate bond(CBOND) , federal government bond(FGNBOND) are in line with the apriori expectation while External bond(EXBOND)revealed a negative coefficient of -5.316403 but significant in the short run(5%).This could be as a result of high cost exchange rates, inflation and other external factors.The Durbin-Watson statistic of 1.340803 is within acceptable range. The ECM value of 68.10% is joined with a probability value of 0.0000 which is significant at 5% level. The ECM absolute value of 68.10% implies the magnitude in which disequilibrium in Nigeria's gross domestic product is corrected by short run adjustments in the employed variables annually**.**

Table 4.1.4: Granger Causality Test

Pairwise Granger Causality Tests			
Date: 03/09/22 Time: 20:31			
Sample: 1981 2021			
Lags: 2			
Null Hypothesis:	**Obs**	**F-Statistic**	**Prob.**
CBOND does not Granger Cause GDP	39	1.09304	0.3467
GDP does not Granger Cause CBOND		6.63466	0.0037
EXBOND does not Granger Cause GDP	39	10.3560	0.0003
GDP does not Granger Cause EX_BOND		5.41269	0.0091

FGNBOND does not Granger Cause GDP	39	1.07844	0.3515
GDP does not Granger Cause FGNBOND		11.7794	0.0001
EXBOND does not Granger Cause CBOND	39	0.51341	0.6030
CBOND does not Granger Cause EX_BOND		0.09741	0.9074
FGNBOND does not Granger Cause CBOND	39	5.54497	0.0082
CBOND does not Granger Cause FGNBOND		0.98552	0.3837
FGNBOND does not Granger Cause EX_BOND	39	21.8474	8.E-07
EXBOND does not Granger Cause FGNBOND		2.30690	0.1150

Source: Extracted from Eview-10

The granger causality output in table 4.1.4 shows both the presence unidirectional and bidirectional the employed variables of study. The unidirectional causality flows from GDP to CBOND, EXBOND,FGNBOND indicating that the variables support and promote the Nigeria's economic growth process.The findings gives credit ofKapingura and Makhetha (2014) while causality flow fromCBOND to GDP,FGNBOND to GDP acknowledged the result of Fink et al.(2003)and reject the findings of Ogboi,Njogoand Alege(2021) .

5.0. Discusion, Conclusion, Recommendation and Implication

The paper study the influence of bond market on Nigeria's economic growth of Nigeria from 1981-2021 with particular focus on the interrelationship among the employed variables. The study proposed positive apriori expectation among the explanatory variable to Nigeria's gross domestic product. The stationarity test result shows that all the variables are stationaryat 1(1).The co-integration test result revealed the presence of long term relationship between thestudy variables.The results of ECM show that CBOND and FGNBOND are capable of predicting Nigeria's economic growth process, the significant and positive relationship evidence in FGNBOND could be as a result of the nature of the bond that being a risk free and marketable security, more reliable and consistence in returns .Also the CBOND shows the level of investors'appetite and confidence in the markets despite the risk involved. This finding supports our apriori expectation while EXBOND shows a negative coefficient but significant relationship in predicting gross domestic product.The ECM absolute value of 68.10% implies the magnitude in which disequilibrium in Nigeria's gross domestic product isbeing corrected aftershort run distortion bythe employed variables. The finding confirm the work Oke et al.(2021).Ndinda (2012),Olaniyan and Ekundayo(2019),Yibin et al. (2013)while Chidi-okeke et al. (2020) ,Nnamdi (2015) negate the findings of CBOND.The granger causality results flows from GDP to CBOND, EXBOND to GDP,GDP to EXBOND,GDP to FGNBOND indicating that the variables support and promote Nigeria's growth process but only External bond(EXBOND) support each other in the , this is in line with the findings of Kapingura and Makhetha (2014) while causality flow from CBOND to GDP,FGNBOND to GDP acknowledged the result of Fink et al. (2003) and reject the findings of Ogboi,et al., Omodero and Alege(2021) .

In conclusion, this study aim is to assess the inter relationships between Nigeria's gross domestic product and various bond market components over the period 1981-2021.The prevailing causal relationships among the variables are explored also in order to determine the extent to which these study variables tend to promote Nigeria's economic growth. The ECM results showthat corporate bond(CBOND) and federal government of Nigeria bond (FGNBOND) are significantlyrelating to Nigeria's gross domestic, while the Granger causality test indicates that the all the independent variable support and promote Nigeria's economic growth. (CBOND, FGNBOND and EXBOND).The findings in general show that CBOND and FGNBOND are capable of providing core development in the country through strict management of funds.

Recommendation and Policy Implication

Base on the findings, it is recommended**;**

1. Nigerian government shouldencourage or promote the study bond types in order to create a more viable business which will promote more confidence in theinvesting public.
2. Create a stable environment that will promote the confidence of investing public in CBOND and more advocacies on corporate bonds so that private sectors can access more funds for their positives business developments which invariably promote the gross domestic product of Nigeria.
3. Government should improve the management and monitoring of the macro-economic indices that triggers the bond market such as exchange rate, coupon rate, and marketoperators in other to encourage foreign investment that will support our domestic bond market.

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