ASSESSMENT OF RELATIONSHIP BETWEEN MARKET DYNAMICS, BANK CREDIT AND ECONOMIC GROWTH

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ABSTRACT

The study examined the relationship between capital market dynamics, bank credit, and economic growth in Nigeria. Secondary data was employed and sourced from the publications of the Security and Exchange Commission and Central Bank of Nigeria. The variables for which the data was sourced include: market capitalisation, All-Share index, market volume and market turnover, inflation rate, and Gross Domestic Product for the period 1988 to 2019. The data was analyzed using multiple regression analysis and other econometric tests such as the unit root test, co-integration test, and vector error correction mechanism (VECM). The findings revealed that capital market dynamic variables and bank credit had a significant positive effect on economic growth. It is concluded that the capital market has a positive and significant impact on the economic growth of Nigeria, both in the short and long run. Also, bank credits significantly impacted economic growth positively in Nigeria. The capital market contributes positively to economic growth in Nigeria. Based on the findings from the study, we recommend that investors should be encouraged with necessary incentives so as to increase the volume and value of equities being traded in Nigeria, thus widening the range of investment opportunities as well as increasing productivity. Further, the government should do everything possible to provide a safe and conducive investment climate by nipping in the bud the prevalent activities of terrorists and kidnappers. This will not only encourage Nigerian investors but also attract foreign investors into the Nigerian capital market.

Keywords: Capital market Dynamic, Bank Credit variables, Capitalization market structure, Real Gross Domestic Product

INTRODUCTION

The pursuit of economic growth and sustainable development is one of the core macroeconomic goals in every nation. Economic growth is usually anchored on the financial development of a country. A critical measure of economic prosperity and growth in countries is the growth rate of real Gross Domestic Product (GDP) per capita and has been used as a close proxy of economic growth. This is because GDP measures the total market value of economic activities within a country and as such, an increase in economic activities means higher growth. Following this, extant studies – both theoretically and empirically – have been done to determine factors that drive economic growth and those that cause growth disasters. The avenue for network of financial institutions and infrastructure that establish the mobilization and allocate long-term funds in the economy is capital market. The market affords business firms and governments the opportunity to sell stocks and bonds, to raise long-term funds from the savings of other economic agents. Capital is one of the factors of production and where finance is readily available in an economy it is presumed that production will be higher and this will impact positively on the economic growth. It is in line with the aforementioned, that governments of many economies try to develop the financial sector in an effort to achieving sustainable economic growth. There is strong perception of economic growth to be associated with the financial sector through other sectors such as real sector and provision of infrastructures. Capital Market provides important avenue for economic growth. Its liquidity role stands on clearly as the most significant among the numerous functions it provides.

The capital market contributes to economic growth through the specific services it performs either directly or indirectly. Notable among the functions of the capital market are mobilization of savings, creation of liquidity, risk diversification, improved dissemination and acquisition of information, and enhanced incentive for corporate control. There is no doubt that capital market is pivotal to the level of growth and development of the economy. Daniel (2004), sees it as an instruments, that is able to mobilize long-term savings and provide capital to investors to finance long-term investments thereby broadening ownership of productive assets. Dealers in the securities segment of the capital market include banking institutions, stockbrokers, investment and merchant bankers and venture capitalists that intermediate between the market and the public. Well-functioning financial markets are very crucial for the promotion of global financial integration. An efficiently functioning domestic financial market can better position a country's competitiveness in the markets for global capital (Senbet and Otchere, 2005).

Therefore, it would seem that policies to develop the financial sector would be expected

to raise economic growth. Indeed, the role of bank credit is considered important to economic growth and development (Khan and Senhadji, 2000). The literature on financial economics provides support for the argument that countries with efficient credit systems grow faster while inefficient credit systems bear the risk of bank failure (Kasekende, 2008). Economic growth rate of change must entail consumption and investment of the firm. Economic growth is therefore, the steady growth in the productive capacity of the economy. It is the increase in the amount of the goods and services produced by an economy over time, the level of increase in economic growth is been attributed to the level of capital structure of firms in the country. This is because economic growth has been attributed to the accumulation of human and physical capital. The dynamism between capital market and bank credit has not been fully explored in many developing countries especially Nigeria. The extent to which capital market and bank credit component influence economic growth worthy of an examination in Nigeria. The current study, therefore, attempts to fill this gap by examining the dynamic relationship between capital market, bank credit and economic growth.

1.2   Statement of the Problem

Adopting a single aspect of the financial system when both the banking sector and stock market are fairly developed may hinder the discovery of the overall effects of financial development on economic performance. The largely underdeveloped nature of the Nigerian economy implies that the Nigerian government is under pressure to improve and strengthened the drivers of economic growth. In order to stimulate development to formulate optimum growth enhancing economic policies, expert knowledge of the relative importance of the banking sector and stock market in the financial system is vital. This raises question of nexus that should be addressed as a study of this nature.More so, from the empirical studies of capital market, bank credit variable   and economic development , different conclusions has been   be found based on the different techniques. Arestis, Demetriades and Luintel (2001), Beck and Levine (2004), Dritsaki and Dritsaki-Bargiota (2005), Handa and Khan (2008), Christopoulos and Tsionas(2004), and Enisan and Olufisayo (2009) have all arrived at different conclusions. The inconclusive nature of these theoretical and empirical studies provides the basis for a further empirical investigation on the appraisal of capital market dynamics, bank credit and economic growth. A study of this nature has become imperative to explore the dynamics of capital market like market capitalization, total new issue and volume of transaction on real economic growth. Also the influence of bank credits on real Gross Domestic Product is worthy of examination. There is the need to appraise the direction of causality between the variants of capital market, bank credit and economic growth in

Nigeria over the years

Research Hypothesis

H0: There is no significant causal relationship between Capital Market Dynamic, bank credit   and economic growth in Nigeria.

LITERATURE REVIEW AND CONCEPTUAL EXPLANATION

Sule and Momoh (2009) notes that the capital market is the medium through which funds are mobilized and channeled efficiently from savers to users of funds. Apart from judicious mobilization of idle savings into productive use, the capital market creates an avenue for foreign investment and the influx of foreign capital for developing projects that will increase the welfare of citizens. Capital market consists of primary markets and secondary markets. Primary markets deal with trade of new issues of stocks and other securities, whereas secondary market deals with the exchange of existing or previously-issued securities. Mbat (2001) describes it as a forum through which long-term funds are made available by the surplus economic unit to the deficit economic units. It must, however, be noted that although all the surplus economic units have access to the capital market, not all the deficit economic units have the same easy access to it. The restriction on the part of the borrowers is meant to enforce the security of the funds provided by the lenders. In order to ensure that lenders are not subjected to undue risks, borrowers in the capital market need to satisfy certain basic requirements such as the capital base of the organization, financial worthiness and a host of others. Gugler, Muler and Yurtoglu (2003) argue that the strength of a country's capital market determines the degree of a firm's investment performance regardless of how closely managers' and owners' match. The capital market offers access to a variety of financial instruments that enable economic agents to pool, price and exchange risks. Through assets with attractive yields, liquidity and risk characteristics, it encourages savings in financial form.

Capital Market System in Nigeria

In Nigerian, the government influences the capital market through the Nigerian Securities and Exchange Commission (SEC) and the Nigerian Stock Exchange (NSE). SEC has the primary objective of being in charge of the overall regulation of the entire capital market while NSE supervises the operations of the formal quoted market (as a self- regulatory organization). However, the Nigerian financial markets are experiencing challenges such as poor infrastructural facilities, low level of public awareness as to the benefits derivable from the operation of the capital market, inadequacy of supply of

securities, stringent stock exchange listing requirements limiting mostly the smaller companies, illiquid market and unfavorable government policies. The capital market is the cornerstone of every financial system since it provides the funds needed for financing not only business and other economic institutions, but also the programme of government as whole. The capital market is essentially a market for long term securities that is stock, debenture and bonds lasting for usually longer than three years. The proper functioning of the capital market was not set up until the establishment of the Central Bank in 1959 and launching of the Lagos stock exchange in 1961even though securities were floated as far back as 1946.

Component of Capital Market Dynamic

- Market Capitalization: Market capitalization represents the aggregate value of stock size (Adewoyin,2004). Market capitalization is the measurement of the size of businesses and corporations which are equal to the market share price times the number of shares in this case shares that have been authorized, issued, and purchased by investors of a publicly traded company (Al-Faki, 2006). Market capitalization is also calculated by multiplying the shares of the company by the price per share. In summary, market capitalization refers to the number of shares of a company multiplied by the market share price. In other words, market capitalization is usually considered as reflecting the worthiness of a company used by the investing public to determine the credit worthiness of a firm in terms of investing in such companies.

- Volume of Transaction: Volume of transaction refers to the total amount of securities traded in the capital market regardless of what type of security instrument. The volume of transaction often determines the level of transactional activities or the performance of the capital market as far as the business transaction of the market is concerned and this in turn could have an effect on the growth of the economy as either positive or negative outcome of the transaction volume (Adewoyin, 2004).Volume of Transaction has to do with the number of shares or contracts traded in a security or in an entire market during a specific period. It is simply the total amount of shares that change hands between buyers and sellers (Mbat, 2001). Volume of transaction is the number of shares traded in a country's stock market or in an entire market over a specific period.

Banking Sector Credit

The Central Bank of Nigeria Brief (2003) defined bank credit as the amount of loans and advances given by the banking sector to the various economic agents. The Central Bank of Nigeria (CBN) Monetary Policy Circular (2010) identifies such bank credits as comprising loans and advances, commercial papers, bankers' acceptance and bills discounted. Bank credit is usually accompanied with some collateral that helps to ensure the repayment of the loan in the event of default. The banking sector includes monetary authorities and deposit money banks as well as other banking institutions that do not accept transferable deposits but do incur such liabilities as time and savings deposits. This sector is viewed as the only financial means of attracting savings on a large scale which is further extended to borrowers as credit (Singaraj&Josephin, 2015). According to Nwanyanwu (2008), the banking sector helps to make credits available by mobilizing surplus funds from the savers, who do not have immediate need for them, and channeling them, in the form of credits, to the investors who have good ideas on how to create some additional wealth in the economy but lack the necessary capital to make use of those ideas.

The Impact Capital Market Dynamic on Economic Growth

Amadi, Oneyema and Odubo (2002) employed multiple regression to estimate the functional relationship between money supply, inflation, interest rate, exchange rate and stock prices. Their study revealed that the relationship between stock prices and the macroeconomic variables are consistent with theoretical postulation and empirical findings in some countries. Though, they found that the relationship between stock prices and inflation does not agree with some other works done outside Nigeria. Barlett (2000), states that rising stock prices have two main effects on the economy; first, it raises wealth in the economy. This increase in wealth raises the amount of consumer spending and thereby increases the wealth of the nation. Secondly, rising stock prices can increase investment spending. We see that one way a firm can finance investment spending is to issue stock. If stock prices rise, it can raise more money per share of the stock issued. He further added that the main mechanism through which the stock market affects the economy is the so-called wealth effect. A standard ''rule of thumb" is that every \$1increase in stock market wealth boosts consumer spending by 3 to 7 cents per year, with a common point estimate being 4 cents. According to him, this happens because a rise in stock market wealth encourages consumers to cut back on savings or increase their debt, and increase their spending on consumption goods. Conversely, a fall in the market causes them to cut back on consumption by a similar magnitude".

Arestis (2001) examine the relationship between stock market development and

economic growth through quarterly time-series data for five developed economies while controlling for the effect of banking system and market volatility. These countries are: the USA, the UK, France, Germany, and Japan. The period covered 1968-1998 although the data span is different for different countries in the sample. The results reveal that in Germany, there is evidence of bidirectional causality between banking system development and economic growth.

Irving (2004) considered the links between stock exchanges and overall socio-economic development to be tenuous, nonexistent or even harmful. He advised African countries not to devote further scarce resources and efforts to promoting stock exchange, since there are many weightier problems to address in Africa: high poverty levels, inadequate social services and undeveloped infrastructure. Even if the resources were available, stock markets could expose already fragile developing economies to the stabilizing effects of short-term, speculative capital inflows.

Caporale, Howells&Soliman (2004) examine the causal relationship between stock market and economic growth.   The overall results indicate that a well-developed stock market can foster long-run economic growth. In another study, Carporale (2005) use the vector autoregression (VAR) framework to test the endogenous growth hypothesis for four countries: Chile, South Korea, Malaysia and the Philippines. The overall findings indicate that the causality between stock market components, investment and economic growth is significant and is in line with the endogenous growth model.

Empirical Review

Agu (2018) appraised the Economic Growth and Capital Market Development In Nigeria. The analysis of data was done using descriptive statistics and ordinary least square (OLS) regression Technique. The result of the study shows that market capitalization was found to have negative relationship with Real Gross Domestic Product (GDP) in Nigeria. Taiwo, Alaka, and Afieroho (2016) assessed capital market and economic growth in Nigeria. This study seeks to evaluate the contribution of capital market to the growth of Nigeria's economy, using Vector Error Correction techniques on an annual time series data spanning from 1981 to 2014 in Nigeria. The result reveals that market capitalization rate, total value of listed securities, labor force participation rate, accumulated savings and capital formation are significant macroeconomic determinants factors of economic growth. Stephen and Nkamare (2015) examined the Impact of Capital Market on the Development of the Nigerian Economy. The result   indicates that none of the variables (predictors) individually predicted GDP.

Suna (2015) assessed the impact of Bank Credits on Economic Growth and Inflation. In

this study, it was analyzed whether or not bank credit had effect on macro variables economic growth (GDP) and inflation for 10 randomly-selected European countries (Spain, Finland, France, Germany, Greece, Hungary, Italy, Poland,Turkey and United Kingdom) by using the annual data of 2006-2012. The findings revealed that Development of financial markets is an indicator that a country is strong in economic sense. Aliyu, Hashim (2014), examined the Impact of Bank Lending on Economic Growth in Nigeria. This study is carried out to examine the impact bank lending on economic growth in Nigeria. In addition, the objective of this study is to examine the impact of bank lending on economic growth in Nigeria for the period 1987 to 2012. The study revealed that the performance of the Nigerian economy is greatly influence by bank lending. Emecheta and Ibe (2014) examined the Impact of Bank Credit on Economic Growth in Nigeria. A major finding is that there is a significant positive relationship between bank credit to the private sector, broad money and economic growth.

Having look at several studies both in the developed and developing nation, It therefore becomes necessary to examine the directional effect of causation between capital market dynamic, bank credit and economic development in Nigeria which form a gap filled by this present study. More so, the idea of this study is based on endogenous growth theory due to the emphasis of the theory on linkage between human capital, capital market growth and innovation to economic growth.

Gaps in the Literature

Having looked at several studies both in developed and developing nations, it therefore becomes necessary to examine the directional effect of causation between capital market dynamics, bank credit and economic development in Nigeria, which form a gap filled by this present study. This present study focuses on capital market dynamics and real GDP with an empirical examination of the period from 1981 to 2019. A mixed research approach was employed in this study, and the idea of this study is based on the endogenous growth theory due to the emphasis of the theory on the linkage between human capital, capital market growth, and innovation to economic growth. The outcome of this study revealed that capital market dynamics and bank credit variables exert relationships on real gross domestic product in Nigeria.

Conceptual Framework Adopted for the Study

Looking at the various models of capital markets both in developed and developing countries, this study sets out to visualize a model that will show the capital market dynamics and bank credit variables and their effect on economic growth in Nigeria. Capital market dynamics were proxies based on market capitalisation, all share index,

total new issue market turnover, and volume of transactions. Bank credit was measured using variables such as loans, advances, and commercial paper. The model showed the independent and dependent variables. The dependent variable of this study was economic growth, a proxy for which is Real Gross Domestic Product.
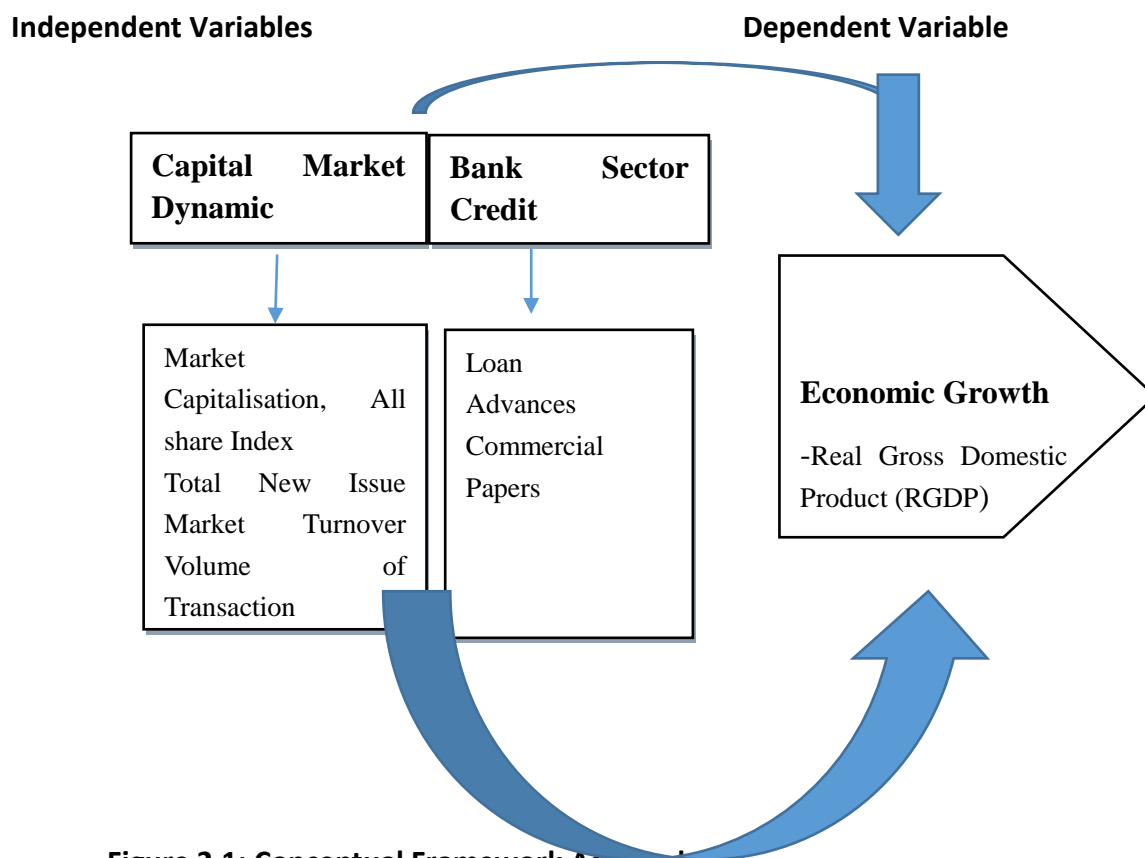
Independent Variables   **Dependent Variable**

Capital Market Dynamic	Bank Sector Credit

Market Capitalisation, All share Index Total New Issue Market Turnover Volume of Transaction	Loan Advances Commercial Papers

Economic Growth

-Real Gross Domestic Product (RGDP)

Figure 2.1: Conceptual Framework Adopted.
Source: Authors Compilation, (2021).

METHODS

Secondary data were employed. The population of this study consists of financial institutions operating t like Central Bank, Capital market operator and Nigeria stock exchange

in Nigeria. The relevant data were sourced from the publications of the Security and Exchange Commission and Central Bank of Nigeria. The variables for which data were sourced include: market capitalisation, All-Share index, market volume and market turnover and Gross Domestic Product for the period 1981 to 2019.Data collected were

analysed through the use of multiple regression analysis technique and other econometric tests such as unit root test, co-integration test and vector error correction mechanism (VECM).

Model specification

This model examines the effect of capital market on economic growth in Nigeria. economic growth is taken as Dependent variable while independent variables are market capitalization, All-share index, market volume, market turnover bank credits and exchange rate. The model below is stated in econometric form:

$$Y = f(x1, x2, x3, x4, x5\ \mu) \tag{1}$$

Where Y is Economic growth, dependent variables, $x1 - x5$ are independent variables

or macro- economic factors and F represents the functional notation.

RGDP = f (MCAP, SHI, MVOL, BAKCRD, MTURN) (2)

Relating it in econometric form and the variables log linearized, it will appear thus;

RGDP = β_0 + β_1LnMCAP + β_2LnSHI + β_3 MVOL+β_4 BAKCRD+ β_5 MTURN+ u (3)

Where;

Ln: Log , LnRGDP = Real Gross Domestic Product, LnMCAP = Market Capitalization, LnSHI = All share index, Ln MVOL = Market Volume of Transactions , LnBAKCRD = Bank Credit, LnMTURN = Market Turnover

RESULTS AND DISCUSSION

Impact of Capital Market, bank credit on Economic Growth in Nigeria

This section of the study focuses on the effect of Capital Market on Economic Growth in Nigeria. The unit root test of stationery and the results of multiple regression analysis, Selection-order criteria, and Vector Auto regression, Johansen Tests for Co-integration, Vector Error-Correction Model, and Granger Causality Wald Tests are presented in table 1 to 8. Analysis in table 1 shows the impact of Capital Market on Economic Growth in Nigeria. 1% increase in the Share index (SHI) reduces Economic Growth (RGDP) by 0.57%. This suggests a negative significant effect of the rate of SHI on RGDP. The outcome is significant (⍰=-.0568476, t = -0.63, P>|t| =0.539). 1% increase in Market volume (MVOL) also reduces Economic Growth by 0.73%.This means MVOL imparted INFL negatively and significantly (⍰=-.0727352, t = -2.26, P>|t| =0.042). That is if MVOL reduces RGDP reduces. More so, 1% increase in the Bank Credits (BAKCRD) increases RGDP by 3.68%. This suggests a positive significant effect of BAKCRD on RGDP (⍰=3.676993, t = 4.41, P>|t| =0.001). Contrarily, 1% increase in market capitalization

(MTURN) increases RGDP by 1.90%. This reveals a positive significant effect of MTURN on RGDP (⯑=-1.895011, t = -4.55, P>|t| =0.001). This is suggesting that if MTURN in Nigeria increases, RGDP also increase. 1% increases in Exchange rate (EXCH) reduces RGDP by 0.97%. This reveals a negative significant effect of EXCH on RGDP (⯑=-9675123, t = 0.33, P>|t| =0.748).

The R^2 coefficient (0.8204) which is the coefficient of determination indicates that the Explanatory variables accounted for 82% of the variation in the influence of Capital Market on Economic Growth in Nigeria for the period under study. Given the adjusted R^2 of 0.7514% which significant, it predicts the independence variables incorporated into this model have been able to determine variation of Capital Market on Economic Growth to 75.14%. It is also indicates that non-oil taxation accounted for 75.14% of the variation in the influence on Economic Growth in the short-run.

Table 1: The Effect of Capital Market, Bank credit on Economic Growth in Nigeria

Dependent variable	Independent variables	Coefficient	Standard error	T	P>/T/	(95% conf. Interval)	
LOGRGDP	LOGSHI	- . 0568476	.0900311	-0.63	0.539	-.251348	.1376527
	LOGMVOL	-.0727352	. 0322238	-2.26	0.042	-.1423504 -.0031199	
	LOGBAKCRD	3.676993	.8341995	4.41	0.001	1.874815 5.479172	
	LOGMCAP	1.895011	.416201	-4.55	0.001	-2.794159 -.9958632	
	LOGEXCH	.9675123	2.942551	0.33	0.748	-5.389482 7.324506	
	CONSTANT	252.7832	52.19818	4.84	0.000	140.0158 365.5505	
R-squared = 0.8204	Adj R-squared = 0.7514	Prob> F = 0.0002	Root MSE = 74.626		F(5, 13) = 11.88		

Source : Author's computation (2021)

Selection-Order Criteria

The Hanna–Quinn information criterion (HQIC) method, Schwarz Bayesian information criterion (SBIC) method, and sequential likelihood-ratio (LR) test all chose four lags, as indicated by the "*" in the output. Both the SBIC and the HQIC estimators suggest that there are four co integrating equations in the balanced-growth data. Having determined that there is a co integrating equation among the RGDP, SHI, MVOL, BAKCRD, MTURN and EXCH series, the parameters of a bivariate co integrating VECM for these four series by

using Vector error-correction model were estimated Table2. Lags four was used for this bivariate model because the Hannan–Quinn information criterion (HQIC)method, Schwarz Bayesian information criterion (SBIC) method, and sequential likelihood-ratio (LR) test all chose four lags, as indicated by the "*" in the output.

Table 2: Selection-Order Criteria

Lag	LL	LR	Df	P	FPE	AIC	HQIC	SBIC
0	-520.202				1.2e+23	70.1602	70.1572	70.4434
1	-434.227	171.95	36	0.000	2.4e+20	63.497	63.4758	65.4795
2	764.796	2398	36	0.000	1.6e-45*	-91.5728	-91.612	-87.891
3	2389.68	3249.8	36	0.000	.	-306.624	-306.669	-302.376
4	2441.77	104.18*	36	0.000	.	-313.569*	-313.615*	-309.321*

Endogenous: RGDP, SHI, MVOL, BAKCRD, MTURN,EXCH

Exogenous: _cons

Source : Author's computation (2021)

Vector Auto regression

In order to confirm the output result of Selection-order criteria in selecting the appropriate Lag, Vector Auto regression was also tested. Lags four was also chosen for this model because the Hannan–Quinn information criterion (HQIC) method, Schwarz Bayesian information criterion (SBIC) method, and sequential likelihood-ratio (LR) test all confirmed four lags as indicated by in the table 3.

Table 3: Vector Auto regression

Equation	Parms	RMSE	R-sq	chi2	P>chi2
RGDP	13	101.177	0.8752	119.2381	0.0000
SHI	13	264.396	0.8994	152.0011	0.0000
MVOL	13	440.389	0.9806	858.4518	0.0000
EXCH	13	2.43583	0.9958	4033.163	0.0000
BAKCRD	13	28.2191	0.9915	1991.186	0.0000
MTURN	13	27.5047	0.9949	3297.546	0.0000
Log likelihood =153.9349	Det (Sigma_ml) = 5.50e-16	AIC =-8.933523	HQIC = -8.553511	SBIC =-5.110544	

Source : Author's computation (2021)

Vector Error Correction Model

This session shows the effect of effect of capital market on real growth in Nigeria both in the short run and in the long run

Vector Error Correction Model (VECM) Short run Effect

Analysis in Table 4 **s**hows short run effect of capital market on real growth in Nigeria, it was discovered that MCAP has significant effect on RGDP in the short run because of P>chi2 which is 0.0366 but less than 0.005 significant level. Also, SHI has significant effect on RGDP in the short run at 5% level of significant because of P>chi2 which is 0.0466 but less than 0.05.   In the same vein, at 5% significant level, all have (EXCH, BAKCRD and MTURN) have relevant significance with RGDP in the short run (P>chi2 = 0.0023; 0.000;   0.0158 respectively) with the erxception of MVOL which has significant with RGDP at 10% significant level (P>chi2 = 0.0540)

Table 4: **Vector Error-Correction Model Short Run Effect**

Equation	Parms	RMSE	R sq	chi2	P>chi2
D_ RGDP	8	106.578	0.8976	3.813588	0.0000
D_ MCAP	8	53.2067	0.6310	2.32453	0.0366
D_ SHI	8	37.036	0.4310	6.81597	0.0466
D_ MVOL	8	70.5769	0.5354	10.37244	0.0540
D_ EXCH	8	46.2793	0.5799	12.42413	0.0023
D_ BAKCRD	8	22.7445	0.7987	35.70686	0.0000
D_MTURN	8	40.8098	0.6765	18.82155	0.0158
Log likelihood = -271.1314	Det(Sigma_ml) = -2872098	AIC = 38.13311	HQIC = 38.39132	SBIC = 40.73077	

Source : Author's computation (2021)

Vector Error Correction Model (VECM) Long run Effect

Analysis in Table 5 contained information about the sample, the fit of each equation, and overall model fit statistics. The first estimation table contains the estimates of the short-run parameters, along with their standard errors, z statistics, and confidence intervals. The three coefficients on L. ce1 are the parameters in the adjustment matrix for this model. The second estimation table contains the estimated parameters of the co integrating vector for this model, along with their standard errors, z statistics, and confidence intervals. According to Johansen normalization restriction imposed table, 1% increase in MCAP increases RGDP by 2.4% in the long run. This shows that there is positive significant effect of MCAP on RGDP in the long run.   1% increase in SHI increases RGDP by 0.19% in the long run; this shows that there is a positive effect of SHI on RGDP. Also, 1% increase in MVOL increases RGDP by 0 .19% in the long run; this also shows a positive effect of MVOL on RGDP in the long run. In the same vein, 1%increase in EXCH, increases RGDP by 10.27% in the long run, this also shows that there is a positive significant effect of EXCH on RGDP in the long run. More so, 1% increase in

BAKCRD reduces RGDP by -9.23% in the long run, this also shows a negative effect of BAKCRD on RGDP in the long run. 1% increases in MTURN, increases RGDP by 4.12% in the long run, this shows a positive effect of MTURN on RGDP. Coefficient is statistically significant confirmed by P>|z| which is 0.000. Overall, the output indicates that the model fits well. The coefficient on RGDP in the co integrating equation is statistically significant.

Table 5: **Johansen normalization restriction imposed**

Beta	Coefficient	Std Error	Z	P>|z|	[95% Conf. Interval]	
_ce1 RGDP	1	.	.	.	. .	
MCAP	2.471201	.4826562	5.12	0.000	3.550923 4.69577	
SHI	.1863209	.0830615	2.24	0.025	-.235234 .3491184	
MVOL	.1917761	.0248678	7.71	0.000	.1430362 .2405161	
EXCH	10.27109	2.713542	3.79	0.000	4.952646 15.58953	
BAKCRD MTURN	-9.2315 4.123347	.8302295 .2920584	-11.12 14.12	0.000 0.000	-10.85872 3.550923 4.69577	-7.60428
-CONS	-519.5463	.	.	.	. .	

Source : Author's computation (2021)

Johansen Tests for Co-integration

Result in Table6 produce information about the sample, the trend specification, and the number of lags included in the model. The main table contains a separate row for each possible value of r, the number of co integrating equations. When r = 3, all three variables in this model are stationary. In this study, because the trace statistic at r = 0 of 98.5990*1 exceeds its critical value of 94.15, the null hypothesis of no co integrating equations are rejected. Similarly, because the trace statistic at r = 1 of 62.2156*5 is less than its critical value of 68.52, the null hypothesis that there is one or fewer co integrating equation cannot be rejected. In the same vein, because the trace statistic at r = 2 of 35.5683 is less than its critical value of 47.21, the null hypothesis that there is two or fewer co integrating equation cannot be rejected. The trace statistic at r = 3 of 22.6821 is less than its critical value of 29.68, the null hypothesis that there is three or fewer co integrating equation cannot be rejected. The trace statistic at r = 4 of 10.4921 is less than its critical value of 15.41, the null hypothesis that there are four or

fewer co integrating equations cannot be rejected. The trace statistics at r = 5 of 1.5544 is less than its critical value of 3.76, the null hypothesis that there is five or fewer co integrating equation cannot be rejected. Because Johansen's method for estimating r is to accept as $\hat{r}$ the first r for which the null hypothesis is not rejected, we accept r = 1 as our estimate of the number of co integrating equations between these six variables. The "*" by the trace statistic at r = 1 indicates that this is the value of r selected by Johansen's multiple-trace test procedure. The Eigen value shown in the last line of output computes the trace statistic in the preceding line.

Table 6: Johansen Tests for Co-integration

Rank	Eigen Value	Parm	LL	Trace statistic	5% critical value	1% critical	Eigen Value
0	-	6	-594.5671	98.5990*1	94.15	103.18	-
1	0.86752	17	-576.37535	62.2156*5	68.52	76.07	0.86752
2	0.77245	26	-563.05173	35.5683	47.21	54.46	0.77245
3	0.51125	33	-556.60861	22.6821	29.68	35.65	0.51125
4	0.49197	38	-550.51361	10.4921	15.41	20.04	0.49197
5	0.39137	41	-546.04476	1.5544	3.76	6.65	0.39137
6	0.8273	42	-545.26757				0.8273

Source : Author's computation (2021)

Granger causality Wald tests - Causality between Capital Market , bank credit and Economic Growth

The results of the five tests for the first equation are shown in the Table 7. The first is a Wald test that the coefficients on the four lags of SHI that appear in the equation for RGDP are jointly zero. The null hypothesis that SHI does not Granger-cause RGDP cannot be rejected because Prob> chi^2 is 0.188 which is greater than 0.05, therefore SHI does not granger-cause RGDP. Also, the null hypothesis that the coefficients on the four lags of MVOL in the equation for RGDP are jointly zero cannot be accepted because Prob> chi2 is 0.003 which is lesser than 0.05**.** So the hypothesis that MVOL does not Granger cause RGDP cannot be accepted, therefore MVOL does granger-cause RGDP. The null hypothesis is that EXCH does not Granger-cause RGDP cannot be rejected because Prob> chi2 is 0.105 which is greater than 0.05, therefore EXCH does not granger-cause RGDP. More so, the null hypothesis that the coefficients on the two lags of BAKCRD in the equation for RGDP are jointly zero cannot be rejected because Prob> chi2 is 0.08 is greater than 0.05. Therefore BAKCRD does not granger-cause RGDP. The null hypothesis that the coefficients on the two lags of MTURN in the equation for RGDP are jointly zero cannot be accepted because prob>chi2 is 0.000 which is lesser than 0.05. Therefore

MTURN does not granger-cause INFL .The sixth null hypothesis is that the coefficients on the two lags of all the other endogenous variables are jointly zero. This null hypothesis cannot be rejected in the sense that Prob> chi2 is 0.011 is greater than 0.05, therefore that is that SHI, MVOL, EXCH, BAKCRD and MTURN jointly does not Granger-cause RGDP. Therefore the null hypothesis is rejected, alternative hypothesis is accepted that is there is causality between Capital Market and Economic Growth.

Table 7: Granger causality Wald tests - Causality between Capital Market, Bank Credit and Economic Growth

Equation Excluded	chi2	DfProb>Chi2		Decision
RGDP MCAP	54.4521 0.000	2		MCAP granger-cause RGDP
RGDP SHI	44.3448 0.000	2		SHI granger-cause RGDP
RGDP MVOL	11.402 0.003	2		MVOL granger-cause RGDP
RGDP EXCH	24.5076 0.005	2		EXCH granger –cause-RGDP
RGDP BAKCRD	9.753 0.008	2		BAKCRD granger-cause RGDP
RGDP MTURN	8.997 0.011	2		MTURN granger-cause RGDP
RGDP ALL	30.744 0.001	10		ALL jointly granger cause RGDP
MCAP RGDP	76.236	2	0.000	RGDP granger-cause MCAP
MCAP SHI	54.902	2	0.000	SHI granger-cause MCAP
MCAP MVOL	45.781	2	0.000	MNOL granger-cause MCAP
MCAP EXCH	22.468	2	0.000	EXCH granger-cause MCAP
MCAP BAKCRD	12.909	2	0.000	BAKCRD granger-cause MCAP
MCAP MTURN	30.112	2	0.000	MTURN granger-cause MCAP
MCAP ALL	56.564	10	0.000	ALL jointly granger cause MCAP

SHI	22.485	2	RGDP granger-cause SHI
RGDP	0.009		MCAP granger-cause SHI
SHI	45.003	2	MVOL granger-cause SHI
MCAP	0.000		EXCH granger-cause SHI
SHI	.07899	2	BAKCRD granger-cause SHI
MVOL	0.961		MTURN granger-cause SHI
SHI	17.281	2	ALL jointly granger –cause SHI
EXCH	0.000		
SHI	.35514	2	
BAKCRD	0.837		
SHI	3.3052	2	
MTURN	0.192		
SHI	70.58	10	
ALL	0.000		
MVOL	24.442	2	INFL granger-cause MVOL
RGDP	0.000		MCAP granger-cause MVOL
MVOL	35.097	2	SHI granger-cause MVOL
MCAP	0.000		EXCH granger-cause MVOL
MVOL	12.257	2	BAKCRD granger-cause MVOL
SHI	0.002		MTURN granger-cause MVOL
MVOL	15.808	2	ALL jointly granger-cause MVOL
EXCH	0.000		
MVOL	64.457	2	
BAKCRD	0.000		
MVOL	26.566	2	
MTURN	0.000		
MVOL	153.46	10	
ALL	0.000		
EXCH	13.572	2	RGDP granger-cause EXCH
RGDP	0.001		MCAP does not granger-cause
EXCH	1.667	2	EXCH
MCAP	0.223		SHI granger-cause EXCH
EXCH	10.41	2	MVOL granger-cause EXCH
SHI	0.005		BAKCRD granger-cause EXCH
EXCH	12.534	2	MTURN does not
MVOL	0.002		granger-cause EXCH
EXCH	5.7278	2	ALL jointly granger-cause EXCH
BAKCRD	0.057		

EXCH	.95782	2	
MTURN	0.619		
EXCH	238.21	10	
ALL	0.000		
BAKCRD	5.8945	2	RGDP granger-cause BAKCRD
RGDP	0.052		MCAP granger-cause BAKCRD
BAKCRD	34.212	2	SHI granger-cause BAKCRD
MCAP	0.000		MVOL granger-cause BAKCRD
BAKCRD	12.82	2	EXCH granger-cause BAKCRD
SHI	0.002		MTURN granger-cause BAKCRD
BAKCRD	4.6731	2	ALL jointly granger-cause
MVOL	0.097		BAKCRD
BAKCRD	.56463	2	
EXCH	0.754		
BAKCRD	4.9363	2	
MTURN	0.085		
BAKCRD	23.381	10	
ALL	0.009		
MTURN	17.501	2	RGDP granger-cause MTURN
RGDP	0.000		MCAP granger-cause MTURN
MTURN	45.125	2	SHI granger-cause MTURN
MCAP	0.000		MVOL granger-cause MTURN
MTURN	9.9882	2	EXCH granger-cause MTURN
SHI	0.007		BAKCRD granger-cause MTURN
MTURN	17.731	2	ALL jointly granger-cause MTURN
MVOL	0.000		
MTURN	2.1994	2	
EXCH	0.333		
MTURN	17.748	2	
BAKCRD	0.000		
MTURN	101.16	10	
ALL	0.000		

Source : Author's computation (2021)

Direction of Causality between Capital Market and Economic Growth

Analysis in table8 showed the results of the causality analysis among MCAP, Share index (SHI), market volume (MVOL), Exchange rate (EXCH), Bank Credits (BAKCRD), market

turnover (MTURN) and Economic Growth (RGDP). The results showed that there was causality between MCAP and Economic Growth (RGDP). It was also showed that there was causality between SHI and Economic Growth (RGDP). Also, the findings revealed that the causality from market volume (MVOL) to Economic Growth (RGDP) and vice visa. That is market volume did not granger - cause Economic Growth (RGDP), and Economic Growth granger cause market volume. Furthermore Exchange rate (EXCH) with the Chi-square statistic (4.5076) and the probability value (0.000), being statistically significant, granger cause RGDP. In the same vein, RGDP granger cause INFL. More so, it was revealed that Bank Credits (BAKCRD) with the Chi-square statistic 9.753 and the probability value 0.000, being statistically significant, granger cause RGDP. Also, RGDP granger cause BAKCRD. RGDP granger cause market turnover (MTURN) with the Chi-square statistic (8.997) and the probability value (0.000), being statistically significant, granger cause RGDP. Also, RGDP granger cause MTURN .Therefore the null   hypothesis is rejected, alternative hypothesis is accepted, that is there is causality between Capital Market and Economic Growth.

Table 8: Direction of Causality between Capital Market and Economic Growth

Equation	Excluded	chi2	Df	Prob> chi2	Decision
RGDP	MCAP	54.4521	2	0.000	MCAP granger- cause RGDP
MCAP	RGDP	76.236	2	0.0000	RGDP granger- cause MCAP
RGDP	SHI	44.3448	2	0.000	SHI granger- cause RGDP
SHI	RGDP	22.485	2	0.359	RGDP granger- cause SHI
RGDP	MVOL	11.402	2	0.003	MVOL granger - cause RGDP
MVOL	RGDP	24.442	2	0.000	RGDP granger- cause MVOL
RGDP	EXCH	4.5076	2	0.105	EXCH granger- cause RGDP
EXCH	RGDP	13.572	2	0.001	RGDP granger- cause EXCH
RGDP	BAKCRD	9.753	2	0.08	BAKCRD granger – cause RGDP
BAKCRD	RGDP	5.8945	2	0.052	RGDP granger- cause BAKCRD
RGDP	MTURN	8.997	2	0.011	MTURN granger-cause RGDP
MTURN	RGDP	17.501	2	0.000	RGDP granger-cause MTURN

Source : Author's computation (2021)

Discussion of Findings

Findings from the study show that total market capitalization, all share index and total value of stock are all joint predictor of economic growth provide by TGDP. The total market capitalization and all share index exert significant positive influence on RGDP growth rate while banking sector credit to the private sector also has significant positive

effect on economic growth. Furthermore, the result of this study indicates that capital market dynamics has a significant impact on the Nigeria economic growth likewise banking sector credit has also have significant impact on the economic growth in Nigeria. This means that stock market capitalization is a significant variable for determining the economic growth in Nigeria likewise banking credit is a significant variable to determine economic growth in Nigeria. This implies that an increase in the values of the stock market capitalization will bring about increase in the economic growth of Nigeria. This is consistent with our a priori expectation since it is an established theory in macroeconomics that an increase in market capitalization will promote economic growth of any economy. The implication of the above results is that an increase in market capitalization will significantly increase GDP, and this is supported by Osinubi and Amaghionyeodiwe (2003), Abu (2009), Agarwal (2001), Chinwuba and Amos (2011) and Ewah (2009), who in their different studies, found that capital market has positive impact on economics growth in Nigeria.

CONCLUSION AND RECOMMENDATIONS

The study concluded that capital market has positive significant impact on the economic growth of Nigeria both in the short and long run. Also, bank credits significantly impacted economic growth positively in Nigeria. Capital market contributes positively to economic growth in Nigeria. That is Capital market granger – caused economic growth and vice versa. Based on the finding from the study we recommend that investors should be encouraged with necessary incentives so as to increase the volume and value of equities being traded upon in Nigeria, thus widening the coast of investment opportunities as well as increasing productivity. Further, government should do everything possible to provide a safe and conducive investment climate by nipping in the bud, the prevalent activities of terrorist and kidnappers. This will not only encourage the Nigerian investors, but also attract foreign investors into the Nigerian capital market.

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