IMPACT OF CAPITAL MARKET ON EXTERNAL SECTOR GROWTH IN NIGERIA

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Abstract

This study examines the impact of capital market on external sector growth in Nigeria for the period, 1995-2020. The Ordinary Least Square method (OLS) was employed in analyzing the time series data obtained from the CBN Statistical Bulletin. The results of the finding indicate that there is a significant link between capital market variables of market capitalization, value of transactions, listed equities and both export and external reserve in Nigeria. The results further reveal that all capital market variables were not separately and individually significant in relation to Export and External Reserve. The study therefore recommends that capital funds from the market should be put into production for export to earn enough foreign exchange to grow our external reserve while liberal policy measures should be formulated and implemented in the Capital Market to boost the growth of the external sector of the economy.

Keywords: Capital market, external reserve, export, market capitalization, equity

JEL Code Classification: D53, Q16, Q49

1. Introduction

Capital market is one of important institutions saddled with the responsibility to create the platform and or channel for savings, investment, productivity and economic growth in both developed and developing nations. This is also the extent to which it plays a major role as the wheel of external sector growth. The adequacy and

availability levels of capital couple with the size, value and volume of transactions in the market determine the rate of gross fixed capital formation, aggregate national output, national income, aggregate exports, employment level and external reserve of the country. Hence, the importance and need for studies on the role of capital market in the development of the external sectors of the country cannot be overstressed as the growth of the capital market indicators will increase the external sector growth of the country. As a capital market institution, the Nigerian Stock Exchange provides avenues for individual, corporate and government as investors to raise medium- and long-term capital through sales and purchase of financial securities.

The form of capital market instrument consists of both fixed-income investments and equity investment. According to Brown and Reilly (2009), a fixed-income investment is having a contractually mandated payment schedule. These investment contracts promise specific payments at predetermined times, although the legal force behind the promise varies and this affects their risks and required return. The instruments in fixed-income investment are Treasury Bonds, Government Agency Bonds, Municipal Bonds, Corporate Bonds, and Preferred Stock. Equity instrument differ from fixed-income securities because their returns are not contractual (Brown and Reilly, 2009). The instruments included in equity investments are Common Stock and other special equity instrument such as Warrants, and Puts and Calls.

The fluctuation of capital market performance can be influenced by many factors. Looking from the internal factors that come from within the company, the fundamental factors of the company such as Price Earnings Ratio, earning per Share, Net Profit Margin, Price to Book Value and Systematic Risk have the significant effect on Stock Price (Astuty, 2017). Besides, there are many other factors from outside the company that can affect the capital market. One of the factors that can influence capital market is important news, both good and bad news.

It is vital to note that no nation can grow beyond its capital formation ability. The growth of every economy to a large extent depends on the flow of adequate capital needed for production of goods and services for both home and foreign consumption or industrial and personal consumption. The external sector of the economy accommodates balance of payments, external reserve, export and import among others variables. The growth and or falloff the above-named external sector variables

depend on either adequate or inadequate flow of capital funds from the capital market. It is on the above premise that this study is anchored.

The crux of this study hinges among others on the lack of empirical papers on capital market and external sector variables in Nigeria, the concern for how COVID-19 has affected the capital market and how such effect constitutes a wheel on the growth and recovery path of the external sector of the Nigerian economy. This paper investigated the relationship between capital market and the growth of the Nigerian external sector.

2. Literature Review

2.1 Conceptual Review

Capital Market Concept

Capital market is an integral part of the financial system that provides an efficient delivery mechanism for mobilization and allocation, management and distribution of long term funds for investment project (Alile &Anao, 1990). Slue and Momoh (2009) noted 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 for productive use, the capital market creates an avenue for foreign investment and the inflow of foreign capital for developing projects that will increase the welfare of citizens.

The capital market is a market for securities (debtor equity), where business enterprises (companies) and government can raise long-term funds (Sullivan &Sheffrin, 2003). It is defined as a market in which money is provided for periods longer than a year while raising of short-term funds takes place the money market. The capital market includes equity securities and the bond market, which is about debt. The financial regulators of the capital market such as the Central Bank of Nigeria, Securities and Exchange Commission (SEC) oversee the capital markets in their designated jurisdiction to ensure that investors are protected against fraud (Afolabi, 1991).

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). The investment community uses the figure to determine a company's size or worth, as opposed to sales or total asset figure (Olowe, 1997).

Other variables like new issues, value of transactions, listed equities and volume of transactions. An increase or rise in the volume or value of these variables is an indication that the capital market is the right track just as a decline depicts the drop in the performance of the market.

External Sector Growth

Okpara (2006) opined that external sector growth is the increase in the amount of goods and services produced in an economy which is measured by positive changes in a country's gross domestic product. External sector growth is the increase in national income, as reflected in the capacity of production of goods and services regardless of either the increase is on a larger or smaller population growth rate (Anyanwu, 1996). According to Robert Solow, cited in Adebiyi (2005) external sector growth is a positive change in the level of production of goods and services by a country over a certain period of time. Overall, external sector growth is the increase in a country's productive capacity, total export, external reserve, and balance of payments as measured by increase in capital stock, advancement in technology and improvement in the quality of life.

2.2 Theoretical Framework

Solow-Swan Growth Theory

The neoclassical growth theory also known as the Solow-Swan growth theory or exogenous growth theory is a class of external sector model of long-run external sector growth. The growth theory explains long-run external sector growth by looking at productivity, capital accumulation, population growth and technological progress (Solow & Swan, 1956). This theory was developed independently by Robert Solow and Trevor Swan in 1956 and supersedes the post Keynesian Harrod – Domar theory. Due to its attractive mathematical characteristics, Solow-Swan proved to be a convenient starting point for various external sector growth theories.

Empirically Udo & Gayovwi (2020). examined the impact of capital market on economic growth in Nigeria with the application of the Phillips-Perron test statistics,

the Johansen Cointegration techniques, Pairwise Granger Causality techniques and the Error Correction Methodology on a log linear multiple regression framework. Annual time series data used were obtained from secondary sources, mainly from the CBN Statistical Bulletin (2019) from 1985 to 2019 on capital market variables (Market Capitalization (MCAP), Total Value of Transaction Traded (TVT) and All Share Index (ASI) were used as explanatory variables while Economic growth in Nigeria the dependent variable was proxy as real gross domestic product (RGDP). The Phillips-Perron test statistics results showed that all the selected economic and capital market variables (InRGDP, InMCAP, InTVT and InASI) were stationary at first difference. In other words, they were found to be stationary at order one I(1), while the Johansen unrestricted cointegration rank test results showed that there exists at least four and one cointegrating equations respectively as both the Trace and Max-Eigen statistics revealed long run relationship between InRGDP, InMCAP, InTVT and InASI. The empirical results showed that the entire explanatory variables of the economic and capital market met their expected signs except the all share index with a negative sign. The results also revealed that the log of market capitalization (InMCAP) and the log of total value of transaction traded (InTVT) had positive impact on the log of real gross domestic product (InRGDP) in Nigeria. This means that 1 per cent increase in InMCAP and InTVT raised real gross domestic product in Nigeria.

Obiakor & Okwu (2011). empirically examined the impact of capital market development on economic growth in Nigeria for the period 1981-2008. The major tool employed for empirical analysis is a multiple regression analysis model specified on the basis of hypothesized functional relationship between capital market development and economic growth. For capital market development indicators, ratios of value of shares traded, market capitalization, gross capital formation and foreign private investment, to gross domestic product, as explanatory variables, while we used growth rate of gross domestic product as the dependent variable. The results showed that while market capitalization, gross capital formation, and foreign private investment individually exerted statistically significant impact on growth of the economy, value of shares traded exerted positive but statistically insignificant impact during the review period. However, the variables jointly exerted statistically significant impact on growth of the economy. In addition, the model exhibited a very high explanatory power and high flexibility in adjustment to long-run equilibrium. The variables time series were stationary at second difference, showed existence of

long-run relationship between the two sets of variables, and exhibited stability for the study period.

Iwedi, Marshal. (2023). examine the effect of capital market performance on economic growth in Nigeria. Financial time series data were collected from the annual report and accounts of Securities and Exchange Commission and Central Bank of Nigeria statistical bulletin for the duration of 1990 to 2021. The data was analyze using multiple regression techniques. The results show that capital market performance variables of market capitalization, all share index, value of transaction and total listing of stock have positive effect on economic growth in Nigeria. The global result shows that 72 percent of the changes in real gross domestic product are explained by joint effects of capital market performance variables. Thus, the study concludes that capital market plays a critical and significant positive effect in enhancing economic growth in Nigeria.

3. Methodology

Descriptive and ex-post facto research design was adopted in line with the purpose, nature and scope of this study. The ex-post facto research design is appropriate when the researcher does not intend to control the variables and as such those variables must have been in existence and had already existed in published form. The ordinary least square regression technique, pre-estimation methods and time series secondary data obtained from CBN Statistical Bulletin for the period 1995 - 2021 were equally part of the components of the methodology employed in this study.

Model Specification

The model specified was in line with Solow-Swan theory and presented below:

$ExtRev = a_{0t} + a_{1t}MCAP_t + a_{2t}VLT_t + a_{3t}LEQ_t + e_t$ ……(1)

$Exports = a_{0t} + a_{1t}MCAP_t + a_{2t}VLT_t + a_{3t}LEQ_t + e_t$ ……(2)

Where:

ExtRev = External Reserve

Export = Export Value

a_0 = Regression Constant

$a_1 - a_3$ = Coefficient of independent variables.

MCAP = Market Capitalization

VLT = Value of Transactions

LEQ = Listed Equities

e = Stochastic Error term (Disturbance term)
t = Time series

Apriori Expectation: In line with theories and previous empirical studies, it was expected that any sustainable growth in the capital market will trigger the growth of the external sector of the economy. This suggested the existence of positive coefficients of the variables.

4. Results and Discussions

Table 1: OLS regression results

Dependent Variable: EXTREV
Method: Least Squares
Data: 10/04/23 Time: 12:40
Sample: 1995 2021
Included observations: 27

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10141.21	29343.525	3.445260	0.0023
MCAP	1.689363	1.307557	1.292000	0.2098
VLT	12.24817	6.436642	.902883	0.0702
LEQ	4.067574	2.670775	1.522994	0.1420

R-squared	0.720764	Mean dependent var	26596.59
Adjusted R-squared	0.682686	S.D. dependent var	16605.13
S.E. of regression	9353.770	Akaike info criterion	21.26558
Sum squared resid	1.92E+09	Schwarz criterion	21.45914
Log likelihood	272.4526	Hannan-Quinn criter	21.32132
F-statistic	.92881	Durbin-Watson stat	2.129920
Prob(F-statistic)	0.000003		

Source: Researcher's computation using E-views, 2022

Table 1 above shows results of the ordinary least square (OLS) between External Reserves (EXTREV) and MCAP, VLT and LE as indicators of the Capital Market Performance. From the table, the coefficients of the independent variables show a negative and insignificant relationship between MCAP and EXTREV. The value of R-square suggests that 72% change in external reserve can be attributed to changes in capital market variables.

The study shows a positive correlation between EXTREV and, Value of Transactions (VLT) and Listed Equities (LE), while MCAP has negative relationship with EXTREV. Only VLT is found to be significant relationships at 10% level with EXTREV.

Table 2: OLS regression results

Dependent Variable: EXPT
Method: Least Squares
Data: 10/04/23 Time: 12:54
Sample: 1995 2021
Included observations: 27

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2888347	1138259	2.537513	0.0188
MCAP	870.7797	505.6314	1.722163	0.0991
VLT	5014.289	2489.046	2.014543	0.0563
LE	-965.4243	1032.787	-0.934776	0.3601

R-squared	0.745229	Mean dependent var	8639440
Adjusted R-squared	0.710488	S.D. dependent var	6722437
S.E. of regression	3617097	Akaike info criterion	33.18088
Sum squared resid	2.88E+14	Schwarz criterion	33.37443
Log likelihood	-427.3514	Hannan-Quinn criter	33.23662
F-statistic	21.45071	Durbin-Watson stat	2.257811
Prob(F-statistic)	0.000001		

Source: Researcher's computation using E-views, 2022

Table 2 Presents the OLS result between Exports and the capital performance indicators. The results indicate that all the explanatory variables have a positive link with total export except LEQ which has a negative coefficient. Apart fromVLT, all other capital market indicators have insignificant relationship with export, although considering the F-statistic, we deduced that there was a significant relationship between export and capital market. The R-squared value shows that 95% changes in export can be explained by changes MCAP, VLT and LEQ.

Considering the results from our first model, a negative and insignificant relationship is found between market capitalization and external reserve. This is against the a priori expectation and portends a grave danger since market capitalization is a major

indicator of the capital market. Given this result, it shows that capital market funds have not been properly channeled to contribute to the growth of the nation's reserve. Our concern from this result is that the Nigerian economy is still far from her dream of diversification as the major source of reserve is still from oil revenue which has no link with the capital market. It further raises questions bothering on private sector contribution to external sector growth and the role of the non-oil sector in boosting both export and external reserve of the country. The above seems to be corroborating the insignificant relationships between export and listed equities, market capitalization and export, value of transaction and external reserve and listed equities and external reserve.

5. Conclusion and Recommendations

From the findings of this paper, we can conclude that although there is significant relationship between capital market and external sector on aggregate consideration, the negative and insignificant relationship between listed equities and export, insignificant relationship between market capitalization and export, significant relationship between value of transaction and external reserve are indications of a weak capital market and an economy dominated by the public rather than private sector**.**

Capital Market regulators especially the Securities and Exchange Commission should be more open to innovations and be flexible without jeopardizing the interest and protection of investors as well as the efficiency of the market. The Commission needs to encourage more companies to be listed in the market so as to expand it and give investors better options for investment. Capital from the market should be channeled into production for export to earn foreign exchange huge enough to enhance external reserve growth.

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