

# MPRA

Munich Personal RePEc Archive

## **Impact of the Nigerian stock exchange on economic growth.**

Azubike, Anulika

4 January 2017

Online at <https://mpra.ub.uni-muenchen.de/75984/>  
MPRA Paper No. 75984, posted 04 Jan 2017 17:11 UTC

**TOPIC: Impact of the Nigerian stock exchange on economic growth.**

**BY**

**ANULIKA, AZUBIKE.A.**

## **ABSTRACT**

*This study examines the impact of the Nigerian stock exchange on economic growth from 1981 to 2011. GDP is the dependent variable, a proxy for economic growth. Market capitalization is a proxy for the Nigerian stock exchange. Other explanatory variables were employed in the model. This study employs the ordinary least square (OLS) methods of estimation, heteroscedasticity and autocorrelation covariance (HAC) in order to avoid spurious regression results. The E-views 6.0 was employed in the regression analysis. In executing this study, the ADF (augmented dickey fuller) test and the Unit Root Test was carried out to test the stationarity of the variables. The result shows that the market capitalization, interest rate, total number of listed securities, number of deals and foreign direct investment satisfy the economic apriori expectation while the total number of issues and the value of deals negates the apriori expectation. The stationarity test shows that all the variables employed are stationary at first difference. The ADF test shows a longrun relationship among the variables in the model of study. Using the t-test, it is revealed that only three (3) variables are significant in the explanation of the dependent variable (GDP) while the remaining four variables are insignificant. Recommendations are made based on the result.*

**Key words:** *GDP, market capitalization, stock market.*

## **1.1 INTRODUCTION**

The major engine of growth and development for any economy is the stock exchange market (Chris, 2012). It is the pivot upon which any economy revolves, especially in its role of creating, mobilizing and rationing long-term funds for economic growth and development. It has been identified as an institution that contributes to the socio-economic growth and development of emerging market and developing economies (Donwa and Odia, 2010). Generally speaking, the importance of the stock exchange market to any economy (developing or emerging markets) cannot be swept under the carpet. Based on the importance of the stock exchange in accelerating economic growth and development, government of most nations tend to have keen interest in the performance of its stock market (Ewah et al 2009).

The mechanism of stock exchange came into existence to enable investment, which were inherently illiquid to become liquid through re-conversion into cash at the decision of the investor without inconveniencing the company (Olowe, 1997).

The Nigerian Stock Market which is regarded as the third largest in Africa (Iheanyi, 2014) underwent a downturn in 2008, and this had an adverse effect on the development of the Nigerian stock exchange and hence, the growth of the Nigerian economy. This was exacerbated by slowdown in government expenditure, tightening of the monetary regime, and potential regulatory changes especially mixed and often conflicting messages from the authorities regarding margin lending by banks to market operators. All seem to have undermined investors' confidence in the capital market, with potential wider implications for Nigerian financial markets. The increasing unease about valuation in the market precipitated a noticeable exit of domestic and foreign investors from the market. Regulatory pronouncements and actions seemed to only exacerbate the situation; the resultant uncertainty further undermined investors' confidence in the market.

Given the number of years since the Nigeria stock exchange has been established and the substantial financial resources available in the country, coupled with the existing institutions, one can claim that the entire spectrum of the stock exchange market has not been sufficiently active, especially when compared with the capital unit of similar or less aged units in other developing countries. This research work therefore seeks to ascertain the impact of the Nigerian Stock Exchange on economic growth given the existing economic and political conditions.

## **1.2 STATEMENT OF PROBLEM**

Despite the popular belief that democracy promotes economic activities which in turn engenders economic growth, the growth of the capital market in Nigeria is still very small in relation to the size of the economy (Echekoba et al. 2013). Developed economies had explored both channels through which resources mobilization affects economic growth and development – money and capital market (Demirguc-Kunt and Roos, 1996; Samuel, 1996). This is however, not the case in developing economies like Nigeria, where emphasis is placed on money market with little consideration for capital market (Nyong, 1997).

The debate and arguments on the exact role of the Capital markets on economic growth is ongoing and so far, a number of studies have shown conflicting results (Oyejide, 1994; Nyong, 1997; Obadan, 1998; Sule & Momoh, 2009; Ewah & Bassey, 2009). While some are of the opinion that a negative link exists between capital markets and economic growth, others argue that there exists a positive link. In any case, stock market will contribute to economic growth in a sustained manner if the right political climate exists. The issues of macroeconomic stability, adequate education of the public on the benefits of stock market on the growth and development of a country's economy, the necessity of minimizing sharp practices of market operators, are all germane to the full realization of the benefits of the stock market in any given economy.

Having examined various researches made on the impact of the capital market on economic growth, we affirm that a technique that appreciates the long run relationship of the economic growth and market capitalization, and the scope of study may just be the missing link in the divergent empirical findings in the Nigerian case.

### **1.3 LITERATURE REVIEW**

In this section of study, selected work will be given due consideration to reveal their findings on the subject under study.

Osinubi and Amaghionyeodiwe (2003) examined the relationship between Nigeria stock market and economic growth during the period 1980 to 2000, using Ordinary least square regression. The results show that there is a positive relationship between the stock market development and economic growth.

Adamu and Sanni (2005) examined the role of the stock market on Nigeria's economic growth, using Granger-causality test and regression analysis. They discovered a one-way causality between GDP growth and market turnover. They also observed a positive and significant relationship between GDP growth and market turnover ratios.

Obamiro (2005) made an investigation on the role of the Nigeria stock market in the light of economic growth. He reported a significant positive effect of stock market on economic growth.

Abu (2009) examines whether stock market development raises economic growth in Nigeria, by employing the Error Correction Approach. The econometric results indicate that stock market development raises economic growth.

Ewah et al (2009), appraised the impact of the capital market efficiency on economic growth of Nigeria using time series data from 1963 to 2004. They found that the capital market in Nigeria has potential of growth-inducing, but it has not contributed meaningfully because of low market capitalization, low absorptive capitalization, illiquidity, misappropriation of funds among others.

Autonios (2010) investigates the causal relationship between stock market development and economic growth for Germany for the period 1965-2007 using a Vector Error Correction Model (VECM) and the Johansen co-integration analysis based on the classical unit roots tests. The results of Granger causality tests indicated that there is a unidirectional causality between stock market development and economic growth with direction from stock market development to economic growth.

**1.4 RESEARCH METHODOLOGY**

This work effectively captures the impact of the Nigerian Stock Exchange on Economic Growth. The OLS Method with the ADF Test was adopted for the unit root. The framework of this study is based on the modification of the work of of Kolapo and Adaramola (2010) and is specified thus;

$$GDP = \beta_1 + \beta_2MCAP+ \beta_3 INTRT + \beta_4TLS+ \beta_5TNI+ \beta_6NOD+ \beta_7VOD+ \beta_8FDI+ \beta_9Ecm+\mu.....(1)$$

From the modified model above, Gross Domestic Product (GDP) is used as a proxy for economic growth while market capitalization (MCAP) is used as a proxy for Nigerian stock exchange. Other independent variables includes the interest rate (INTRT), total listed securities (TLS), total Number of Issues(TNI), number of Deals(NOD), total value of deals(VOD) and foreign direct investment(FDI). ECM is the series of the residual of the model run at level and  $\mu$  is the Error term or white noise.

**1.5 ECONOMIC A PRIORI EXPECTATION**

This shows whether or not the explanatory variables conform to the postulations of economic theory in terms of their signs and magnitudes. According to economic theory, market capitalization, total number of listed securities, number of deals, foreign direct investment, total number of issues and the value of deals has a positive relationship with GDP while interest rate has a negative relationship with GDP. If the estimates do not conform to what we have above then they must be rejected unless there are strong reason that will lead to their acceptance.

**1.6 DATA SOURCES AND TYPES**

The study utilizes time series data from 1980-2011. The data were sourced from the Central Bank of Nigeria’s Statistical bulletin (2011) and the Nigerian Stock Exchange (NSE) fact book (2011).

**1.7 THE RESULT**

ECM Result

Dependent Variable: GDP

Method: Least Squares

Date: 02/1/17 Time: 11:06

Sample: 1980 2011

Included observations: 32

White Heteroskedasticity-Consistent Standard Errors & Covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.2047	0.1617	1.2659	0.2217
MCAP	0.6776	0.1845	3.6723	0.0017
INTRT	-0.0109	0.1358	-0.0803	0.9369
TNI	-0.0805	0.0489	-1.6458	0.1171
TLS	1.6339	0.2030	8.0484	0.0000
NOD	0.0701	0.1354	0.5182	0.6106

VOD	-0.0079	0.1220	-0.0649	0.9490
FDI	0.1214	0.0466	2.6041	0.0179
ECM	-0.2457	0.2011	-1.2219	0.2375

R-squared 0.999

Adjusted R-squared 0.998

F-statistic 2018.445

Prob. (F-statistic) 0.000000

Durbin-Watson 1.76139

The result of the ECM shows that the coefficient of determination R<sup>2</sup> is 0.999. Also, the adjusted R<sup>2</sup> is 0.998. These findings imply that our estimated model achieved a strong goodness of fit. Accordingly, we surmise that the mix of regressors in this model on the average, accounts for about 99.90% of the changes in the Nigeria Stock Exchange while the remaining 0.10% variation is attributed to the error term. The F-statistic offers reliable proof of the overall significance of the model. With a value of 2018.445, the calculated F is greater than the critical F which has a value of 2.57 at 5% level of significance. This simply implies that at least one of the variables in the model is statistically significant. The probability of the calculated F is 0.000000 which is less than the level of significance. This further affirms the overall significance of the model. The low values of the standard errors in the result show that some level of confidence can be placed on the estimates. The Durbin-Watson statistic with a value of 1.76139, offers evidence of the absence of first-order autocorrelation in estimated model since d\* is approximately equal to two.

## 1.8 CONCLUSION

Given the findings of this study, the following recommendations are made. The need to stabilize the macro-economic environment to ensure a conducive environment that would promote investment in the stock market. Also, the government should institute appropriate technology that would restore confidence in the market. Lastly, investment instrument in the stock market should be diversified and market capitalization improved.

## **REFERENCES**

*Adam, J. & Sanni, I. (2005). Stock Market Development and Nigeria's Economic Growth. Journal of Economics and Allied Fields, 2 (2), 116-132.*

*Adebiyi, M.(2005). Capital Market Performance and the Nigerian Economic Growth.In Oluwatayo, A Olasupo (Eds.): Issues in Money, Finance and Economic Management . Lagos: University of Lagos.*

*Akingbohunbe, S. (1996) The Role of the Financial Sector in the Development of the Nigerian Economy Paper presented at a Workshop Organized by Centre for Africa Law and Development Studies.*

*Gujarati, D.N. (2004). Basic Econometrics. New York: Tata MC Graw-Hill.*

*Koutsoyrannis, A. (1977). Theory Of Economics. Hampshire Macmillan Education Ltd. London.*

*Nieuwerburgh, S., Buelens, F. &Cuyvers, L. (2006).Stock market development and economic growth in Belgium, Explorations in Economic History, Global Finance Journals. 43, 13–38.*

*Mohtadi, H. &Agarwal, S. (2004). Financial Markets and the Financing choice of Firms; Evidence from developing countries, Global Financial Journal, 15(2) 52-70*

*Obamiro, J. K. (2005). Nigerian Economy: Growth and the Role of Stock Market. Journal of Economic and Financial Studies, 2(2).*