Global Advanced Research Journal of Management and Business Studies (ISSN: 2315-5086) Vol. 8(2) pp 016-024 March, 2019
Available online http://garj.org/garjmbs/index.htm

Full Length Research Paper

Implications Of Stock Market Efficiency On Nigerian Manufacturing Sector Performance 1985 To 2017

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Accepted 24 March 2019

This study sought to investigate the implications of stock market efficiency on the performance of Nigeria manufacturing sector. The study adopted the *ex-post facto* research design and regression analysis as methodology. Annual time series data for a 32-year period, 1985-2017, were collected from Central Bank of Nigeria Statistical Bulletin, Stock Exchange Fact Book and World Bank Handbook of Statistics for the period. Descriptive statistics and graphs were also used to complement the regression result. The result from the study found that the stock market efficiency (ASI) has a negative and significant implications on the performance of Nigerian manufacturing sector (coefficient of ASI = -0.310838; t-value = 2.801903; p-value = 0.0001 > 0.05). The implication of this is that the variables (stock market efficiency, Inflation Rate, Exchange Rate and Interest Rate) are the major variables that determine how stock market efficiency affects the performance of Nigerian manufacturing sector. These variables have been used over time in Nigeria, yet the country's manufacturing sector performance suffers from low output, high unemployment rate, and economic instability compared with other emerging economies in the World. We, therefore, recommend that since stock market efficiency variable (ASI) in this study shows negative and significant, it is therefore pertinent to recommend that the mechanism for registration and valuation of shares in the stock exchange should be improved. The prices of equities quoted on the stock market should be made to reflect as much as possible the underlying economic fundamentals of the firms. This will assist in computing a more accurate size for the stock market in Nigeria and enable the market to respond appropriately to economic developments.

Keywords: Efficiency, ASI, Industrial Development, Performance, Growth.

INTRODUCTION

The ultimate objective of most governments' worldwide and other macroeconomic policy makers is to enhance the welfare of the citizens. To achieve this objective, policy initiatives are introduced to achieve and sustain rapid economic growth. The development of financial markets is one of such policy initiatives. Therefore the development of financial markets in most countries of the world has been made a priority by most governments. This policy is based on the belief that these markets would by as serving as a source of long term investible

funds, facilitate rapid economic growth and industrial development. However, in some countries, Nigeria inclusive, there is still some contention as to whether the markets have fmet this expectation.

In CBN (2004) the Nigerian financial markets is divided into three broad categories according to their functions and institutions. The Central Bank and Deposit money Banks collectively referred to as monetary intermediaries form the first group. The non-monetary intermediaries ie the specialized institutions such as savings and loan institutions, development banks, mutual funds, investment trust, insurance and pension funds are in the second group. The third group is the securities market where stocks and bonds are traded. The securities market where stocks and bonds are traded forms the focus of this study.

The Nigerian stock market crashed in the first quarter of 2008 partly as a result of the global financial crises which started in the US in 2007. The crash was so severe that the entire Tier 1 capital of some firms quoted on the exchange was virtually wiped out. From a height of 57,990.28 in December 2007, the All Share Index (ASI) crashed to 31,450.78 at the end of December 2008 while the MCAP also fell by 31.56 percent in the same period. In addition to the injection of huge amount of funds to bail out some banks that had become insolvent, other macroeconomic costs of that crash included credit squeeze, job losses, business failure and slowdown in growth. By the end of 2016, the market has recovered significantly in response to the measures put in place by the monetary and fiscal authorities as well as other stakeholders. Data from the NSE fact sheet shows that the performance of the NSE reached an all time high with ASI at 43,031.83 in July 2014 from an all time low of 19,785.03 in December 2011. In 2012, it rose from 28078.81 to 41329.19 in 2013. It also declined from 34657.15 to 25864.18 in 2017(CBN 2017). The instability on the side of stock market efficiency as proxied by the All Share Index and its implications on Nigerian manufacturing sector growth in Nigeria is what provided the basis for this study.

Review of Related Literature

Concept of Stock Market Efficiency

Stock Market Efficiency is proxied by All Share Index (ASI) which is a measured by the magnitude and direction of general price movement. It is also the total market index reflecting the behavior of stock in the market. All Share Index hit an all-time high of 58,990.22 basis points in 2008 from 100 points in 1984 when All Share Index was introduced in Nigerian capital market (Ndi Okereke, 2012).

All Share Index which opened at 127.30 in the beginning of 1985, closed at 25,874.18 in 2017, indicating a very high increase in the preceding years. Similarly, three of the four sectorial indices, namely the NSE Banking Index, NSE Food/Beverage and NSE Insurance increased as well (CBN, 2017).

Concept of Manufacturing Sector Growth

Many studies have used different indicators in evaluating the performance of the manufacturing sector in Nigeria. Some of the indicators used in previous studies include index of manufacturing production and capacity utilization. In this study, manufacturing sector contribution to GDP will be used to capture performance in the manufacturing sector.

The manufacturing sector in Nigeria is made up of 13 activity groups viz; oil refining; cement; food, beverages and tobacco; textile, apparel and footwear; wood and wood products; pulp, paper and paper products; chemical and pharmaceutical products; non metallic products; plastic and rubber products; electrical and electronic, basic metal and iron and steel; motor vehicle assembly and other manufacturing (NBS, 2017). The aggregate value of output of these subsectors constitutes the total manufacturing sector output at any point in time.

The NBS GDP report for 2016 reveals that real GDP growth in manufacturing remained negative in Q4, 2016. This was a year on year contraction of 2.54 per cent. For full year 2016, the manufacturing sector in real terms contracted by 4.32 per cent compared to a decline 1.46 per cent in 2015. The poor performance of the manufacturing sector has been attributed to many factors including inadequate funding and high dependence on foreign inputs. Consequently, the sector has not performed up to expectation with regards to contribution to GDP and employment generation. In the words of Amadi and Odubo (2003), the sector has become a major consumer of foreign exchange with high level of dependence on imported raw materials rather than being a leading growth sector and a key factor in socioeconomic transformation. Manufacturing output could be expressed in nominal value or inflation adjusted. Also, the index of manufacturing production could be used as a proxy for the output.

According to Keynes (1936) manufacturing sector is a key variable that measures the worth or strength of a country's economic growth and it plays a significant role in decision making. A country formulates economic policy with the aim of stabilizing real sector such as manufacturing sectors, among others. Manufacturing industries is a key issue in economic policy because it motivates conversion of raw material into finished goods and services. In the work of Charles (2012), manufacturing industries creates employment which helps to boost agriculture and diversify the economy on the process of helping the nation to increase its foreign exchange earnings. Thus, most countries attempt to

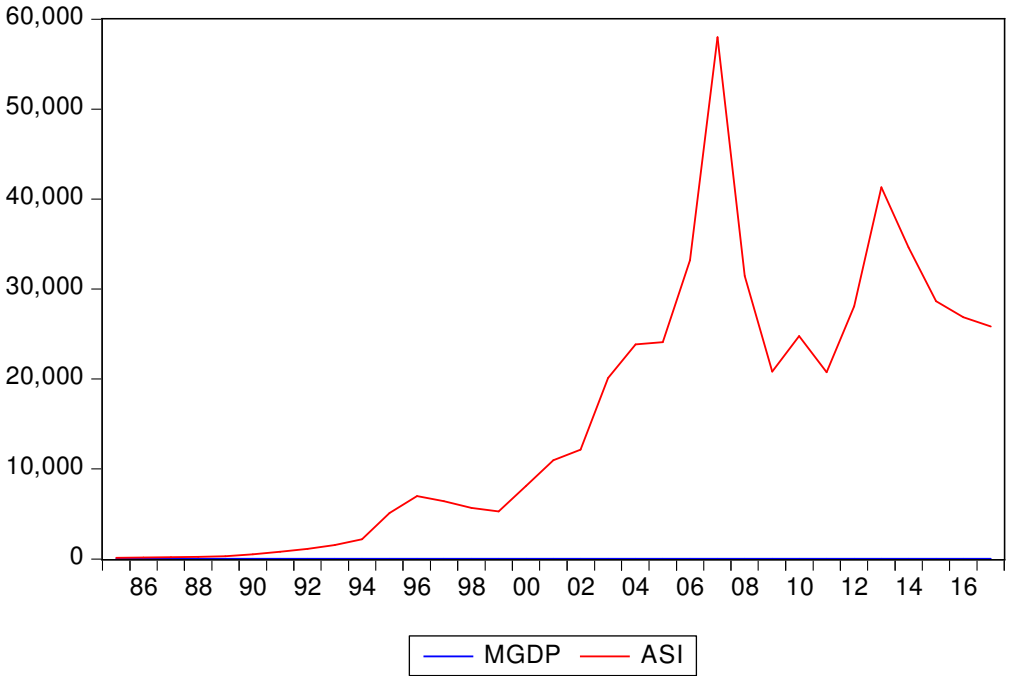

Figure 1. Trend analysis between MGDP and ASI (1985-2017).
Source: Author's computation 2019.

introduce measures that will stabilize their real sector of the economy through manufacturing sectors.

Relationship Between All Share Index and Manufacturing Sector in Nigeria.

Figure 1 above shows the trend of the dependent variable (Manufacturing sector contribution to GDP) and independent variable (All Share Index (ASI)) from 1985-2017. From Figure 1, it can be seen that between 1985 and 1989, manufacturing sector contribution to GDP (MGDP) has been 9% increase with minimal fluctuating. However, beyond the late 80s, manufacturing sector contribution to GDP (MGDP) begins to decrease although with minimal fluctuations up till 2010. In year 2011, manufacturing sector contribution to GDP (MGDP) recorded a continuous rise up till the year 2017. In summary, we can conclude that over the period of study, the manufacturing sector contribution to GDP (MGDP) have not been experiencing an increase but with minimal fluctuations in the early years (that is, in the early and mid 90s).

The graphical analysis shows that All Share Index (ASI) had the highest index of 57,990.20points in 2007 followed by 41,329.19point in 2013. There In conclusion, there have been high level of increase in All Share Index (ASI) from 1985 to 2007 with minimal fluctuation. From 2008 to 2017, it recorded decrease with minimal fluctuation. Since All Share Index (ASI) is a series of number which shows the changing average value of the share price of all companies on a stock exchange and it is used as a measure of market efficiency, we can say that with respect to this indicator, the market performed well over the years under study with minimal fluctuation.

Empirical Review

Earlier studies in the area of capital market efficiency had concentrated on the relationship between stock market efficiency and overall economic growth without specific focus on the sectors that drive the growth. This relationship has been investigated empirically for both advanced economies with well developed stock markets and for the emerging and developing economies. More recent studies have narrowed the focus of this relationship to between stock market efficiency and the manufacturing sector. Odo, Anoke, Onyeisi and Chukwu (2017) examined the impact of capital market indicators on economic growth in Nigeria from 1986 – 2016. The study adopted Auto Regressive Distributed Lag bound testing and VAR Granger causality econometric tools of estimation to test the variables in the model. The result of the estimation showed a stable long run relationship between the dependent and independent variables as supported by the greater bound value of 10.58. The result of the ARDL revealed that market capitalization has positive significant relationship with economic growth. Also; total number of stock traded total value indicated a

negative insignificant link with economic growth, all in the short run. The findings further revealed that Market Capitalization as percent of GDP and Stock Traded Total Value as percent of GDP exhibited a negative insignificant link with economic growth in the long run within the period of the study. Findings of VAR Granger test revealed that, causality was seen from market capitalization as percentage to growth in GDP with a probability value of 0.0034.The study therefore recommends among other things the supportive business environment that will enable growth in market capitalization through investment.

Popoola, Ejemeyovwi, Alege, Adu and Onabote (2017) investigates the short run effect, long run effect and causal relationship between stock market and economic growth in Nigeria. The Augmented Dickey Fuller unit root test, Ordinary Least Squares, Johansen Co-integration test and Pairwise granger causality methods were applied to the variables. The OLS result showed that the all share index had a significant but negative relationship with economic growth; The Johansen co-integration test showed that a long run relationship exists between the stock market performance and economic growth in Nigeria in the long run while the Granger causality test results showed that stock market performance does not granger cause economic growth but economic growth granger causes stock market performance at 5percent significance level. The study suggested some of the possible reasons for the negative impact of stock market on the Nigerian economic growth and recommended that efforts should be made to improve the stock market performance to have a positive effect on the real gross domestic product of Nigeria overtime.

Florence, Ogechi, Kingsley, Idika and Odili (2017) investigated the impact of stock market liquidity and efficiency on performance of the manufacturing sector in Nigeria using time series data from 1985-2014. In the course of data analysis, the study employed unit root test and ARDL bounds test approach to co-integration. The unit root test results showed that capacity utilization from the manufacturing sector, stock market efficiency and turnover ratio were integrated at order zero, while other variables were integrated at order one. The ARDL bounds test result revealed that the variables in the specified model were bound together in the long-run. The associated equilibrium correction was also significant attesting to the existence of long-run relationship. The findings also indicated that stock market efficiency and number of deals were significant variables that explained the changes in the Nigerian manufacturing sector. Therefore, an efficient market must be large and liquid. As such, accessibility and cost information must be widely available and released to investors at more or less the same time.

Murtala, Suraya and Zunaidah (2015) used regression analysis to examine the impact of stock-market based financial development on economic growth in Nigeria. The study analyzes the empirical work from 1997 to 2014. Within this time frame, the authors reviewed over 50 articles from different academic journals. Most of the empirical studies employ ordinary least square and vector error correction regression model in their methodology. However, Nigerian macroeconomic environment experiences some structural changes. Nearly all of the reviewed works did not use an econometric method that employed structural breaks or dummy variables, in considering the structural changes in the financial time series data. This omission may lead to spurious or biased results. For further study the paper, therefore, suggests the use of a structural break or dummy variables in the econometric analysis.

Theoretical Framework

Under this sub-section, we anchored the study on Efficient Market Hypothesis.

Efficient Market Hypothesis

Efficient Market Hypothesis was developed by Fama in 1965. The theory states that stock markets are efficient or prices on traded assets that have already reflected all known information and therefore are unbiased because they represent the collective beliefs of all investors about future prospects. Previous test of the EMH have relied on long-range dependence of equity returns. It shows that past information has been found to be useful in improving predictive accuracy. Equity price would tend to exhibit long memory or long range dependence, because of the narrowness of their market arising from immature regulatory and institutional arrangement. They noted that, where the market is highly and unreasonably speculative, investors will be discouraged from parting with their funds for fear of incurring financial losses. In situations like the one mentioned above, it has detrimental effect on growth through manufacturing sector contribution to gross domestic product of the country because investors will refuse to invest in financial assets. The implication is that companies may not be able to raise additional capital for expansion which counters the general view that efficiency of the capital market is a necessary condition for growth in Nigeria through manufacturing sector contribution.

RESEARCH METHODOLOGY

This research adopts the *ex-post facto* research design. Onwumere (2005) posits that the *ex-post facto* research design establishes a causal link between them. From the forgoing, therefore, it is conclusive that the best research design for this research is *the ex-post facto* research design, hence its adoption in this research. This study

Table 1: Descriptive Statistics

Parameter	MGDP	ASI	INFL	EXR	INTR
Mean	7.865625	15139.68	19.99457	87.76427	19.35223
Median	7.685000	9537.050	12.06481	107.0243	17.92000
Maximum	10.20000	57990.20	76.75887	305.1800	36.10000
Minimum	6.050000	127.3000	0.223606	0.893750	9.250000
Std. Dev.	1.406551	14929.04	19.45407	75.36659	4.979573
Skewness	0.193695	0.873195	1.596270	0.594927	1.319087
Kurtosis	1.484778	3.181483	4.358901	3.068229	5.900265
Jarque-Bera	3.261291	4.110414	16.05190	1.893877	20.49533
Probability	0.195803	0.128066	0.000327	0.387927	0.000035
Sum	251.7000	484469.7	639.8262	2808.457	619.2714
Sum Sq. Dev.	61.32999	6.91E+09	11732.29	176083.8	768.6807
Observations	33	33	33	33	33

Source: Author's Computation 2019

Table 2: Correlation Matrix

Variables	MGDP	ASI	INFL	EXR	INTR
MGDP	1	-0.249131	0.290718	-0.179260	-0.012862
ASI	-0.249131	1	-0.422682	0.763775	-0.353782
INFL	0.290718	-0.422682	1	-0.406019	0.499709
EXR	-0.179260	0.763775	-0.406019	1	-0.240272
INTR	-0.012862	-0.353782	0.499709	-0.240272	1

Source: Author's Computation 2019

seeks to assess the implications of stock market efficiency on the performance of Nigerian manufacturing sector in Nigeria for the period of 1985 to 2017.

Based on the above, the model for this study were therefore estimated as follows:

MGDP = f (ASI, INFL, EXR, INTR) … (1)

i.e. MGDP = $\beta o + \beta_1$**ASI +** β_2**INFL +** β_3**EXR +** β_4**INTR +**u_t**. …(2)**

WHERE;

M/GDP = Manufacturing Sector Contribution to GDP/GDP

ASI = All Share Index

INFL = Inflation Rate

EXR = Exchange Rate

U = Stochastic error term

RESULT AND DISCUSSION

Descriptive Test

In a bid to carry out this study, the various descriptive statistics of the data used was initially examined. The descriptive statistics of data series gives information about simple statistics such as mean, median, minimum value, maximum value and the distribution of the sample measured by skewness, kurtosis and the Jaque-Bera statistic. It is worthy of note that all data series used for econometric investigation ranged from 1985 to 2017. The descriptive result is presented in table 1.

Table 1 above reports the overall mean and standard deviation for all the variables involved in this standard regression analysis. The mean of the dependent variable chosen which is manufacturing sector contribution to the growth of Nigerian economy (MGDP) is 7.865625 which is very low compared to the mean of other independent variables which are the variables of stock market development. With the mean value of ASI standing at 15139.68 while those of EXR, INF and INTR are 87.76427, 19.99457 and 19.35223 respectively, we can conclude that ASI has the highest mean value, followed by EXR, INFL, INTR and finally, MGDP. The standard deviation of each variable appears to follow the same hierarchical trend as those of the mean values. Clearly viewed, MGDP show the least deviation while ASI has the highest standard deviation value of the seven variables presented in Table 1 above.

Correlation Test

Correlation analysis is a method of statistical evaluation used to study the strength of a relationship between two, numerically measured, continuous variables (e.g. height and weight). Correlation is a term that refers to the strength of a relationship between two variables. A strong, or high, correlation means that two or more variables have a strong relationship with each other, while a weak or low correlation means that the variables are hardly related. Correlation results arising from the study as part of the descriptive analysis were also presented in table 2 below.

The correlation matrix as seen in the table 2 above is from numbers between -1 and 1. It shows whether

Table 3. Augmented Dickey Fuller test for stationarity.

Variables	ADF test statistic		Critical values (5%)		Order of integration	Remark
	At level	At 1ST difference	At level	At 1ST difference		
MGDP	-0.646733	-4.721489	-2.963972	-2.963972	I(1)	Stationary
ASI	-1.574516	-5.399377	-2.960411	-2.967767	I(1)	Stationary
INFL	-1.080123	-5.023895	-2.976263	-2.976263	I(1)	Stationary
EXR	-1.450080	-4.875037	-2.960411	-2.963972	I(1)	Stationary
INTR	-3.325634	-4.298314	-2.963972	-2.991878	1(1)	Stationary

Source: Author's computation 2019

Table 4: Co-integration Test

Sample (adjusted): 1987 2017
Included observations: 31 after adjustments
Trend assumption: Linear deterministic trend
Series: MGDP ASI INFL EXR INTR
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.971596	338.7790	159.5297	0.0000
At most 1 *	0.877307	231.9419	125.6154	0.0000
At most 5 *	0.506487	34.26019	29.79707	0.0143
At most 6	0.342710	13.07402	15.49471	0.1121
At most 7	0.016041	0.485129	3.841466	0.4861

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Source: Author's computation 2019.

variables or paired set of data are related or not. The closer the values are to 1, the more confident we have that the variables have positive linear correlation and a negative sign implies an inverse correlation. The correlation between All Share Index (ASI) and Manufacturing Sector Contribution to GDP (MGDP) with values of -0.25 indicates a negative and weak good correlation between the two variables. The correlation between Manufacturing Sector Contribution to GDP (MGDP) and Inflation (INFL) is 0.29 which indicates a weak correlation. The correlation between Manufacturing Sector Contribution to GDP (MGDP) and Exchange Rate is -0.18 which indicates a negative and weak correlation. The correlation between Manufacturing Sector Contribution to GDP (MGDP) and Interest rate is -0.01 which indicates a negative and weak association or correlation.

Diagnostic Tests

Diagnostic tests were conducted and the aim was to ascertain the nature and the reliability of the data used in dependent and independent variables in the study. The diagnostic tests carried out include Unit root test, Co-integration test and Granger causality test.

Unit Root Tests.

Literature has established that most macroeconomic time series variables are not stationary. Therefore, using non-stationary variables in the model might lead to spurious regression which cannot be used for precise prediction (Gujarati, 2011). Hence, our first step is to examine the characteristics of the time series data used for estimation of the model to determine whether the variables have unit roots, that is, whether they are stationary or otherwise. In testing for the stationarity of variables, Augmented Dickey-Fuller (ADF) test is used for this purpose as shown in Table 3. A variable is considered stationary if the absolute ADF t-statistic value is higher than any of the absolute Mackinnon values. The test is conducted with intercept term. The null hypothesis formulated using

Table 5: Granger Causality Test Result

Null Hypothesis:	Obs	F-Statistic	Prob.
ASI does not Granger Cause MGDP	31	1.65117	0.2121
MGDP does not Granger Cause ASI		1.82806	0.1816
INFL does not Granger Cause MGDP	31	3.34607	0.0516
MGDP does not Granger Cause INFL		1.23168	0.3089
EXR does not Granger Cause MGDP	31	3.25683	0.0553
MGDP does not Granger Cause EXR		6.97359	0.0039
INTR does not Granger Cause MGDP	31	1.44556	0.2546
MGDP does not Granger Cause INTR		1.14916	0.3331

Source: Author's computation 2019

both test statistics is that the variable in question has a unit root.

From the unit root test as summarized in the table 3 above, we observe that all variables in the model (MGDP, ASI, INFL, EXR and INTR) are all non-stationary at level, that is, they all contain a unit root. However, differencing each variable once makes all non-stationary variables stationary at 5% level of significance. This now implies that the variables no longer contain a unit root or, we say they are integrated of order one, that is, they are I(1).

Co-integration Test

Co-integration test is a test used to test for the existence of long-run relationship between dependent and independent variables. The Johansen co-integration test was conducted on the selected variables.

Table 4 shows the result of the co-integration test which tests the long run equilibrium relationship between the variables in the model. From table 4, we observe the presence of three (3) co-integrating equations from the trace statistics while we observe the presence of two co-integrating equations from the Maximum-Eigen statistics. This leads us to the rejection of the null hypothesis at 5% level of significance. We therefore conclude the presence of a long run relationship between MGDP, ASI, INFL, EXR and INTR.

Granger Causality Test

Considering the output of Granger Causality and using 6 degree of freedom and 30 observations, the F-tabulated value is 1.128 at 30 observations. It is observed from the pair-wise relationship between ASI and MGDP that the F-statistics is 1.65117 while the value for MGDP and ASI is 1.82806. The estimate shows that 1.65117 and 1.82806 are greater than 1.128 and hence, the acceptance that ASI does not granger cause MGDP and that MGDP does not granger cause ASI. From the overall result, we observed that there is two-way causation between EXR and MGDP. It means that Nigerian stock market development does not granger cause the slow growth of Nigerian manufacturing sector and manufacturing sector does not granger cause Nigerian stock market development since none of the stock market development variables has P-value less that 0.05 level of significance.

Error Correction Mechanism

The purpose of error correction model is to indicate the speed of adjustment from the short-run to long run equilibrium state. Co-integration relationship has been established among the variables, and then Error Correction Mechanism was used for this exercise to determine the behavior of Nigerian stock market efficiency on manufacturing sector performance. This is because the greater the coefficient of the parameter, the higher the speed of adjustment of the model from the short-run to long run equilibrium. As noted, the ECM is meant to tie the short-run dynamics of the co-integrating equations to their long-run static dispositions. With the help of E-view 8.0 package, the Error Correction Model Estimate was run and presented below.

Decision Rules

Decision Rule 1**:** Accept the alternate hypothesis and reject the null hypothesis if the P-value is less than the chosen level of significance (0.05). It implies that the estimated variable has significant impact on the dependent variable.

In this study, stock market efficiency was proxied as All Share Index (ASI). As shown in table 6 above, the

Table 6. Error Correction Mechanism (ECM) test result.
Dependent Variable: D(LMGDP(-1))

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LGASI(-1))	-0.310838	0.013516	-2.801903	0.0001
D(LGINFL(-1))	0.470745	0.041001	1.725433	0.0000
D(LGEXR(-1))	0.252848	0.015943	3.314863	0.0047
D(LGINTR(-1))	0.129949	0.014608	2.050135	0.0503
D(LGMGDPCONS(-1))	-0.284583	0.036011	-2.348795	0.0330
EC(-1)	-0.453672	0.198196	-1.434860	0.0000
C	0.687520	0.060825	2.438881	0.0007
R-squared	0.746489	Mean dependent var		0.064829
Adjusted R-squared	0.686382	S.D. dependent var		0.196062
S.E. of regression	0.031184	Akaike info criterion		-3.796713
Sum squared resid	0.014587	Schwarz criterion		-3.220786
Log likelihood	63.25563	F-statistic		12.690465
Durbin-Watson stat	1.285285	Prob(F-statistic)		0.000000

Source: Author's computation 2019.

variable All Share Index (ASI) appeared in our Error Correction Mechanism (ECM) estimated with a negative sign of 0.310838 with T. Statistics of -2.801903 which its significant coefficient is in line with P-value of 0.0001. The R^2 shows that 74.65% change in the manufacturing sector performance is attributed to All Share Index while 25.35% are caused by other unknown factors.

Using T-Statistic and P-value, ASI is statistically significant. This is because, it is observed to be 2.80190 and 0.0001 respectively which falls outside the acceptance region and is greater than 5% level of significance at 6 degrees of freedom and 32 observations.

We reject the null hypothesis since the P–value is less than 0.05 at 5% level of significance and accordingly accept the null hypothesis with conclusion that stock market efficiency known as all share index (ASI) does significantly and negatively impacted on the performance of manufacturing sector. This is an indication that the Nigeria stock market efficiency have significantly impacted on the manufacturing sector over the years under study.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The analysis of the impact of stock market efficiency on the manufacturing sector performance in Nigeria was done using error correction model results presented in chapter four earlier (Table 6). From the result, the stock market efficiency variable (ASI) has the p –value 0.0001 which is less than 0.05 level of significance. This indicated that stock market efficiency variable (ASI) has significant impact on manufacturing sector performance in Nigeria. The coefficient -0.310838 shows that it has significant negative impact on manufacturing sector performance in Nigeria. The negative sign shows that stock market efficiency variable (ASI) does not comply to the expected apriori sign. The coefficient indicates that one naira increase in stock market efficiency variable (ASI) resulted to 0.3 percent decline in manufacturing sector performance in Nigeria. The significant negative influence of stock market efficiency variable (ASI) on manufacturing sector performance in Nigeria may be due to incidences of stock market instability in Nigeria. Also, it reveals that government policies towards manufacturing sector performance through stock market efficiency variable (ASI) have not been effective. This result is in contrast to popular economic theory which posits that increase in stock market size variable (ASI) will spark –off economic growth of any economy through manufacturing sector performance. The study is of the view that stock market efficiency variable (ASI) in Nigeria has not played its expected role in manufacturing sector performance of the country. Over the years there have been consistent rise in stock market efficiency variable (ASI) due to increase in activities of the market even though this has not translated to any meaningful development in the economy through manufacturing sector performance.

Recommendations

Based on the findings, the study makes the following recommendations;

1. Since stock market efficiency variable (ASI) in this study shows negative and significant sign, it is therefore pertinent to recommend that the mechanism for registration and valuation of shares in the stock exchange

should be improved. The prices of equities quoted on the exchange should be made to reflect as much as possible the underlying economic fundamentals of the firms. This will assist in computing a more accurate size for the stock market in Nigeria and enable the market to respond appropriately to economic developments. The process of registering in the market is considered cumbersome while the cost of raising funds is considered very high for some firms. These processes should be overhauled to enable more companies especially from the manufacturing sector to access funds from the market so that it can contribute to the performance of manufacturing sector in Nigeria.

2. The demutualization of the Nigerian Stock Exchange should be implemented. Demutualization involves the transformation of the exchange from a company limited by guarantee to a public company that is accountable to shareholders. It is part of the proposed reforms for the Nigerian Stock market. This study recommends its implementation in the belief that when the exchange becomes a public company accountable to the public via its shareholders, the oversight over its functions and activities will be stronger and the monitoring process will be closer. The closer monitoring will help to improve corporate governance and eradicate the alleged malpractices in the market. This will help to promote the development of the market and its contribution the manufacturing sector performance in Nigeria.

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