
Impact of Stock Market Liquidity and Efficiency on Performance of the Manufacturing Sector in Nigeria (1985-2014).

Florence O. Ariwa, Ogechi I. Ani, Kingsley O. Onyele, Idika J. Ekeleme & Odili Okwuchukwu (Ph.D)

Department of Banking and Finance
Michael Okpara University of Agriculture, Umudike
Umuahia, Abia State,
Nigeria.

onyiariwa@yahoo.com, ogeibeabuchiani@gmail.com, kingsleyonyele@gmail.com,
palmereck@gmail.com, joellytex@yahoo.com

ABSTRACT

The paper 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 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.

Keywords: *Stock market efficiency, stock market liquidity, turnover ratio and manufacturing sector capacity utilization*

INTRODUCTION

Generally, the manufacturing sector of any economy is known for its involvement in transformation of raw materials into finished goods. This sector of the economy embarks on productive ventures that result to domestic consumption and foreign exchange earnings. The performance and growth of the manufacturing sector is a prerequisite for the level of industrialization; modernization; urbanization, gainful and meaningful employment for all those who are able and willing to work, equitable distribution of income, the welfare, income per capita and quality of life enjoyed by the citizens (Kwode, 2015 & Oteh, 2010). Consequently, with global recognition, the manufacturing sector is viewed as an important force that drives an economy towards a sustainable growth level in both developing and developed countries.

In Nigeria, the manufacturing sectors have not played the expected vital and vibrant role in economic growth and development. Over the years, the sector has recorded low productivity, subjecting the economy to high rate of importation. This is because the sector is characterized by low productivity as a result of poor expertise, poor technology and lack of finance (Udoh & Ogbuagu, 2012). Consequently, the underperforming manufacturing sector in Nigeria have been of great concern to the government, operators, practitioners and the organized private sector

groups. However, there have been fiscal incentives, grants, bilateral and multilateral agencies support and aids as well as specialized institutions all geared towards making the manufacturing sector vibrant, yet its performance have remained dismal due to unmet financial needs of this prominent economic sub-sector in Nigeria.

Globally, in promoting economic prosperity, a key factor is seen to be a healthy development of a nation's financial sector, which in turn improves access to bank credit, equity capital, payments and risk management services for the various sectors. As a result, literature abound that access to financial resources is a pathway to accelerating domestic production and economic growth (Yusuf, 2009, Adenuga, 2010, Udoh & Ogbuagu, 2012). Hence, diverse sectors of the economy have been reported to be short of these investable funds, thus resulting to low productivity in particular, and economic breakdown in general. Nevertheless, the stock market as a source of raising funds has been a heated topic over the years among financial and economic experts. Whereas, the linkage between stock market and economic growth have long been a subject of intense scrutiny. Nevertheless, not much has been done to specifically examine the link between stock market liquidity, efficiency and the manufacturing sector performance in Nigeria.

According to the literature, stock markets as a segment of the financial system have the potentials of affecting economic activities through the creation of liquidity (Nneji, 2013). According to Yusuf, (2009) liquid equity markets make investments less risky and more attractive because they permit savers to acquire assets and sell them with ease if they need access to their savings or want to alter their portfolios. At the same time, companies enjoy permanent access to capital raised through equity issues (Dalvi & Bahgi, 2014). Consequently, the Nigerian stock market is expected to play the role of an enabler for the transformation of the Nigerian economy by becoming the first port of call for firms in the manufacturing sector, as well as international investors (Oteh, 2010; Chipaumire & Ngirande, 2014).

Following the report published by Vision (2010) Committee on the Nigeria capital market, the Nigerian capital market is not large enough to serve the long-term financial needs of the economy. It is shallow; not up to world standard and uncompetitive as a primary source of financing long-term business needs. Consequently, with the problem associated with the stock market, it becomes glaring why the manufacturing sector is still facing diverse challenges despite government efforts aimed at revitalizing and revamping it. These challenges manifest in the form of shortage of long-term funds, high interest rates, epileptic electricity supply, lack of infrastructure etc. Consequently, the Nigerian stock market lacks the liquidity and efficiency that would ensure availability of long-term funds to the manufacturing sector at affordable rates.

Based on the background, this paper sets off with the objective of providing an empirical analysis of the impact of stock market liquidity and efficiency on performance of the manufacturing sector in Nigeria. The paper is organized as follows: Section 1 detailed the introductory phase of the paper, while section 2 reviews the existing literature on the link between stock market liquidity, efficiency and manufacturing sector performance. On the other hand, section 3 detailed the methodology and explanations of variables used for the empirical analysis, while section 4 reported the estimation results and interpretations. Finally, section 5 summarizes the paper and draws some conclusions on the subject of stock market efficiency, liquidity and manufacturing sector performance in Nigeria.

REVIEW OF RELATED LITERATURE

STOCK MARKET EFFICIENCY

According to Oladapo & Ayowole (2013) stock market efficiency refers to the degree at which the price of shares reflects all available and relevant information at any given time. The need for efficiency is to ensure accurate pricing of stocks by preventing under and over valuation of stocks which supports the buying and selling of shares (Dragota & Oprea, 2014). This is because when stocks are mispriced, it hinders potential investors from purchasing shares due to fear of uncertainties (price fluctuations) and this significantly reduce the availability of financial resources to firms. According to Omuchesie *et al* (2014) stock market efficiency ensures efficient allocation of resources such that firm's performance is reflected in their stock prices which give the ground for potential investors to take investment decisions optimally.

Stock market liquidity

Liquidity is an important ingredient for a well-functioning stock market. In a liquid market, the trade-off is not severe; price remains stable even when assets are sold quickly (Chordia, *et al.*, 2001). Liquidity reveals how big the trade-offs between the velocity of the sale and price stocks can be sold for. Consequently, in a relatively illiquid market, quick selling will entail reducing the asset price by some amount (Dalvi & Bahgi, 2014). As such, stock market liquidity could also mean the degree at which financial instruments can be quickly traded in the market without altering the asset prices (Yusuf, 2009). The implication is that the stock market should have the ability to facilitate buying and selling of assets, while ensuring that there is no drastic change in the prices of financial assets. Similarly, market liquidity theory suggests that an asset should have the ability to sell at a stable price (i.e. without the asset price reducing significantly).

A liquid stock market has some characteristics as highlighted below.

1. An investor can sell the asset with ease
2. Losses on asset value are minimal
3. It could be trade anytime within trading hours
4. There always ready and willing buyers

The manufacturing sector

The manufacturing sector of any economy simply involves the various activities aimed at transforming raw materials into finished goods. According to some economists, the manufacturing sector is a wealth-producing sector of an economy. Hence, a very vital sector that ensures economic growth. It provides important material support for national infrastructure. The sector is involved in the production of two categories of goods; consumer goods and capital goods (Kwode, 2015). While the consumer goods refers to the ones produced for consumption the producer goods are those produced to aid further production processes. Generally, the manufacturing sector is the hub of economic activities. This is informed by the fact that it is the sole sector that extracts raw materials and transforms such materials to a usable form. By so doing, the sector employs about 70 percent of the working population in a country. On the other hand, by accelerating their productive activities, the economy would have surplus that can be exported for foreign exchange revenue (Udoh & Ogbuagu, 2012).

THEORETICAL FRAMEWORK

The efficient market hypothesis (EMH)

The efficient market hypothesis suggests that a market is efficient when it is able to adjust quickly to take account of all available information, such that no single participant in the market

gets more information than the information that is already reflected in the market prices. Consequently, the efficient market hypothesis discusses three main dimensions involved in capital market efficiency depending on the set of information available: weak- form market efficiency, Semi-strong market efficiency and Strong market efficiency (Omuchesie *et al.*, 2014). Weak-form market efficiency exists when current prices fully reflect all historical price information, such that prices automatically adjust to information changes without lags. With semi-strong form efficiency, market prices reflect available public information including company reports, annual earnings, stock splits and company public profits forecasts. The strong form of efficiency, however, exist when prices reflect both public and private information about earnings, book values, investment opportunities.

The random walk model

The random walk model suggests that the price fluctuations at time t should be independent of the sequence of price changes in previous time periods (Afego, 2012). This is in tandem with the postulations of the weak-form version of the EMH that technical analysis, based on historical price information is worthless since current prices always adjust to all historical information.

EMPIRICAL EVIDENCE

From the literature, the financial system in every country is expected to exert a positive influence on industrial growth and development (Sam & Salami (2014). In line with this expectation, Schumpeter (1932) asserted that the services provided by financial intermediaries i.e. savings mobilization, project evaluation, managing skills, monitoring managers and facilitating transactions could aid the stimulation of technological innovations and economic development. This assertion was supported by Levine and Robert (1993), when they presented cross countries' evidence that the financial system promotes economic growth and industrial development.

In Nigeria, Kwode (2015) examined the importance of capital market in financing the manufacturing sector using data from 1970- 2012. The results showed that growth in capital market activities did not impact significantly on the manufacturing sector. In fact, the Nigerian manufacturing sector has been on the decline because of non-access to long-term funds from the capital market, high interest rate, volatile foreign exchange and unstable electricity supply.

Dalvi & Baghi (2014) investigated the relationship between performance and liquidity of shares listed on the Tehran Stock Exchange. They examined data from 154 companies listed in Tehran Stock Exchange between 1383 and 1388 with the combinational methods, the relationship between business performance and liquidity was studied. The results showed that between the liquidity and performance scales, a strong correlation was observed.

Dragota & Oprea (2014) reviewed empirical results obtained in the investigation of the Romanian stock market's informational efficiency. Tests on the predictability of returns suggested that the Romanian stock market has a low level of efficiency. Furthermore, the impact of new information was intense before and after its release. Also, Chipaumire & Ngirande (2014), examined the impact of stock market on economic growth in South Africa and concluded that stock market liquidity had a positive impact on growth in South Africa.

Udoh & Ogbuagu (2012) used total production framework and autoregressive distributed lag (ARDL) co-integration technique for Nigerian time series data covering the period 1970 to 2009. It was found that both the long run and short run dynamic coefficients of financial sector development variables has a negative and statistically significant impact on industrial production. Afego (2012), analyzed the weak-form efficient market hypothesis for the Nigerian stock market by testing for random walks in the monthly index returns over the period 1984-2009. The results

of the non-parametric runs test showed that index returns on the Nigerian Stock Exchange (NSE) displayed a predictable component, thus suggesting that traders can earn superior returns by employing trading rules.

Olowo, Oluwatoyin & Fagbeminiyi (2011) critically analyzed the efficiency of capital market on the Nigerian economy for the period between 1979 and 2008. The results indicated that the stock market indeed contributed to economic growth as all variables conformed to expectation. The major findings revealed a negative relationship between market capitalization and gross domestic product as well as a negative relationship between turnover ratio and gross domestic product while a positive relationship was observed between the all-share index and gross domestic product.

Okpara (2010) carried out an investigation on the impact of capital market performance on growth of the Nigerian economy. The results showed that there was a long run interaction between the growth of the economy (gross domestic product) and capital market indicators. From the results, one period lag of market capitalization, new issues, value of shares traded and turnover ratio had impacted significantly on the growth rate of gross domestic product.

Adenuga (2010) explored the hypothesis that stock market development promotes economic growth in Nigeria and attempted to confirm its validity or otherwise, using quarterly data from 1990:1 to 2009:4 for Nigeria by employing vector error correction model (VECM) technique on the commonly used stock market development indicators. From the results, the model for the total value of shares traded ratio has the best fit followed by the market capitalization ratio model while the model for the turnover ratio lagged behind.

Yusuf (2009) investigated whether financial liberalization has any significant impact on the liquidity and efficiency of the stock market in sustaining economic growth. Using paired test to analyze the data for twenty years (1986-2005). The study found that financial liberalization has significant positive impact on the liquidity and efficiency of the Nigerian stock market.

Guo (2008) tested the efficient market hypothesis (EMH) for the Chinese stock market with respect to monetary policy. The vector auto regression (VAR) model was used to estimate the relationship between stock returns and relative macroeconomic variables related to monetary policy. The estimated VAR equation proved that there are significant impacts of lagged changes of interest rate, money supply and gross domestic product on stock returns. Impulse Responses Functions (IRFs) and Variance Decompositions (VDCs) were then generated from the estimated VAR models to further assess the efficiency of the Chinese stock market. With significant bands conducted for IRFs and VDCs, the results supported the semi-strong form of the EMH for the Chinese stock market.

Murinde (2006) carried out a study with respect to micro-structure theory of the African capital markets in 1999. The findings was that institutional changes in market efficiency improved in NSE (Nigerian Stock Exchange), NSE (Nairobi stock exchange), JSE (Johannesburg stock exchange) and market liquidity also improved, while volatility reduced. There was a highly significant improvement in the performance Nigerian Stock Exchange after the introduction of ATS (Automated Trading System) in 1999. Similarly, Sunday, Omah & Oladimeji (2012) evaluated the effect of microstructure change (from manual trading system to the automated trading system) on the trading effectiveness in the Nigerian stock market from 1999 to 2011. The study revealed that ATS was an effective trading system and it had brought about an efficient settlement system and fostered new trading opportunities.

Chordia, Roll & Subrahmanyam (2001) studies total market spreads, depths and trading activities for U.S. equities over an extended time period. The results revealed that changes in market averages of liquidity and trading activities are highly volatile and negatively serially

dependent. Also, the long term and short term interest rates influenced liquidity. On the other hand, depth and trading activities increased just prior to major macroeconomic announcements. Nyong (1997) developed an aggregate index of capital market development and determined its relationship with long-run economic growth in Nigeria. The study employed a time series data spanning from 1970 to 1994. The results revealed that capital market development was negatively and significantly correlated with long-run growth in Nigeria.

METHODOLOGY

In a bid to empirically analyze the impact of stock market liquidity and efficiency on the performance of the manufacturing sector in Nigeria, the Autoregressive Distributed Lag (ARDL) model proposed by Pesaran *et al.* (2001) was used to show the long-run relationships and dynamic interactions between stock market liquidity, efficiency and the manufacturing sector in Nigeria using the Autoregressive Distributed Lag (ARDL) co-integration test popularly known as bound test. This method was adopted for this study because the regressors can be either I(0) or I(1) or mutually co-integrated. Also, the long-run and short run parameters of the models can be simultaneously estimated. Therefore the Autoregressive Distributed Lag (ARDL) bound test was used to show the impact of stock market liquidity and efficiency on performance of the manufacturing sector in Nigeria from 1985 to 2014.

Nature and sources of data

The data used for this study were all secondary data sourced from central bank of Nigeria (CBN) statistical bulletin 2014 edition and Nigerian Stock Exchange Bulletin.

Model specification

To achieve the objective of this study, an econometric model capturing the impact of stock market liquidity and efficiency on the manufacturing sector in Nigeria in line with the theoretical framework and literature reviewed was developed. The model was derived from the literature reviewed, particularly, Levine, (2003); Chipaumire & Ngirande, (2014) and Werigbelegha & Ogiriki (2015) with some modifications as specified below.

$$\ln CPU_{t-i} = \beta_0 + \beta_1 \ln MKTEF_{t-i} + \beta_2 \ln MKLQ_{t-i} + \beta_3 \ln NDLS_{t-i} + \beta_4 \ln TNR_{t-i} + \beta_5 \ln INFR_{t-i} + ECM_{t-i} \quad (1)$$

Where,

MKTEF = Market efficiency (proxied by changes in all share index).

MKTLQ = Stock market liquidity (proxied by the ratio of market capitalization to nominal gross domestic product)

NDLS = Number of deals in the stock market

TNR = Stock market turnover ratio (proxied by the ratio total value of shares traded to market capitalization ratio).

INFR = Inflation rate

CPU = Capacity utilization from the manufacturing sector

In = Natural log

β_0 = Constant

$\beta_0 - \beta_5$ = Coefficients

ECM = Error correction model

RESULTS AND DISCUSSIONS

The results from the Augmented Dickey Fuller unit root test, bounds test approach to co-integration test and the Autoregressive Distributed Lag (ARDL) model were presented in Tables 1, 2 and 3 below.

Unit root test

Table 1 below shows the stationary characteristics of the variables used in the study.

Table 1: Summary of Augmented Dickey Fuller (ADF) unit root test results

Variables	ADF @ level	ADF @ First Difference	Order of integration
InCPU	-0.479754	-6.925567***	I(1)
InMKTEF	-5.660701***	---	I(0)
InMKTLQ	-2.404524	-5.464953***	I(1)
InNDLS	-3.476126	-6.616279***	I(1)
InTNR	-6.837597***	---	I(0)
InINFR	-3.043715	-5.021946***	I(1)

Source: Authors computation (2016) using EVIEWS

Table 1 above shows the summary of the unit root results. From the results, some of the variables were integrated at order one i.e. I(1), while others like stock market efficiency and turnover ratio were integrated at order zero i.e. I(0). Since there is mixed order of integration, there is need to investigate the co-integration properties of the variables used in the model. This result imply that the regression results that would be obtained from the model earlier specified would return a spurious result if there is no long-run relationship (co-integration) among the variables in the model.

Co-integration test

As a follow up to the unit root test, co integration test was used to determine the existence of long run relationship between the dependent and independent variables. The test technique used here is the ARDL bounds test since the data set used for the analysis had mixed integration. The test results were presented below in Table 2.

Table 2: ARDL bounds test result for co-integration

Critical value	Lower bound value	Upper bound value
10%	2.26	3.35
5%	2.62	3.79
1%	3.41	4.68

Computed F-statistic: $F_{InCPU}(InMKTEF, InMKTLQ, InNDLS, InTNR, InINFR)=3.96$

Source: Authors computation (2016) using EVIEWS

The computed F-statistics as shown in Table 2 is = 3.96. This value is greater than the upper bounds of the critical value of 3.79 at 5% level of significance. This implies that there is co-

integration (long run relationship) between manufacturing sector capacity utilization, capital market efficiency, market liquidity, number of deals, turnover ratio and inflation rate. Consequently, the null hypothesis of no co-integration between the variables was rejected and the alternative hypothesis was accepted.

Estimated long run relationship

The results obtained for the long run relationship was presented in table 3 below.

Table 3: Estimated long run relationship using the ARDL approach

Variable	Coefficient	Std. Error	t-Statistic	Prob.
InMKTEF	0.579804	0.158256	3.663719	0.0080
InMKTLQ	-0.148770	0.141467	-1.051628	0.3279
InNDLS	0.914465	0.266175	3.435581	0.0109
InTNR	-0.234662	0.149868	-1.565795	0.1614
InINFR	0.011515	0.009153	1.257961	0.2487
C	-2.375802	2.293074	-1.036077	0.3346

Source: Author Computations (2016) using EViews

The result of the long run relationship coefficients in Table 3 indicates that stock market efficiency has a positive and significant impact on manufacturing capacity utilization at 5% probability level. The estimated coefficient of market efficiency (MKTEF) implies that 1% increase in market efficiency will increase manufacturing capacity utilization by approximately 57%, all things being equal. This finding contradicts those of Oladapo & Ayowole (2013) and Nneji (2013), who concluded that changes in market efficiency depleted manufacturing sector productivity.

On the other hand, number of deals (NDLS) played a significant role in augmenting the manufacturing sector utilization capacity in Nigeria. Following the coefficient, 1% change in number of deals accounted for approximately 91% increase in the manufacturing sector utilization capacity. This result authenticates the findings of Okpara (2010) that number of deals has a substantial effect on growth.

Inflation rate was found to be positively related to manufacturing sector capacity utilization with an estimated coefficient of 0.011515, though insignificant at neither, 1%, 5% and 10% levels. Market liquidity and turnover ratio had a negative sign but not significant at 1, 5 and 10% probability levels.

Short run results

The following result presented in table 4 explains the short run dynamic coefficients.

Table 4: Results of the ARDL short-run relationship

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DIn(MKTEF)	0.242992	0.074842	3.246741	0.0141
DIn(MKTLQ)	0.248103	0.184328	1.345984	0.2203
DIn(NDLS)	0.548245	0.239733	2.286897	0.0561
DIn(TNR)	-0.032951	0.053187	-0.619534	0.5552
DIn(INFR)	0.006903	0.006206	1.112349	0.3027
CointEq(-1)	-0.599525	0.162717	-3.684462	0.0078

Source: Authors computation (2016) EViews

The results of the short run dynamic coefficients associated with the long run relationships was given in Table 4. The estimated error correction coefficient i.e. CointEq(-1) of -0.599525 (0.0078) is highly significant and has the correct sign, which implies a fairly high speed of adjustment to equilibrium after a shock. From the CointEq(-1) coefficient, approximately 59% of disequilibria from the previous year's shock converge back to the long run equilibrium in the current year. From the results, market efficiency and number of deals were found to be significant in influencing manufacturing sector capacity utilization at 5 and 10% probability levels, respectively. Also, the coefficient of turnover ratio was found to be negative and insignificant in line with the long run results. Inflation rate was found to be insignificant, similar to the long run relationship. Market liquidity was found to possess similar result with the long run relationship as it was insignificant at 5% probability levels with an estimated coefficient of 0.248103.

Diagnostic test

The outcome of the serial correlation, Jarque Bera normality test and heteroscedasticity test presented in Table 5 below indicates that the model passed all the tests and this implies that it has a correct functional form, its residuals are serially uncorrelated, normally distributed and homoscedastic. This conclusion was informed by the probabilities of the serial correlation, normality and heteroscedasticity tests.

Table 5: ARDL model diagnostic tests

Tests	Probability
Serial correlation – LM test	0.0702
Normality test	0.9509
Heteroscedasticity	0.1840

Source: Authors computation (2016) using EViews

The cumulative sum (CUSUM) and cumulative sum of square (CUSUMQ) plots from a recursive estimation of the model is shown in Figures 1 and 2, respectively. This indicate stability in the coefficients over the sample period as the plot of the CUSUM and CUSUMSQ statistic fall inside the critical bands of the 5% confidence interval of parameter stability.

Figure 1. Test result for model stability (CUSUM Test)

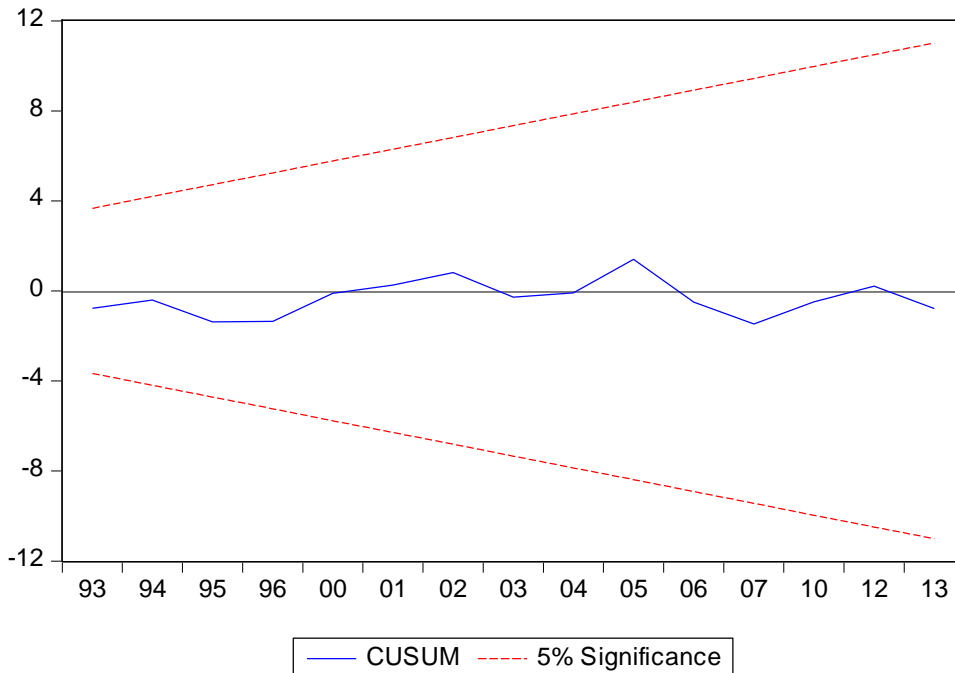
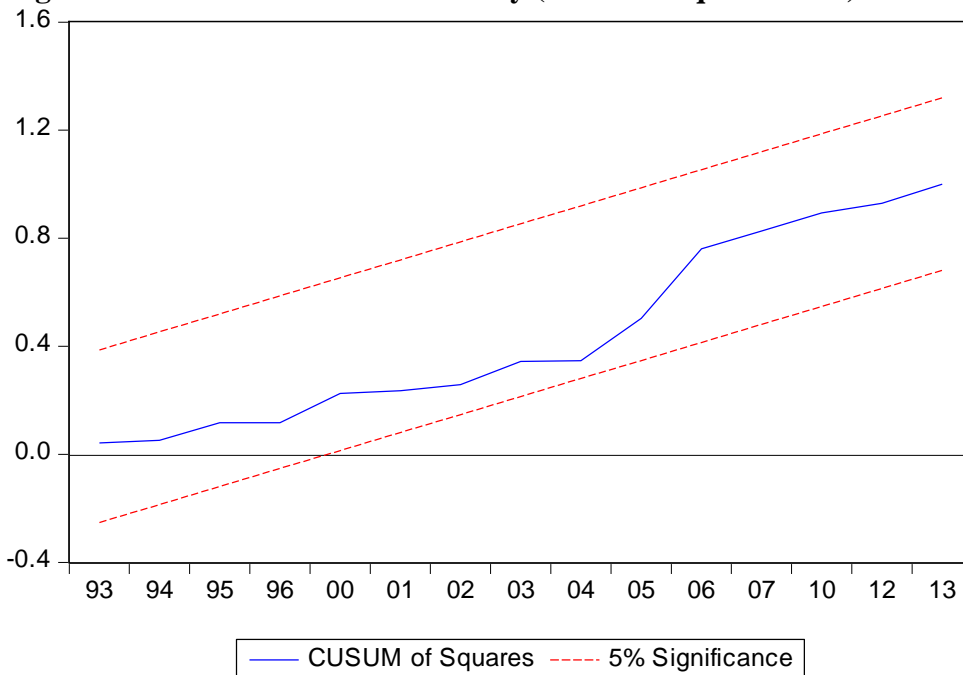


Figure 2. Test result of model stability (CUSUM Squares Test)



RECOMMENDATIONS AND CONCLUSION

The stock market of any country is expected to play intermediary roles by channeling funds from surplus units to the deficit unit. This is achieved by ensuring that the market is well equipped to

be efficient and liquid in order to fulfill its mandate of funds mobilization. As such, literature abound that the Nigerian manufacturing sector has suffered from stock market inefficiency for the period under study. Though, the stock market liquidity was positive and insignificant in this study, but if combined with high level of efficiency the Nigerian stock market will indeed provide the necessary lubricant (financial resources) that will turn the wheels of the economy towards sustainable growth through accelerated productivity in the manufacturing sector.

Based on the findings of this paper, the following recommendations were made:

1. To attain a level of efficiency, sufficient number of market participants should have equal access to relevant information, and make maximum use of these information to guide their buying and selling decisions. To achieve this, it is recommended that there should be an increased level of public enlightenment on the gains of the stock market.
2. With the interest of domestic firms to make foreign investments, and foreign investors entry into the domestic stock market will force the information disclosure policies and accounting systems to be upgraded to world standards. Hence, high level of efficiency and liquidity in the stock market will be ensured.

REFERENCES

- Adenuga, A. (2010). Stock Market Development Indicators and Economic Growth in Nigeria (1990-2009): Empirical Investigations. Central Bank of Nigeria *Economic and Financial Review Volume 48/1*.
- Afego, P. (2012). Weak Form Efficiency of the Nigerian Stock Market: An Empirical Analysis (1984 – 2009). *International Journal of Economics and Financial Issues Vol. 2, No. 3, 2012, pp.340-347 ISSN: 2146-4138*.
- Chipaumire, G. & Ngirande, H. (2014). How Stock Market Liquidity Impact Economic Growth in South Africa. *J Economics, 5(2): 185-192*.
- Chordia, T., Roll, R. & Subrahmanyam, A. (2001). Liquidity and market efficiency. *Journal of Financial Economics, 87, 249-268*.
- Creswell, J.W. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approach*. New Castle: Sage.
- Dalvi, M.R. & Baghi, E. (2014). Evaluate the Relationship between Company Performance and Stock Market Liquidity. *International Journal of Academic Research in Accounting, Finance and Management Sciences, Vol. 4, No. 4*.
- Dragota, V. & Oprea, M.V. (2014). Informational Efficiency Tests on the Romanian stock Market: A Review of the Literature. *The Review of Finance and Banking Volume 06, Issue 1, Year 2014, Pages 015—028 S print ISSN 2067-2713, online ISSN 2067-3825*.
- Guo, Y. (2008). Efficiency of the Chinese Stock Market with Respect to Monetary Policy. Thesis for Master programme in Finance School of Economics and Management.
- Kwode, E.I. (2015). Capital Market and the Performance of the Manufacturing Industries in Nigeria 1970-2012. *European Journal of Business and Management www.iiste.org ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.7, No.13*.
- Levine, R. & Robert, K. (1993). Finance and growth: Schumpeter might be right. *Quarterly Journal of Economics 108: 717-737*.
- Murinde, V. (2006). *Capital Markets Roles and Challenges*. Birmingham: University of Birmingham. Retrieved from www.bham.ac.uk/staffitem.asp?section
- Nneji, I. (2013). Efficiency of the Nigerian Capital Market; an Empirical Analysis. *Research Journal of Finance and Accounting. ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.4, No.4*

- Nyong, M.O. (1997). Capital Market Development and Long run Economic Growth: Theory, Evidence and Analysis. *First Bank Review*, December pp. 13-38.
- Okpara, G. C. (2010). Analysis of capital market performance and the growth of the Nigerian economy: A cointegration approach. *Global Journal of Human Social Science*, 10(4), p.9.
- Oladapo, F. & Ayowole, A.J. (2013). An Empirical Analysis of Efficiency of the Nigerian Capital Market. *Research Journal of Finance and Accounting* www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.4, No.17.
- Olowo O., Oluwatoyin, M. & Fagbeminiyi, F. (2011). Nigerian Stock Exchange and Economic Development. Knowledge Management, Information Management, Learning Management.
- Omuchesie, A. J., Bosire, M. & Muiru, M. (2014). The Effect of Automation on Stock Market Efficiency: A Case of Nairobi Securities Exchange. *Research Journal of Finance and Accounting* www.iiste.org ISSN 2222-1697
- Oteh, A. (2010). A Roadmap for Transforming the Nigerian Capital Markets, Press Briefing, Securities and Exchange Commission Media Center, Lagos, February 5.
- Pesaran H. M, Shin Y. & Smith R.J (2001). Bounds Testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics*. Econ. 16: 289–326 (2001). DOI: 10.1002/jae.616
- Sunday, J. K., Omah, I. & Oladimeji, M. (2012). Microstructure Change and the Effective Trading System: The Nigerian Experience. *Global Journal of Management and Business Research*. Volume 12, Issue 10, Version 1. June 2012, 10-14.
- Schumpeter, J.A (1932): *The theory of economic development*, Translated by Redvers Opie Cambridge, Mass. Harvard University Press. Pp. 50-102
- Udoh, E. & Ogbuagu, R. U. (2012). Financial Sector Development and Industrial Production in Nigeria (1970-2009): An ARDL Cointegration Approach. *Journal of Applied Finance & Banking*, vol.2, no.4, 2012, 49-68.
- Werigbelegba, A. P. & Ogiriki, T. (2015). Determinants of Stock Market Performance and Manufacturing Sector Growth in Nigeria (1987-2013). *Research Journal of Finance and Accounting*, Vol.6, No.6.
- Yusuf, H. (2009). The Impact of Financial Liberalization on Liquidity and Efficiency of the Nigerian Stock Market. A Thesis Submitted to the Postgraduate School, Ahmadu Bello University, Zaria-Nigeria.