Rethinking Capital Market Clearing and Settlement Process for Efficiency in Developing Countries: Evidence from Nigeria

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This paper focuses on the efficiency of the capital market from the perspective of the clearing and settlement system with specific attention paid to ease of access to the right information, needed infrastructure and its impact on the growth of the market and the economy at large. Primary data generated through the use of administered questionnaires and responses therefrom were analysed based on the relationship and impact of variables such as availability of information, capital market efficiency, effective prices and actual occurrences. The ordinary least square estimation technique was deployed and findings showed that the lack of adequate infrastructure, relevant and timely information and share price volatility are still major challenges to an efficient market in Nigeria as it concerns the clearing and settlement process. The increase in transaction cost and the lack of depth of the market is a resulting effect of the inefficiency. It was recommended that strengthening over the counter deals and the introduction of derivatives, options could help in deepening the market. It was also recommended that government must put in place and sustain investors-friendly policies geared towards the efficiency of the market.

**Key words:** Capital Market, Clearing, Efficiency, Derivative, Investors

**INTRODUCTION**

The strength of any economy is often related to the strength and efficiency of its financial system of which the capital market is a part. Traditionally, institutions in the financial system performs functions that have to do with handling of the payment system, channeling saving to investment opportunities, risk management, regulatory functions within the context of corporate governance framework to protect investors against agency problems.

Within the context of the capital market there exists a complex institution and mechanism through which intermediate and long-term funds are made available to government and businesses unlike the money market which primarily exist as a means of liquidity adjustment. The capital market provides a bridge of transforming saving into long term investment by using equity bonds, debentures, mortgages and investment stocks to facilitate intermediation.
The capital market is an important part of country’s economy necessary in propelling economic growth and it comprises of a primary market which is responsible for raising funds through the issuance of new securities and the secondary market which provides facilities for trading in already issued securities with participants such as the Securities and Exchange Commission, Nigeria Stock Exchange, Stock brokers, Trustees, Issuing Houses, Registrars.

The capital market assists in the efficient mobilization of savings and allocation of such savings into profitable investments and which in turn increases and improves the capacity of other sectors of the economy and their productivity. The Nigerian stock exchange plays key roles in the transactions in the secondary market which passes through three distinct phases, viz., trading, clearing and settlement. While the stock exchanges provide the platform for trading, the clearing system determines the funds and securities obligations of the trading members and ensures that the trade is settled through exchange of obligations. The Securities and Exchange Commission (SEC) has been putting in efforts to enhance the market’s growth, but this has been frustrated by the various environments of the country as it still remains at the infant stage after over fifty years of existence and activity.

In this paper, an attempt has been made to investigate problems associated with the clearing system and to proffer solutions drawing from the fact that the time element that is required for financial transactions to take place demands that the process of financial transactions be efficient and seamless to avoid losses.

Hence, this study attempts to identify the challenges faced in capital market in terms of efficiency in clearing and settlement process which mainly affects individual investors in the course of their participation in the capital market and which may hinder the flow of funds to the market.

Statement of the Problem

One of the major problems of the capital market in developing countries is its inefficiencies. As a result of globalization and liberalization of financial systems as well as the global competition for capital there is a need to improve on Nigeria’s capital market efficiency. The global financial crisis has raised many important issues regarding the prudential regulation and supervision of financial markets, including the institutional structure and operation of post-trading systems for securities transactions. Post-trading infrastructure consists mainly of clearing and settlement systems. The efficient operation of financial markets depends on clearing and settlement systems that are competitive and sound.

Despite the importance of the clearing system of the market, clearing and settlement lies outside the spotlight of high visibility economic policymaking and has a rather unglamorous image, often referred to as ‘the plumbing in the building. Though vital to the operation of financial markets, clearing and settlement systems are usually forgotten until a crisis occurs.

This study derives from the challenges in the market ranging from inefficiencies of capital market operators, lack of information about quoted companies, ineffective real time clearing and settlement, paucity of investible funds, low returns on investment, and lack of transparency in the market etc with the aim of proffering solutions. Consequently, the objectives of the study are:
i. To investigate the problem of capital market clearing and settlement inefficiency and propose ways to enhance efficiency.

ii. To make recommendations as to how the operations of the market could be improved to enhance economic growth and development of Nigeria.

LITERATURE REVIEW

The importance and role of financial markets in catalyzing economic growth has been a subject of several scholarly discussions and researches with experts coming up with various positions. For example, Levine (1997) in a study conducted on the relationship between financial development and economic growth and the compatibility of stock market development with financial intermediation for economic growth, posited that stock market development is positively correlated with the development of financial intermediaries and long term economic growth. In a similar fashion, in a study conducted by Borenztein in 1998 to validate the expediency of an efficient capital market, he affirmed that a functional capital market facilitates foreign direct investment thus enhancing capital accumulation and by extension raising the efficiency of investments.

Reforms to improve the market have been introduced at various times but these have been marginally successful. The failure to develop a robust and efficient capital market do have significant consequences, as growing empirical evidence suggests that financial development as depicted by the indirect and causal impact is not just correlated with a healthy economy, but actually causes economic growth and has a positive impact on poverty alleviation and income distribution. In recent times, the Nigerian capital market has kept pace with the new technologies and ways of improving the operations of the market. An example of this is the establishment of the Central Securities Clearing System (CSCS) in 1992 which began to function in 1997. This is an institution of the capital market that makes the clearing process of securities much easier and faster with the use of the latest infrastructure. In literature, related studies by scholars have brought to the fore many things. For example among the supply-leading theorists African capital markets have not passed the emergent stage as a result of poor flow of investment funds into the continent in addition to the low investment culture of the people. This can be traced to embedded inefficiency. Adetiloye, Babajide and Ugwu, (2015), argued that investment in African capital markets is inhibited by several factors some of which relate to what happens in the Nigeria capital market. Finally, (Ikeobi, 2015), summarizes the challenges of capital market development in emerging markets as stable macroeconomic stability, sound banking system sound institutional quality and an adequate regulatory and supervisory framework.

The concept of an efficient market has been considered as ambiguous over the years by several researchers even though certain definitions have been postulated. A market is neither strictly efficient nor strictly inefficient, the issue has been the degree of efficiency and one way to measure the efficiency of the market is to ascertain what type of information is available against the backdrop of the total set of all available information, as reflected in security prices. The general thinking is that efficiency can lead to better market capitalization through confidence building by the public.
Generally, in literature the effective functioning of capital markets requires the existence of an exchange, clearing and settlement system; the existence of a legal system to enforce contracts; the availability of information on financial soundness and future prospects of companies and governance of corporations in a manner that gives the investors’ confidence that their funds will not be stolen or wasted. This has necessitated the need for automation. According to a study by Edward Attafuah (2020) automation has an impact on market efficiency. He posited that there is a posited impact of automation on exchange rate, interest rate and volume of stock traded.

In a related study by Yartey and Adjasi (2007) they established the fact that automation decreases the inadequacies in African markets and increase trade as well as liquidity. In a similar vein, studies by Venkataman (2001) and Theissen (2002) on issues that relate to the efficiency of the market have posited that spreads are lower on a floor base exchange as against an electronic exchange. Theissen affirmed that automated trading scheme gives minimal intermediation spread for liquid stocks. One emerging area of study is that of analysing how automation can help in shielding the stock market from the volatility of some macroeconomic indicators.

METHODOLOGY

Model Specification

In order to do justice to the core objective of this study, variables that influence and impact on efficiency were analyzed from data sourced through responses from different stakeholders and a model was developed.

\[
\text{CME} = f(AI, EP, IR, AO) \ldots \ldots \ldots
\]

where:

\(\text{CME} = \) Capital market efficiency,

\(\text{AI} = \) Availability of information,

\(\text{EP} = \) Effective prices,

\(\text{IR} = \) Investors responses

\(\text{AC} = \) Actual occurrences

Put in a function form, it becomes:

\[
\text{CME}_{it} = \beta_0 + \beta_1 \text{AI}_{it} + \beta_2 \text{EP}_{it} + \beta_3 \text{IR}_{it} + \beta_4 \text{AO}_{it} \ldots \text{equation (1)}
\]

Where: \(\beta_0\) = regression constant; \(\epsilon_{it}\) = error term, normally distributed about the mean of zero; \(\beta_1, \beta_2, \beta_3\) and \(\beta_4\) = coefficients of variation

Estimation Technique

Using multiple regression analysis with Ordinary Least Square (OLS) estimation techniques as it gives the Best Linear Unbiased Estimators for the study of period between year 2012 to 2017
where herein the capital market efficiency is influenced by a number of factors, which include how financial assets are priced, interest rates and market price for risk, liquidity, efficient information system, clearing and settlement processing days, size of the stock market that is market capitalization and number of listed equities. Since the interrelationship of these factors ensures the efficiency of the capital market to mobilize and allocate resources for economic growth with data gotten from structured questionnaires were used.

Given that most of the items in the questionnaires are targeted to measure respondents’ opinion about research variables, the 5-point likert scale was utilized in the questionnaire. The scale ranges from strongly agree, agree, undecided, disagree, and strongly disagree.

A total number of three hundred and fifty (350) copies of questionnaires were, properly filled, returned and found adequate enough to be used for data analysis, this gives a response rate of eighty-eight percent (88%) with the analyzed data presented below.

ANALYSIS OF QUESTIONNAIRE ITEMS RELATED TO THE STUDY

Table 4.2: Opinion of respondents on Research question 1 - What are the challenges confronting the Nigerian Stock market making the capital market in Nigeria seem to be inefficient?

<table>
<thead>
<tr>
<th>SN</th>
<th>STATEMENTS</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Lack of relevant stock exchange information is a challenge in the Nigerian capital market</td>
<td>Freq 178</td>
<td>72</td>
<td>30</td>
<td>40</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(%) 50.9</td>
<td>20.5</td>
<td>8.6</td>
<td>11.4</td>
<td>8.6</td>
<td>100.0</td>
</tr>
<tr>
<td>9</td>
<td>Ineffective documentation of quoted companies is a major challenge in the Nigerian Capital market</td>
<td>Freq 188</td>
<td>88</td>
<td>22</td>
<td>30</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(%) 51.4</td>
<td>25.1</td>
<td>6.3</td>
<td>8.6</td>
<td>8.6</td>
<td>100.0</td>
</tr>
<tr>
<td>10</td>
<td>Share price volatility is a challenge in the Nigerian capital market</td>
<td>Freq 93</td>
<td>101</td>
<td>79</td>
<td>42</td>
<td>38</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(%) 26.6</td>
<td>28.9</td>
<td>21.7</td>
<td>12.0</td>
<td>10.9</td>
<td>100.0</td>
</tr>
<tr>
<td>11</td>
<td>Technological infrastructure hinders the speed and accessibility of trading in the Nigerian Capital market</td>
<td>Freq 138</td>
<td>162</td>
<td>9</td>
<td>10</td>
<td>31</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(%) 39.4</td>
<td>46.3</td>
<td>2.6</td>
<td>2.8</td>
<td>8.9</td>
<td>100.0</td>
</tr>
<tr>
<td>12</td>
<td>The legal and regulatory environments of the Nigerian capital markets is still very weak causing a major challenge for the market.</td>
<td>Freq 30</td>
<td>30</td>
<td>22</td>
<td>88</td>
<td>188</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(%) 8.6</td>
<td>8.6</td>
<td>6.3</td>
<td>25.1</td>
<td>51.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field study, 2019  
N= 400  
Valid =350  
Missing = 50
Table 4.2, above shows that 50.9% of the respondents strongly agreed to the statement that “Lack of relevant stock exchange information is a challenge in the Nigerian capital market.” 20.5% of the respondents agreed, 8.6% of the respondents were undecided, 11.4% of the respondents disagreed while 8.6% of the respondents strongly disagreed. Hence, majority of the respondents strongly agreed that lack of relevant stock exchange information is a challenge in the Nigerian capital market.

Also, the table shows that 51.4% of the respondents strongly agreed to the statement that “Ineffective documentation of quoted companies is a major challenge in the Nigerian Capital market”, 25.1% of the respondents agreed, 6.3% of the respondents were undecided, 8.6% of the respondents disagreed while 8.6% of the respondents strongly disagreed. Hence, majority of the respondents strongly agreed that ineffective documentation of quoted companies is a major challenge in the Nigerian Capital market.

The table shows that 26.6% of the respondents strongly agreed to the statement that “Share price volatility is a challenge in the Nigerian capital market”, 28.9% of the respondents agreed, 21.7% of the respondents were undecided, 12.0% of the respondents disagreed while 10.9% of the respondents strongly disagreed. Hence, majority of the respondents agreed that share price volatility is a challenge in the Nigerian capital market.

Furthermore, the table shows that 39.4% of the respondents strongly agreed to the statement that “Technological infrastructure hinders the speed and accessibility of trading in the Nigerian Capital market”, 46.3% of the respondents agreed, 2.6% of the respondents were undecided, 2.8% of the respondents disagreed while 8.9% of the respondents strongly disagreed. Hence, majority of the respondents agreed that technological infrastructure hinders the speed and accessibility of trading in the Nigerian Capital market.

Finally, the table shows that 8.6% of the respondents strongly agreed to the statement that “The legal and regulatory environments of the Nigerian capital markets is still very weak causing a major challenge for the market.”, 8.6% of the respondents agreed, 6.3% of the respondents were undecided, 25.1% of the respondents disagreed while 51.4% of the respondents strongly disagreed. Hence, majority of the respondents strongly disagreed that the legal and regulatory environments of the Nigerian capital markets is still very weak causing a major challenge for the market.
Table 4.3: Opinion of respondents on Research Question II - What solutions are available for capital market clearing and settlement process for efficiency in Nigeria?

<table>
<thead>
<tr>
<th>S/N</th>
<th>STATEMENT</th>
<th>Freq</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Improvement of transaction policies and procedures by working with regulatory bodies like CBN, NDIC and SEC.</td>
<td></td>
<td>196</td>
<td>54</td>
<td>25</td>
<td>45</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td>56.0</td>
<td>15.4</td>
<td>7.1</td>
<td>12.9</td>
<td>8.6</td>
<td>100.0</td>
</tr>
<tr>
<td>14</td>
<td>Reduction of transaction cost by strengthening of over the counter (OTC) deals can help improve capital market efficiency</td>
<td></td>
<td>200</td>
<td>83</td>
<td>27</td>
<td>30</td>
<td>10</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td>57.1</td>
<td>23.7</td>
<td>7.7</td>
<td>8.6</td>
<td>2.9</td>
<td>100.0</td>
</tr>
<tr>
<td>15</td>
<td>Fixing of a maximum level of charges and elimination of some duplicated commissions or charges can improve capital market efficiency in terms of speed and authenticity of capital market transactions.</td>
<td></td>
<td>196</td>
<td>54</td>
<td>25</td>
<td>45</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td>56.0</td>
<td>15.4</td>
<td>7.1</td>
<td>12.9</td>
<td>8.6</td>
<td>100.0</td>
</tr>
<tr>
<td>16</td>
<td>The introduction of the various instruments such as derivatives, options and the likes, will deepen the market and increase its turnover ratio.</td>
<td></td>
<td>252</td>
<td>48</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td>72.0</td>
<td>13.6</td>
<td>2.9</td>
<td>2.9</td>
<td>8.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field study, 2019   N= 400   Valid =350   Missing = 50

The table 4.3 above shows that 56.0% of the respondents strongly agree that “Improvement of transaction policies and procedures by working with regulatory bodies like CBN, NDIC and SEC.” 15.4% agree, 7.1% are undecided, 12.9% disagree and 8.6% strongly disagree. Hence, it can be deduced from the above result that majority of respondents strongly agreed that improvement of transaction policies and procedures by working with regulatory bodies like CBN, NDIC and SEC.

However, the table shows that 57.1% of the respondents strongly agree that “Reduction of transaction cost by strengthening of over the counter (OTC) deals can help improve capital market efficiency”23.7% agree, 7.7% are undecided, 8.6% disagree and 2.9% strongly disagree. Hence, majority of respondents strongly agreed that reduction of transaction cost by strengthening of over the counter (OTC) deals can help improve capital market efficiency.

The table also, shows that 56.0% of the respondents strongly agree that “Fixing of a maximum level of charges and elimination of some duplicated commissions or charges can improve capital market efficiency.” 15.4% agree, 7.1% are undecided, 12.9% disagree and 8.6% strongly disagree.
Hence, it can be deduced from the above result that majority of respondents strongly agreed that fixing of a maximum level of charges and elimination of some duplicated commissions or charges can improve capital market efficiency.

Finally, table shows that 72.0% of the respondents strongly agree that “The introduction of the various instruments such as derivatives, options and the likes, will deepen the market and increase its turnover ratio” 13.6% agree, 2.9% are undecided, 2.9% disagree and 8.6% strongly disagree. Hence, majority of respondents strongly agreed that the introduction of the various instruments such as derivatives, options and the likes, will deepen the market and increase its turnover ratio.

Table 4.4: Opinion of respondents to Research Question III- What new initiatives would be recommended as to how the operations of the market could be improved to boost economic growth and development of Nigeria?

<table>
<thead>
<tr>
<th>S/N</th>
<th>STATEMENT</th>
<th>Freq</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Improvement in clearing days can boost economic growth and development through rapid transactions on the floor of Nigerian stock exchange.</td>
<td></td>
<td>196</td>
<td>54</td>
<td>25</td>
<td>45</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td>56.0</td>
<td>15.4</td>
<td>7.1</td>
<td>12.9</td>
<td>8.6</td>
<td>100.0</td>
</tr>
<tr>
<td>18</td>
<td>Enhanced administration and management of the Nigerian Stock Exchange</td>
<td></td>
<td>210</td>
<td>68</td>
<td>22</td>
<td>20</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td>60.0</td>
<td>19.4</td>
<td>6.3</td>
<td>5.7</td>
<td>8.6</td>
<td>100.0</td>
</tr>
<tr>
<td>19</td>
<td>Integration of information and communication technology will help enhance operational efficiency of CSCS.</td>
<td></td>
<td>252</td>
<td>48</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td>72.0</td>
<td>13.6</td>
<td>2.9</td>
<td>2.9</td>
<td>8.6</td>
<td>100.0</td>
</tr>
<tr>
<td>20</td>
<td>Ensuring corporate governance and non-diversion of corporate profits, the management of the Nigeria stock Exchange should be more vigilant in their supervisory and regulatory roles.</td>
<td></td>
<td>210</td>
<td>68</td>
<td>22</td>
<td>20</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td>60.0</td>
<td>19.4</td>
<td>6.3</td>
<td>5.7</td>
<td>8.6</td>
<td>100.0</td>
</tr>
<tr>
<td>21</td>
<td>Attracting new listings and new investors in the market. Securities and Exchange Commission (SEC) and Nigerian Stock Exchange (NSE) embark on more aggressive campaigns to create more awareness about the activities of the capital market</td>
<td></td>
<td>210</td>
<td>68</td>
<td>22</td>
<td>20</td>
<td>30</td>
<td>350</td>
</tr>
<tr>
<td></td>
<td>(%)</td>
<td></td>
<td>60.0</td>
<td>19.4</td>
<td>6.3</td>
<td>5.7</td>
<td>8.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field study, 2019  N= 400  Valid =350  Missing = 50

The table 4.4 above shows that 56.0% of the respondents strongly agree that “Improvement in clearing days can boost economic growth and development through rapid transactions on the floor of Nigerian stock exchange”, 15.4% agree, 7.1% are undecided, 12.9% disagree and 8.6%
strongly disagree. Hence, it can be deduced from the above result that majority of respondents strongly agreed that improvement in clearing days can boost economic growth and development through rapid transactions on the floor of Nigerian stock exchange.

Furthermore, it shows that 60.0% of the respondents strongly agree that “Enhanced administration and management of the Nigerian stock” 19.4% agree, 6.3% are undecided, 5.7% disagree and 8.6% strongly disagree. Hence, majority of respondents strongly agreed that enhanced administration and management of the Nigerian stock. The table also shows that 72.0% of the respondents strongly agree that “Integration of information and communication technology will help enhance operational efficiency of CSCS.”, 13.6% agree, 2.9% are undecided, 2.9% disagree and 8.6% strongly disagree. Hence, majority of respondents strongly agreed that integration of information and communication technology will help enhance operational efficiency of CSCS.

The table above shows that 60.0% of the respondents strongly agree that “Ensuring corporate governance and non-diversion of corporate profits, the management of the Nigeria stock exchange should be more vigilant in their supervisory and regulatory roles.”, 19.4% agree, 6.3% are undecided, 5.7% disagree and 8.6% strongly disagree. Hence, it can be deduced from the above result that majority of respondents strongly agreed that ensuring corporate governance and non-diversion of corporate profits, the management of the Nigeria stock exchange should be more vigilant in their supervisory and regulatory roles.

Finally, the table above shows that 60.0% of the respondents strongly agree that “Attracting new listings and new investors in the market. Securities and Exchange Commission (SEC) and NSE embark on more aggressive campaigns to create more awareness about the activities of the capital market”, 19.4% agree, 6.3% are undecided, 5.7% disagree and 8.6% strongly disagree. Hence, it can be deduced from the above result that majority of respondents strongly agreed that attracting new listings and new investors in the market. Securities and Exchange Commission (SEC) and NSE embark on more aggressive campaigns to create more awareness about the activities of the capital market.

Regression Analysis

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Capital market efficiency, Availability of information, Effective prices, Investors responses, Actual occurrences

It is found that R = 0.358 is the correlation of the independent variables (Capital market efficiency, Availability of information, Effective prices, Investors responses, Actual occurrences, Actual occurrences) and dependent variable (economic growth). Also, it is found that R Square = 0.128, which is the explained variance. What the results mean is that 12.8% of the variance (R-Square) in the dependent variable has been significantly explained by the independent variables.
The ANOVA shows that the $F$ value = 5.159 with significant value of 0.002 is statistically significant when compared to the level of significance (0.05). Thus, there is a statistically significant influence of capital market efficiency on economic growth.

The regression model for the hypotheses:

$y = a + b_1x_1 + b_2x_2 + b_3x_3$

Where:

$y$ = Capital Market Efficiency
$x_1$ = Availability of information
$x_2$ = Effective prices
$x_3$ = Investors responses
$x_4$ = Actual occurrences

The regression equation can be written as follows:

$y = 1.779 + 0.187x_1 - 0.200x_2 + 0.222x_3$
The above equation revealed a constant value of 1.779, which is the part of capital market efficiency that does not depend on the components of availability of information, effective prices, investors responses and actual occurrences. The model shows that 1% improvement on each of the variables availability of information, effective prices, investors responses and actual occurrences will increase capital market efficiency (y) by 0.187 and 0.222, 0.200 respectively.

**DISCUSSION OF FINDINGS**

Drawing from the analysis, it was found that the major challenges facing the capital market making it inefficient include the lack of relevant stock exchange information, ineffective documentation of quoted companies, share price volatility and inadequate technological infrastructure which hinders the speed and accessibility of trading.

It was also found that the solution for capital market clearing and settlement process challenges to efficiency in Nigeria should include reduction of transaction cost by strengthening of over the counter (OTC) deals and the introduction of the various instruments such as derivatives, options of which will deepen the market and increase its turnover ratio.

**CONCLUSION AND RECOMMENDATIONS**

There is the strong belief that the inadequacy of relevant technological infrastructure hinders the speed and accessibility of trading in the Nigerian capital market and as such the market is still fraught with human inhibitions that can be done away with. Hence it is recommended among others that here is the need to improve capital market efficiency through reduction of transaction cost by strengthening over the counter deals and introduction of various instruments such as derivatives, options to deepen the market and increase turnover ratio. It is also recommended that the market should be made more investor friendly through relevant policies and policy consistency. To enhance efficiency, it is thus recommended that there is need to improve on management of the Nigerian Stock Exchange through the integration of information and communication systems with the Central Securities Clearing System.

**REFERENCES**


