Efficiency of the Nigerian Capital Market: 
Implications for Investment Analysis and Performance

Sunday Eneojo Samuel and Richard Uzoefuna Oka *

Abstract: This paper appraises the nature and efficiency of the Nigerian capital market and its implications for investment analysis and performance. It examines the implications of the efficient-market hypothesis and types and levels of market efficiency. Data was collected using a survey questionnaire. A multi-stage and random sampling technique was used to select a sample including four categories of people and firms relevant to the study. Data were analyzed using a Likert scale and descriptive statistics. The null hypothesis was analyzed using a five-point Likert scale with a 5% error term, and the study found that information has contributed to the efficiency of the Nigerian capital market to a great extent. It is therefore suggested that the Nigerian Stock Exchange and the Nigeria Securities and Exchange Commission should be more purposeful and aggressive in educating and enlightening the investing public on the workings and technicalities of the market while also committing to continuous training and retraining of their staff.

Key words: Nigerian capital market, efficient capital market, market efficiency, securities, investment

1. Introduction

Nigeria is a developing country. Its government has severally shown commitments to its socio-economic advancement through various initiatives and policy documents. The Millennium Development Goals (MDGs), Vision 20, 20-20, Poverty Alleviation Programme, financial sector reforms and the Seven Point Agenda are instances of this. However, the success or failure of any government-led development effort hinges on the soundness of its financial system. In a nutshell, the financial market is the heartbeat of any market economy, and the capital market is the focal point of the financial market.

According to Ologunde et al (2006), the capital market is a collection of financial institutions set up for the granting of medium- and long-term loans. Babalola (2008) is of the opinion that the major significance of the financial system in any economy is its ability to mobilize savings and to efficiently intermediate in financial service delivery so as to create liquidity in the economy, minimize information cost, and create a bridge in assets diversification. Nwankwo (2007) states that a developed local securities

* Sunday Eneojo Samuel and Richard Uzoefuna Oka, Department Of Accounting, Kogi State University, Anyigba, Nigeria. Tel: +234 8059281392; +234 7063049070 E-mail: aglowsum@yahoo.com, drruoka@yahoo.com.
market will stabilize the financial sector, entrench competitive spirit within the sector, and effectively complement the banking sector.

The Nigerian capital market is a veritable instrument for promoting limitless wealth accumulation through investment (Adepetun, 2008). However, in efficient capital markets, information is expected to be accurate because security prices react instantaneously to new information such that there are no opportunities for market participants to achieve abnormal returns consistently (Hadi, 2006).

The broad objective of this study is to appraise the efficiency of the Nigerian capital market, its implications for investment analysis and performance. Specifically, the study intends to:

(i) create a clear understanding of the nature of the Nigerian capital market;
(ii) determine the efficiency level of the Nigerian capital market;
(iii) make recommendations based on the findings.

The following null hypothesis was formulated and tested:

(i) Information has not greatly contributed to the efficiency of the Nigerian capital market.

2. Efficiency of the Nigerian Capital Market

2.1. An overview of the Nigerian Capital Market

According to Okwoli and Kpelai (2008), the capital market is the second type of financial market that provides the facilities for long-term lending and borrowing using securities. This is the market in which large amounts of money or capital are raised by institutions such as governments and companies for long-term use (Drummond, 1998).

Capital market activities took place long before the establishment of actual capital markets. According to Momoh (2008), capital market activities in Nigeria began in 1946 during the introduction of the Ten Year Development Ordinance, through which 3.25% £300,000 loan stock was issued to the public in units of £10, with a maturity date of 10-15 years. Mfomiso (2007) states that prior to 1960, virtually all formal savings were made through the banking sector, with only core capital investments made on behalf of Nigeria by Britain on the London Stock Exchange.

The first ever capital market in Nigeria was the Lagos Stock Exchange, which began operation in 1961. However, the first ever ordinary shares to be traded in Nigeria and offered to the public were those of the Nigeria Cement Company Limited in 1959, followed by the ordinary and preference shares of John Holt (Liverpool) Investment Company Limited and the ordinary shares of Nigeria Tobacco Company Limited in 1960 (Areago, 1990). These activities were supervised by the London Stock Exchange (Okwoli and
Sunday Eneojo Samuel and Richard Uzoefuna Oka

Kpelai, 2008). Subsequently, in 1976, the Lagos Stock Exchange was transformed into “The Nigeria Stock Exchange” following the recommendation of Dr. Pius Okigbo’s committee (Uduehi, 2005).

The Nigerian capital market is categorized into the primary and secondary markets. The primary is the market for fresh issues. Traded securities are offered through subscription, right issues, offer for sales, by introduction, and by private placement (Drummond, 1998). The secondary market operates after an issue has been completed and securities listed in the stock market (Okwoli and Kpelai, 2008). The secondary market is made up of two exchanges: The Nigeria Stock Exchange and the Abuja Commodities Exchange (Sanni, 2008).

2.2. Efficient-Market Hypothesis

According to Koijen and Nieuwerburgh (2007), the efficient-market hypothesis implies that capital markets are efficient with regards to a set of information, thereby rationally reflecting all new information in securities prices in terms of magnitude and direction of such movements. This means that stock prices move with the influx of information (McMinn, 2009). Hirschey and Nofsinger (2008) state that the efficient-market hypothesis is the situation where security prices fully reflect all available information. That is to say, “if stock and bond markets are perfectly efficient and current prices fully reflect all available information, then neither buyers nor sellers have an information advantage”.

2.3. Efficient capital market

Efficient capital market is the ability of securities to reflect and incorporate relevant information, almost instantaneously, in their prices (Pandey, 2005). According to Hadi (2006), an efficient capital market is a market that is efficient in processing information. Bruce (2008) opined that, efficient capital market is informational efficiency, which essentially means that market prices adjust instantaneously to new information that could inform future prices.

2.4. Types of market efficiency

There are three types of market efficiency; they are Operational efficiency, Allocation efficiency and pricing efficiency.

2.4.1. Operational efficiency: According to Mensah (2003), operational efficiency implies that all transactions in securities are carried out instantly, correctly, and at a low cost. This may be promoted through enhancing competition between exchanges for secondary market transaction.

2.4.2. Allocation efficiency: This refers to mechanism which allocates scarce resources to where they can be most productive.

2.4.3. Pricing efficiency: A market that is price efficient is one in which an investor can only expect to earn a risk-adjusted returns from an investment as prices move instantaneous and in an unbiased
manner to any news. A capital market is described as efficient if security prices are timely and accurately reflects all available information about the current and future likely worth of the assets (Adelegan, 2008).

2.5. Levels of market efficiency

Robert (1991) identifies the followings as the three levels of market efficiency: weak form, semi-strong form and strong form.

2.5.1. Weak form efficiency: Okwoli and Kpelai (2008) defined weak form efficiency as a situation where the security prices reflect all the past information as reported by the press. It is therefore, not possible for an investor to predict future security price by analyzing historical prices, and achieve a performance (return) better than the stock market index. It is so because the capital market has no memory, and the stock market index has already incorporated past information about the security prices in the market price (Pandey, 2005).

2.5.2. Semi-strong efficiency: This level of efficiency assumes that all publicly available information about a given security has been accurately factored into the present price of that security (Russel and Violet, 2002). Okwoli and Kpelai (2008) looked at semi-strong efficiency as a situation where the security prices reflect not only past information but all other published information.

2.5.3. Strong-form efficiency: This is a situation where the security prices reflect not only public information but all information that can be acquired by painstaking analysis of the company and the security (Okwoli and Kpelai, 2008). According to Pandey (2005), in strong-form efficiency, the security prices reflect all published and unpublished, public and private information.

2.6. Implications of the efficient-market hypothesis

The concept of market efficiency has a number of implications for three categories of persons. These are the investing community, the corporate world and the regulatory authorities (Mensah, 2003).

2.6.1. For investors:

- Both technical and fundamental analyses are meaningless.
- Rationality demands that an investor hold a well-diversified portfolio.
- It is necessary for high investor networks to demand for timely release of adequate information in order to steer the market towards semi-strong form efficiency.

2.6.2. For companies:

- Emphasize substance over form
- It is pointless to fine tune the timing of new issues
- Consider prices of own stocks as an indication of market perception of virility or a lack of it.
2.6.3. For regulators

Professional accounting bodies and capital market regulations should be geared towards boosting investors’ confidence through the prevention of insider trading; protection of investors from abuse; minimizing systematic risk; enthronement of fairness; and enhancing market efficiency.

2.7. Methodology

A survey research method was used for the study. The instrument for data collection was the questionnaire. Fixed response questions were put forward to the respondents as data collected from such facilitates data analysis and estimation of the validity and reliability indices of the instrument.

A multi-stage sampling technique was used to select four categories of people and firms relevant to the study. They are professional accountants, stock broking firms, the Nigeria Stock Exchange and Academicians. A random sampling technique was later used to select ten staff from stock broking firm, twenty from Nigerian Stock Exchange, fifteen from Professional Accountants and thirty from the academia making a total sample size of seventy-five.

The analytical tools used in analyzing the data collected for the study include the descriptive statistics and Likert Scale. The descriptive statistical tools used were frequency distribution percentages and tables. The null hypothesis was analyzed on a five-point Likert scale measuring the extent information has contributed to the efficiency of the Nigeria capital market.

The formula for Likert Scale is: $\frac{\sum Fx}{N}$

Where $\sum Fx$ = weighted sum of frequencies and N = Total response.

The mean point of scale is: $\frac{\sum X}{n}$

Where $\sum X$ = sum of nominal value and n= Number of response categories

The cut-off point = mean + e, Where e = error term i.e. 0.05.

2.8. Data Analysis and Results

Data collected via the questionnaire are analyzed bellow:

Table 1.1 below shows the frequency distribution of respondents’ view on the efficiency of the Nigerian capital market.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>40</td>
<td>53</td>
</tr>
</tbody>
</table>
Efficiency of the Nigerian Capital Market

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>35</td>
<td>47</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100</td>
</tr>
</tbody>
</table>


From Table 1.1 above, 53% of the respondents said the Nigerian capital market is efficient while 47% said it is not.

Table 1.2. below shows the frequency distribution of respondents’ view on the level of efficiency of the Nigerian capital market.

### Table 1.2. Level of efficiency of Nigerian Capital Market.

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak form</td>
<td>51</td>
<td>68</td>
</tr>
<tr>
<td>Semi strong form</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Strong form</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source:* Field survey, 2009

From Table 1.2. above, 68% of the respondents are of the opinion that the level of efficient of the Nigeria capital market is weak form, while 20% and 12% of the respondents said it is semi-strong form and strong form respectively.

### 2.9. Test of hypothesis

**H₀:** Information has not contributed to the efficiency of the Nigerian Capital Market to a great extent.

Table 1.3. below shows the calculation of figures to determine the extent information has contributed to the efficiency of the Nigerian Capital Market using Likert-Scale.

### Table 1.3. Calculation of figures using Likert Scale

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency (F)</th>
<th>Scale (X)</th>
<th>FX</th>
</tr>
</thead>
<tbody>
<tr>
<td>To a very great extent</td>
<td>29</td>
<td>5</td>
<td>145</td>
</tr>
<tr>
<td>To a great extent</td>
<td>35</td>
<td>4</td>
<td>140</td>
</tr>
<tr>
<td>Undecided</td>
<td>4</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>To no extent</td>
<td>7</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>To no extent at all</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>15</strong></td>
<td><strong>311</strong></td>
</tr>
</tbody>
</table>

*Source:* Field survey, 2009
Mean point = (∑FX)/N = 311/45 = 4.15
Mean point of scale = (∑X)/N = 15/5 = 3.00
Cut off point = Mean + e = 3.00 + 0.05 = 3.05

To determine the extent to which information has contributed to the efficiency of the Nigerian capital market, a five-point Likert scale of rating responses was used. The mean point of the responses is 4.15 and the cut off point is 3.05. The decision rule is that where the calculated mean point is above the cut off point, it is regarded as effective; while below, reverse is the case. The calculated mean point of 4.15 is greater than the cut off point of 3.05. Therefore, the null hypothesis is hereby rejected. That is, information has contributed to the efficiency of the Nigerian capital market to a great extent.

3. Conclusion

The following conclusions were reached from the findings of the study:

(i) The results of the study are consistent with the reports of Adeleogan (2008) which disclosed that the Nigerian capital market is in the weak form level of efficiency. This is premised on the following:

- Operations of the market are not transparent. There are instances of insider trading, deception, complacency by NSE officials in enforcing rules, delay in issuance of certificates and in dividend declaration, exploitative fees by brokers, and other market makers (Anonymous, 2008).
- There are instances of stock overvaluation and ‘cooked’ accounting books as in the case of Cadbury Nigeria Plc (Oluba, 2008; Ryan, 2006)

(ii) Information has a positive effect on the efficiency of the Nigerian capital market. A market is said to be efficient when security prices fully reflect all available information. This means that the price of stocks moves with the influx of information.

(iii) An efficient market holds profound implications for investors, companies and regulators.

The following recommendations are capable of enhancing the efficiency of the Nigerian capital market:

(i) The Nigerian stock exchange and Securities and Exchange Commission should be more purposeful and aggressive in educating and enlightening the investing public on the workings and technicalities of the market.

(ii) Institutional investors and stock broking firms should be more committed to continuous training and re-training of their staff.

(iii) SEC should ensure that its rules are adequate, relevant and up-to-date.

(iv) Institutional investors and stock broking firms should invest more in information technology apparatus.
References


Babalola, R. A speech delivered at members' evening roundtable talks held at IOD National Secretariat, Ikoyi, Lagos, Nigeria.


Acknowledgement

A number of individuals have contributed immensely in bringing this article to its present state. We are thankful to all of them for their criticisms, help and encouragement. Even though time and space constraints would not permit us to list all of their names, we must specifically express our gratitude to Professor Akpa Abimaje of Benue State University, Makurdi, Nigeria, and Dr. Ajachukwu, Mr. Rufai, Mr. Inyanda, and Mr. Audu, all of Kogi State University, Anyigba, Nigeria.

About the Authors: Sunday Eneojo Samuel is a lecturer in the Department of Accounting at Kogi State University in Anyigba, Nigeria, where he obtained his B.Sc. in the discipline. He received his M.Sc in Accounting and Finance from Benue State University in Makurdi, Nigeria and is a member of the Institute of Certified Public Accountants of Nigeria (ICPAN). Mr. Samuel worked for Arewa Textile plc as finishing inspector from 1999-2002 and also served as a Director of Special Duties for the World Changers Youth Foundation in Kaduna, Nigeria (a Non Governmental Organization) from 2007 to 2008.

Richard Uzoefuna Oka, Ph.D., is a Senior Lecturer in the Department of Accounting at Kogi State University in Anyigba, Nigeria. He was formerly the Head of the Department of Accounting and Dean of the Faculty of Management Sciences at the same university. Dr. Oka’s educational history is as follows: Associate Diploma in Education, University of Lagos, 1974; B.Sc. (Hons) in Accountancy, University of Nigeria, Enugu Campus, 1980; Post-Graduate Diploma, Business and Public Administration, Anambra State University of Technology, Enugu, 1989; MBA in Banking and Finance, Anambra State University of Technology, 1991; Professional Diploma in Computer Software Applications, Enugu State University of
Efficiency of the Nigerian Capital Market


Contact Information:

Sunday Eneojo Samuel and Richard Uzoefuna Oka, Department Of Accounting, Kogi State University, Anyigba, Nigeria. Tel: +234 8059281392; +234 7063049070 E-mail: aglowsun@yahoo.com, drruoka@yahoo.com.