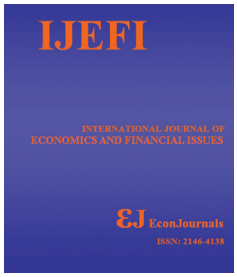

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Semi Strong Form Efficiency Test of the Nigerian Stock Market: Evidence from Event Study Analysis of Bonus Issues

Charles O. Manasseh[1]*, Chukwuka Kenneth Ozuzu[2], Jonathan E. Ogbuabor[3]

[1]Department of Economics, University of Nigeria Nsukka, Enugu State, South East Nigeria, [2]Department of Economics, University of Nigeria Nsukka, Enugu State, South East Nigeria, [3]Department of Economics, University of Nigeria Nsukka, Enugu State, South East Nigeria. *Email: charssille@gmail.com

ABSTRACT

This study tests the consistency of the Nigerian Stock Market with the efficient market hypothesis (EMH) in the semi-strong form using bonus issues as the information generating event. Using daily data, a total of 121 bonus issues were observed and examined for the period 2002-2006. The stocks which were tested were classified according to the size of their bonus issues and also according to the price of the stock to know the impact of information released on the price of different categories of stock. Using the event study methodology, the market and the market adjusted models as well as the vector auto regression models, the study discovered that information release impacts significantly only in the year 2002. Also, it reveals that small bonus issues responded speedily to bonus issues more than medium and large bonus issues. In addition, the test between penny stocks and blue chips shows that only penny stocks were significantly affected.

Keywords: Semi-strong Form, Efficiency, Stock Market, Event Study, Bonus Issues
JEL Classifications: G10, G11, G12, G14

1. INTRODUCTION

Resource mobilization for national development has over the years been the main interest of development economists. As such, the central point of savings and investment in economic growth has been given considerable attention in literature (Soyode, 1999; Samuel, 1996). To ensure sustainable development and growth, funds must be effectively mobilized and allocated to promote businesses. The smooth functioning of the financial system, facilitates economic growth because, it reduces costs and enterprise risks and promotes the production of goods and services as well as employment. As economies develop, more funds are needed to meet rapid expansion, and efficient stock market serves as a veritable tool in the mobilization and allocation of savings among competing uses which are critical to the growth of any economy (Alile, 1984). Hence, market efficiency is important to both investors and regulatory authorities.

The effectiveness of the market in playing the significant role of allocating fund depends on efficiency of the stock prices. As postulated by (Fama et al. 1969; Fama, 1970), it is impossible for an investor to beat the market because, stock market efficiency causes existing share prices to always incorporate and reflect all relevant information contained in bonus issues, dividend and stock splits announcement among others. According to the efficient market hypothesis (EMH), stocks always trade at their fair value on stock exchanges, making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices. As such, it would be impossible to outperform the overall market based on information linkage or through expert stock selection or market timing, and that the only way an investor can possibly obtain higher returns is by purchasing riskier investments. Therefore, the ability of the market to reflect all publicly available information instantaneously ensure effective allocation of capital to projects that yield the highest expected return with necessary adjustment for risk. Hence, efficient stock market provides no opportunities for investors or group of investors to engage in excess profit trading activities continuously (Arusha and Guneratne, 2005). More so, with efficient price system, an economy's savings and investment are allocated efficiently because, investors would wish to channel

their funds to stocks that are trading at the best optimal range considering its future prospects.

Be that as it may, there has been misconception on the relationship between event announcement (e.g., bonus issues) and stock prices movement amongst researchers. The extent to which stock prices incorporate this information depends not only on the efficiency level of the market but also the degree at which the information is understood by investors - bad or good news (Michelle and Shiguang, 2002; Nickolas et al., 2000, among others). If the information on bonus issues is not fully understood by investors and other market participants, share prices may not fully adjust to it (Oludoyi, 2001). Hence, even if the information in the market as regards to bonus issues announcement is fully understood by investors and market participants, they may not act promptly on the information, owing to institutional bottlenecks (e.g., insider trading due to information asymmetry) or interventions by capital market authorities. In this circumstance therefore, there is distinction between publicly available information and the information utilized by the market to determine security prices (Fama, 1976). The lack of an immediate response to the information contained in the bonus issues may lead to drift returns in the market and consequently contradict efficient market theory.

The efficiency of the Nigerian stock market has been seriously restrained by so many factors like ineptitude behavior of market actors, poor awareness, inadequate information or information asymmetry and poor protection of investor's property right, among others. As observed by Oludoyi (1998), the Nigeria stock market is illiquid because of the buy and hold attitude of Nigerian investors. This is probably because Nigerians are yet to know the inherent benefits of trading on shares. While examining the Nigerian stock market, Olowe (1996) reiterated that the problem affecting pricing efficiency includes inadequate information flows and poor understanding of financial information by local investors. Irrespective of the small size of the Nigerian stock market - measured in terms of number of listed securities and its major operators, the unethical attitudes of capital market participants in delaying investors' share certificates had further compounded the market performance, as investors will be handicapped if they want to sell their shares. Some stockbrokers are also known to trade on their client' funds even when an order had been placed for the purchase of a particular stock and at particular price. Also, the delay in the arrival of share certificates due to poor postal system which sometimes take up to 12 months or even get lost on transit; 5% ceiling north or south on the price of a stock on any trading day which limits the amount by which the price of a stock can change a day is also a greater challenge to the market efficiency.

Recently, efforts have been made by the regulatory authorities such as Security and Exchange Commission (SEC) and Nigerian Stock Exchange (NSE) to improve the system via the introduction of X-whistle, online trading, investors' protection fund, market surveillance and Alternative Securities Market, among others. These reforms aimed at putting the NSE at par with developed stock markets where stock dealers trade from the comfort of their offices and as well creating enabling business environment to increase the number of listed firms and dealings by maintaining Investors' Protection Fund in line with part XIV of the Investment and Securities Act 2007, which promulgated the compensation of investors with genuine claims of pecuniary loss against dealing member firms; revocation or cancellation of the registration of a dealing member firm; robust surveillance system in identifying and investigating potential market abuse that may violate NSE rules and securities laws such as insider trading, Market Manipulation and abuse, Pump and Dump, False press release and violations of rules governing members' on-Floor trading among others. However, in face of the problems highlighted, even in the presence of the possible reforms in the market, one may be constrained to ask whether the Nigerian stock market is efficient or not by investigating the impact of information release on stock pricing; stock market responds to bonus issues announcement and the duration taken by Nigeria's stock prices to reflect information – divided announcement.

According to Fama et al. (1969), efficient-market hypothesis is commonly stated in three forms - weak-form, semi-strong-form and strong-form efficiency. In weak-form efficiency, future prices cannot be predicted by analyzing prices from the past. Excess returns cannot be earned in the long run by using investment strategies based on historical share prices or other historical data. In semi-strong-form efficiency, it is implied that share prices adjust to publicly available new information very rapidly and in an unbiased fashion, such that no excess returns can be earned by trading on that information, which implies that neither fundamental analysis nor technical analysis techniques can reliably produce excess returns. In strong-form efficiency, share prices reflect all public and private information, and no one can earn excess returns. In view of the above form of market efficiency, the study assessed share prices behavior of NSE with respect to information like bonus issues announcement with particular interest in semi-strong test. This is because, almost all the reviewed works on efficiency test in Nigeria was in the weak form. Indeed, only Soyode (1991), Oludoyi (1998), Olowe (1996) and Olatundun (2003) tested Nigerian stock market for semi-strong form efficiency. Out of these works, only Oludoyi (1998) concluded that the Nigerian stock market was partially semi-strong form efficient. Considering the inconsistency in the findings and the fact that most of these studies were carried out as far as 2000, there is the need for further investigation on the efficiency of the Nigerian stock market in semi-strong form test vis-à-vis the influence of reforms that have taken place from 2000 to 2007. The study covers those equities that are quoted and listed on the floor of the NSE which have issued free shares to their shareholders between January 2002 and December 2007. Government bonds, industrial loan/corporate bonds, unlisted corporate loans and equities are not of interest to this study. The remainder of this paper proceeds as follows: Part two discusses the review of literature; part three discusses the research methodology. Evaluation of results is presented and discussed in part four while summary, recommendation and conclusion is presented in part five.

2. LITERATURE REVIEW

This section discussed the understanding of efficient market theory and empirical studies with emphasizes on works in semi-strong form tests.

2.1. Theoretical Review

The efficient markets theory is a proposition that the prices of stocks, bonds, and other securities fully reflect all available information at any point in time. This is the result of profit-maximizing investors conscientiously searching for information and using what they know, including their expectation about the future, when trading securities. Active trading changes prices until the risk-adjusted expected returns are equal for all securities. The theory postulated that further oscillation which may be as a result of events not known beforehand, are quickly built into prices. In an efficient market, investment capital is allocated to its most productive use. Market efficiency also implies that investors cannot "beat the market" or find securities that are mispriced such that their portfolios consistently perform better than the market. In a scholarly article by Fama (1970), market efficiency is defined in various degrees. It can be view according to how much information is captured in prices. He also stressed the importance of specifying in a model how information is reflected in asset prices in order to conduct a proper test of market efficiency. Fama argues, however, that it is difficult to determine whether an empirical result that appears to be inconsistent with efficiency is truly due to an inefficient market or the inadequacy of the asset pricing model.

Beyond the normal utility maximizing agents, efficient-market hypothesis requires that agents have rational expectations. EMH argued that when investors are faced with new information, some them may overreact while others under react. The theory assume investors' reactions to be random and follow a normal distribution pattern so that the net effect on market prices cannot be reliably exploited to make an abnormal profit, especially when considering transaction costs (including commissions and spreads). Thus, any one person can be wrong about the market - indeed, everyone can be - but the market as a whole is always right. However, Fama classified efficient-market hypothesis into; weak-form efficiency, semi-strong-form efficiency and strong-form efficiency, each of which has different implications for how markets work. According to Fama et al. (1969), in weak-form efficiency, future prices cannot be predicted by analyzing prices from the past. Excess returns cannot be earned in the long run by using investment strategies based on historical share prices or other historical data. In weak form efficient market, technical analysis techniques will not be enough to consistently produce excess returns, though some forms of fundamental analysis may still provide excess returns. Therefore, share prices exhibit no serial dependencies. This implies that future price movements are determined entirely by information not contained in the price series. Hence, prices must follow a random walk. The EMH does not require that prices remain at or near equilibrium, but only that market participants cannot consistent and systematically outperform the market. However, while EMH predicts that all price movement (in the absence of change in fundamental information) is random (i.e., non-trending). In semi-strong-form efficiency, it is implied that share prices adjust to publicly available information very rapidly and in an unbiased fashion, such that no excess returns can be earned by trading on the information. Semi-strong-form efficiency implies that neither fundamental analysis nor technical analysis techniques will be able to reliably produce excess returns. In addition, in strong-form efficiency, share prices reflect all information - public and private, and no one can earn excess returns. If there are legal barriers to private information becoming public, as with insider trading laws, strong-form efficiency is impossible, except in the case where the laws are universally ignored.

Nevertheless, in the bid to show the relationship between bonus issues and shareholders wealth having in mind of Fama's postulates, Miller and Modigliani (1961) demonstrated that bonus issues do not alter shareholder wealth. They argued that if a company plans to finance a bonus issue from retained earnings, it makes a book entry to allocate retained earnings into paid-up capital in the shareholders equity section of the company's balance sheet. Alternatively, a company that decides to realize a bonus issue by using accumulated reserves adjusts the accumulated capital reserves into paid up capital. The company does not receive any cash and its financial position remains the same. The modification triggered by bonus issue is that the number of outstanding shares is adjusted by the bonus issue ratio; therefore, the price of the shares declines according to the same bonus issue ratio. The total market value of the shares or the value of the shares that are held by each investor should remain unchanged. Sloan (1987) provided Australian evidence that bonus issue do not affect shareholders' wealth.

Yet, much academic research in the United States documents positive stock price responses to stock dividend (bonus issue) e.g., Grinblatt et al. (1984). Moreover, Asquith et al. (1989) document abnormally positive earnings performance before bonus issues. McNicholas and Dravid (1990) found a positive relationship between the stock dividend factor and the information-related abnormal return. So, in practice, there may be an increase in share price following the release of information on bonus issue. Such an increase can occur because the announcement of a bonus issue may have beneficial information content (Peterson, 1971). Furthermore, predominant explanations for stock dividends are based on the information-signaling hypothesis and the "optimal" trading price-range hypothesis. Both hypotheses predict a positive impact of bonus issues on firm value and can explain why a firm may undertake such transactions given non-zero transaction costs. Given information asymmetry between managers and investors, stock dividends are signals that convey management's positive private information about the firm's future prospects. Companies would transfer accumulated capital to common stock (and issue free shares) only if they expect future earnings to increase and, thus, future accumulated capital to replace capitalized accumulated capital. Investors therefore may interpret the stock dividend as good news. However, shareholders away believe that after the bonus issue, companies usually increase total dividend payout. This in turn, indicates the confidence of management in the company's future. Consequently, increase in response to information on dividend or bonus issues, may increase share prices and affect shareholders wealth. McNicholas and Dravid (1990) provided evidence that is consistent with a signaling explanation for stock dividends. Thus, it is argued that high trading prices are inaccessible to small investors who may be unable to buy shares in round lots. Therefore, to achieve higher liquidity, many firms aim at lower trading prices. Conversely, larger institutional investors prefer trading shares at higher prices because of the

fixed transaction cost component. These influences suggest the existence of an optimal trading price range for firms to improve marketability of their stock. Stock dividends, like stock splits, can therefore be a tool towards attaining such an optimal trading price for firm shares. Lakonishok and Lev (1987), among others, provide empirical evidence that is consistent with firms employing scrip issues and stock splits in order to shift share prices to an optimal trading level.

2.2. Empirical Review

Using two tests to investigate the random walk hypothesis on 543 stocks registered on the London stock exchange, Girmes and Benjamin (1975) based their numerical analysis on observations of daily closing prices of stocks and shares for a period of about six hundred (600) days from 1968 to 1971. From the findings of the study, they concluded that there were fairly strong evidences that the larger companies have more random share price movements. Out of the 543 stocks covered in the study, about 30% were noticed to behave like a genuine random walk while 20% deviated significantly. Chang et al. (2002) examined the Hong Kong stock market for the period 1993-1997 with regards to insider trading using event study methodology and employing the capital asset pricing model (CAPM). They concluded that insiders were making significant abnormal returns by trading on their companies' shares. This is an indication that the Hong Kong stock market was strong form inefficient. In the same vein, Jeong (2004) investigated the efficiency of the Korean capital market with respect to fiscal and monetary policies. He applied full-information-maximum-likelihood technique to a set of monthly data over the period 1982 to 2000. He found that the Korean stock market was efficient with respect to monetary policy with inconclusive results on fiscal policy. In course of the study, he also discovered that investors reacted to the macroeconomic shocks more sensitively after the foreign currency crisis in Korea.

In addition, in a study on stock market efficiency in relation to the capital inflows and exchange rate movements in India, applying unit root tests, co-integration, long-run Granger non causality test and monthly data for the period 1993-2004, Basabi and Jaydeep (2006) observed that; (i) There was a bi-directional causality that exists between stock return and FDI, (ii) no causal relationship existed between exchange rate and net investments by foreign institutional investors. Nickolas et al. (2000) investigated stock market reaction to announcements of cash dividend increases and bonus issues in the emerging stock market of Cyprus, the study concluded that the Cyprus stock market was not semi-strong form efficient. Michelle and Shiguang (2002) used the market-adjusted model to investigate stock price reaction to the announcement of bonus issues for the Chinese stock market using daily data. Classifying the Chinese stock market into A shares market and B shares market for Chinese citizens and foreigners respectively, they found that Chinese A shares market was semi- strong form efficient while the B market was not. In addition to analyzing the factors affecting the development of an emerging capital market, Osei (1998) tested for weak form efficiency in Ghana using random walk test and the law of one price. The study established that Ghana's stock market was weak form inefficient. According to him, if Ghana stock market were efficient, the price of Ashanti Gold Fields on the Ghana stock exchange would have been the same with that on the London stock exchange.

In a study by Kross and Schroeder (1990), they investigated whether the stock returns of small firms responded differently to fourth quarter earnings announcement than they did to inter earnings announcements. They studied 296 firms listed on the NYSE and the ASE for the period 1977-1980. Kross and Schroeder set out primarily to establish whether the magnitude of stock return response to earnings announcements across all quarters was the same for small firms. This is irrespective of whether annual or inter earnings are involved. They found that although there was an apparently fourth quarter seasonality for small firms in their earnings stock relationship, there was little evidence of any seasonality for large firms. This result suggests the efficiency of the market with regard to the adjustment of share prices of large firms to quarterly and annual earnings announcements. However, the same cannot be said about the adjustment of share prices of smaller firms to this information set. French (1980) studied stock returns and the weekend effect in the United States. The paper examined two alternative models of the process generating stock returns. Under the calendar time hypothesis, the study found that the process operates continuously and the expected return for Monday is three times the expected return for other days of the week. Under the trading time hypothesis, returns are generated only during active trading and the expected return is the same for each day of the week. During most of the period studied, from 1953 through 1977, the daily returns to the Standard and Poor's composite portfolio are inconsistent with both models. Although the average return for the other 4 days of the week was positive, the average for Monday was significantly negative during each of 5-year sub periods.

Harris (1986) did a transaction data study of weekly and intraday patterns in stock returns in the London stock exchange. He examined weekly and intraday patterns in common stock prices using transaction data. For large firms, negative Monday close-to-close returns accrue between the Friday close and the Monday open; for smaller firms they accrue primarily during the Monday trading day. For all firms, significant weekday differences in intraday returns accrue during the first 45 min after the market opens. On Monday mornings, prices drop, while on the other weekday mornings, they rise. Otherwise the pattern of intraday returns is similar on all weekdays. Most notable is an increase in prices on the last trade of the day, thereby supporting day of the week (Monday) effect. Rathinasamy and Mantripragada (1996) studied the January and small firm size effect in India using risk adjusted Treynor and Sharpe portfolio performance measures for the period 1963-1982. The study found that while the return increases along with risk for small firms in January, the extra return is more than what is warranted by the extra risk. There is an abnormal return component to the January small firm return even after adjusting for the added risk in January. Balaban (1995) also studied the month of the year (January) effect in the emerging stock market of Turkey for the period 1988-1993 employing percentage returns on the Istanbul securities exchange composite index. The study reported large returns during 3 months January, June and September with January having the highest daily mean return of

one percent reflecting a compounded monthly return of 22% which is about four times greater than global return if all months are considered. He also observed that compounded returns in June and September were half of that in January. The researcher however attributed the anomaly to asymmetric information among traders. Wong (2002), using sample of 542 corporate news announcements from January 1994 through December 2000 of Hong Kong and China affiliated firms that are listed on the stock exchange of Hong Kong, investigates the abnormal price and volume performances surrounding the corporate news announcements. Using data from U.S. stocks as a benchmark for a comparative analysis of the relative market efficiencies and the event study approach, she found that there was very little unusual price and volume behavior for both Hong Kong and U.S. stocks. The study therefore concluded that there exists however strong evidence that points towards suspicious insider trading activities. This however means that the Hong Kong stock market is strong form inefficient.

Samuels and Yacout (1981) tested weak form efficiency of the Nigerian capital market for the period 1977-1979 covering 21 companies quoted on the exchange and employing standard least square technique as well as autoregressive analysis for the error term. They found that Nigerian share prices follow a random walk. They however implicitly attributed the efficiency to price administration by the NSE. In like manner, Ayadi (1984) investigates Monday closing prices of thirty firms quoted on the NSE between 1977 and 1980 using weekly data. He employed non-parametric tests to determine if the Nigerian stock market is weak form efficient. He found that share prices in Nigeria follow a random walk implying that the market was weak form efficient. Ekechi (1989) examined most actively traded firms in the Nigerian stock market between 1980 and 1986. He employed serial correlation and runs tests techniques as well as the log difference of prices. With regard to the latter, he computed the mean standard deviations of the empirical distribution of log price differences. He found that the three methods he used to test weak form market efficiency provided evidence that the Nigerian stock market was weak form inefficient conflicting studies by Samuels and Yacout (1981) and Ayadi (1984).

Also Asekome (1991) tested the semi-strong form efficiency of the Nigerian capital market using 41 stocks selected from January to December 1990. Adopting autocorrelation tests techniques, he found that stock prices in Nigeria follow a random walk. As such, he concluded that the market was weak form efficient. More so, Omole (1997) examined the impact of financial liberalization on the efficiency of the Nigerian capital market at the weak form. He studied daily, weekly and monthly prices of 25 firms in the market. He studied the behavior of share prices of the sampled firms before and after financial liberalization, using non-parametric and parametric tests. Omole found that the Nigerian capital market was largely efficient at the weak form. Olowe (1999) examined weak form efficiency in the Nigerian capital market using monthly stock returns data during the period 1981-1992. Employing correlation analysis in the study, he found that stock price movements in Nigeria are serially uncorrelated indicating that Nigerian stock market was weak form efficient. Olatundun (2003) studied efficiency of Nigerian stock market in the weak form. She used daily data that covered fifty companies that are quoted in the Nigerian stock market for the period 1992 to 1993. Serial correlation tests and sign tests were put to use. The result of the runs test indicated that the price series of the majority of the companies were not random. Results that were inconsistent with the randomness hypothesis were observed mainly in the runs test. According to her that was not enough to conclude that the market was inefficient.

In a semi-strong form efficiency study carried by Yohannes (1994) in relation with the Nigerian capital market by examining the reaction of share prices to several macroeconomic variables such as money supply, real economic activity, inflation, interest rates, foreign exchange rate and crude oil prices, using Granger and Morgenstern (1963) and Haugh (1976) causality approaches, he found mixed evidence of efficiency of the market in the semi strong form. Owing to the nature of the methods used by Johannes, it is not possible to know how efficient or inefficient the market is, and for how long. His approaches amount to a one-shot-affair, whereby causality runs from the dependent variable to any of the independent variables and vice versa. It is not possible through Johannes' methodology for investors to know whether or not abnormal profits can be earned and for how long this can be done. In the bid to add to already existing knowledge on semi strong form efficiency test, Olowe (1996) investigated the Nigeria stock market using "stock splits" as the information-generating event. The methodology employed in the study is the residual analysis, incorporating the, market deducted returns model and the mean adjusted returns model to test the semi-strong form efficiency of the Nigerian stock market. The results showed that the Nigerian stock market was inefficient in the semi-strong form.

In addition, Oludoyi (1998, 2001) tested efficiency in the Nigerian stock market in the semi-strong form using earnings announcements as the relevant information set. He made use of the market model and weekly data to study the behavior of stock prices around the event as well as to find out if the speed varies when compared with any of the earnings expectation models. The study found that the Nigerian stock market was partially efficient in the semi-strong form using sub-martingales earning expectation model, and inefficient with the martingales and BOX Jerkins models. However, the use of weekly rather than daily data by Oludoyi makes it difficult for the end user of the work to know the actual day of the week on which the announcement was made. Following the findings of Oludoyi study in 2001, Olatundun (2003) investigated the semi strong form efficiency in the Nigerian stock market with respect to dividend announcements in price adjustments. She made use of daily data, covering 595 cases of annual dividend announcements during this period and employing the market model. The results revealed that there were excess returns and the cumulative excess returns were significant for 30 days before and until 25 days after dividend announcements. She therefore concluded that Nigeria stock market was not efficient in the semi strong form. From the reviewed empirical studies in Nigeria, apart from Soyode (1991), Oludoyi (1998), Olowe (1996) and Olatundun (2003), all the reviewed works on efficiency test in Nigeria were in the weak form. Amongst these studies, only Oludoyi (1998) concluded that the Nigerian stock

market was partially semi-strong form efficient while Olatundun (2003) remains inconclusive.

Furthermore, considering the inconsistency in the findings of previous studies and the fact that most of these studies were carried out as far back as 2000, there is the need for more investigation on the efficiency of the Nigerian stock market in semi-strong form test vis-à-vis the influence of reforms that have taken place from 2000 to 2007. Unlike most studies in semi-strong form test in Nigeria, this study makes use of daily data instead of weekly or monthly data commonly used in previous studies. The essence of the use of daily data lies on the evidence that the mean abnormal return in a cross section of securities converge to normality as the number of securities in the sample increases. In addition, Brown and Warner (1985) argued that standard parametric tests are well specified with daily abnormal returns computed using either the market model or the market adjusted model and as expected, the power of each test is greater with daily returns than with monthly returns. Also, the use of daily data in event studies gives the precise information of the actual day of the week on which the event takes place. Hence, due to scanty nature of studies in semi strong form efficiency tests and the inconsistency in the findings, we concur with Omole (1997) who argued that information generating event on stock split alone in the semi-strong form of efficiency test by Olowe (1996) is not enough to conclude that the market is efficient as suggested by Olowe study though partially. Therefore, there is the need for comparable evidence from other information generating sets like dividend announcements, earnings announcements and bonus issues etc. Given the fact that many studies in semi strong form efficiency in Nigeria used earning, stock split and dividend announcement as the information set, bonus issues is considered the relevant information set for this study, hence it occur at intervals in Nigeria and could have influence the behavior of share prices. Thus, it is therefore pertinent to investigate the reaction of share prices in relation to bonus issues announcement before, during and after the event day.

3. RESEARCH METHODOLOGY

The event study analysis is used to evaluate the behavior of share prices to publicly available information. It is typically used for different reasons. Firstly, it is used for semi-strong form efficiency test on the assumption that the postulates of market efficiency hypothesis holds. Secondly, it is used as a tool for examining the impact of some event on the wealth of firms' shareholders (Michelle and Shiguang, 2002; Khotari and Warner, 2006). Thirdly, it is used for strong form efficiency test (Wong, 2002). This method was employed as early as 1933 by Dolley where he examines the price effects of stock splits, investigating nominal price changes at the time of the stock split were he tested the effect of unexpected dividend changes on the changes of stock prices and is taken to be a major breakthrough in testing market efficiency. Over the past half century, event studies have been employed in much research and their sophistication has been greatly improved by authors such as Fama et al. (1969) and Brown and Wamer (1980, 1985).

To construct an event study, the event, event window, estimation window, and investigation window should be determined. The event in this study is bonus issues announcement by companies while the event window is the period in which an event occurs. However, an event window is the period when event is publicly announced. To factor in the situation where event is reflected on the next day's due to time difference news media, the event window is expanded to three Thus, the event window in this study is combined with the day before the announcement (−1); day of the announcement (0) and the days after the announcements (+1) which is numerically expressed as −1, 0, +1. The estimation window in this study is defined from day −150 to the day −21 before the announcement date 0 while the investigation window is an extension of the event window. That is, day −20 through day +20. In addition, in an event study, both the abnormal returns occurring during the time of the event window and the abnormal returns occurring in the periods around the event window must be investigated. The abnormal returns occurring in an interval before the event window reveal whether the market has anticipated the information content of the event (or there has been trading on inside information). The abnormal returns in an interval after the event window can tell us whether the market overreacts or under react to the announcement of the event.

3.1. Data Selection Criteria and Sources

Two sets of data are collected for the study. The first is the prices of shares listed in the NSE and the second is the event dates. That is the date bonus issues proposals were made public. The study covered bonus issue publications made in the period 2002-2006. The study also extended its investigation into events in second tiers market of the NSE. During the study's period, a total of 121 bonus issues announcements were observed which we decomposed into small bonus, medium bonus and large bonus. In this study, small bonus is defined as 1:8 and above which consists of 48 events; medium bonus ranges from 1:4 to 1:7 consisting of 31 events while large bonus is made up of 42 events with the bonus ratio of 1:3 above. The study also classified the stocks into penny and blue chip stocks. Data for the study is obtained mainly from the NSE fact book for various years. Hence, the information on the date of bonus issues announcement (i.e., event date) is generated from NSE reports (various weeks, months and years) and the daily official list (various weeks, months and years).

3.2. Models for the Study

The adopted models for this study are the Eugene Fama's market model and market adjusted model. The market model is the simplest of the models used in estimating security returns. It simply assumes that a firm's returns generating process is linearly related to the market portfolio. It also assumes that both the slope and intercept of the model are constant overtime, when the model is used on a particular data. The model has been designated as the best in the event study analysis as against Arbitrage Pricing model and CAPM. In addition, are free from joint hypothesis problem (Fama, 1991, Copeland and Wetson, 1983) in (Oludoyi 1998). Studies in which the market model has been used include Ball and Brown (1968), Fama et al. (1969), Scholes and Williams (1977): Brown (1978), Dimson (1979), Collins and Dent (1984); Brown et al. (1988), Haw and Ro (1990); Kross and Schoeder

(1990), Barthov (1992), Husnan and Theobald (1993), Oludoyi (1998), Michelle and Shiguang (2002), Olatundun (2003) etc. The market-adjusted model is an offshoot of the market model. It has been used by researchers including (Michelle and Shiguang, 2002, Olatundun, 2003) who usually combined it with the market model. The market-adjusted model assumes that the normal returns are equal across all stocks at time t, but not necessarily constant for a given security at different times. Thus, the market-adjusted model is specified as;

$$r_{i,t}=r_{m,t}+\varepsilon_{i,t} \quad (1)$$

Where,
$r_{i,t}$ is the return of stock i at day t; $r_{m,t}$ is the market return of stock i at time t, as calculated from a market portfolio or market index; and $\varepsilon_{i,t}$ is the abnormal return of stock i at day t. Thus, the market-adjusted model assumes that the normal returns are equal across all stocks at time t, but not necessarily constant for a given security at different times. The abnormal return on any stock i is determined by the difference between its return and that on the market portfolio simultaneously. Hence

$$\varepsilon_{i,t}=r_{m,t}-r_{m,t} \quad (2)$$

The market model is specified thus:

$$t_{i,t}=\alpha_i+\beta_i r_{m,t}+\varepsilon_{i,t} \quad (3)$$

Where,
$r_{i,t}$ and $r_{m,t}$ are as earlier defined. α = Intercept term; β = Slope of the regression, which is the beta or systematic risk of shares of firm i. Thus, the models for the study as deducted from equation (3) above are as stated below:

Model 1:

This model is used to estimates the impact of information release on the behaviour of stock prices.

$$Yr=\beta_0+\beta_1 Range+\mu_t \quad (4)$$

Where,
YR = YR2002, YR2003, YR2004, YR2005 and YR2006; Range = time of information release.

$$Xb=\beta_0+\beta_1 Range+\mu_1 \quad (5)$$

Where,
Xb = Small bonus, medium bonus, and large bonus.

$$Pb=\beta_0+\beta_1 Range+\mu_1 \quad (6)$$

Where;
Pb = Penny stocks, and blue chip stocks.

Model 2:

Vector auto regression (VAR) is an econometric model used to capture the evolution and the interdependencies between multiple time series, generalizing the univariate AR models. All the variables in a VAR are treated symmetrically by including for each variable an equation explaining its evolution based on its own lags and the lags of all the other variables in the model. Based on this feature, Sims advocates the use of VAR models as a theory-free method to estimate economic relationships, thus being an alternative to the "incredible identification restrictions" in structural Vector models (Sims, 1980). This model was used to examine whether variations in information release precedes the variations in Nigerian stock market.

$$Bond=\beta_0+\beta_1 Bonds_{t-1}+\beta_2 Range_{t-1}+\beta_2 Range_{t-2}+\mu_t \quad (7)$$

$$Range=\beta_0+\beta_1 Range_{t-1}+\beta_2 Bonds_{t-1}+\beta_2 Bond_{t-2}+\mu_t \quad (8)$$

Where,
Bond; is the different bonds categories.

To examined how different forms of bonds in the Nigerian stock market adjust to innovation in information release. The impulse responses graph from the above VAR model was used for the different forms of stocks. The analysis is carried out with the aid of E-views. The result emanating from the models was evaluated using t-statistic as stated below:

H_o: $\beta_i=0$ (i.e., coefficient is equal to zero); α=5%

Decision rule: Reject H_o if/t_{cal}/>/t_{tab}/; accept if otherwise.

4. PRESENTATION AND EVALUATION OF RESULTS

In this section, we presented summary of empirical results on both the impact of information release on stock price behaviour; information release on small, medium and large bonus issues; and information release on penny and blue chips stocks among others.

4.1. Information Release and Behaviour of Stock Prices

The results presented on Table 1 shows the summary of the impact of information release on the behaviour of Nigerian stock prices across different years.

The result above shows that none of the coefficients is statistically significant at 5% significant level apart from year 2002 (YR02). Incidentally, the coefficient of year 2002 is positive, suggesting that as the level of information release increases, the price of the stock increases. For instance, the result reveals that one unit increase in the level of information release; ceteris-paribus, led to approximately 0.0044 increase in the stock price in the YR02. However, it is worth noting that although information release has no significant impact in other years, it shows positive association in all of them apart from the stock price for YR03 where it is negatively related. Therefore, in general, we reject the null hypothesis and conclude that the level of information release affected the stock price for YR02.

Table 1: Impact of information release across different years

Variable	YR02	YR03	YR04	YR05	YR06
Range coefficient	0.0,04,384	−0.0,00,208	0.0,06,572	4.39E-05	0.0,01,025
t-statistic	5.0,89,595*	−0.1,05,510	1.2,31,460	0.0,97,219	0.3,42,751
t-tab	2.021	2.021	2.021	2.021	2.021
R^2	0.3,99,112	0.0,00,285	0.0,37,429	0.0,00,242	0.0,03,003
Durbin-Watson stat	0.2,12,029	0.1,74,966	0.1,16,064	0.1,74,214	0.1,01,662

*Indicates significance at 5%

Table 2: Impact of information release across small, medium and large bonus

Variable	SB	MB	LB
Range coefficient	0.0,14,459	0.0,03,434	−0.0,06,076
t-statistic	9.4,36,035*	0.5,31,434	−1.8,22,518
t-tab	2.021	2.021	2.021
R^2	0.6,95,405	0.0,07,190	0.0,78,484
Durbin-Watson stat	0.3,05,339	0.0,80,331	0.1,53,123

SB: Small bond, MB: Medium bond, LB: Large bond. *Indicates significance at 5%

Table 3: Impact of information release between Penny and blue chips

Variable	Penny	Blue Chips
Range coefficient	0.0,02,096	0.0,09,895
t-statistic	6.713757*	0.943790
t-tab	2.021	2.021
R^2	0.536126	0.022330
Durbin-Watson stat	0.119616	0.072851

*Indicates significance at 5%

4.2. Information Release across Small, Medium and Large Bonus

Table 2 shows the comparison of the impact of information release on small, medium and large bonus issues.

The results on Table 2 show that none of the coefficients is statistically significant at 5% significant level apart from that of small bonds. The regression result shows that the coefficient of small bond is positive. This implies that as the level of information release increase the price of the small bonds increases. For instance, the result reveals that one unit increase in the level of information release leads to approximately 0.015 increase in the prices of small bonus ceteriparibus. On the other hand, it is observed that information release has no significant impact on medium and large bonus. Though, level of information released is positively associated to the former, while negatively associated with later. Therefore, in general, we reject the null hypothesis and conclude that the level of information release affected the price of small bonus stocks.

4.3. Effect of Information Release on Penny and Blue Chips

Table 3 shows the results on the impact of information release on penny and blue chips stocks/bond.

The Table 3 examined the effect of information release on penny and blue chips. The result shows that while the level of information release affected the price of penny stocks significantly; the price of blue chips stocks is not affected. However, the level of information release was found to have positive relationship with both penny stocks and blue chip stocks in terms of their pricing. From the regression result, we infer that a unit increase in the level of information release, leads to about 0.0021 increases in the price of penny stocks. Therefore, in general, we reject the null hypothesis and conclude that the level of information release affected the price of penny stocks.

4.4. Variation in Information Release and Nigerian Stock Market across Different Yeas

The study examined if variation in information release precedes variation in Nigerian stock market. To achieve this, information release represented with range was used to conduct VAR analyses. The results are shown on Table 4.

It is important to note that the coefficient of each year (YR) is statistically zero when the value of t-calculated falls within the acceptance region given the theoretical t-statistic. The theoretical t-statistic value at 5% with degree of freedom of 35 from statistical table is 2.0315. Comparing the t-statistic of coefficient of each variable (YR02, YR03, YR04, YR05 and YR06) with the theoretical t-statistic from statistical table, it could be seen from the result in Table 4 shows that only the coefficient of YR04 is significant at 5% level of significance vis-à-vis lag 1 of range. We, therefore, reject the second null hypothesis concerning YR04 and conclude that variation in information release preceded the variation in the price of stock in YR04. In other words, the Nigerian stock market in YR04 responded to information released in connection to bonus issues. However, such was not the case in years such as YR02, YR03, YR04, YR05 and YR06.

4.5. Variation in Information Release and Small, Medium and Large Bonus

The results on Table 5 show the variation in information release precedes small, medium and large bonus. Information release represented with range was used to conduct VAR analyses.

The theoretical t-statistic value at 5% with degree of freedom of 35 from statistical table is 2.021. Comparing the t-statistic of coefficient of each variable (small, medium, and large bonus) with the theoretical t-statistic from statistical table, it could be seen from the result in Table 5 that only the coefficient of medium bonus is significant at 5% level of significance vis-à-vis lag 1 of range. We, therefore, reject the second null hypothesis concerning price of stocks that issued medium bonus and conclude that variation in information release preceded the variation in the price of medium bonus issues. In other words, the medium bonus in Nigerian stock market responds to information released on bonus issues. However, such is not the case in small and large bonus.

Table 4: Impact of information release across different years

Information	RANGE1	YR02	YR03	YR04	YR05	YR06
RANGE1(−1)	1.1,25,235	0.0,00,623	0.0,04,630	0.0,31,970	0.0,01,091	−0.0,00,279
	[0.19328]	[0.00166]	[0.00517]	[0.01260]	[0.00128]	[0.00367]
	(5.82169)	(0.37440)	(0.89581)	(2.53753*)	(0.84895)	(−0.07592)
RANGE1(−2)	−0.2,21,833	0.0,01,363	−0.0,03,292	−0.0,20,896	−0.0,01,139	−0.0,01,894
	[0.18779]	[0.00162]	[(0.00502]	[0.01224]	[0.00125]	[0.00357]
	(−1.18125)	(0.84329)	(−0.65563)	(−1.70701)	(−0.91227)	(−0.53111)

*Indicates significance at 5%. (.), denotes the t-statistics value while [.] is the standard error. H_o: β_i=0; i=1 to 5; α=5%. Decision Rule: Reject H_o if/t_{cal}/>/t_{tab}/and accept if otherwise

Table 5: Information release among Small, Medium and Large Bonus

Information	RANGE1	SB	MB	LB
RANGE1(−1)	1.3,46,560	−0.0,04,948	0.0,23,973	−0.0,07,085
	[0.15643]	[0.00378]	[0.00950]	[0.00662]
	(8.60816)	(−1.31043)	(2.52308*)	(−1.06961)
RANGE1(−2)	−0.5,89,077	0.0,02,310	−0.0,11,168	0.0,02,211
	[(0.15498]	[0.00374]	[0.00941]	[0.00656]
	(−3.80092)	(0.61751)	(−1.18633)	(0.33685)

*Indicates significance at 5%. (.), denotes the t-statistics value while [.] is the standard error. The Null hypothesis that tested for the significance of Small, Medium and Large Bonus is that the coefficient of each of them is zero such that; β_i=0, where i=1 to 3. Coefficient of each variable is statistically zero when the value of t-calculated falls within the acceptance region given the theoretical t-statistic

Table 6: Information release between Penny and Blue Chips Stocks

Information	RANGE1	PENNY	BCHIP
RANGE1(−1)	1.5,05,732	0.0,01,360	0.0,22,312
	[0.14279]	[0.00038]	[0.01154]
	(10.5450)	(3.59906*)	(1.93272)
RANGE1(−2)	−0.6,32,045	−0.0,00,786	−0.0,23,430
	[0.16144]	[0.00043]	[0.01305]
	(−3.91513)	(−1.83994)	(−1.79523)

*Indicates significance at 5%. (.), denotes t-statistics value while [.] is the standard error. H_0: β_i=0; i=1 to 5, where i=1 to 2; α=5%; Decision Rule: Reject H_0 if/t_{cal}/>/t_{tab}/; accept if otherwise

4.6. Variation in Information Release and; Penny and Blue Chips Stocks

The results on Table 6 show the summary of the influence of variation in information release on penny and blue chips stocks. Range represented Information release which is used to conduct VAR analyses.

The theoretical t-statistic value at 5% with degree of freedom of 39 from statistical table is 2.021. Comparing the t-statistic of coefficient of each variable (penny and blue chips stocks) with the theoretical t-statistic from statistical table, it could be seen from the results above that only the coefficient of penny stocks is significant at 5% level of significance vis-à-vis lag 1 of range. We, therefore, reject the second null hypothesis concerning penny stocks price and conclude that variation in information release preceded the variation in the price of penny stock. In other words, the penny stocks in Nigerian stock market responds to information released about bonds unlike the price of blue chip bonds.

4.7. Nigerian Stock Market and Adjustment to Innovation in Information Release

Using equations 7 and 8, we examine the speed of adjustment of Nigerian stock market given the release of bonus issues information as shown in Graphs 1, 2 and 3 below. Invariably, we examined how different forms of stocks in the Nigerian stock market adjust to innovation in information release. To achieve this, impulse responses of one standard deviation innovation in information release vis-à-vis each of the different forms of stocks was carried out considering three different innovations - five (5) periods in each case (see Figures 1, 2 and 3 below). The three different categories of stocks across different years (i.e., 2002 to 2006) are examined as indicated in the graphs.

From the above graphs, it is observed that the stock price in year 2002 (YR02) was the fastest to respond to innovation in information release, followed by the stock price in year *2006* (*YR06*). as indicated in graph 1(a) and 1(e) respectively. Also, graph 1(b) and 1(d) stock price do not respond to innovation owing to information release in 2003 (YR03) and 2005 (YR05), though it was found to adjust to the information release after six and four periods respectively. In like manner, we observed that stock price in year 2002 (YR02) and 2004 (YR04) as shown in graph 2(a) and 2(c) respond faster to innovation in information release between first and second periods before declining after periods six and five respectively. Contrary to this findings, we also observed that stock price did not respond to information release not until after periods six in graph 2(b) of 2003 (YR03) and graph 2(d) of 2005 (YR05). However, by the third innovation in graph 3(a), 3(c) and 3(e) of 2002 (YR02), 2004 (YR04) and 2006 (YR06) respectively, all stocks adjusted to information release especially in first two periods except graph 3(b) in 2003 (YR03), which adjusted to information release after period six. This can be seen in Graph 3 where all stocks passed the base line. Therefore, we reject the third hypothesis and draw conclusion that Nigerian stock prices in the YR02 and YR06 responded to information contained in bonus issues quickly.

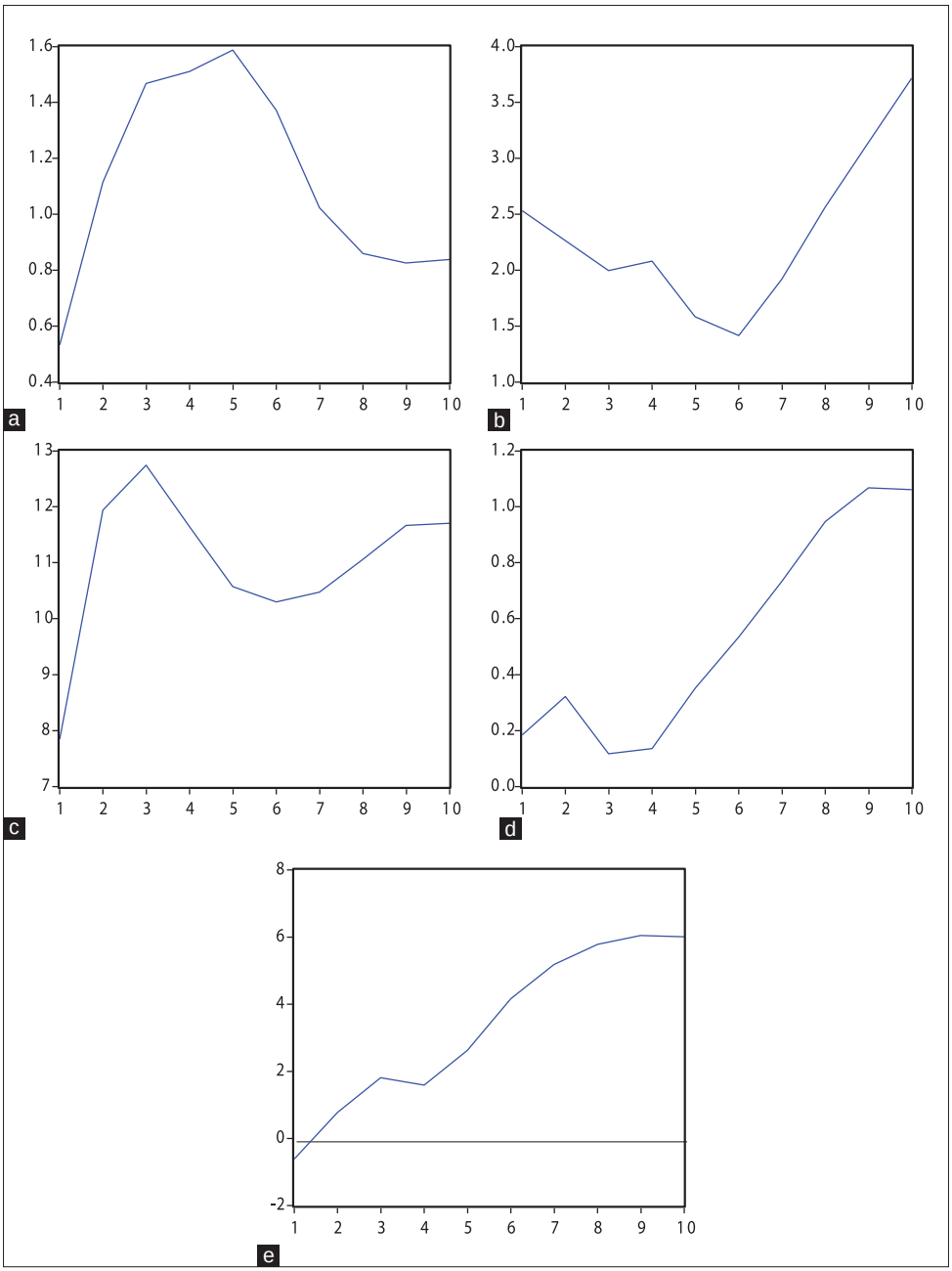
4.8. Comparison among Small, Medium and Large Bonus Issues

The above Graphs 4-6 shows the stock price for small, medium and large bonus issues did not respond to information release up to the second innovation. It was only the price of small bonus that adjusts significantly by the third innovation. Therefore, we accept the hypothesis and conclude that both medium and large bonus do not respond to information release vis-à-vis bonus issues announcement. However, in the case of small bonds, slow response was observed.

4.9. Comparison between Penny and Blue Chips

The above Graphs 7-9 shows the stock price for penny and blue chip stocks responded slowly to information release. As observed

Graph 1: First innovation, (a) Response of YR02 to one standard deviation RANGE 1 innovation, (b) Response of YR03 to one standard deviation RANGE 1 innovation, (c) Response of YR04 to one standard deviation RANGE 1 innovation, (d) Response of YR05 to one standard deviation RANGE 1 innovation, (e) Response of YR06 to one standard deviation RANGE 1 innovation

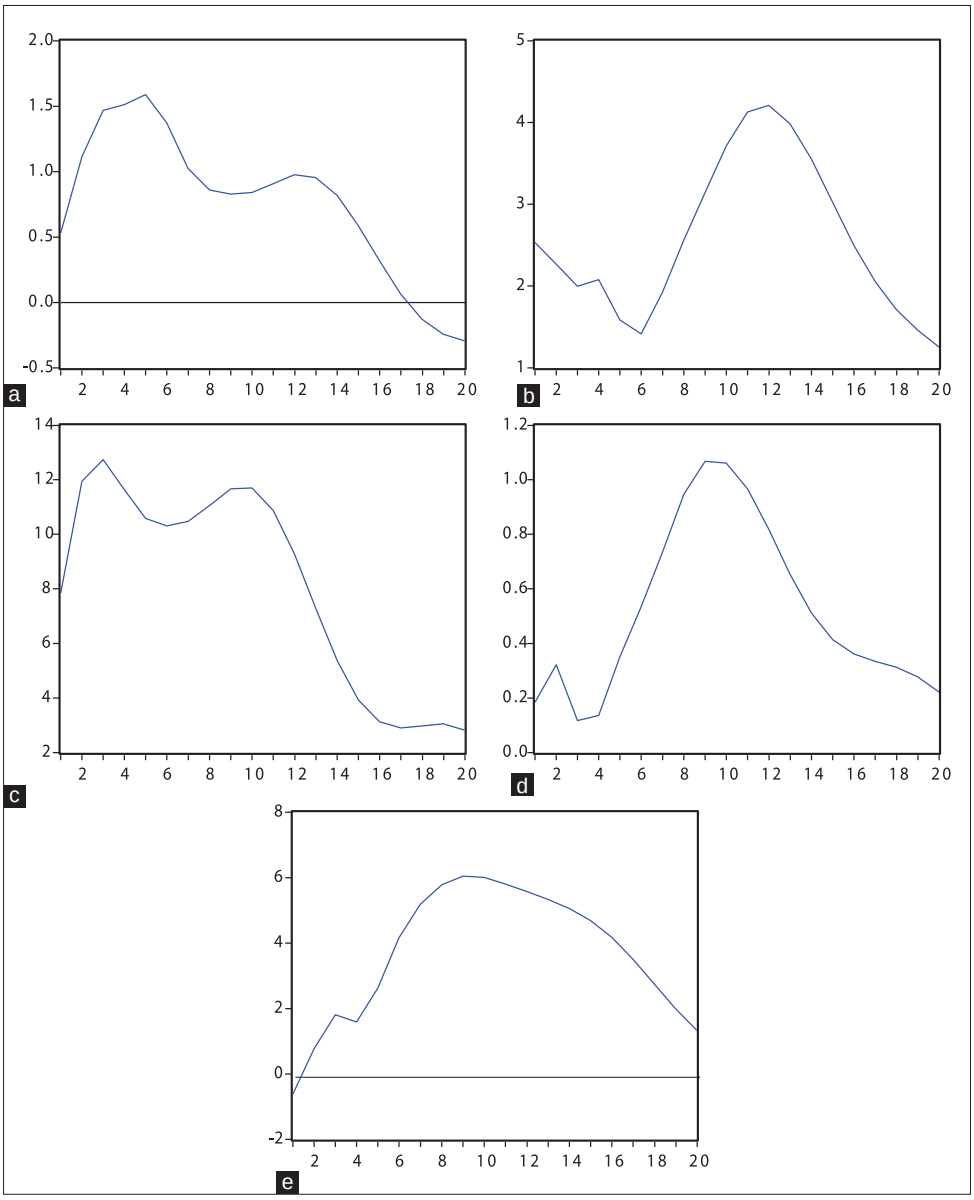


from the introduction of the third innovation, only the price of penny stocks crossed the base line. Hence, blue chip stock prices adjusted to bonus issues announcement insignificantly. Therefore, we reject the hypothesis concerning penny stocks and then conclusion that the price of penny stocks response to information release. However, we accept the hypothesis in the case of blue chip stocks, since there was no significantly respond to information release vis-à-vis bonus issues.

5. SUMMARY AND RECOMMENDATIONS

This work examined semi strong form efficiency test of the Nigerian Stock Market in relation to bonus issues announcement. Specifically, the study investigates the speed at which Nigerian stock market responds to bonus issues announcement. This is to ascertain if stock prices of the NSE reflect quickly and instantaneously to publicly available information such as bonus issues. The study further investigates if information (bonus issues) impact significantly on stock prices in Nigeria. These were examined considering the prices of stocks between 2002 (YR02) and 2006 (YR06). We also classified stocks according to size of the bonus issues (i.e., small, medium and large bonus), as well as the price range of the stocks (i.e., penny and blue chip stocks). The results across different periods show that information release impacted significantly only in YR02. Also, it reveals that prices of stocks responded quickly to small bonus

Graph 2: Second innovation, (a) Response of YR02 to one standard deviation RANGE 1 innovation, (b) Response of YR03 to one standard deviation RANGE 1 innovation, (c) Response of YR04 to one standard deviation RANGE 1 innovation, (d) Response of YR05 to one standard deviation RANGE 1 innovation, (e) Response of YR06 to one standard deviation RANGE 1 innovation

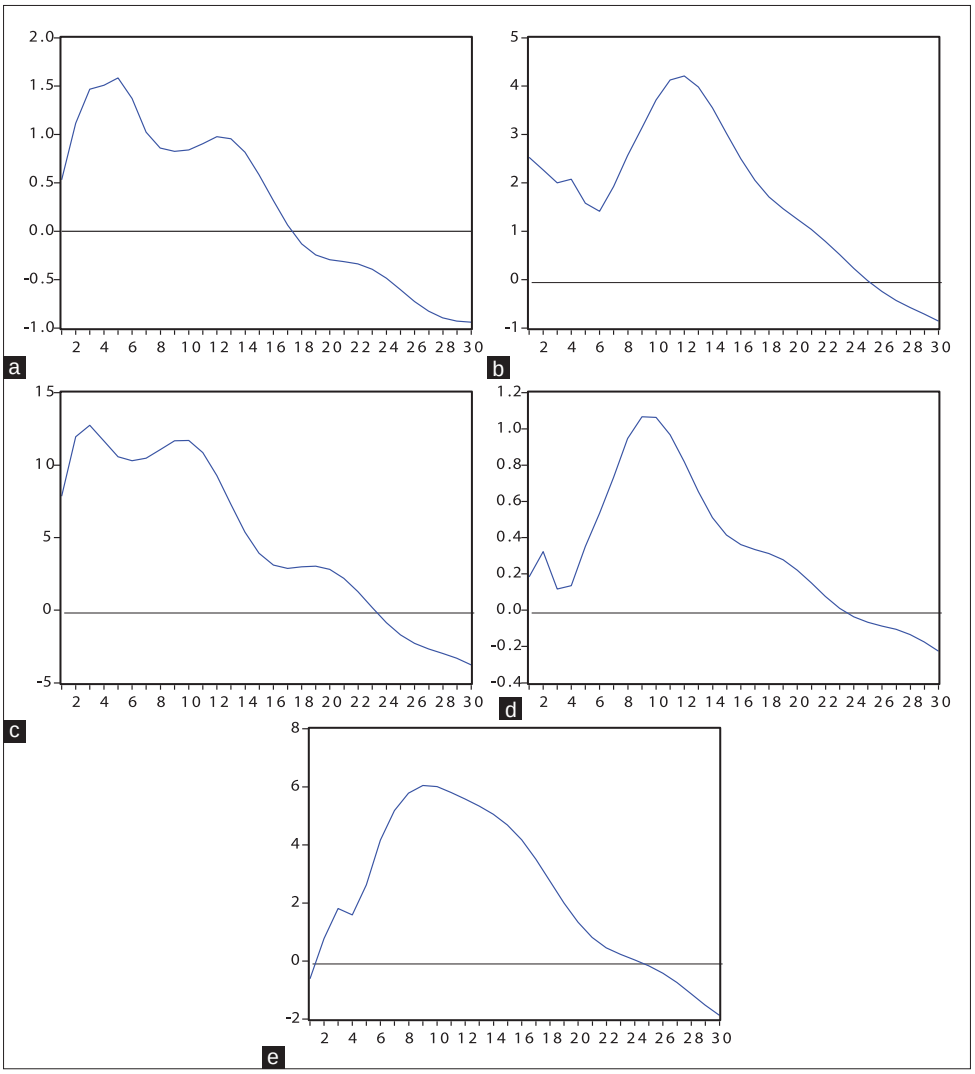


issues more than medium and large bonus issues. In addition, the test between penny stocks and blue chips shows that only penny stocks were significantly affected by variation in information release.

In term of causality, it was observed that variation in information release preceded the variation in the price of stock in only YR04. Also, from the findings, we observed that only medium bonus issues have significant causality. Likewise, comparing penny and blue chip stocks shows that only penny stock was found to have significant causality. In addition, in terms of speed of adjustment to information release, it is observed that the stock price in YR02 was the fastest followed by stock price in YR06. However, by the third innovation, all the years adjusted to information release. It was equally revealed that only the price of small bonus stocks adjusted significantly by the third innovation.

Hence, the introduction of the third innovation shows the price of penny stocks to have crossed the base line in response to information release contained in bonus issues. Therefore, we conclude that Nigerian stock market is partially semi-strong form efficient. Hence, this findings supported the work of Oludoyi (1998) on semi strong form test using sub-martingales earning expectation model. Irrespective of the fact that the inference from the study suggested partial semi strong form efficiency of the Nigerian stock market, our findings contract the works of Oludoyi (1998) using martingales and BOX Jerkins models; Olowe (1996); Soyode (1991) and Olatundun (2003). Following the assumption of Fama et al. (1969), which stated that semi strong form test can only be tested if the market is weak form efficient, having established that as indicated in Ayadi (1984); and Samuels and Yacout (1981), we concluded that stock prices respond to publicly available information instantaneously though

Graph 3: Third innovation, (a) Response of YR02 to one standard deviation RANGE 1 innovation, (b) Response of YR03 to one standard deviation RANGE 1 innovation, (c) Response of YR04 to one standard deviation RANGE 1 innovation, (d) Response of YR05 to one standard deviation RANGE 1 innovation, (e) Response of YR06 to one standard deviation RANGE 1 innovation



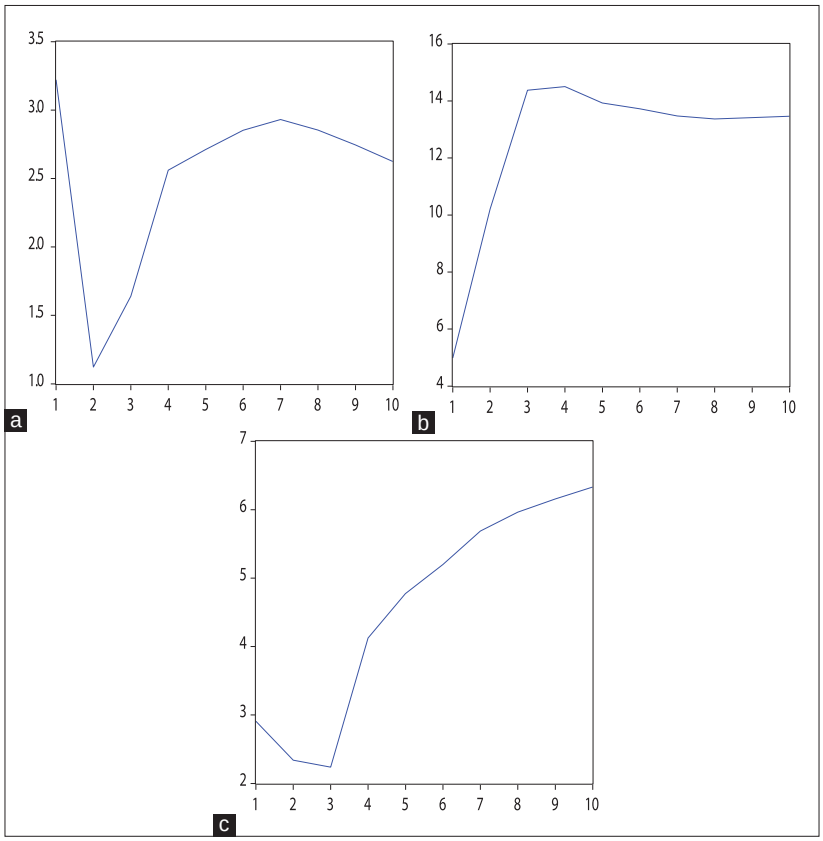
not very quick. This suggests that neither fundamental analysis nor technical analysis techniques can reliably produce abnormal/excess returns by beating the market consistently, thus supporting the postulates of efficient market theory.

The Securities and Exchange Commission (SEC) and NSE should prevail upon firms to release their reports as early as possible after the end of their fiscal year. We believe that information delayed is information denied. If firms do not announce their earnings promptly, investors may lose interest in such announcements and could prompt insider trading. If this happens, it may not augur well for the efficiency of the Nigerian capital market.

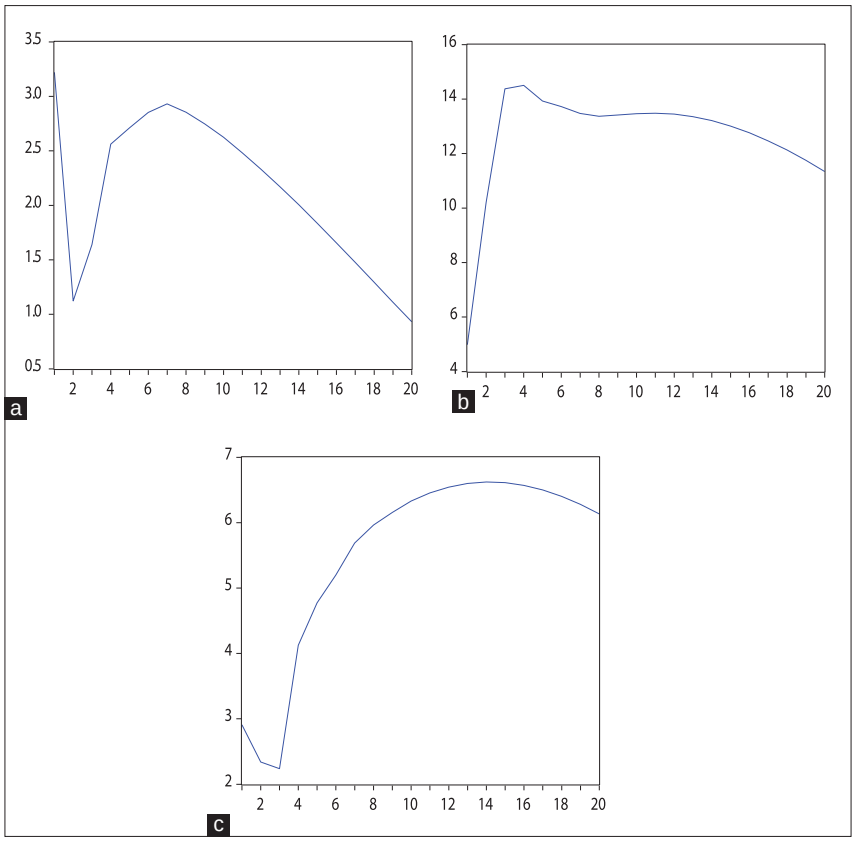
The SEC and the NSE should remove the 5% price cap placed on the movement of share prices on any trading day. Maintaining any form of cap on share price movements could militates against the deregulation of the market. If the two regulatory bodies develop adequate rules and regulations with strong monitoring to guide market participants, it may not be ideal to place any cap on share price movements because of its consequence of restricting stock price adjustment. Therefore, the removal of price cap could promote market stabilization and efficiency of Nigerian capital market. Naturally, there may be increase in the inflow of foreign portfolio capital to countries with the highest returns, given particular levels of risk. The Nigerian capital market cannot continue to lose out to other emerging stock markets, simply because stock returns are not allowed to reflect market forces. Also, the idea of the regulatory authorities of the Nigerian Stock Market to introduce the electronic share and bonus certificate is a welcome idea. They should however speed up the process to enable investor's access their investments without delay.

We also recommend that Nigeria Stock Exchange office should be opened in the 36 states of the federation and the Federal Capital Territory to bring the activities of the exchange closer to the people and also to enable stock brokers in all parts of the federation to trade on the floor of the exchange with ease. As pointed earlier, one of the problems faced by the NSE is

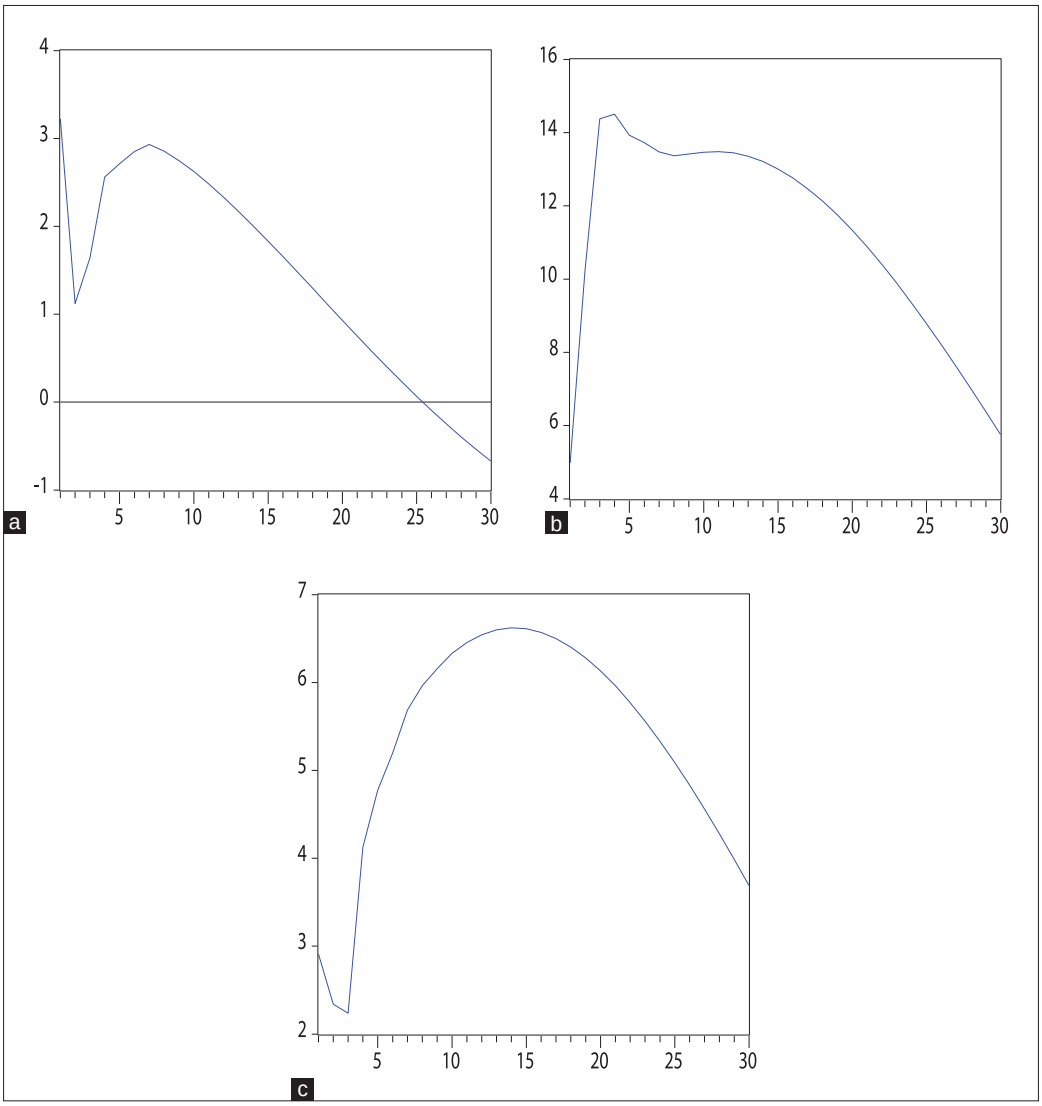
Graph 4: First innovation, (a) Response of SB to one standard deviation RANGE 1 innovation, (b) Response of MB to one standard deviation RANGE 1 innovation, (c) Response of LB to one standard deviation RANGE 1 innovation



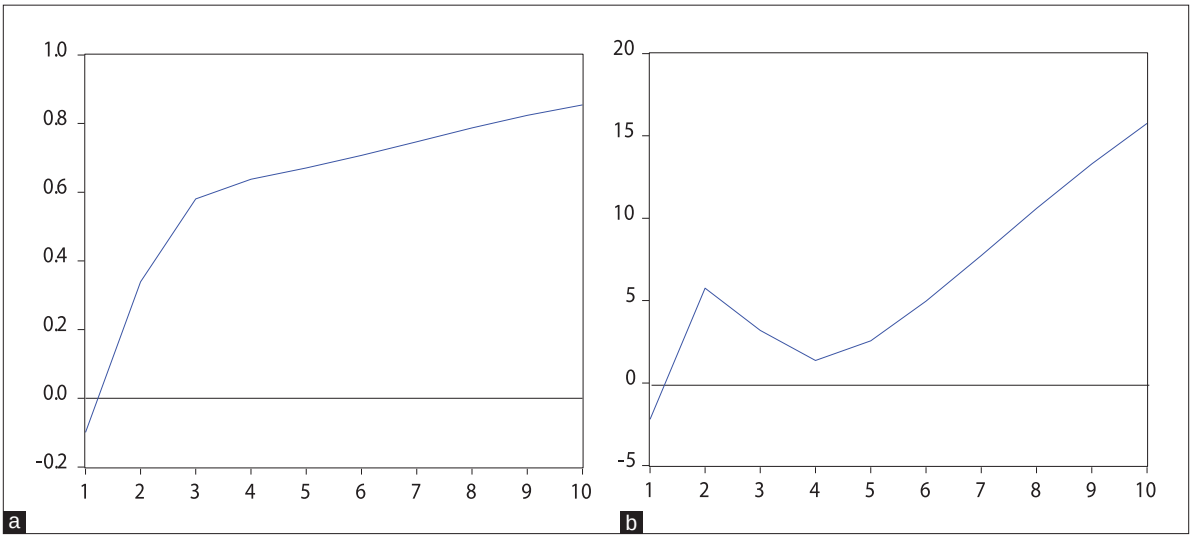
Graph 5: Second innovation, (a) Response of SB to one standard deviation RANGE 1 innovation, (b) Response of MB to one standard deviation RANGE 1 innovation, (c) Response of LB to one standard deviation RANGE 1 innovation



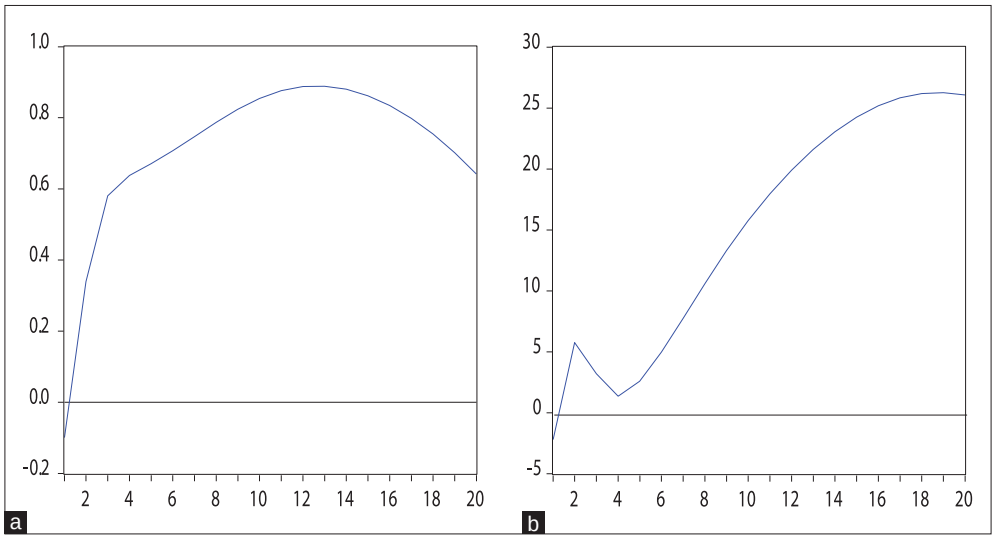
Graph 6: Third innovation, (a) Response of SB to one standard deviation RANGE 1 innovation, (b) Response of MB to one standard deviation RANGE 1 innovation, (c) Response of LB to one standard deviation RANGE 1 innovation



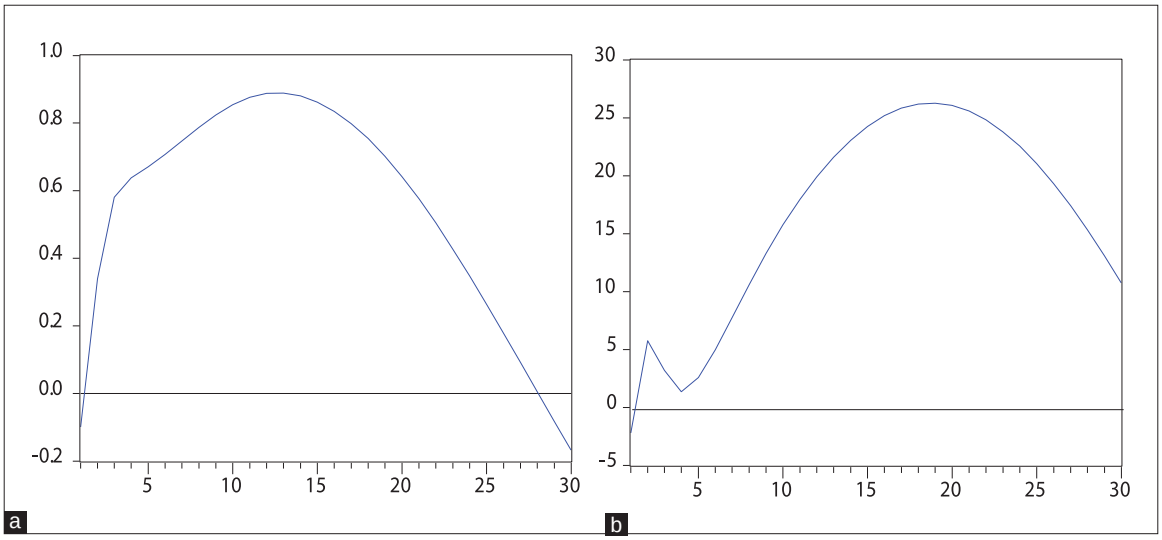
Graph 7: First innovation, (a) Response of PENNY to one standard deviation RANGE 1 innovation, (b) Response of BCHIP to one standard deviation RANGE 1 innovation



Graph 8: Second innovation, (a) Response of PENNY to one standard deviation RANGE 1 innovation, (b) Response of BCHIP to one standard deviation RANGE 1 innovation



Graph 9: Third innovation, (a) Response of PENNY to one standard deviation RANGE 1 innovation, (b) Response of BCHIP to one standard deviation RANGE 1 innovation



due to its size. The federal government of Nigeria through the capital market authorities should compel major oil and communication companies operating in Nigeria like MTN, ZAIN, and GLOBACOM, SHELL etc. to be quoted and listed on the floor of the exchange. This will not only increase the size of the market but also enable Nigerians benefit from the profits made by these companies.

SEC should also encourage stockbrokerage firms to operate virile financial/security analysis department. This is to ensure that stockbrokers are not only interested in helping their clients to buy and sell shares, but that they are also capable of guiding their clients to make good investment decisions.

Since it has been established that stock prices could respond significantly to information release vis-à-vis bonus issues, information management should be seen as good tool towards achieving a given target in the Nigerian stock market. Therefore, the researcher believes that if the above recommendations are implemented, the Nigerian stock market will improve drastically.

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