



EFFECT OF RIGHTS ISSUE, BONUS ISSUE AND STOCK SPLIT ANNOUNCEMENTS ON SHARE RETURNS OF FIRMS LISTED IN NAIROBI SECURITIES EXCHANGE

^{1*} Nicholas Njagi Maingi
 ¹Post Graduate Student: Kenyatta University
 *Corresponding Author's E-mail:
 nicholasnjagim@gmail.com

² Dr. Fredrick Warui Waweru Department of Accounting and Finance, Kenyatta University

Article History

Received 9th May 2022

Received in Revised Form 16st June 2022

Accepted 5th July 2022

Abstract

Purpose: The objective was to find out the effect of rights issue, bonus issue and stock split announcements on share returns of firms listed in Nairobi Securities Exchange.

Materials and Methods: Event study research design was used in the study. Target population comprised all companies in the Nairobi Securities Exchange register that announced bonus issue, rights, and stock split from 2014 to 2020. There were 6 companies which announced rights issue, 17 companies which announced bonus issue and 2 companies which announced stock splits. The study employed event study methodology whereby collection of secondary data was done for 30 days before and after respectively for each bonus issue, rights issue and stock split announcement. Statistical bias was eliminated by using normality and autocorrelation tests there after the Mean Adjusted Return Model was used in determining expected returns and abnormal returns.

Results: In all the companies there were abnormal returns which prove that the announcements had an effect on share returns, Sixteen companies witnessed increase in abnormal returns while nine firms witnessed decline in abnormal returns following the announcements. To whether the effects were significant null hypothesis postulating that the announcements had significant effect on share returns of firms listed in Nairobi Securities Exchange was accepted for twenty four firms and rejected for one firm. The conclusion was that right issue, bonus issue and stock splits announcements have a significant effect on Share returns.

Unique contribution to theory, practice and policy: The study recommendations include that; the Nairobi Securities exchange should support research by providing data free of charge for interested researchers. The Capital Markets Authority and NSE should educate investors on the investment opportunities available and this will increase local investors in the bourse, currently most investors are foreigners. NSE and CMA should beef up surveillance in the market so as to curb insider trading especially when companies are about to make any form of corporate announcements.

Key words: Rights Issue, Bonus Issue, Stock Split, Share Return, Nairobi Securities Exchange.



www.iprjb.org

1.0 INTRODUCTION

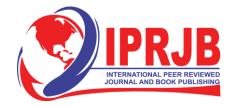
Capital markets give institution the chance to raise capital to finance feasible investments. This acts as a catalyst which increases the market value of institutions and investor wealth which enables a country to develop and grow its economy (Owusu & Kuwornu, 2011). A securities exchange one of the elements in a capital market eases trading of financial asset and is a measure of the level of economic performance which is important in any economy (Kirui, Wawire & Onono, 2014). Those who invest in a company's share earn share returns by way of receiving dividends as a slice of profit and via capital gains obtained when prices of shares in the market soar (Wilcox & Fabozzi, 2013). Miglani (2011) argues that evolved, coming up and evolving capital markets vary in terms of transactions, asset, size, risk and liquidity therefore they will have different reaction of share return upon announcement of rights issue, bonus issue or stock split.

Globally study by Rohit, Pinto and Bolar (2016) indicates that rights issue announcement led to positive average abnormal returns in Indian Stock Exchange on the announcement day. However, return was statistically insignificant. Onclin (2014) documents a positive response on share return in the Dutch securities exchange after a rights issue announcement during interval between 2001 to 2013. According to Agarwal and Mohanty (2012) return of shares were positive upon announcement of rights issue in Japan, Sweden, Finland, Switzerland and Norway on the other hand in United states, Hong Kong, Australia, United Kingdom and Korea there was a negative reaction of the returns.

In Kenya, Mariko and Theuri (2016) reported that share returns had an impartial reaction after a rights issue announcement in NSE during 2004 to 2013 study period. Mbui (2016) reported a positive response on share return after announcement of bonus issue in NSE during study period 2010 to 2014. Kithinji, Oluoch and Mugo (2014) found a positive reaction to the announcements of rights issue and in addition existence of a relationship between performance of a company shares and the rights issue announcement. Otieno (2014) recorded a negative response on share returns after announcements of rights issue in NSE during study period of between 2007 and 2014. A study administered by Ndua (2012) stipulated that share returns were influenced by rights issue and that the rights issue announcement has information content in NSE. Njoroge (2003) research documented abnormal negative return a day prior to rights issue announcement and a moderate setback thereafter. Due to the mixed results the study seeks to look into the matter.

Rights issue

Rights issue is described as an arrangement where current stockholders are given the privilege to acquire more securities relative to their holdings in a corporation before these securities can be offered to any other person (Korteweg and Renneboog, 2003). These securities are usually offered at a discounted price. Rights issue price being traditionally beneath the market price, grants shareholders an opportunity to trade their shares to prospective investors (Wright & Sylla, 2013). Companies issue rights to investors so as to raise resources for strategic expansions, obtain fresh assets or to pay debts owed. According to Van Horne and Wachowicz (2005), rights holders have three options, firstly they can purchase the extra shares; secondly, they can sell them since they



www.iprjb.org

are transferable; and thirdly they can simply choose do nothing about them. In the event a shareholder exercises their rights it does not impact on their wealth it only ensures they retain their control of the company. The benefits of rights issue are the reduced floatation expenses; therefore, it is a cost-effective technique for businesses to raise extra resources. Rights have an intrinsic value since these shares are priced below the announcement price. The disadvantage of rights issue are indirect costs such as taxes on capital gains, selling transaction costs for rights transactions and increased bid-ask spread. However, owing to its comfort to both investors and the business, the firm is in a better place to raise extra capital from investors (Eckbo & Masulis, 1992; Kothare, 1997).

Bonus issue

The term bonus issue implies shares freely awarded by a business to its current shareholders depending on the number of shares that they hold (Loader, 2005). Companies who have adequate profit to announce dividends but are faced with a constraint of either not having enough cash at their disposal to pay the dividends or are not willing to part with cash so as to execute some future projects which are capital intensive result in announcing bonus issue. Therefore, bonus issue results in capitalizing of firm's profit. There is a shift in capital structure of a company once bonus shares are given since owing to transfer of funds to issued common stock capital the retained earning shrink. This notion is referred to as reserve capitalization which keeps money from leaving the company in the form of cash dividends. Several hypotheses have been put forward concerning dividend announcements, including, cash substitution hypothesis arguing that companies choose to maintain money by issuing bonus stocks this being a temporary replacement for cash dividends (Mishra, 2005). The attention received or overlooked company hypothesis argues that in the event company executives perceive that the company's stocks are underestimated they may draw analysts' attention to the company's future cash flows for purposes of stock re-evaluation by sanctioning bonus issue (Adaoglu & Lasfer, 2008).

Stock Split

Stock split implies to raising or reducing the total number of shares in a business without varying the market value of the business or current shareholders' proportionate ownership interest. Stock splits may be either; forward stock split or reverse stock split. A forward stock split results to reduction in price of shares but leaves the market capitalization unchanged. A reverse stock split by contrast results to increase in price of shares but also leaves the market capitalization unchanged.

A share split is regarded a weird phenomenon because the event is viewed as nothing more than cosmetic since splits have zero effect on company's finances or structures. Westfall (2010) recounted that a stock split is a trade-off of shares in which at minimum five stocks are issued for every four stocks formerly held. Shareholders thus received extra stocks for each share they formerly held. Stock splits happen when the Board of Directors chooses to break each ancient share into many fresh shares whose worth is reduced while still maintaining the same share capital. Baker and Powell (1993) explains that a share split is a choice made by company's directors to



www.iprjb.org

enlarge the number of outstanding shares in a public company by distributing additional shares to the current shareholders.

Share return

Okech and Mugambi (2016) explain that Share return consist of capital gains coupled with any income an investor receives from the shares. Those who invest in a company's share earn share returns by way of receiving per annum dividends based on profit earned and also via capital gains obtained when prices of shares in the market soar after a while (Wilcox & Fabozzi, 2013). A constant rise in share price is referred to as an uptrend while a constant fall in share price is referred to as a downtrend. Bull market refers to sustained uptrends while bear market refers to sustained downtrends. Other factors that might cause share price changes include, demand and supply, financial position of a company, management profiles of companies, political factors, level of foreign investments in the market, effective regulation, action of institutional investors, government stability, speculation and availability of credit.

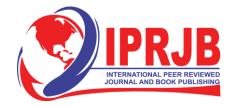
Nairobi Securities Exchange

This stockbroker institution was inaugurated in 1954 under the Societies Act. Asians and Africans were barred from dealing in bonds thus the company's activities were restricted to the resident European community until after independence was achieved in 1963. In the 1980s the government acknowledged the need to have policy reforms and design which would stimulate lasting profit-making system. Capital market authority (CMA) a regulatory body to help in the broadening and advancement of the country's capital market was established in the year 1989. The CMA ensures that companies are not listed in the NSE if they do not meet the minimum listing requirement. On the other hand, the NSE makes sure that listed companies stick to the set rules; contrary to this they are delisted.

In addition to trading in shares, trade of Corporate and government bonds is also conducted on the Nairobi Securities Exchange. The trading hours are between 09:00 and 15:00. An electronic Central Depository System (CDS) is used for performing the delivery and settlement of traded items. In 2006, an Automated Trading System (ATS) was launched. The system ensured orders were automatically executed on the grounds of progression. Thereafter the ATS, Kenya's Central Bank system and the CDS were integrated thus easing trading of government bonds electronically. The NSE is made up of different sectors, namely; banking, agriculture, insurance, commercial and services, automobile, Petroleum and energy, manufacturing, construction, investment services, technology and telecommunication and real estate investment trust. There were 64 listed companies as at December 2020.

Statement of the Problem

Several studies on rights issue, bonus issue and stock split announcement have been performed in different stock markets around the globe, resulting in mixed results. Some of the studies discovered that these announcements lead to beneficial effect on share returns; others reported adverse effect on share returns while some studies discovered no market response on share returns. The statement



www.iprjb.org

of the problem is derived from the mixed outcomes from such studies. Movement in share prices may be associated with information content of the announcement. According to efficient market hypothesis, this should not be the case; share prices should encompass all information concerning a company.

Research on effect bonus issue has on stock returns of companies listed in NSE done by Gachuhi and Iraya (2017) found out that abnormal returns decreased slightly in the following years after the bonus issue. However, in 2009 and 2010, the study reported a steady but slight rise in abnormal returns. The conclusion of this study was that abnormal returns are usually higher after bonus issue as compared to prior the bonus issue. Similarly, actual stock returns are higher after the issue of a bonus than before the issue of a bonus. Kamanja (2014) carried out research on the effect of the announcement of bonus shares by banks listed in Nairobi Securities Exchange during period between 2009 and 2013.Most of the stock prices fluctuated after announcing the bonus issue. Therefore, a relationship was established between banks' share price performance and the announcement of bonus issue.

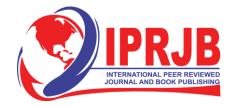
Modi (2016) studied the effects stock split and right issue have on listed companies in the NSE, the conclusion was that rights issue and stock split significantly affect the prices of shares. Kithinji, Oluoch and Mugo (2014) documented existence of relationship between right issue and performance of companies listed in NSE. Similarly, Ndua (2012) documented that rights issue have impacts on the share returns. Aduda and Chemarum (2010) reported that the Kenyan market has a positive reaction to announcement of stock splits. This is being demonstrated by a widespread increase in trade of shares during the period of stock split. Njoroge (2003) research documented abnormal negative return a day prior to rights issue announcement and a moderate setback thereafter.

Based on the mixed finding of the studies done on firms in NSE some companies which announced rights issue, bonus issue or stock split reported growth in market value while others reported shrinking of their market value. On the other hand, investors who participated and whose shares were affected by such announcements either grew their wealth or reduced their wealth. Management and shareholders are thus not assured growth of their market value and wealth respectively. It is therefore important for them to have information on how share returns are affected by rights issue announcement, bonus issue announcement and stock split announcement. The information will enhance decision making during investment. This study seeks to avail such information.

Theoretical Review

The Efficient Market Hypothesis (EMH)

Fama et al. (1969) states that market efficiency would result from a perfect world where transaction costs are zero, market-relevant information are cost-free and available to all participants, and everyone agrees with the current ramifications of information on current share price plus future price volatility. Boldt and Arbit (1990) state that empirical research on EMH testing has been



finished at multiple concentrations of data since 1970 specifically; weak, strong and semi-strong. The Weak EMH asserts that security prices always mirror accessible historical data on prices therefore, sequence data is of no advantage in shaping future projection in prices. The Semi-strong EMH asserts that prices of securities mirror data at the public disposal thus investors cannot derive any abnormal profits from this information. Tests in this type of EMH focus on price adjustment of securities through a specific information case, including bonus issue, rights issue and stock split. Strong EMH form says that securities prices completely reflect government, private, and monopolistic data which is accessible on the market in extreme interpretations.

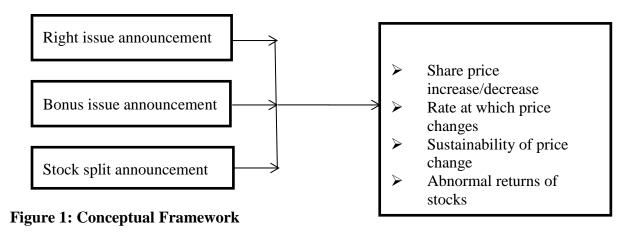
Thus, investors with exceptional kind of information cannot gain abnormal returns from using it. Efficient market hypothesis is characterized to show that subsequent securities' prices changes signify random volatilities from previous prices. Random walk ideology has the judgment that information is unrestricted and is at the same time mirrored in securities' prices and subsequent prices reflects the subsequent day's information. Malkiel (2003) thus defines efficiency in financial markets as scenarios where one cannot obtain above average returns without undertaking risk which is above average. This concept makes financial experts' belief of outdoing the market impossible. The market prices under EMH reflect both private and public information. There is relevance of this theory in this study since all the three announcements namely rights issue, bonus issue and stock split are all in the public domain. The empirical test of the efficient market hypothesis can be run by examining how market prices react to announcements made by companies.

Conceptual Framework

The following diagrammatic model showing the relationship between rights issue, bonus issue and stock split announcements and share returns of firms listed in NSE was used. It is presumed that when a firm announces rights issue, bonus issue as well as stock split its share return improves. However, whether this assertion is true or not was the subject of our discussion.

Independent Variables

Dependent Variable





www.iprjb.org

METHODOLOGY

Target population comprised all companies in the Nairobi Securities Exchange register that announced bonus issue, rights, and stock split from 2014 to 2020. There were 6 companies which announced rights issue, 17 companies which announced bonus issue and 2 companies which announced stock splits. The study employed event study methodology whereby collection of secondary data was done for 30 days before and after respectively for each bonus issue, rights issue and stock split announcement. Statistical bias was eliminated by using normality and autocorrelation tests there after the Mean Adjusted Return Model was used in determining expected returns and abnormal returns.

RESULTS

The objective of the study was to evaluate the effect of rights issue, bonus issue and stock split announcements on share returns of firms listed in Nairobi Securities Exchange. Data belonging to 25 companies which announced bonus issue, rights issue and stock splits in between 2014 and 2020 have been used in the study. Their stock returns were analysed for 30 days before the announcement and 30 days after. A sum 17 companies announced a bonus issue during the period. Six companies announced rights issue while two companies announced stock splits during the period. The study made use of T-test to find out the effects and significance of the announcements on share returns. The analysis was carried out using Ms Excel (2016). Pearson's correlation coefficient has been used to evaluate the association between the abnormal returns of the companies during the events. The test statistics is founded on the principles of covariance (Lee Rodgers & Nicewander, 1988). The following section explains in details the reaction of stock returns to the announcement of bonus issues, rights issues, and stock splits.



Bonus Issue CIC Insurance Group Ltd

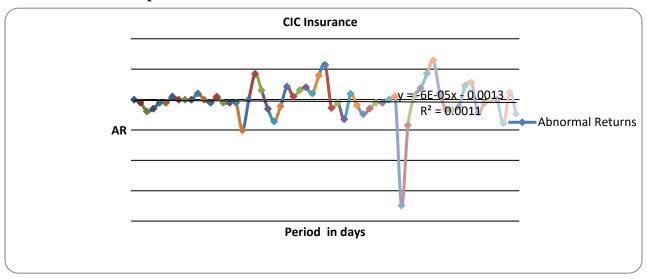
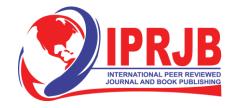


Figure 2: CIC Insurance Abnormal Returns

Source: Survey Data 2020

CIC insurance declared a bonus issue of 1:05 on 14th July, 2014. The Pearson correlation coefficient was -0.8874 implying the abnormal returns before and after the announcement of the bonus issue had a weak and negative relationship. The trend line is on a downward trend indicating that the abnormal returns continued to decrease after the announcement indicating a negative reaction. The calculated t-value was 0.980345 and the critical t was 2.04523 thus, accept the null hypothesis that the bonus issue announcement had a significant effect on CIC insurance stock performance in Nairobi Securities Exchange.



Longhorn Kenya Ltd

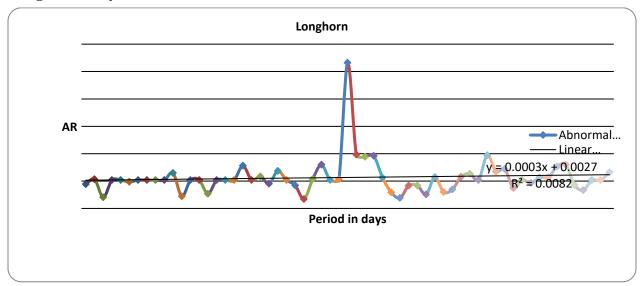


Figure 3: Longhorn Kenya Abnormal Returns

Source: Survey Data 2020

Longhorn Kenya Ltd announced a bonus issue of 1:10 on 26th September, 2014. The abnormal returns were on an upward trend following the announcement as shown by the trend line during the period under observation. There was a short extreme positive reaction after the announcement. The Pearson Correlation test was -0.16175 implying that the abnormal returns before and after the announcement had a weak negative relationship. The calculated T value and the critical T value were -1.20984 and 2.04523 respectively. Since the calculated T value is less than the critical t value, accept the null hypothesis that the bonus issue announcement had a significant effect on Longhorn Kenya Ltd stock performance in Nairobi Securities Exchange.

Pan Afric Insurance Holdings Ltd

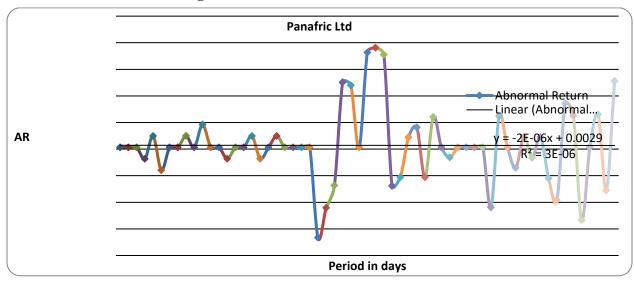


Figure 4: PanAfric Insurance Abnormal Returns Source: Survey Data 2020

Pan Afric Insurance Holdings Ltd declared a bonus issue of 1:02 on 27th February, 2015. The Pearson correlation coefficient was 0.037479 implying the abnormal returns before and after the announcement of the rights issue had a weak positive relationship. The trend line is on an upward trend indicating that the abnormal returns continued to increase slightly after the announcement. The calculated T-value is -0.49565 and the critical T value was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on Pan Africa Insurance Holdings stock performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on the stock performance in Nairobi Securities Exchange.

Jubilee Holdings Ltd

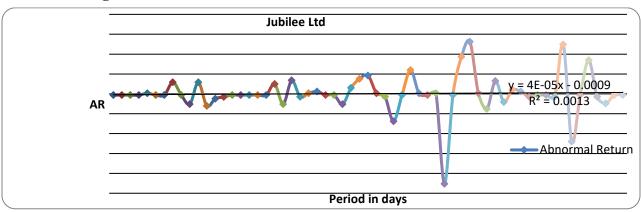


Figure 5: Jubilee Holdings Abnormal Returns

Source: Survey Data 2020

Jubilee Holdings Ltd declared a bonus issue of 1:10 on 25th March, 2015. The Pearson correlation coefficient was -0.0326 implying the abnormal returns before and after the announcement of the bonus issue had a weak negative relationship. The trend line is on an upward trend indicating that the abnormal returns continued to increase after the announcement. The stock was highly sensitive to the announcement. The calculated t-value was 0.017025 and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on Jubilee Holdings Ltd stocks' performance in Nairobi Securities Exchange.

National Bank of Kenya Ltd

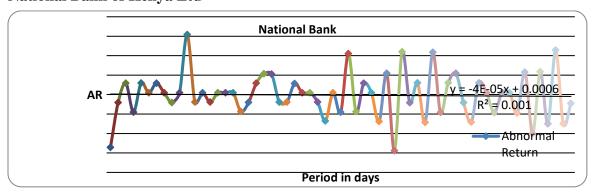
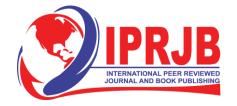


Figure 6: National Bank Abnormal Return

Source: Survey Data 2020

National Bank of Kenya Ltd declared a bonus issue of 1:10 on 3rd March, 2015. The Pearson correlation coefficient was -0.37674 implying the abnormal returns before and after the



announcement of the bonus issue had a weak positive relationship. The trend line is on a downward trend indicating that the abnormal returns continued to decrease after the announcement. There was a high stock reaction after the announcement. The calculated t-value was 0.1000947 and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on National Bank of Kenya Ltd stocks' performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on the stocks' performance in Nairobi Securities Exchange.

Crown Paints Kenya Ltd

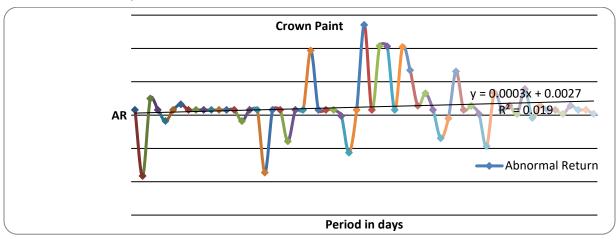


Figure 7: Crown Paints Abnormal Returns

Source: Survey data 2020

Crown Paints Kenya Ltd declared a bonus issue of 2:01 on 4th May, 2015. The Pearson correlation coefficient was -0.22884 implying the abnormal returns before and after the announcement of the bonus issue had a weak negative relationship. The trend line is on an upward trend indicating that the abnormal returns continued to increase after the announcement. The stock was highly sensitive to the announcement. The calculated t-value was -2.02704 and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on Crown Paints Kenya Ltd stocks' performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on the stocks' performance in Nairobi Securities Exchange.

Kapchorua Tea Co. Ltd

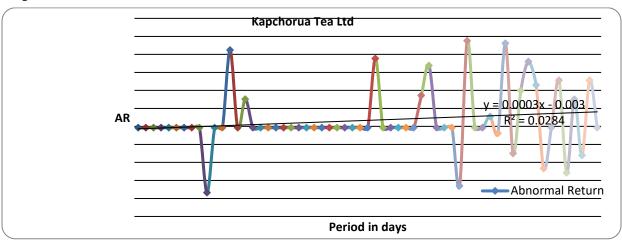


Figure 8: Kapchorua Tea Abnormal Returns

Source: Survey Data 2020

Kapchorua Tea Co. Ltd declared a bonus issue of 1:01 on 15th June, 2015. The Pearson correlation coefficient was 0.293984 implying the abnormal returns before and after the announcement of the bonus issue had a strong positive relationship. The trend line is on an upward trend indicating that the abnormal returns continued to increase after the announcement. The calculated t-value was - 1.85183and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on Kapchorua Tea Co. Ltd stocks' performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on the stocks' performance in Nairobi Securities Exchange.

Williamson Tea Kenya Ltd

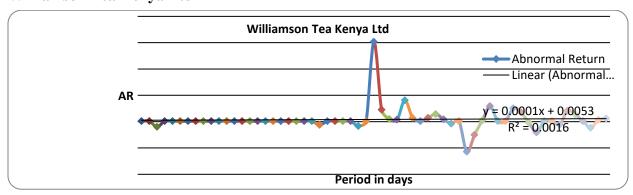


Figure 9: Williamson Tea Abnormal Returns

Source: Survey Data 2020

Williamson Tea Kenya Ltd declared a bonus issue of 1:01 on 15th June, 2015. The Pearson correlation coefficient was 0.045602 implying the abnormal returns before and after the announcement of the bonus issue had a weak positive relationship. The trend line is on an upward trend indicating that the abnormal returns continued to increase after the announcement. The stock was highly sensitive to the announcement. The calculated t-value was -0.07971 and the critical t-value was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on Williamson Tea Kenya Ltd stocks' performance in Nairobi Securities Exchange.

Nairobi Securities Exchange Ltd

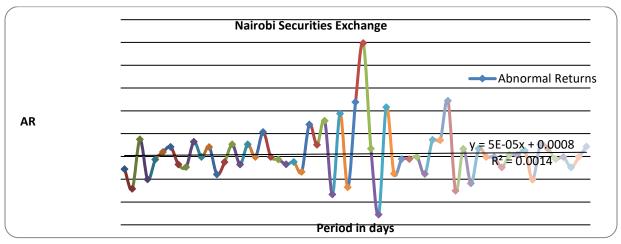


Figure 10: Nairobi Securities Exchange Abnormal Returns

Source: Survey Data 2020

Nairobi Securities Exchange Ltd declared a bonus issue of 1:03 on 24th March, 2016. The stock was highly sensitive to the announcement. The Pearson correlation coefficient was -0.16433 implying the abnormal returns before and after the announcement of the bonus issue had a weak negative relationship. The AR trend line is on an upward trend indicating that the abnormal returns continued to increase after the announcement. The calculated t-value was -0.48124 and the critical t-value was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect Nairobi Securities Exchange stocks' performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on the stocks' performance in Nairobi Securities Exchange.

Diamond Trust Bank Kenya Ltd

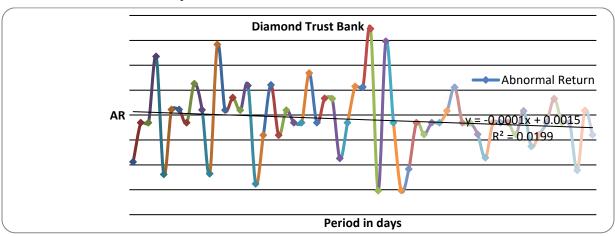


Figure 11: Diamond Trust Bank Abnormal Returns

Source: Survey Data 2020

Diamond Trust Bank Kenya Ltd declared a bonus issue of 1:10 on 10th March, 2016. The Pearson correlation coefficient was 0.063396 implying the abnormal returns before and after the announcement of the bonus issue had a weak positive relationship. The trend line is on a downward trend indicating that the abnormal returns continued to decrease after the announcement. The stock was highly sensitive to the announcement. The calculated t-value was 1.223176 and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on Diamond Trust Bank Kenya Ltd stocks' performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on the stocks' performance in Nairobi Securities Exchange.



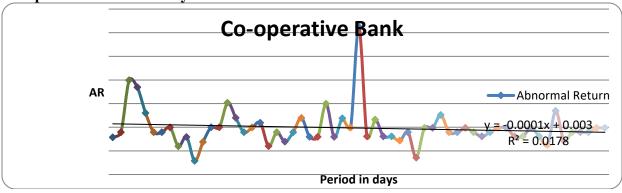


Figure: Co-operative Bank Abnormal Returns

Source: Survey Data 2020

The Co-operative Bank of Kenya Ltd declared a bonus issue of 1:05 on 17th March, 2017. The stock was highly sensitive to the announcement. The Pearson correlation coefficient was -0.06443 implying the abnormal returns before and after the announcement of the bonus issue had a weak negative relationship. The trend line is on a downward trend indicating that the abnormal returns continued to decrease after the announcement. The calculated t-value was 1.394846 and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on The Co-operative Bank of Kenya stocks' performance in Nairobi Securities Exchange.

Flame Tree Group Holdings Ltd

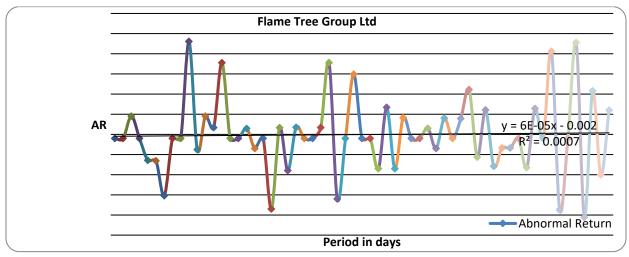


Figure: Flame Tree Abnormal Returns

Source: Survey Data 2020

Flame Tree Group Holdings Ltd declared a bonus issue of 1:10 on 28th April, 2017. The Pearson correlation coefficient was -0.03265 implying the abnormal returns before and after the announcement of the bonus issue had a weak negative relationship. The trend line is on a downward trend indicating that the abnormal returns continued to decrease after the announcement but at the latter days. The stock was not very sensitive to the announcement. The calculated t-value was 0.029979 and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on the Flame Tree Group Holdings Ltd stocks' performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on the stocks' performance in Nairobi Securities Exchange.

National Bank of Kenya Ltd

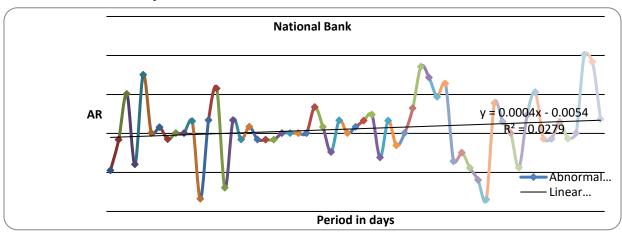


Figure 14: National Bank Abnormal Returns

Source: Survey Data 2020

National Bank of Kenya Ltd declared a bonus issue of 1:10 on 27th April, 2017. The Pearson correlation coefficient was -0.04819 implying the abnormal returns before and after the announcement of the bonus issue had a weak negative relationship. The trend line is on an upward trend indicating that the abnormal returns continued to increase after the announcement. The calculated t-value was -1.14077 and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on the National Bank of Kenya stocks' performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on the stocks' performance in Nairobi Securities Exchange.

Housing Finance Corporation Kenya

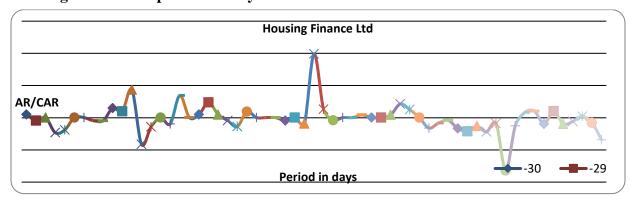


Figure 15: Housing Finance Abnormal Returns

Source: Survey Data 2020

On 29th March 2018, Housing Corporation Finance Kenya announced a bonus issue of 1:10. Following the announcement, the study shows that during the event, it had a Pearson correlation of -0.29293 indicates that there was a weak negative relationship between the abnormal returns before and after the event. It had a calculated t of 1.23238 and a critical t of 2.04523 which is greater than the calculated t. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on stock performance of the firm. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on stock performance. The trend line was on a downward trend indicating that the abnormal returns over the period of observation. The stock was highly sensitive to the announcement.

NIC Bank Ltd

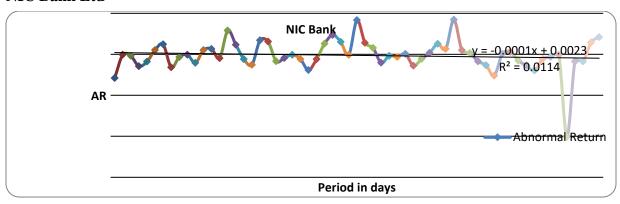


Figure 16: NIC Abnormal Returns

Source: Survey Data 2020

NIC bank announced a bonus issue of 1:10 on 22nd March, 2018. The abnormal returns increased on the day of announcement to 0.0417 from -0.0006 on the previous day. However, the abnormal returns were generally on downward trend during the period under observation indicating a negative reaction to the announcement in general. However, immediately after the announcement, there was a negative reaction. The Pearson Correlation test was 0.01769 implying that the abnormal returns before and after the announcement had a weak positive relationship. The calculated t value and the critical t value were 0.85794 and 2.04523 respectively. Since the calculated T value is less than the critical t value, accept the null hypothesis that the bonus issue announcement had a significant effect on NIC bank stock performance in Nairobi Securities Exchange.

I & M Holding Ltd

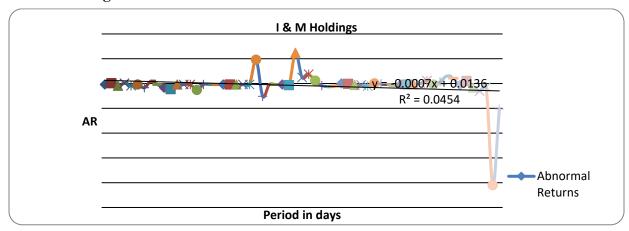


Figure 17: I & M Holding Abnormal Returns

Source: Survey Data 2020

On 28th March 2019, I & M Holdings announced a bonus issue of 1:1, following the announcement it had a Pearson correlation of -0.14926 indicating that there was a weak negative relationship between the abnormal returns before and after the event. It had a calculated t of 1.1194 and a critical t of 2.0452 which is greater than the calculated t. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on stock performance of the firm. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on stock performance. The trend line was on a downward trend indicating that the abnormal returns over the period of observation declined.

Kenya- Reinsurance

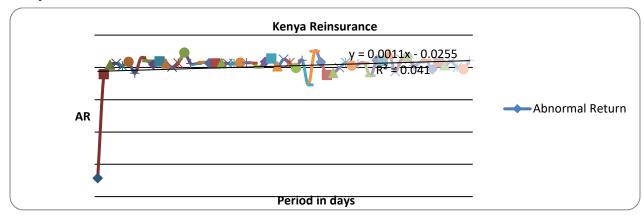


Figure 18: Kenya Reinsurance Abnormal Returns

Source: Survey Data 2020



Kenya Reinsurance declared a bonus issue of 3:1 on 29th July, 2019. The Pearson correlation coefficient was -0.0519 implying the abnormal returns before and after the announcement of the bonus issue had a weak negative relationship. The trend line is on an upward trend indicating that the abnormal returns continued to increase after the announcement. The calculated t-value was -0.6296 and the critical t were 2.0452. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on the Kenya Reinsurance stock's performance in Nairobi Securities Exchange.

Rights Issue

Diamond Trust Bank Ltd

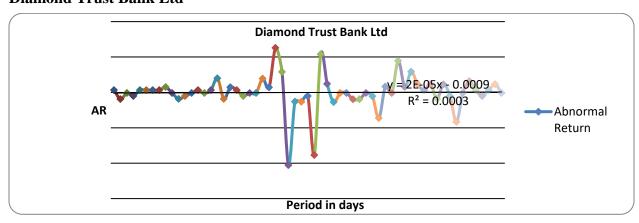


Figure 19: Diamond Trust Bank Abnormal Returns

Source: Survey Data 2020

Diamond Trust Bank Kenya Ltd offered a rights issue on 30th June, 2014 at a price of Kshs. 165. The abnormal returns were on a downward trend following the announcement as shown by the trend line during the period under observation. The Pearson Correlation test was -0.02004 implying that the abnormal returns before and after the announcement had a very weak negative relationship. The calculated T value and the critical T value were 0.020495 and 2.04523 respectively. Since the calculated T value is less than the critical t value, accept the null hypothesis that the rights issue announcement had a significant effect on stocks performance of the company in Nairobi Securities Exchange.

NIC Bank Ltd

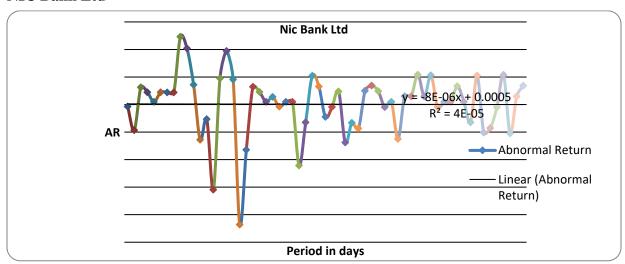


Figure 20: NIC Abnormal Returns

Source: Survey Data 2020

NIC Bank Ltd offered a rights issue on 23rd October, 2014 at a price of Kshs. 49.25. The abnormal returns were on an upward trend following the announcement as shown by the trendline during the period under observation implying a positive reaction. The Pearson Correlation test was -0.14649 implying that the abnormal returns before and after the announcement had a very weak negative relationship. The calculated T value and the critical T value were -0.12908 and 2.04523 respectively. Since the calculated T value is less than the critical t value, accept the null hypothesis that the rights issue announcement had a significant effect on stocks performance of the company in Nairobi Securities Exchange.

Uchumi Supermarket Ltd

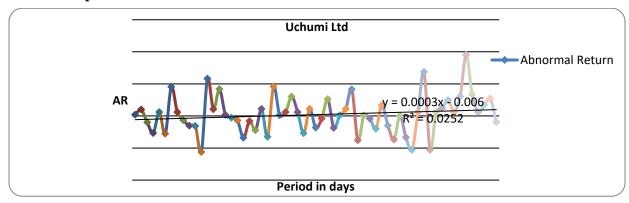
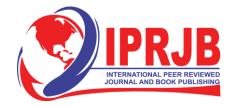


Figure 21: uchumi Supermarket Abnormal Returns

Source: Survey Data 2020



Uchumi Supermarket Ltd offered a rights issue on 9th October, 2014 at a price of Kshs. 9.00. The abnormal returns were on an upward trend following the announcement as shown by the trend line during the period under observation indicating a positive general reaction. The Pearson Correlation test was -0.11883 implying that the abnormal returns before and after the announcement had a weak negative relationship. The calculated T value and the critical T value were -0.59594 and 2.04523 respectively. Since the calculated T value is less than the critical t value, accept the null hypothesis that the rights issue announcement had a significant effect on stocks performance of the company in Nairobi Securities Exchange.

Housing Finance Co. Kenya Ltd

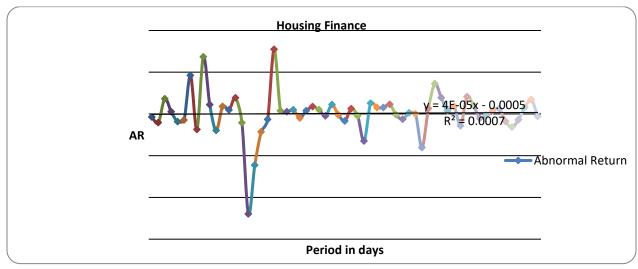


Figure 22: Housing Finance Abnormal Returns Source: Survey Data 2020

Housing Corporation Finance Kenya announced a rights issue at a price of Kshs. 30 in 19th February 2015. The Pearson correlation coefficient was -0.03334 implying the abnormal returns before and after the announcement of the rights issue were negative and had a weak relationship. The trend line is on an upward trend indicating that the abnormal returns continued to increase after the announcement. The calculated t-value is -0.24204 and less than its critical t of 2.04523. As a result, accept the null hypothesis that the right issue announcement had a significant effect on Housing Corporation Finance Kenya stock performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the right issue announcement had no significant effect on stock performance in Nairobi Securities Exchange.

Longhorn Publishers Ltd

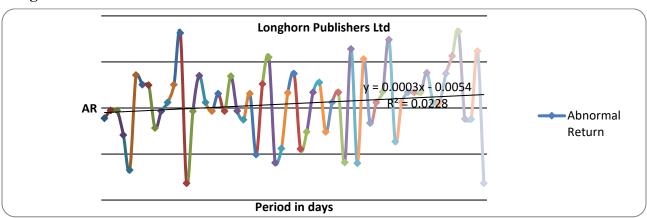


Figure 23: Longhorn Publishers Abnormal Returns

Source: Survey Data 2020

Longhorn Kenya Ltd offered a rights issue on 18th April, 2016 at a price of Kshs. 4.20. The abnormal returns were on an upward trend following the announcement as shown by the trend line during the period in the event. The Pearson Correlation test was -0.13716 implying that the abnormal returns before and after the announcement had a weak negative relationship. The calculated T value and the critical T value were -0.079028 and 2.04523 respectively. Since the calculated T value is less than the critical t value, accept the null hypothesis that the rights issue announcement had a significant effect on stocks performance of the company in Nairobi Securities Exchange. The stock was highly sensitive to the announcement.

KenGen Co. Ltd

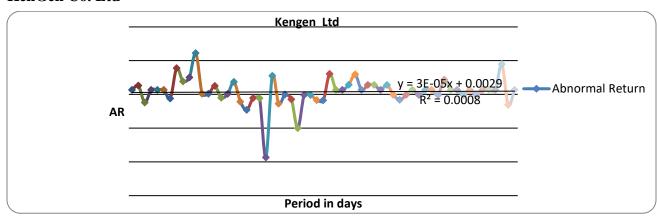
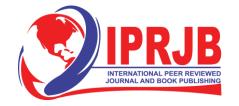


Figure 24: KenGen Abnormal Returns

Source: Survey Data 2020



KenGen Co. Ltd declared a rights issue of Kshs. 6.55 on 23rd May, 2016. The Pearson correlation coefficient was 0.098281 implying the abnormal returns before and after the announcement of the rights issue had a weak positive relationship. The trend line is on an upward trend indicating that the abnormal returns continued to increase after the announcement. However, the stock was not very sensitive to the announcement. The calculated t-value was -1.61263 and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on the KenGen Co. Ltd stocks' performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the rights issue announcement had no significant effect on the stocks' performance in Nairobi Securities Exchange.

Stock Split Limuru Tea Co. Ltd

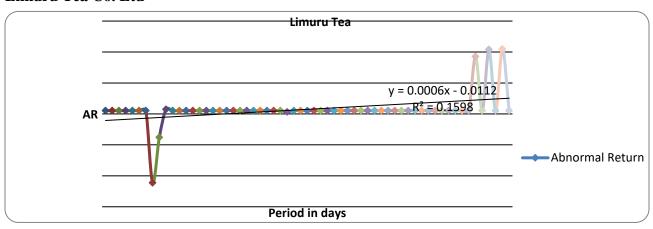


Figure 25: Limuru Tea Abnormal Returns

Source: Survey Data 2020

The Limuru Tea Co. Ltd declared a stock split of 1:02 on 12th May, 2015. The Pearson correlation coefficient was 0.080314 implying the abnormal returns before and after the announcement of the rights issue had a weak positive relationship. The trend line is on an upward trend indicating that the abnormal returns increased after the announcement. However, the stock was slightly sensitive to the announcement. The calculated t-value was -2.30393 and the critical t was 2.04524. As a result, reject the null hypothesis that the stock split announcement had a significant effect on the Limuru Tea Co. Ltd stocks' performance in Nairobi Securities Exchange since in absolute terms the t calculated is greater than the critical t.



Kenya Airways

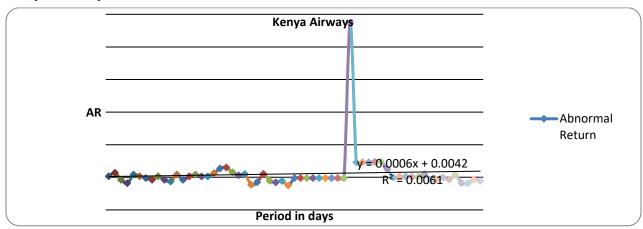


Figure 26: Kenya Airways Abnormal Returns

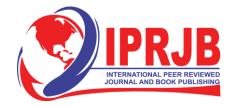
Source: Survey Data 2020

The Kenya Airways Co. Ltd declared a stock split of 1:20 on 15th Nov, 2017. The Pearson correlation coefficient was 0.05381 implying the abnormal returns before and after the announcement of the stock split had a very weak positive relationship. The trend line is on an upward trend indicating that the abnormal returns increased sharply after the announcement. The calculated t-value was -1.35321 and the critical t was 2.04523. As a result, accept the null hypothesis that the bonus issue announcement had a significant effect on the Kenya Airways Co. Ltd stocks' performance in Nairobi Securities Exchange. Reject the alternative hypothesis that the bonus issue announcement had no significant effect on the stocks' performance in Nairobi Securities Exchange.

Discussion of Research Findings

According to the study, all the 25 companies listed at the Nairobi Securities Exchange reacted to the announcements made in between 2014 and 2020 either positively or negatively. In all the cases except one the calculated t value was less than the critical t-value therefore the null hypothesis that the announcement had a significant effect on stocks performance of the surveyed companies in Nairobi Securities Exchange was accepted. The stocks were highly sensitive to the announcements. As a result, high price movement was witnessed after the announcements. Nine companies witnessed a decline in abnormal returns after the announcements. Sixteen companies witnessed increase in abnormal returns following the announcements. In general, most companies depicted heightened activities shortly before and after the announcements. It is consisted with other studies in Singapore, Greece and Korea (Tsangarakis, 1996; Kinyanjui, 2014).

Issue of bonus issue is a positive indicator in the market that the company is performing well financially. Thus, it is in a position to service more shares. Investors perceive positively believing



www.iprjb.org

that a company cannot issue bonus share knowing well that it will be profitable in future. It is therefore giving investors' confidence in company (Ratib, 2013). However, some companies issue share bonus in lieu of dividends to enhance their liquidity because in so doing, they retain the profits. Seventeen companies announced a bonus issue in between 2014 and 2020. According to a study by Healy and Palepu (1988), companies that issue bonuses tend to have higher earnings in following years.

Six companies announced rights issue while two companies announced stock splits during the period. Rights issue are usually made by companies which are strained in terms of cash. Similarly, stock splits are meant to increase the liquidity of a company. Companies issue rights to existing shareholders to buy more shares at a discounted price. Except for Kengen, all the other companies covered in the study and offered rights issues were oversubscribed. Rights issue normally dilute stock prices and their prices decline in the security markets (Owen & Suchard, 2008).

Some investors buy stocks perceived to be good for speculative purposes. Efficient Market Hypothesis (EMH) explains that in a competitive market, it is not possible to make profits by speculation because all the share prices in the market reflect every other information that could be available in the market (Sewell, 2011). Thus, it is impossible to purchase undervalued stock in the market and sell it at a profit later. However, it can happen in inefficient markets.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The objective of the study was to evaluate effect of rights issue, bonus issue and stock split announcements on share returns of firms listed in Nairobi Securities Exchange. Twenty five companies were involved in the research. These are the companies that announced either bonus issue, rights issue or share splits in between 2014 and 2020. A total of 17 companies announced bonus issue. Two companies announced stock split and six companies announced rights issue during the period of study. The research realized its objective by discussing abnormal returns.

During the period, the following companies announced a bonus issue and had decline in abnormal returns; NIC Bank, National Bank of Kenya, Co-operative Bank of Kenya Ltd, Diamond Trust Bank, Flame Tree Group Holdings Ltd, CIC insurance, I & M bank and Housing Finance Kenya. Diamond Trust Bank announced a rights issue and experienced a decline in abnormal returns. However in all the cases except one the calculated t value was less than the critical t value, therefore the null hypothesis that the announcement had a significant effect on stocks performance of the surveyed companies in Nairobi Securities Exchange were accepted. The alternative hypothesis that the announcement did not have a significant effect on stocks performance was rejected.

Conclusion

The study found that the various announcements made by the companies affect the returns generated from the market. Reason being that the performances of most of the companies in the study that made the announcement were significantly affected after the announcements especially in the case of bonus issue announcement. Following the announcements, there was immediate



www.iprjb.org

adjustment of prices in the market indicating a semi-strong efficient market where security prices factor in all information available in the public. As a result, there are no cases of cost cutting among the investors. The volume of traded shares generally increased shortly before and after the announcements indicating adjustments of the stock prices to the announcements. Few companies experienced heightened activities before their announcements. From the research, some traders in companies that experienced increased abnormal returns could have gained while those in companies that experienced a decline in abnormal returns could have made a loss.

Recommendations

From the study, the Nairobi Securities Exchange seems to be semi-strong efficient. The stock prices tend to reflect all the public available information. There were abnormal returns in all the 25 companies examined. It is necessary that the market be improved to make it strong. As such, its communication infrastructure should be improved. Changes of the stock prices and trading activities are associated with herd behaviour, anchoring, overconfidence, loss aversion, and mental accounting errors (Unions, 2019). As a result, the Nairobi Securities Exchange should make a point of educating its investors to avoid such behaviours which may lead them to losses. The Capital Market Authority and Nairobi Securities Exchange should support research in the market in one way or another. One of the ways of support would include providing data to researchers free of charge. Continuous research on the market would help in improving its efficiency.

The Capital Market Authority and Nairobi Securities Exchange needs to beef up surveillance in the market to prevent insider trading. It should continue tracking activities in the market by using modern equipment and facilities such as the use artificial intelligence (Tadapaneni, 2020). People caught doing insider trading should be prosecuted and disciplinary action taken against them. The concerned authorities should support investment in the security market by carrying out campaigns in the public domain. Most of the investments in the NSE are dominated by foreign investors. Local investors should also be brought on board by being encouraged to invest in the market. During periods of heightened political activities, the trading volumes at the NSE usually decline. The concerned authorities should protect the market from such matters that affect the market negatively yet have nothing to do with the market.

REFERENCES

- Adaoglu, C., &Lasfer, M. A. (2008). The Market Valuation of Bonus Issues in an Inflationary Environment. In *Financial Management Association European Conference in Prague*.
- Aduda, J. O., & Chemarum, C. (2010). Market reaction to stock splits.
- Agara, B. (2014). The effect of stock split on share prices of companies listed at the Nairobi securities exchange (Doctoral dissertation, University of Nairobi).
- Agarwal, A., & Mohanty, P. (2012). The Impact of Rights Issues on Stock Returns in India. Asia Pacific Finance and Accounting Review, 1(1), 5-16.



- Amuthan, R., & Ayyappan, S. (2011). Analysis on Bonus Share Issuing Event Impact on Share Prices with Special Reference to Indian Banking Sector and Information Technology Sector Stocks in India European Journal of Economics. *Finance and Administrative Sciences*, (38), 20-28.
- Baker, H & Powell, G (1993). "The role of information in stock split Announcement Effects". Quarterly Journal of Business and Economics; 32(2), 1-35.
- Barnes, M. L., & Ma, S. (2001). Market Efficiency or not? The Behaviour of China's Stock Prices in Response to the Announcement of Bonus Issues.
- Bashir, A. (2013). Impact of Right Issues Announcement on Shareholders Wealth: Case Study of Pakistani Listed Companies. International Journal of Contemporary Business Studies, 4(3)
- Boldt, B. L., & Arbit, H. L. (1990). Efficient markets and the professional investor. *Financial Analysts Journal*, 40(4), 22-34.
- Charitou, A., &Louca, C. (2009). Cross-listing and operating performance: evidence from exchange-listed American Depositary Receipts. *Journal of Business Finance & Accounting*, 36(1-2), 99-129.
- Dhar, R., Goetzmann, W. Shepherd, S and Zhu (2004). "The impact of clientele changes". Evidence from stocks splits.
- Eckbo, E, & R. Masulis (1992). "Adverse selection and the Rights offer paradox. "Journal of Financial Economics 32, pp 293-332 36
- Fama, E. F., Fisher, L., Jensen, M. C., & Roll, R. (1969). The adjustment of stock prices to new information. *International economic review*, 10(1), 1-21.
- Gachuhi, P. M., &Iraya, C. (2017). Effect of Bonus Issue on Stock Prices of Companies Quoted at the Nairobi Securities Exchange. *International Journal of Finance*, 2(1), 1-16.
- Garza-Garcia, J. G., & Yue, Y. (2010). International Determinants of stock market performance in China: a cointegration approach. *University of West of England: Working Paper*, *3*(10).
- Ghatak, A. (2011). Capital market reaction around the stock splits and bonus issues: Evidence from some Indian IT stocks. *The International Journal, Research Journal of Social Science and Management*, *1*(5), 191-213.
- Gupta, A., & Gupta, O. P. (2007). Market reaction to stock market splits: Evidence from India. *The ICFAI Journal of Applied Finance*, 13(1), 5-22.
- Healy, P. M., & Palepu, K. G. (1988). Earnings information conveyed by dividend initiations and omissions. *Journal of financial Economics*, 21(2), 149-175.
- Http://www.nse.co.ke. A history of NSE.



- Https://www.cma.or.ke/index.php/lincensing-approvals/approvals/issue-ofinstruments/category/43-2021?download=381:capital-markets-authority-cma-quarterly-statistical-bulletin-q3-2021
- Kamanja, B. K. (2014). The effect of bonus issue announcements on share prices of commercial banks listed at the Nairobi Securities Exchange (Doctoral dissertation, University of Nairobi).
- Kinyanjui, A. K. (2014). Effect of right issues on share prices for companies listed at the Nairobi securities exchange (Doctoral dissertation).
- Kirui, E., Wawire, H. W., &Onono, P. O. (2014). Macroeconomic Variables, Volatility and Stock Returns: A Case of Nairobi Securities Exchange Kenya. International Journal of Economics and Finance, 6(8), 214-228. https://doi.org/10.5539/ijef.v6n8p214
- Kithinji, J. G., Oluoch, W., & Mugo, W. (2014). The Effect of Rights Issue on Firm Share Performance at Nairobi Securities Exchange. Research Journal of Finance and Accounting, 5(4), 76-84.
- Kothari, S. P., & Warner, J. B. (2007). Econometrics of event studies. In *Handbook of empirical corporate finance* (pp. 3-36). Elsevier.
- Kothare, M. (1997). The effects of equity issues on ownership structure and stock Liquidity: A comparison of rights and public offerings. *Journal of financial Economics Nairobi Securities Exchange 2013*.
- Korteweg, A. G., & Renneboog, L. (2003). The Choice between Rights-Preserving Issue Methods. Regulatory and Financial Aspects of Issuing Seasoned Equity in the UK. Regulatory and Financial Aspects of Issuing Seasoned Equity in the UK (March 2003). ECGI-Finance Working Paper, (15).
- Lee Rodgers, J., & Nicewander, W. A. (1988). Thirteen ways to look at the correlation coefficient. *The American Statistician*, 42(1), 59-66.
- Leemakdej, A. (2007). New Evidence of Stock Split When Uncertain Event Window is identified. *Available at SSRN 990963*.
- Loader, D. (2005). Clearing and settlement of Derivatives. Amsterdam: Elsevier.
- Lofgren, K. G., Persson, T., & Weibull, J. W. (2002). Markets with asymmetric information: the contributions of George Akerlof, Michael Spence and Joseph Stiglitz. *The Scandinavian Journal of Economics*, 104(2), 195-211.
- Malkiel, B. G. (2003). The efficient market hypothesis and its critics. *Journal of economic perspectives*, 17(1), 59-82.
- Mariko, J. B., & Theuri, J. M. (2016). Effect of New Information from Rights Issue Announcements on Share Prices of Firms Listed on Nairobi Securities Exchange. American Journal of Finance, 1(4), 54-70.



- Markowitz, H. M. (1991). Foundations of portfolio theory. *The journal of finance*, 46(2), 469-477.
- Mbui, A. L. (2016). Effect of Bonus Issue Announcements on Share Returns of Companies Listed on Nairobi Securities Exchange. Unpublished Dissertation. University of Nairobi, Kenya.
- Mishra, A. (2005). An empirical analysis of market reaction around the bonus issues in India. *Indian Institute of management working paper*, (2005-10).
- Modi, R. O. (2016). Effects of stock split and rights issues on share price of companies listed on the Nairobi Securities Exchange (Doctoral dissertation, University of Nairobi).
- MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of economic literature*, 35(1), 13-39.
- Miglani, P. (2011). An Empirical Analysis of Impact of Right Issues in the Indian Listed Companies. Journal of Arts, Science and Commerce, 2, 169-176.
- Musau, M. (2007). Stock Splits: The Hidden Flaws. The African Executive 14th-21st March 2007. Website: www.africanexecutives.com/modules/magazine/ articles.
- Mutua, N. M. (2013). The effect of rights Issue on performance of firms listed at the Nairobi Securities Exchange. Unpublished MBA project. University of Nairobi.
- Ndua, D. N. (2012). The effect of rights issue on market returns of firms listed at Nairobi securities exchange (Doctoral dissertation, University of Nairobi).
- Njoroge, C. (2003). Impact of rights issues on stock prices: the case of Companies listed at the Nairobi stock exchange (Doctoral dissertation).
- Okech, T. C., & Mugambi, M. (2016). Effect of macroeconomic variables on stock returns of listed commercial banks in Kenya.
- Oloo, E. O. (2012). The effects of stock split announcements on share returns at the Nairobi Security Exchange (Doctoral dissertation).
- Onclin, N. (2014). An Investigation to the Announcement Impact from Right Issues on Stock Prices in the Dutch Capital Market. Unpublished Dissertation. University of Twente, Netherlands
- Otieno, D. (2014). The Effects of Rights Issue Announcements on Stock Returns of Firms Listed on Nairobi Securities Exchange. Unpublished Dissertation. University of Nairobi, Kenya.
- Owusu, N. V., & Kuwornu, J. K. (2011). Analyzing the Effect of Macroeconomic Variables on Stock Market Returns: Evidence from Ghana. Journal of Economics and International Finance, 3(11), 605-615. Retrieved from http://www.academicjournals.org/JEIF
- Pooja. (2013). Stock split announcement and liquidity effect: Evidence from India. XIMB Journal, 10 (1), 135 148.



- Rahim, N. (2017). Sustainable growth rate and firm performance: a case study in Malaysia. *International Journal of Management, Innovation & Entrepreneurial Research*, 3(2), 48-60.
- Ratib, M. R. (2013). Effects of bonus share issues on stock returns of firms listed at the Nairobi securities exchange (Doctoral dissertation, University of Nairobi).
- Reilly, F. K., & Brown, K. C. (2011). *Investment Analysis and Portfolio Management (Text Only)*. Cengage Learning.
- Sewell, M. (2011). History of the efficient market hypothesis. Rn, 11(04), 04.
- Simbovo, H. (2006). *The effect of stock split and large stock dividend on Liquidity Evidence from the NSE* unpublished MBA Project UON. 39
- Singh, S. (2012). Investor irrationality and self-defeating behavior: Insights from behavioral finance. *Journal of Global Business Management*, 8(1), 116.
- Spence, M. (1973). "Job Market Signalling". Quarterly Journal of Economics 87 (3): 355–374.
- Sponholtz, C. (2008). The information content of earnings announcements in Denmark. *International Journal of Managerial Finance*.
- Subaih, O. (2013). The effect of stock split announcements on stock prices: an empirical investigation for the Toronto Stock Exchange (TSX).
- Suresha, B. &Gajendra, N. (2012). An empirical study on announcement effect of right Issue on share price volatility and liquidity and its Impact on market wealth creation of informed Investors in Bangalore with special reference to CNX Nifty stocks of NSE. International Journal of Multidisciplinary Management Studies 2 (7).
- Owen, S., & Suchard, J. A. (2008). The pricing and impact of rights issues of equity in Australia. *Applied Financial Economics*, 18(14), 1147-1160.
- Ray, K. K. (2011). Market reaction to bonus issues and stock splits in India: An empirical study. *IUP Journal of Applied Finance*, 17(1), 54.
- Rohit, B., Pinto, P., &Bolar, S. (2016). Impact of stock splits and rights issue announcements on market price: Evidence from India. *Drishtikon: A Management Journal*, 7(2), 1-16.
- Tadapaneni, N. R. (2020). Artificial Intelligence in Finance and Investments. *International journal of innovative research in science, engineering and technology.*
- Tsangarakis, N. V. (1996). Shareholder wealth effects of equity issues in emerging markets: Evidence from rights offerings in Greece. *Financial management*, 21-32.
- Unions, A. (2019). Contemporary Issues in Behavioral Finance. *Artificial intelligence*, 20, 23.
- Van Horne, J. C., &Wachowicz, J. M. (2005). Fundamentals of financial management. Pearson Education.



- Westfall, T. (2010). Stock split announcements: A test of market efficiency. In *Allied Academies International Conference*. Academy of Accounting and Financial Studies. *Proceedings* (Vol. 15, No. 1, p. 59). Jordan Whitney Enterprises, Inc.
- Wilcox, J. W., & Fabozzi, F. J. (2013). Financial Advice and Investment Decisions (1st Ed.). New York: Wiley.
- Wright, R. E., & Sylla, R. (2013). Corporate Governance and Stockholder/Stakeholder Activism in the United States. Daedalus, 142(2), 1790-1860.
- Zhao, J., Katchova, A. L., & Barry, P. J. (2004). Testing the pecking order theory and the signalling theory for farm businesses (No. 377-2016-21038).