

The effects of Rights Issue Announcements on Stock Returns for Firms Listed at the Nairobi Securities Exchange

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ABSTRACT

Rights issue is a secondary equity issue in which new additional shares are issued to the existing shareholders in exchange for cash (capital) needed by a publicly quoted company, either for expansion purposes or to finance company operations. The rights are issued to the shareholders in the proportion of their existing holdings. Empirical studies give mixed results on the direction of stock returns upon a rights issue announcement. Since there has been no consensus on how capital markets generally respond to rights issue announcement, this study investigates the effect of rights issue announcement on stock returns of companies listed at an organised exchange. The study adopts an event study technique on a sample of twelve companies which issued rights between January 1, 2007 and August 31, 2014. Secondary data on share prices is collected from the Nairobi Securities Exchange (NSE) database. The study establishes that stock prices and returns changes significantly in the post announcement period than in the preannouncement period. Analysis of mean abnormal return reveals that rights issue announcement results into either positive or negative stock return. Based on the cumulative average abnormal return (CAAR), the study concludes that rights issue announcement results into a negative abnormal stock return for the listed firms. The study therefore recommends that the investment banks and listed companies should consider the negative abnormal stock price reactions and the subsequent negative abnormal stock return changes to the announcement of rights issue while setting the discounted rights issue prices so as to ensure that during the issue period, the stock trading prices do not fall below the rights issue price, a fact that can lead to the collapse of the rights issue exercise. The study recommends further academic exploration on the effects of repeat rights issues on stock prices and returns so as to understand the possible response of investors to seasonal issues.

Key Words: Rights Issue Announcement, Stock Returns, Nairobi Securities Exchange

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INTRODUCTION

Firms in the securities markets engage in rights issue as a means of generating more capital to finance their expansion plans and to finance internal operations (Ramirez, 2011). Companies have an option of using either debt or equity to finance their operations. The common long term means of raising capital available to companies include long-term debt (bonds), common stock, preferred stock and retained earnings. In most cases, companies prefer financing using equity since it forms a permanent source of funding that cannot be easily redeemed. Companies that are listed in the stock exchange markets around the world normally raise external equity capital in an initial public offer (IPO) where initial investors usually members of the public are invited to participate, or from existing shareholders in a secondary issue also known as rights issue. A rights issue offers an opportunity to the existing shareholders to buy additional securities in a corporation at a discounted price and are allotted based on the number of shares currently held (Lambrechts & Mostert, 1980).

Several empirical researches both in the global and local context have been done to investigate the effect of rights issue on stock returns. A number of the findings are consistent with the signalling theory indicating that capital markets react to new information, particularly when management announces offering of additional equity stock to the firms' existing shareholders. For instance, study done by Tsangarakis (1996) in Greece found a positive relationship between announcement of a rights issue and increase in returns. A local study by Kithinji, Oluoch and Mugo (2014) on effect of rights issue on firms share performance also found that rights issue has effects on the share performance of the companies listed in NSE. Gatundu (2007) in a study on the effects of secondary equity offering on stock returns established that there are price movement in the periods preceding and after the date of announcement of secondary equity issue, and these movements result into increased abnormal returns for the shareholders.

The rights are issued to the shareholders in the proportion of their existing holdings (Prabina, Raghunathan & Raghunathan, 2007). This is because the existing shareholders have pre-emption rights on the new shares, in which they can as well refuse. The pre-emption rights give the existing shareholders opportunity to uphold their existing percentage of ownership in the company, but can still choose to buy or waive the shares to be taken by others.

The share prices in a rights issue are typically set much lower than the prevailing market price for the shares. This discount can be as low as between 20-30% and is purposefully to make the offer reasonably attractive to existing shareholders, in order to either take up their rights, or sell them to others who also have the right to take up the new shares under same conditions as that of the seller (Becket, 2012). This strategy is employed by management to ensure full subscription for the shares in order to raise the required amount of capital. Equally, the discount price is also to cushion the shareholders in case the market share price falls before the rights issue period is completed (Lhabitant & Gregoriou, 2008).

Stock returns refer to the gain or loss of a security in a particular period. The return consists of the income and the capital gains relative on an investment and is normally quoted as a percentage (Ilmanen, 2011). The stock return is a function of stock prices and trade volumes a particular stock. In this case, capital gains occur when the securities sell at higher prices than the purchase price, while capital loss occurs when security prices sell at a lower price than the purchase price. In economics and financial theory, a random walk technique is used to model the behaviour of asset prices, particularly the share prices on security markets, commodity prices and currency exchange

rates. This technique is based on the assumption that investors are rational and without biases, thus fairly estimate the value of asset or shares based on future expectations. In a securities market, investors always want to maximise their returns, thus always interpret any information based on whether the information will positively influence their returns.

Announcement of a rights issue usually elicits different responses among the investors. For instance, an announcement of a secondary equity issue (SEI) may send positive signals that the company is likely to perform better in future after additional investment, and this gives the investors' confidence to demand more investment in shares (Becket, 2012). This increase in demand for the company's shares based on the technical analysis of better future performance is likely to result in the increase in the share prices and consequently increase in stock returns (Musyoki, 2012). Conversely, persistent rights issue may make shareholders react negatively, since it may be an indicator that the firm's liquidity is always very low, thus limiting future return and capital gains.

Finance signalling theory asserts that capital markets react to information released into the market, and is based on the assumption that there is information asymmetry in the market. This means that corporate financial decisions such as rights issue act as signals that can either elicit positive or negative response, thus affecting the stock returns. Miller and Rock (1985) argue that unexpected equity issues signals bad news. Several studies, which give mixed results on the effect of rights issue on stock returns have also been done. For instance, studies done by Suresha and Naidu (2012) in India, Cotterell (2011) in South Africa, and Roosenboom and Kabir (2002) in Netherlands found that stock market reacts negatively to the announcement of a rights issue, leading to abnormal negative stock returns. On the contrary, the study by Miglani (2011) in India and Gatundu (2007) in Kenya found an increase in stock prices and consequently a positive abnormal stock returns.

The inconsistent results therefore indicate that there is no agreement on the effect of rights issue announcement on stock returns. There has been no consensus on how capital markets generally respond to rights issue, thus not possible to generalize the direction of market reaction as instigated by the announcement of rights issue in the Kenyan market. There exists a gap. This study therefore seeks to fill the gap to understand the direction stock returns take when rights issue is announced at NSE. The research question that guided this study is; what is the effect of rights issue announcement on stock returns of firms listed in Nairobi Securities Exchange?

The main objective of this study is to investigate the effect of rights issue announcement on stock returns of firms listed in Nairobi Securities Exchange.

LITERATURE REVIEW

Three theories that give the foundation of this study include; random walk hypothesis, signalling theory and efficient market hypothesis.

Random Walk Hypothesis

The theory points that information reach the security market randomly and elicits random reactions of the security prices. Investors are assumed to rationally estimate the value of shares based on the expected future returns. Random walk theory states that the past movement or direction of the price of a particular security or of the whole market cannot be employed to forecast its future movement since information arrive randomly (Elton et al, 2009). This means that share prices are independent of each other and have similar probability distribution, thus take unpredictable path. This theory leads into efficient market hypothesis (EMH) in which security prices reflect both publicly and

privately available information, and that one cannot rely on historical information to make arbitrary profits (Singal, 2003). In this context, announcement of a rights issue may elicits random share price changes.

Efficient Market Hypothesis

An investment theory developed by Fama (1970), outlining that financial markets respond efficiently to information reaching it. This means that market prices fully reflect all the available information. This means that a single investor cannot consistently achieve returns in excess of average market returns on a risk-adjusted basis, given the information available at the time the investment is made (Fama et al, 1969).

Signalling Theory

This theory states that corporate financial decisions and communications are signals sent by company managers to investors, in order to minimise information asymmetry and to facilitate rational investment decisions (Elton et al, 2009). These signals are the basis of financial communications policy. The theory is constructed on the premise that information is not evenly available to all parties at the same time. Usually, managers are privy to consistent, accurate and relevant private information that inform their decisions, which in turn signals the market. For instance, company announcements of an increase in dividend pay-outs act as an indicator of the firm having strong future prospects. Having that investor's intention is to maximise their returns, they will be willing to invest only in a company projected to have stable future performance (Quiry et al, 2011).

Roosenboom and Kabir (2002) looked at whether the stock market could anticipate future operating performance using equity rights issues in Netherlands, for a period covering 1984-1995. One of the objectives of the study is to examine the effect of stock market announcement, particularly rights issues on the stock prices. The study adopted a standard event study design and a sample of 58 firms listed in the Amsterdam Stock Exchange that issued rights were analysed to measure the reaction of share prices to the announcement. The market model parameters were used to estimate over 200-trading days surrounding the event period, but the event period analysed limited to 60 days prior to the announcement to 30 days of post announcement. It is found that upon the announcement of a rights issue, stock prices significantly declined and gradual decline in stock return throughout the period of rights trading. This means that stock holders interpret secondary equity issue as negative news. Further analysis by the researchers revealed that rights are actively traded during the subscription period.

Cotterell (2011) did a study to investigate the impact of rights issues announcements on share price performance in South Africa. The study is conducted by analysing rights issue announcements occurring on the Johannesburg Stock Exchange (JSE) between January 1, 2001 and December 31, 2010. The study adopted a standard event study design to analyse 35 events that took place in that period and employed a market model and control portfolio to measure abnormal returns statistical analysis conducted to confirm significance. The study found that there is an average abnormal returns of -2.33% and -3.30% on the day of the announcement subject to the model used, and Cumulative Average Abnormal Returns (CAARs) for five days post the announcement ranging between -5% and -6%. Cotterell found share price reactions to differ with statistical significance, in respect to financial situation of the issuer. However, the firms that were categorised as healthy recovered from the initial decline to a CAAR of less than -1% twenty days post the rights issue

announcement, while firms categorised as unhealthy and grouped in the grey zone deteriorated further to a CAARs of -9.17% and -8.06% respectively in the same period. Overall findings indicated share price decline on the announcement of a rights issue, but that this response is considerably worse for firms in a poor financial position, as measured by their Altman Z Score.

Miglani (2011) also explored the impact of right shares issued by Indian firms between year 2005 and 2010. The study is to investigate the reaction of stock prices to the information content of announced right issues, with a view of determining whether Indian stock market is semi-strong efficient or not. Using event study methodology and a sample of 32 right issues announced during the period of study (2005-2010), it is found that there is a statistically significant abnormal return of the stock on the announcement and the surrounding dates, attributed to the positive increase in share prices and increase in volumes of shares traded.

Cheruiyot (2006) in a study that focussed on the impact of rights issues on security Prices for firms trading at NSE also revealed that security prices respond based on the information content. This study involved 6 firms that issued rights in the period April 1, 1996 to December 31, 2002. Market model is employed to generate the excess returns and the parameters of the model were computed using GARCH model. Least Squares method is used to compare findings and two tailed t statistic used to test the significance of the findings. The study found that rights issue impacts on the firm's security prices at NSE. However, the movement of the prices whether negative or positive is dependent on the content of information released to the market. The nature of the information may be negative but the extent is varied across the sample. This finding is similar to the finding by Ndua (2012) that found that stock returns after rights issue depends on information content. This means that firms intending to issue rights must release sufficient and relevant information for positive market interpretation.

Gatundu (2007) in an empirical study that investigated the effect of announcement of secondary equity offerings on stock prices of companies quoted at the NSE as well as to determine the impact of the announcement on trading volume before and after the secondary issue found that the announcements do not shock the market. The study adopted an event study research design and identified ten companies that had issued secondary shares to the market between 1996 and 2006 at Nairobi Stock exchange. The study found minimal abnormal returns showing that the information about rights issue does not shock the market in a significant way. Conversely, the analysis revealed that more shares were traded after the announcement of the secondary equity issue than in the pre-announcement period for most firms involved in the study. The study concluded that the announcement of secondary equity issuing led to the increase in the volume of trade.

Olesaaya (2010) in an empirical study also examined the effects of rights issues on the stock returns of firms quoted at Nairobi stock exchange. The study adopted an event study research design as outlined by Brown and Warner (1985) and used market statistical model, which links the returns of any given security to the return of the market portfolio to measure and analyse the abnormal returns. The researcher noted that the abnormal returns are considered to indicate the stock market's reaction to the announcement of secondary equity issues. The analysis of the study found that there is a negative abnormal return prior to the announcement of rights issue, positive abnormal returns during the announcement and negative results after the rights issue period.

A study by Kithinji, Oluoch and Mugo (2014) whose objective is to determine the effect of rights issue on firms share performance in the Nairobi Securities Exchange also found significant changes

in share performance after the announcement. The study used a sample of 9 companies that form the NSE 20 share index and had issued rights between 2007 and 2012, with an event period of 20 days before and 20 days after the announcement. Using descriptive study design and market model to analyse the data, the study found that rights issue announcement has a significant impact on the share price performance of firms in which 100% of the results pointed a positive significance level. Having that the findings of the evidences reviewed showed both negative and positive impacts, this study will add into the knowledge on the response of stock returns when rights issue are announced.

RESEARCH METHODOLOGY

This study adopts descriptive research design to investigate the general behaviour of stock returns whenever a rights issue is announced by companies listed at NSE. Descriptive design is defined as a scientific method which involves observing and describing the behaviour of a subject without manipulating it in any way (Christensen, Johnson & Turner, 2011). This design is preferred since the researcher uses the realized data of stock returns before and after the announcement without influencing the subject, in order to judge the natural behaviour of stock returns around the event period. The study population in this case includes the 61 companies listed in the Nairobi Securities Exchange as at August 31, 2014 and a sample 12 companies listed at the Nairobi Securities Exchange which issued rights between January 1, 2007 and August 31, 2014 (Appendix II). Data analysis in this study involves determining any abnormal stock returns after the announcement of the event. This is achieved through the use of standard event study model (MacKinlay, 1997).

Analytical Model

This is done using the following steps;

Step one; involves determining the actual return (R_i) for each of the days studied. This is done by calculating price after the announcement date less the price before announcement date plus any additional income received over the period, divided by the price of the security before the announcement date (Elton et al, 2009). This is computed using the following model;

$$R_i = \frac{(P_1 - P_0 + D_1)}{P_0} \dots\dots\dots \text{Equation 1}$$

Where:

R_i = Return on security i

P_1 = Price after the announcement date

P_0 = Price before announcement date

D_1 = Any income received over the period

Step two; involves determining the abnormal stock returns for each of the days under study comprising 30 days before the announcement of rights issue (t_{-30}) and 30 days after the announcement of rights issue (t_{+30}). Abnormal return in this case is the actual return less expected return. This helps in determining any significant change in stock returns associated with the event (t_0).

The abnormal return is calculated using the market model below that first shows the linear relationship of returns and market;

$$ER_{it} = \alpha_{it} + \beta_i R_m + e_i \dots\dots\dots \text{Equation 2} \quad \text{Where;}$$

ER_{it} = Expected return for security i at time t

α_{it} = Alpha (intercept of the characteristic line of y intercept)

β_{it} = Beta (gradient characteristic line that gave the sensitivity of stock

excess return after the announcement)

R_{mt} = Return on market portfolio at time t

e_{it} = Avoidable risk

Having that investors are only compensated for systematic risk due to efficient diversification, the equation for expected return becomes;

$$ER_{it} = \alpha_{it} + \beta_i R_m \dots\dots\dots \text{Equation 3}$$

Abnormal stock return is then calculated by actual return (R_i) less expected return (ER_{it}), computed as follows;

$$AR_{it} = R_{it} - (\alpha_i + \beta_i R_{mt}) \dots\dots\dots \text{Equation 4}$$

The parameters α_i and β_i in the model were estimated using the ordinary least square (OLS) regression over the estimation period of 30 days prior to the window period (t_{-60} to t_{-31}) in order to estimate the normal expected returns, which are not influenced by possible insider trading activities instigated by their knowledge of looming announcement of the rights issue. This short period is preferred to minimise exposure of the regression parameters to possible changes in risks. This is because longer estimation period may affect the regression parameters in case the risk of stock changes during the estimation period. For this period, the expected return is determined using the market model.

For the sample of 12 securities, mean abnormal returns (MAR) on each of the days within the window period (t_{-30} to t_{+30}) is then calculated to determine the average abnormal returns of the companies that issued rights within the study period. This is calculated as;

$$MAR_{it} = \frac{\sum AR_i}{N} \dots\dots\dots \text{Equation 5}$$

Where N is the number of sample (12)

Step three; this involved computing the cumulative abnormal returns for all the days studied. This is done by adding all the abnormal returns for the event window (t_{-30} to t_{+30}).

Testing the significance of the cumulative abnormal return (CAR) and mean abnormal return (MAR) is the fourth step and is done using standard t-test statistic at 95% significance level. Using these models, the researcher is able to determine the effects of the announcement of rights issue on the firm's share prices and volumes of trade for the companies listed at the NSE.

DATA ANALYSIS, RESULTS AND DISCUSSION

The objective of the study is to investigate the effects of rights issue announcement on stock returns of firms listed in Nairobi Securities Exchange. To meet this objective, data comprising adjusted share prices and volumes traded for twelve companies listed in Nairobi Stock Exchange that had issued rights between 2007 and August 31, 2014 were collected in order to analyse the movement of prices and volumes of shares within the window period of 61 days. This analysis also include firms that offered rights more than once, in which each issue is analysed independently. The precise announcement date is established and event study model is employed to assess if there is any abnormal market reaction to announcement of rights issue.

Analysis is done by determining the mean abnormal returns of the security returns for the study period of 30 days before and 30 days after the announcement of right issue. The significant difference between the mean abnormal return before announcement and mean abnormal return after the announcement, as tested by the t-statistic at 95% significance level, helps to describe the reaction of stock return when information about rights issue officially reaches the security market.

The results of the data analysis for each of the 12 companies are as are summarized in table 4.1 below.

Table 4.1: Results of Abnormal Returns

Companies that Issued Rights	T-Value (AR)	Degree of Freedom (Df)	T-Critical Value	Cumulative Abnormal Average Return (CAAR)
Olympia capital	5.66E-10	29	1.699	0.0675
KCB 2008 Issue	3.15E-06	29	1.699	-0.0035
KPLC	7.37E-07	29	1.699	-0.1594
KCB 2010 Issue	4.54E-06	29	1.699	-0.1832
TPS East Africa	3.31E-21	29	1.699	0.25497
Standard Chartered Bank (2010)	0.037459	29	1.699	0.16569
CFC Stanbic Holdings Ltd	0.0001031	29	1.699	-0.1677
Kenya Airways	0.000121	29	1.699	-0.2636
NIC bank	0.00021296	29	1.699	-0.0828
DTB (2012 Issue)	0.00036185	29	1.699	-0.0329
DTB (2014 Issue)	0.98966159	29	1.699	0.03365
Standard Chartered Bank (2012)	0.187647	29	1.699	0.02939
		CAAR		-0.0285

Source: Research Findings

The cumulative abnormal return (CAAR) is calculated to understand the overall effect of rights issue announcement on stock returns for each of the 12 listed companies involved in the study. The abnormal return is also tested at 95% significance level. The study found a negative CAAR of -0.0285. This leads to a conclusion that the announcement of a rights issue results into a negative stock returns for listed companies in the NSE.

Interpretation of the Findings

The results contained in table 4.1 were generated from the event window of t_{-30} to t_{+30} making a total of 61 days. The calculated mean abnormal return for Olympia capital for the event window is found to be 0.0675 and a t-test value that compared the mean of abnormal returns before announcement and after announcement is found to be 5.66E-10. The t-value is less than the t-critical value of 1.669 at degree of freedom of 29, tested under 95% significance level. This is interpreted that in Olympia Capital, the announcement results in an increase in stock returns by 6.75%. The t-value shows that there is significant difference in mean of abnormal returns. It is noted that the calculated t-value (5.66E-10) is far much lower than the critical t-value (1.699), thus the means are significantly different at $p = 5.66 \times 10^{-10}$. This means that rights issue announcement has a significant effect on stock returns.

Repeated procedure for the remaining eleven companies generates either positive or negative mean abnormal return, as indicated in table 4.1 column 5 or t-tests in column 2. Out of the 12 companies analysed, 5 recorded positive mean abnormal return, while 7 recorded negative mean abnormal returns, with all the 12 generating a t-test which is less than the t-critical value of 1.699. The negative cumulative abnormal average return (CAAR) for the 12 companies analysed show that there is a negative value of -0.0285. This means that there is a cumulative reduction of stock return by 2.85% during the event window t_{-30} to t_{+30} . This study therefore, finds that the announcement of a rights issue results into negative abnormal stock returns for listed companies.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

From the results, the study found that in all the companies, the announcement had significant effect on the stock returns. Share prices and stock returns for all the companies involved in the study took a downward trend in the post announcement period as compared to the pre-announcement period, except for Olympia Capital and TPS East Africa whose returns increased after the announcement. This finding leads to the conclusion that the changes in stock returns were attributed to the announcement.

Analysis of the mean abnormal return also indicate that for the event period (t_{-30} to t_{+30}), seven out of the twelve firms recorded negative abnormal return, leading to a negative cumulative abnormal average return of -0.0285 for all the companies under study. The results show that most companies' stock, record a negative return around the rights issue announcement period. In all the companies, there is a significant difference between the means of abnormal return prior to the event day and the mean after event day, with 100% of the t-value indicating a positive significance level. Therefore, rights issue announcement has a significant negative effect on the stock return of companies listed in NSE.

Recommendations for Policy

Investment banks need to understand stock price reactions and stock return changes to the announcement of rights issue, in order to determine the rights issue discount prices. It is recommended that Capital Markets Authority and NSE to develop a policy that will limit the minimum and maximum price levels, especially during rights issue period to protect the prices from manipulations and to protect the interest of the investors. This will limit how low or high prices can go during the issue period.

Limitations of the Study

The study faced the limitation of identifying the exact rights issue announcement date, especially for those issues in 2007 whose exact dates could not be explicitly identified. It is also noted that there are other important days that may affect stock returns, such as the date CMA approves a planned rights issue, but is not considered in this study. This means that the official rights issue announcement day alone may not have a huge impact on returns since the information of the planned rights issue occasionally leaks to the market way before the official announcement date, and may cause changes in stock prices as proved by the consistent unidirectional changes in stock prices a few days before the event day for most of the companies analysed in this study.

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APPENDIX I: Companies that Issued Rights between January 1, 2007 and August 31, 2014

Name of Company	Year Rights are Issued
Olympia capital	2007
Kenya Commercial Bank	2008
KPLC	2010
KCB Group	2010
TPS East Africa	2010
Standard Chartered Bank	2010, 2012
CFC Stanbic Holdings	2012
Kenya Airways	2012
NIC bank	2012
DTB	2012, 2014

Source: NSE Handbook 2014

APPENDIX II: Share Price movement and % Stock Returns

Figure 1: Share Price movement and % Stock Returns Rates OCH

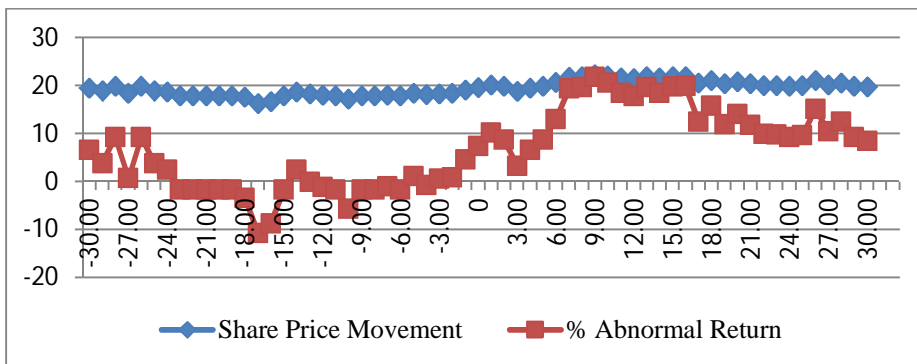


Figure 2: Share price movement and % Stock Returns for KCB 2008

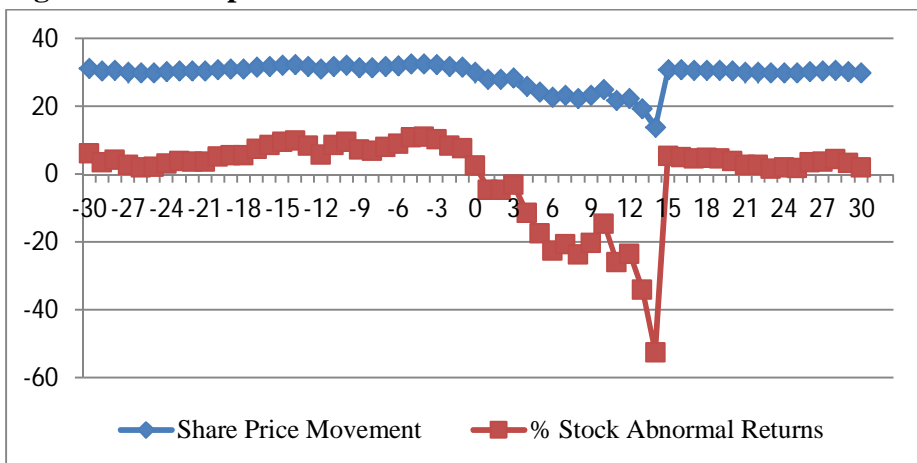


Figure 3: Share Price and % Stock Returns for KCB 2010

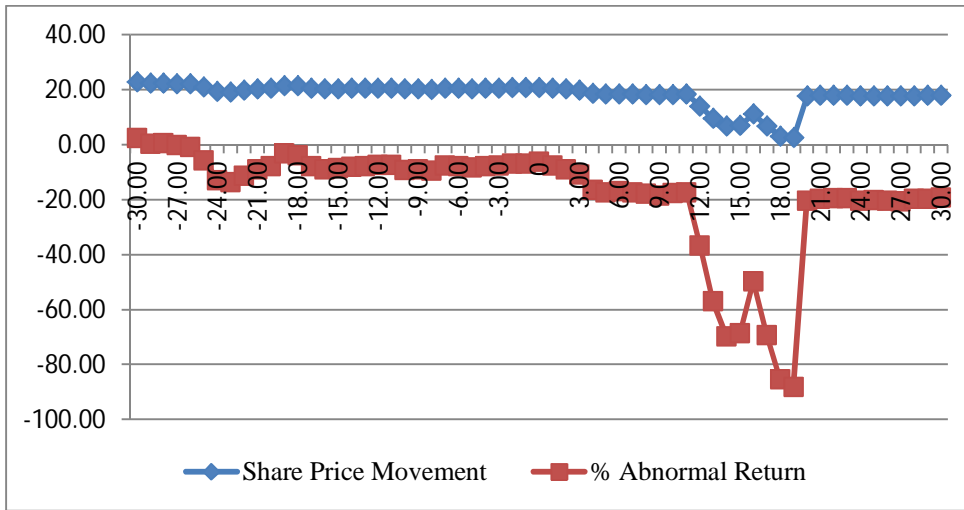


Figure 4: Share Price Movement and % Stock Returns for Kenya Power

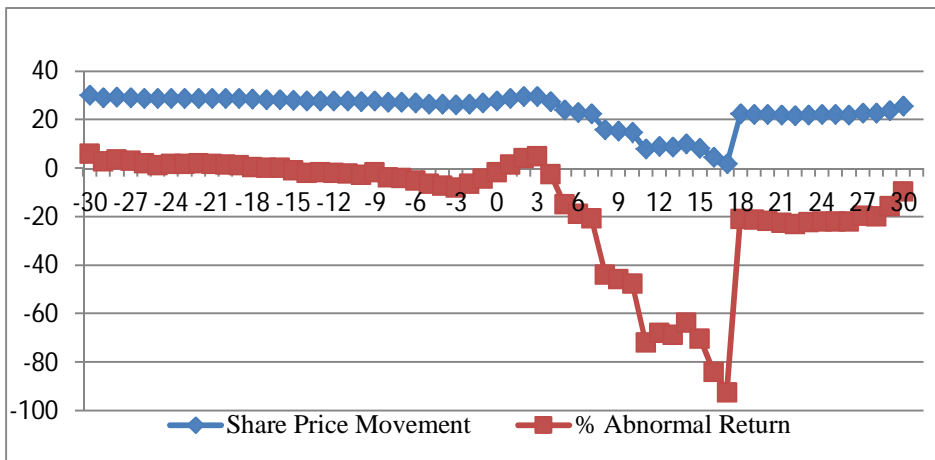


Figure 5: Share Price Movement and % Stock Returns for SCBK

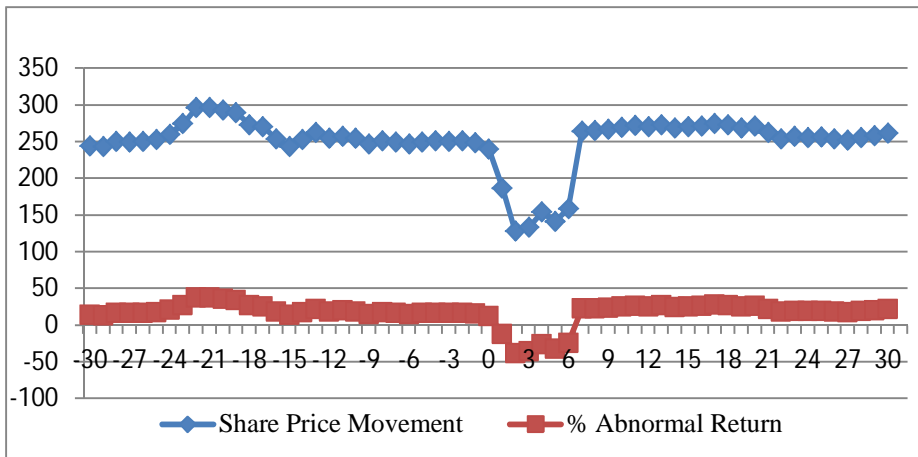


Figure 6: Share price Movement and % Stock Returns for TPS East Africa

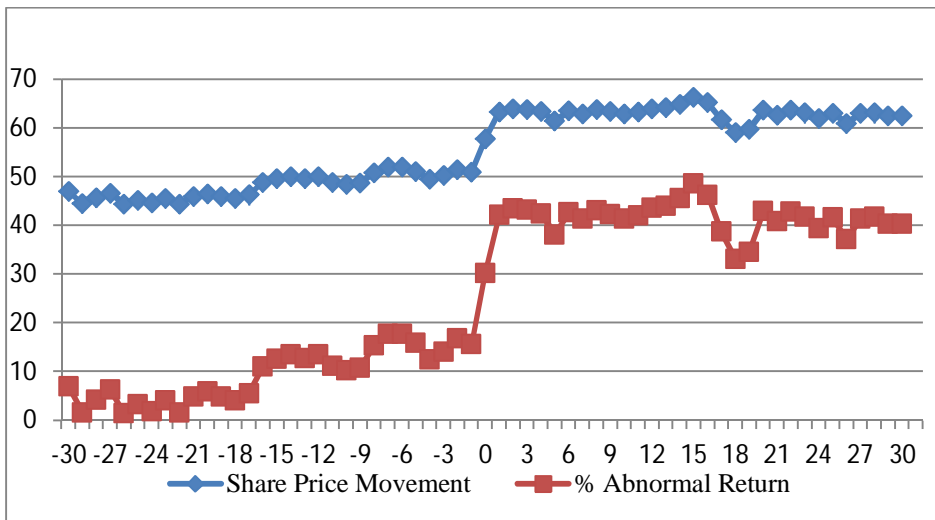


Figure 7: Share Price Movement and % Stock Return for KQ

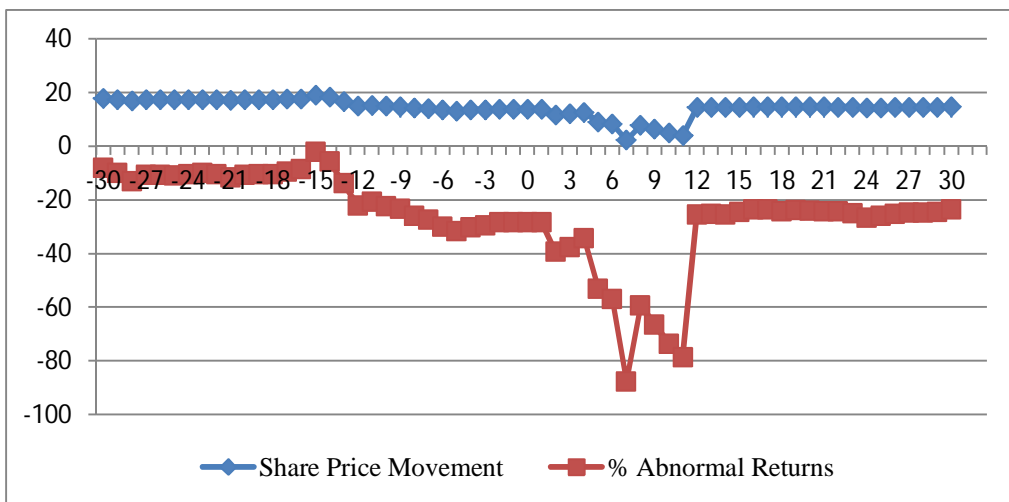


Figure 8: Share Price Movement and % Stock Return for CFC Holdings

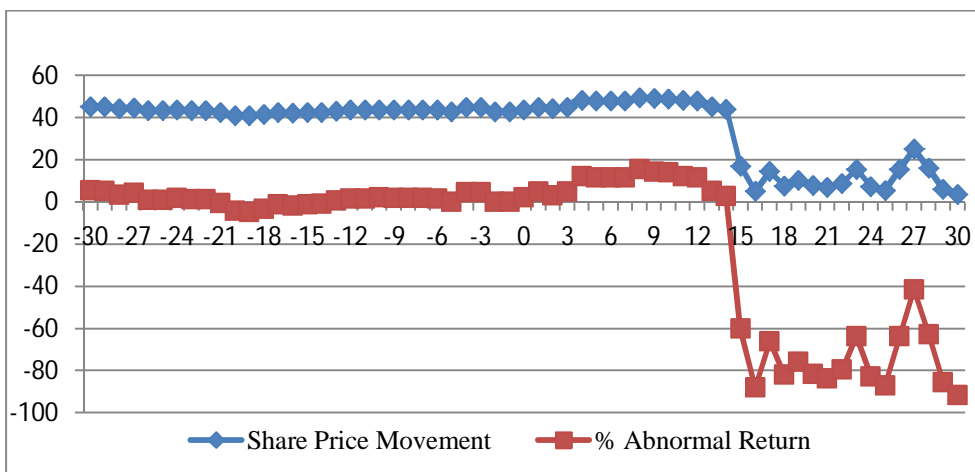


Figure 9: Share Price Movement and % Stock Return for NIC Bank

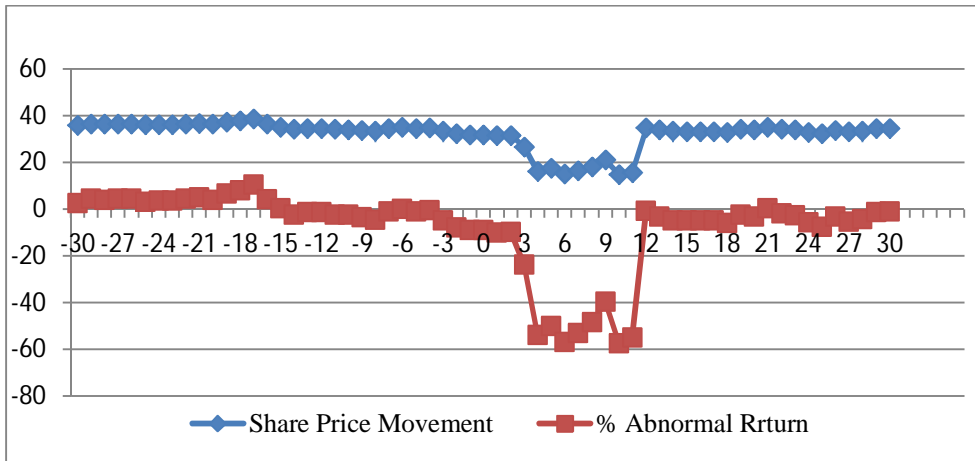


Figure 10: Share Price movement and % Stock return for SCBK 2012 Issue

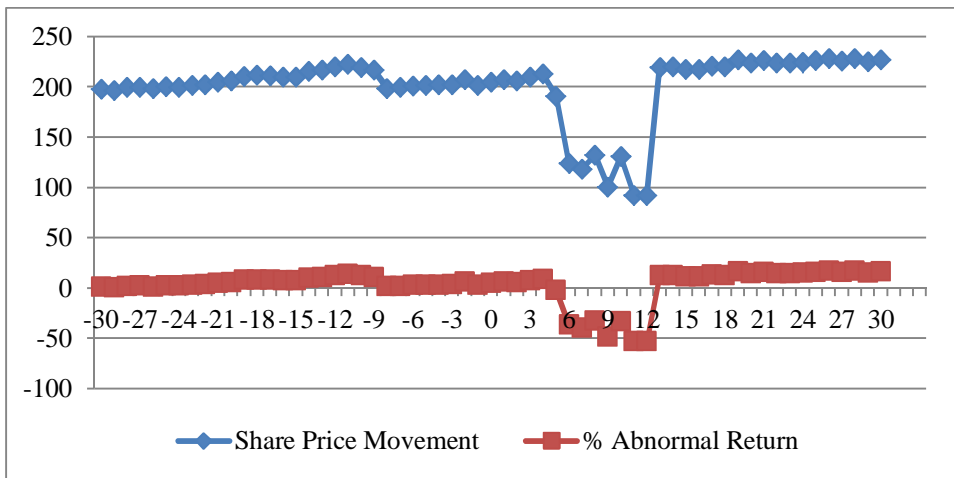


Figure 11: Share Price Movement and % Stock Return for DTK 2012 Issue

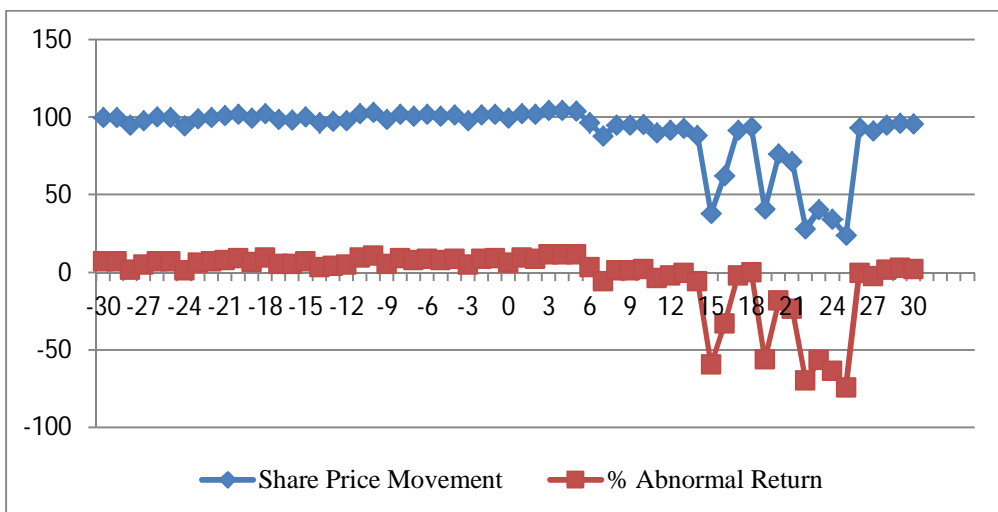


Figure 4.12: Share Price Movement and % Stock Return for DTK 2014 Issue

