THE EFFECT OF RIGHTS ISSUES ON PERFORMANCE OF STOCK PRICES OF COMPANIES LISTED IN THE NAIROBI STOCK EXCHANGE

By

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A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTERS OF BUSINESS ADMINSTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI.

OCTOBER, 2011

DECLARATION

This management research project is my own work and has not been submitted for any degree in any other university and where other peoples research work has been used, they have been used, they have been duly acknowledge.

Signed: _____ Date: 11th - NOV - 2011

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This management research project has been submitted for examination with my approval as university supervisor.

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DEDICATION

This study is dedicated to my parents, brothers and sisters without whose guidance, understanding and sacrifice I would not have progressed this far. More so, to my Dad who instilled and inspired us through the values of hard work. May their sacrifice and dreams of their hard work be a blessing unto them.

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May God bless you all.

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ABBREVIATION

AAR -	Average Abnormal Returns
ANOVA-	Analysis of Variance
CAAR –	Cumulative Average Abnormal Return
CAPM -	Capital Asset Pricing Model
CMA -	Capital Market Authority
EA -	Earnings Announcement
EMH-	Efficient Market Hypothesis
MAAR -	Market Adjusted Abnormal Return
MS Excel-	Microsoft Excel
NSE 20-	Nairobi Securities Exchange 20 Share Index
NSE -	Nairobi Securities Exchange
P/B -	Price to Book Ratio
P/E-	Price Earnings Ratio
SP's -	Stock Price(s)
SPSS-	Statistical Package for Social Statistics
TVA -	Trading Volume Activity

ABSTRACT

This study is undertaken with a view to establish where rights issues by firms listed in the Nairobi Stock Exchange and have had successful rights issues have any impact on stock prices. These will include comparing and analyzing the trading activity before and after commencing trading and also abnormal returns.

Any information content into the market is noted to progressively affect levels of trading volume .Intraday volatility decreases as information is absorbed conforming more closely to random walk which is usually caused by information based trading. Sensitivity of past trading before new information is fully absorbed and can significantly reveal a more wide spread use of such trading strategies setting new stock prices.

Objective of the study is to determine whether firm's rights issues commencing trading generate any increase or decrease of share price before and after on stock price of a firm. Data extracted from the NSE Daily stock and NSE hand book is analyzed using SPSS with focus on comparing critical F-value. From the data analysis and resulting table shows whether companies have had any impact pre and post commencing trading.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The price of a share is determined by supply and demand. It's what the investor is prepared to pay for it at that time and what others are prepared to sell it for. Its price therefore is what an investor believes its worth. A Share price reflects all known information and represents the collective beliefs of all investors about the business future prospects (Fama 1970). When an investor is considering buying a company's share, they will attempt to assess how much a share is worth by determining how much money they will receive in terms of future dividends from the shares and how much money shares are likely to be worth when investor comes to sell them. Investor will also consider how risky shares are and can only do this by attempting to place a value on company's business and its ability to earn profits in the future.

The stock market is almost seen to be efficient .If an investor thinks a share is worth more than current market price, they will buy it or at least they should. Alternatively, if value of stock they own is less than market price, they should consider selling it.Examples of pieces of information likely to affect company's share price are interest rate changes, significant changes in political situations, financial results, top management changes, major acquisitions and disposals, major changes in financial structure, analyst's forecasts and changes in credit ratings. Stock market prices adjust to new information quickly and at any time will reflect all that is known relating to prospects of the company and collective judgment of market as to what is worth (Patell and Wolfson, 1984, Gonsell, Keown and Pinkerton, 1996).

Fama (1970) provides two different modes of raising and financing projects which are mainly through two main categories which are equity financing, debt Financing or both. One method of equity financing is rights issues and its popularity in the Kenyan market can be viewed from the recent spate of rights issues by firms listed in the NSE over the last decade. Under this method of financing, additional capital is raised from the stock exchange.

Fama et al (1969) defined Rights issues a method of financing where additional shares are offered to existing shareholders for subscription while at the same time giving them the right to maintain these share of interest in firm as before. As such, the supply end or total outstanding shares of issuing companies in market place increases thus causing concern to investors over effect on the available stock prices. Right issues are not an outcome of executive decision by firms management rather they reflect a complicated combination or investment strategy, financial decision and private information (Miller and Rock, 1985).

Rights issues affect in one way or another, the amounts of dividend and dividend income that investments will receive from the investor's perspective. Dividends are beneficial since they represent a regular income stream which will enhance self control by avoiding national trades.

Some of the companies that have had rights issues from the CMA Quarterly Bulletin (QI) include;

- Standard Chartered Bank which raised Sh 2.5 Billion through a rights which was used to pay for Barclays security services ,a custodial and registry business it acquired from Barclays bank
- Kenya Power Lightening Company issued rights to raise Sh 10 Billion invested in system that cut on transmission losses and purchases of prepaid electricity meters to replace the post paid.

- KCB raised Sh.5.8 Billion which was used to retire expensive corporate wholesale deposits, strengthen its regional operations and provide more funds for its mortgage business.

Other companies have raised funds for expansion of the business and include TPS East Africa, HFCK, DTB, Uchumi, Total Kenya, Kenya Orchards, CFC Bank and Olympia Capital.

Study assets the impact to which stock price performance surrounding the time or event has been abnormal with extent to which stock returns are different from what would have been had such an event not occurred.

Fama (1969) proposed three forms of Efficient Market Hypothesis (EMH): Strong form, Semi-strong firm and Weak form. The event study will study the semi- strong version of (EMH) .Under this version, every bit of new and publicly available information in market is presumed to be fully reflected instantly and in unbiased manner into the stock price.Thus stocks that exhibit abnormal returns (positive or negative) which persist after a particular type of event are taken as inconsistent with semi-strong version of EMH.

1.1.2 NairobiStockExchange and CapitalMarketsAuthority

The Nairobi Stock Exchange (NSE) was established in 1954, and among other roles facilitates the exchange of securities issued by publicly quoted companies and government of Kenya. Stock exchange assists in transfer of savings to invest in productive enterprise as an alternative to avoid idle savings.

The market is regulated by Capital Market Authority (CMA). Regulation authority is under a government body the Ministry of Finance and governed through the Capital Markets Authority Act. Cap 185 .The capital market can be dichotomized in two ways: the Primary market (the initial public sales or securities supplied by newly listed firms or new issues by previously listed firms.) versus the Secondary market (trading in issues previously issued publicly: and private securities market (trading in stocks and bonds of privately owned. Authority has established to regulate and oversee the orderly development of Kenya's capital market (2006, NSE handbook)

Average market capitalization for the first quarter of 2011 stood at Ksh 1.1 trillion, 3% lower than 1.2 trillion average market capitalization for the preceding quarter, but 6% above the average market capitalization of Ksh 1.09 trillion for whole of 201. General decline has been attributed to reduced participation of foreign investors particularly February 2011, when net inflow dropped by 70%. Inflow however registered significant recovery in March 2011.

Capital Market helps in growth of economy and facilitates good management of companies by assisting companies to provide periodic reports on their performance. Investors get an understanding of their worth or investments (assets) at all times through the NSE daily market report and price list of listed companies. The listed equity companies at the NSE are categorized into five segments, Agriculture, Commercial and services, financial strive, industrial and allied and finally alternative investment market segments (AIS) (2006, NSE handbook). Respective companies are attached as Appendix 1.Investors expects returns on their investment and given certain level of a rational investor will expect to maximize returns.

1.2 Statement of the Problem

Several studies have considered how markets react to new information and there is also empirical evidence of effect of stock prices performance of companies quoted at different stock exchanges in the world. Practitioners and financial scholars have noted valuable information content that firm's performance on the stock price.

In Kenya, available evidence documents related studies. This include Ondigo (1995) studyon the information content of annual reports for eighteen blue chip companies listed in the NSE and the focus was on behavior of share prices before and after release of annual reports. Study concluded that on average, annual reports of sampled companies had no information content during period of study.

Korir (2006) carried out a study on the effect on financial performance of companies listed in the NSE after merging .Objective was to find out effects of mergers if any on performance of companies. Time frame was from 1994-2005.Population of 48 companies listed in the NSE. A sample of 20 listed companies was conducted it consisted of 10 companies that merged and 10 that never merged and were in operation for period counterparts were merged. Measures of performance used were stock prices, volume, market capitalization and profit. They were analyzed in terms on basis of descriptive statistics. It was concluded that mergers improves the overall performance of companies listed in the NSE.

Langat (2006), studied corporate governance structures and performance in firms quoted in the NSE. Aim of the research was to see if listed companies change their corporate governance structures when experiencing underperformance. Study followed a cross-sectional survey design that sought to identify differences in governing structures between companies facing decline in value, those with appreciating values and those with stable value over period of 2000-2005. Findings established there was a positive relationship between listed firms performance stock prices and frequency of board meetings.

Muthui (2003) conducted study of 20 quoted companies which make up Nairobi 20 share Index relating the price earnings ratio to share performance. He used one way ANOVA to rest results and concluded for those companies, the return of low price earnings stocks are not significantly higher.

White and Luztig (1980) studies rights issues effect by using intervention analysis approach in which dummy variables were used in order to take into consideration the effect of other source of information arising from right issues. Their results showed price effect associated with rights issues announcement was significantly negative from zero.

This study is aimed at identifying the effect of rights issues on performance of stock prices of companies listed at the NSE. The result will be used to contribute on the level of information content rights issues contain and how this affects the overall stock price performance. It is also intended to highlight positive and negative aspects of rights issues by companies listed in the NSE. Study will analyze daily stock prices for the listed companies having rights issues distinguishing it from other studies during the event period. This research will study Kenyan firms to prove a conclusive result on the effect on stock price performance pre and post rights issues.

1.3 Objective of Study

Study is guided by the objective of examining the effect on performance of stock prices to the information content (if any) that is implicit in the event of right issues for companies listed in the Nairobi Stock Exchange. Based on trading activity ratio, impact on performance on company stock will be studied with objective of studying the information content of the rights issue event.

1.4Importance of the Study

Rights issues are mainly used by firms with high ownership concentration where high insider take-up and exercise of the right can be expected. This is expected to neutralize adverse selection and wealth transfers. The negative signal that poorly subscribed rights offering would send which could occur in firms with widely dispersed ownership is seen as too damaging to risk. In this study, the popularity of this form of financing will be analyzed.

Study is important to economist who seeks to understand and appraise the functioning of capital markets. The most important functions of capital markets is to allow issuers of securities to raise money from investors in primary markets. This provides a mechanism for funding expansion and new ventures capital markets also encourage investments because they have an existing mechanism when you need money back from your investment, there is a market to sell your money.

It is important to investment advisors when advising and managing investor's portfolio. A broker not only performs the buying and selling investors into clients but also advises the investors at which stock to buy and to sell. It also ensures they are able to get better returns for their clients and therefore get more clients and build their confidence.

To academicians the study will provide useful basis upon which further studies on variables of rights issues will be conducted. Finance scholars have engaged in extensive studies and level of information content if any is available for companies that undertake rights issue.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter summarizes the information from other researchers that have been carried out their resource in same field of study. The specific areas covered are EMH Theory, pricing of securities at NSE, Rights issues and there effects and Event Window Study.

2.1. Efficient Market Theory

Concept of the efficient market is one in which the market place uses information as soon as its available and immediately evaluates all the effects or that information in setting assets prices.

The information and its effects are not limited to factual information; the effect may exist only on the expectations of market participants. Because EMH does not explicitly state a formula for valuing assets, the concept that changes in expectations can affect securities values is compatible with efficient market hypothesis.

In an efficient capital market, security prices fully reflect all available information in a rapid and unbiased way and thus provide unbiased estimates of underlying values (Baru 1977). A market in which prices always full reflect all available information is called efficient, (Fama 1970). The market efficiency hypothesis is a simple statement that assumes security prices fully reflect all information.

Fama (1970) identified three distinct levels or strengths at which a market might actually be efficient. The weak E.M.H claims that prices fully reflect the information implicit in the sequences of past prices. The semi- strong form of the hypothesis asserts that prices reflect all relevant information publicly available, while the strong form is market efficiency asserts information that is known to any participant to be reflected in market prices.

2.1.1 Weak form of EMH

New information must by definition be unrelated to previous information; otherwise it would not be new. Share price in response to new information can be predicted from last movement of price and development of price assumes the characteristics of random walk. In other words, the future price cannot be predicted from study of historic prices.

If market is of Weak- form, there is no correlation between successive prices. Excess returns cannot consistently be achieved though the study of past price movement. This kind of study is called technical or chart analysis because it's based on the study of past price patterns without regard to any further background information.

2.1.2 Semi- Strong Firm EMH

EMH states that markets are efficient and all relevant publicly available information is quickly reflected in market price.

Theory further states market will quickly digest the publication of relevant new information by moving the price to a new equilibrium level that reflects change in supply and demand caused by emergence of that information. One problem with semi-strong form lies with identification of relevant publicly available information.

In semi- strong market, the current price is best available unbiased predictor of a fair price having regard to all publicly available information about risk and return of an investor.

The study of any public information cannot yield consistent excess return because it means that fundamental analysis cannot produce consistency higher return than are justified by risk involved.

2.1.3 Strong Form EMH

Efficient market it stages that a market as either of all relevant to value or share, whether or not generating to existing or potential investor in quickly and accurately reflected on market price. It is the most satisfying and compelling form of EMH in theoretical sense but it suffers from one big drawback in practice.It is difficult to conform empirically, as the necessary research work would be unlikely to win the cooperation or relevant section or financial communication (insider dealers)

2.2 Security Prices Behavior

Empirical research in accounting and finance suggest that share price do not follow a pure vendor random walk and are likely comprised of sum of trend component and stationary component. (Fama& French, 1988: Poeterba& Summers, 1988; Lipe and Kormendi, 1994; Zhou, 1996)

To the extent that price is related to earnings, then work implies that time series process of earnings for individual firm is also comprised of these trend and stationary components. A problem arises from the interaction or the EMH with a mechanical applicant of CAPM. If CAPM and EMH and both carried simultaneously, the CAPM is how the market sets the prices and everybody knows the correct price. Any movements away from this price must be interpreted as missing price. If this missing price occurs in an efficient market, then sophisticated market participant can be expected to buy or sell as necessary to force the security prices back to its uncritically correct prices.

No buyer would pay more than publicly know CAPM price and no seller would accept less than publicly known CAPM prices. That however is not what is observed to happen in reality. Present paradigm of how capital market value assets consists of combination or Capital Asset Pricing Model plus EMH. CAPM is a normative model for the valuables of an asset. The EMH addresses the speed with which process changes.

Given an initial price observed in market, expect return during a period can be translated into equilibrium price of risky asset. (Copeland and Weston, 1979)
Thus the CAPM becomes a normative pricing model. In the CAPM formula, this is only one term which varies by security, so at least, according to the formula the force of an asset is determined by its covenant which is measured by Beta - how it moves relative the market as a whole, nothing else matters and can change price relative to the market.

2.3 Empirical Literature Review

Bernard and Thomas (1990) examined evidence that stock prices do not fully reflect the implementation of current earnings for future earnings, they summarized that there is consistency that stock prices partially reflect a naïve earning expectation. The study documented abnormal returns around subsequent earnings announcement. Evidence presented here is consistent with a failure of stock prices to fully reflect the implication of current earnings for future earnings.

Islam and Clark (2005) studied emerging markets are efficient by investigating partial correlation of stock returns during 1992- 2001. The study observed that there is an autocorrelation on their stock market especially during the post- crisis period concluding the emerging stock market is inefficient. The efficiency is caused by a combination of lack of development and implication of the policy choices. The inefficiency of the stock markets follows from violation of the necessary conditions for an efficient with developed financial system and also implies financial and institutional imperfections.

Many empirical studies on the world capital markets tend to focus on the reaction speed of the market to important events or other new information. The principle role or stock market is to act as an intermediary between lenders and borrowers. Markets primary function is providing a central market place, pooling funds and spreading risks.

In this study, right issues commencing trading earn information which affects the price of stock traded at NSE according to that markets can be weak, semi strong and strong form. In semi- strong form efficiency market, the yield should adjust instantaneously to unanticipated information. However new information can allow or reduce uncertainty in the market.

Kendall (1953) analyses an economic time series by extracting from it a long term movement or trend for separate study and then scrutinize the residual portion for short term oscillatory movements and random functions. Kendall examined 22 UK stocks and commodity prices series and concluded that in series of prices which are observed at fairly close intervals the random changes from one term to next are no large as to swamp any systematic effect which may be present.

Data behave almost like wandering series. The near zero correlation of process changes was an observation that appeared inconsistent with economist views. Nevertheless, these empirical observations came to be labeled the "random walk model" or the "random walk theory." If prices wander randomly, then this poses a major challenge to market analysts who try to predict the future path of security prices. Despite the emerging evidence on the randomness of stock price changes, there were occasional instances of emulous price behavior, where certain senses appeared to follow predictable paths.

Samuelson (1965), studied proof that properly anticipated prices fluctuates randomly began with the observation that in competitive markets there is a buyer for every seller. If one could be sure that a price would rise, it would have already risen. Samuelson asserted that arguments like this are used to deduce that competitive, prices must display price changes that perform a random walk with no predictable bias.

Samuelson explains that we would expect investors in market place in pursuit of avid and intelligent self interest, to take account of those elements of future events that in a probability sense may be discerned to be casting their shadows before them. Through his study proceeds from theory to empirical work, he notes that most of empirical work proceeded developments of the theory. The theory involves defining an efficient market as one in which trading on available information fails to provide an abnormal profit. A market can be deemed to be efficient, therefore only if we post a model for returns. From this point on, tests of market efficiency become joint tests or market behaviors and models of asset pricing.

On stock splits, Lemakdey (2007) detected significantly negative returns in 20 days before and 18 days after effective date of a split, with most returns been clustered around the event data. This was in contrast to other studies that noted positive returns around stock splits dates. Boechme (2001) investigated long- term effects from stock splits in US market during 1950-2000 and found that an abnormal return was detected only in first year and this subsidized afterwards. Significant abnormal returns only occurred during the year 1975- 1987 period caused by lower systematic risk.

Fama (1970) summarizes the early random walk literature, his own contributions and other studies of information contained in historical sequences or prices and concludes that the results are strongly in support of weak form of market efficiency. The author concludes that in short, the evidence in support of efficient market models is extensive and (somewhat uniquely in economics) contradictors evidence is sparse.
He further observes that much remains to be done and indeed, Fama (1991) subsequently returned to the fray with a reinterpretation of EMH in light of subsequent research.

Kilo (2006) investigated in the NSE's semi- strong level by looking at speed of adjustment of share prices in cash earnings announcements between 2000–2004. The study used 21 days event window to capture the reaction over the period.

The most frequently cited article on fund manager's performance was to be the detailed analysis of 115 mutual funds over the period 1955- 64 undertaken by Jansen (1968). On a risk adjusted basis, he finds that any advantage that portfolio managers might have is consumed by fees and expenses. Even if investors' management fees and loads are added back to performance measures and returns are measured gross of management expenses (that is assuming research and other expenses were obtained free). Jansen (1968) concludes that "on average the funds apparently were not quite successful enough in their trading activities to recoup even their brokerage expenses".

Fama (1991) summarizes a number of subsequent studies of mutual fund and institutional portfolio manager's performance. Though some mutual funds have achieved miner abnormal gross returns before expenses, pension funds have underperformed passive bench marks on a risk adjusted basis. It is important to note that EMH doesn't rule out small abnormal returns before fees and expenses. Adjusts could therefore still have are incentive to acquire and act on valuable information, though investors would expect to receive no more than average net return.

To make sense, the concept of market efficiency has to admit the probability of minor market inefficiencies. The evidence accumulated during the 1990's and 1970's appeared to be broadly consistent with this view. While it was clear that markets cannot be completely efficient in strong form, there was striking support for weak and semi strong form and even for version of strong form efficiency that focus on the performers in professional involved managements.

The efficiency hypotheses are simple in principle, but remain elusive. Evolving from an initially puzzling set of observations about random character of security prices, it became the dominant paradigm in finance 1970's. During the heyday, the EMH came to be supported by growing body of empirical research demonstrating the difficult of beating the market whether by analyzing publicly available information or by employing professional investment advisors.

2.4 Rights Issue and Effects

Theoretical literature or finance has advanced three different hypotheses to product price effects of new additional outstanding shares.

This hypothesis clarified as:

- No price effect hypothesis
- Negative price effect hypothesis
- Positive price effect

The proponent of No price effect hypothesis assumes that demand curve for company shares are essentially horizontal. Securities are said to be in close substitution to each other (Scholes, 1972) in that they face similar risk and return characteristics as either directly available in market or portfolio.

Thus, price of any firm shares is independent of number of shares outstanding among the empirically evidences which support them in the widely quoted study by Fama, Fisher, Jensen & Ross (FFJR, 1969)

By using mutually stock returns and cumulative residual approach, they concluded that price adjustment caused by a split is not associated with split itself but its implication on the future dividends. Their findings also concluded market is efficient in semi-strong version but their results are tentative however in that monthly stock prices and effective data rather than daily prices and the announcement date should be used.

Findings by Hansmow, West &Langary (1971) also came to the same but more concrete conclusion as that of FFJR (1969) Using daily returns announcements data their findings showed that investors cannot obtain any systematic abnormal returns from a stock split. Even then, stock splits were studied where effects were similar to rights issues (Levy 1971)

Second hypothesis advanced is the price effect hypothesis. This hypothesis asserts that investment are typically facing a downward sloping demand curve for firm shares (Scholes 1972) and any price reduction is said to be permanent in nature upon such changes as firms outstanding shares. Empirical evidence for this hypothesis were found in a study by Asquith and Marulis (1986)

Their results showed overall, primary offering of seasoned equity reduces stock prices on announcement date. They also examined price effect of past announcement date by studying the stock price performance around the issue date found no significant temporary price pressure effect apparent thus conforming to the semi- strong version of EMH.

Similar conclusion was reached in the study by Scholes (1972), where rights issues were studied on an addendum to his study on large block distributions. Scholes tested the right issue effects via an approach similar to FFJR (1969) and found CAR is positive prior to date of issue and fall by 0.3% on the number of issues but experiences no abnormal returns thereafter.

White and Lusztig (1980) studied the right issues effect by using the intervention analysis approach in which, variables were used in order to take into consideration the effects of other sources of information arising from a right issue.

Their results showed price effect associated with right issue announcements was significantly negative from zero. But in contrast to the hypothesis or permanent price reduction, their evidence showed that the coefficient of dummy variable for 5 days subsequent to announcement data was significantly different from zero at the 5% level, thus rejecting the semi- strong version of EMH.

The third hypothesis offers a positive price effect where rights issue is said to be associated with favorable information about planned investment of issuing corporations and value enhancing from financial leverage reduction. Empirical evidence supporting this hypothesis was lacking.

Apollo (2010) carried out a study on Evaluation of Price to Earning and Price to book values as predictors of stock returns of firms listed at the NSE. Study concluded that valuations multiples such as P/E and P/B ration are very useful to investors and analysts in term of information content. They are used to determine which securities to invest and when to divest. Generally, these valuation multiples have been used to select the cheap or overvalued securities to buy or sell.

Abdi (2010) carried out a study on signaling effect of Dividend payment on Earnings of firm or companies listed at the NSE study concluded dividend payout ratio is positively related with future earnings although association is low.

Kiptoo (2006) in a study to investigate the information content of dividends announced by firm quoted at the NSE , with a population of all firms listed at the exchange market and choose sample of 13 firms which met criteria of researchers using regression analysis concluded that dividend payment do affect phone price and earnings in firms quoted at the NSE.

Mohammed (2010), studied the effect of Earnings announcement on stock prices companies listed at the NSE between 2004- 2008. Period under study was around the earnings announcement even thou all firms do not announce their earnings on one and the same period. The findings and stock prices may be adjusted accordingly. Over the period of announcements, investors incurred losses up to 52.14 percent of stock value on average.

Oluoch (2003) studies timing effect of Earnings announcements on stock returns of companies listed at the Nairobi Stock Exchange, the findings indicated no systematic relationship between firms earnings (whether good or bad) and the timing of release of the annual reports. This implies that companies listed on NSE do not deliberately delay announcements of poor results, an indication that there may be other factors explaining delay on reporting however, the findings contradict any research done on time lag.

2.5 Event Study

First event study was undertaken by Fama, Jensen and Roll (1969), though the first to be published was by Ball and Brown (1968). Using the market model of CAPM as benchmark, these event studies provided evidence on the reaction of share prices to stock splits and earning announcements respectively. In both cases, market appears to anticipate the information and most of price adjustment is complete before the event is revealed to the market when news is realized the remaining price adjustment takes place rapidly and accurately.

The Fama, Fisher, Jensen and Roll study in particular demonstrates that prices reflect not only direct estimates of prospective performance by sample companies but also information that requires more subtle interpretation.

Even studies examine the behavior of company stock prices around corporate events. A vast literature written over past several decades has become an important part or financial economics. Prior to that time, there was little evidence on central issue of corporate finance. In a corporate context, the usefulness of event studies arises from fact that magnitude of abnormal performance at time of an event provides a measure of the (unanticipated) impact of this type of event on the wealth of firms claim holders. Thus event studies focusing on announcements effects for short horizon around an event provided evidence relevant for understanding corporate policy decisions.

Event study using daily data can be meaningfully performing on small exchange provided that certain adjustment are made to accounts for problems caused by trading, (Bartholdy&Olsun, 2006).

Event studies also serve an important purpose in capital markets research as a way of testing market efficiency. Systematically, zero abnormal security returns that persist after a particular type of corporate event are inconsistent with market efficiency. Accordingly, event studies focusing on long horizons following on event can provide key evidence on market efficiency (Brown and Warner, 1980, Fama, 1991)

Event studies are useful in related areas e.g. in accounting literature. The effect of earnings announcements on stock prices has received much attention. In the field of law and economics, event studies are used to examine the effect on regulation, as well as assess damage in legal liability cases. The number of published event studies is increasing and continues to give a second and parallel literature, which concentrates on methodology of event studies, began in the 1980's

From the methodologist paper, it must be known about how to do and how not to do an event study. While professional thinking about event study methods has evolved over time, there seems to be relatively little controversy about statistical proportion or event study methods. The conditions lender which event studies provide information and permit reliable inferences was well understood.

Cowler (1933) found that there was no discernable evidence or any ability to outgo the market. Subsequently, Cowles (1944) provided corroborative results for a large number of forecasts over a much longer sample period. By the 1940's there was therefore scattered evidence in favour of weak and strong form efficiency of the most, though these terms are not yet in use. Studies on Semi- strong form of EMH can be categorized as tests or the speed of adjustments of prices to new information.

The principle research tool in this area is event study. An event study averages cumulative performance of stocks over time, from specified number of time periods before an event to a specified number of period's after. Performance for each stock is measured after adjusting for market wide movements in security prices.

Scholes (1972) study of the price effects of secondary offerings. He examines stock prices movements when the seller may be in possession of non public information.
On average, share price full by amount that reflects value of information. Impact on secondary distribution on the stock price is largely unaffected by size of transaction which confirms one depth of market and sustainability of one security for another. Note, however that there is some indication of post event price drift which may constitute a violation of market efficiency. Evidence that carries and looses their information as time lag increases and such information mitigation is relatively more pronounced.

2.6 Studies of NSE

Studies which have been done on NSE are many, which among them include Munga (1974), Omaso (1989), Kerandi (1993), Riona (2000) and others.

Munga (1974) studied history, organization and role of NSE in Kenya Economy. He found NSE to be characterized by high liquidity and low function.Omasa (1989) studied productive ability or asset pricing model on the NSE and found that these models were not generally good predictive or prices due to what he argues to be efficiency of models or imperfection in the market.

In her study of relationship between corporate attributes and timeliness or annual reports of companies listed at NSE, Lisheriga (1989) found evidence and there are tendencies for less profitable company to delay reporting. In his research, timeliness was defined as time lag occurring between balance sheet data and earning announcement data.

An empirical test of information content of annual reports states of company listed in the NSE was done by Ondigo (1995). His study was based on 18 blue chip companies and focus was on behavior of share price on average before and after release of annual earnings reports. Study concluded that on average annual reports of sample companies had no information content during period of study. Possible explanation of findings such that share prices before and after earnings announcements have already adjusted to most of information contained in forecast coming annual report. This can only be confirmed by research on an unexpected share price and is during period shortly proceeding earning announcement date.

Oluoch (2003) studies the timing effect of earning announcement on stock return of company listed at the NSE, the findings indicated no systematic relationship between firms earning (whether bad or good) and the timing of release of annual report. This implies companies listed on NSE do not deliberately delay announcements of poor results; an indication there may be other factors explaining delay in reporting. However findings tend contradict early research done on time lag.

2.7Conclusion

The above literature review sheds light on the effect of rights issues on stock prices of companies listed in the NSE. Research intends to study aspects of effects of rights issues on stock prices performance in terms of variability in the event period and therefore contribute to the knowledge gap in the Nairobi Stock Exchange.

CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction

This chapter outlines the strategy that was used to meet the objectives of the study. Included is the research design, population and sample, data collection and data analysis and presentation.

3.1 Research Design

This research was an event study on effect of performance on stock prices by rights issues. According to Serra (2002), Event studies start with a hypothesis about how a particular event affects value of a firm. Change in the value of a firm was then interpreted into showing how stock prices indicate abnormal return. Serra (2002) notes that coupled with notion that information is readily impounded in to prices, the concepts of abnormal returns (or performance) is key to event study methods.

In this research, a descriptive survey design of quantitative method of data collection was adopted which is appropriate for collecting data for entire members of the population. A survey design method of research examines the effect on stock prices of right issues by companies listed in the Nairobi Stock Exchange. Descriptive study describes the relationship between the dependent variable Stock Prices and independent variable right issues.

3.2 Population and Sample Size

Population of study included companies listed at the Nairobi Stock exchange (NSE). Listed companies are preferred over non listed companies because data is readily available.It also used 10most recent companies that have conducted successful rights issues during the period 2001-2010 and have been trading continuously to allow for sufficient data for computation and comparisons.

Companies all taken from the Nairobi Stock Exchange were studied with the latest being given consideration first and availability of stock exchange data. Appendix II presents companies that have had right issues between 2000- 2011 and their respective years, offer price, sum raised and subscription level. Reason for choosing listed companies is because of availability of information unlike private companies; listed companies are required to have their financial published. This being the most recent period, it was to bring out the current developments in stock market as well as a representative of period when there was a registered growth in Kenyan Economy.

A list of companies that are listed in NSE is shown in Appendix 1 and companies that have successful rights issues are in Appendix II. NSE handbooks and CMA Quarterly Bulletins also provided information on right issues dates and daily stock values for 50 days preceding and succeeding the rights issues. Internal secondary source from within company's statements was also used.

3.3 Data Collection

Study is confined to companies listed at the NSE. Daily data on stock prices for the event period is used. Secondary data is used for the research which entirely was collected from the NSE handbook and daily stock prices during the event study period.

3.4 Data Analysis

Data analysis is a process of gathering, modeling and transforming data with a goal of highlighting useful information, suggesting conclusions and supporting decision making. Data analysis has multiple facets and approaches encompassing diverse techniques under a variety of names in different business, science and social domains.

Study made use of daily stock prices for the sample stocks of the 10 companies. This period of 50 days was considered sufficient to provide estimate for any changes and incorporated any potential changes in stock prices at the NSE.
The time period of event study was then taken to be T =±50 days

Event study methodology is used to asses any abnormal market reaction to rights issues announcement. This is done by company using the trading activity ratio of companies sampled before and after the rights issue. Cheramanun (2010) did an event study on stock splits using a simple regression equation which was used together with the Trading Activity Ratio (TAR) to hypothesis on performance impact on the share price. This study seeks to use a similar approach of regression to be able to research on rights issues.

Using a standard F- test, hypothesis is tested using a 95% confidence level. Trading activity ratio is calculated by dividing the total number of tradable shares issued by number of shares traded during the event period. Any movement (upwards or downwards) of the stock price was done between the close of the rights issues and start of trading of new shares. On the day new stocks commence trading was the event date.

Brown and Warner (1984) used a simple methodology based on market forces model which is well specified and adapts well to variety of conditions. Model is used to compute any abnormal returns using a simple regression model

$$R_{JT} = \alpha_J + \beta_J R_{MT} + \delta$$

R_{JT}= Actual daily return of security J

R_{MT}= Actual market return at the NSE

T- Day of study

β_J = is the intercept of the regression line coefficient which represents the stocks sensitivity to market return i.e. slope coefficient

Using the above equation a hypothesis test was conducted as follows

H_O: $TAR_{IT} = 0$

H_I: $TAR_{IT} \neq 0$

Where the trading activity ratio is equal to zero indicating changes upon stocks prices representing the Null Hypothesis and Alternative hypothesis being some changes on (TAR) for company stock J on date T.

Normal Return is the expected return without assuming a rights issue took place. For any company therefore, any abnormal return is the difference between actual and normal returns i.e.

$$AR_{JT} = R_{JT} - E[R_{JT}] \text{----------1}$$

Where AR_{JT}= Abnormal Returns on Stock J on day T

R_{JT}- Actual Return on Stock J on day T

E $\{R_{JT}\}$ - Normal returns for the stock J on Day T

Using the NSE price index, this was used to device the market return i.e.

$$R_{MT} = \log\left[\frac{I_T}{I_T - 1}\right] \text{.....II}$$

Daily return for security J was calculated by equation

$$R_{JT} = Log\frac{R_T}{RT - 1} \text{----------III}$$

Where α_J *and* β_J are derived by market model over 50 days between day when new stocks start trading.

For each event data T, cross- section average abnormal returns (AAR) for all firms are defined as

$$AART = \frac{1}{n}\sum \in_{JT} \quad \text{----------IV}$$

$$OT = \pm 50 days$$

Abnormal return observation was aggregated to be draw an inference on the right issue event.

The data was processed using computer spread sheet to come up with the ratio. Table and graphs are constructed that will provide useful results. This will be input into SPSS.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.0 Introduction

This chapter presents the analysis of the secondary data obtained from 10 listed companies at the Nairobi Stock Exchange from the period 2004-2011.The results are qualitatively analyzed to ascertain the level at which companies stock prices react upon a successful rights issue.

4.1 Data Analysis

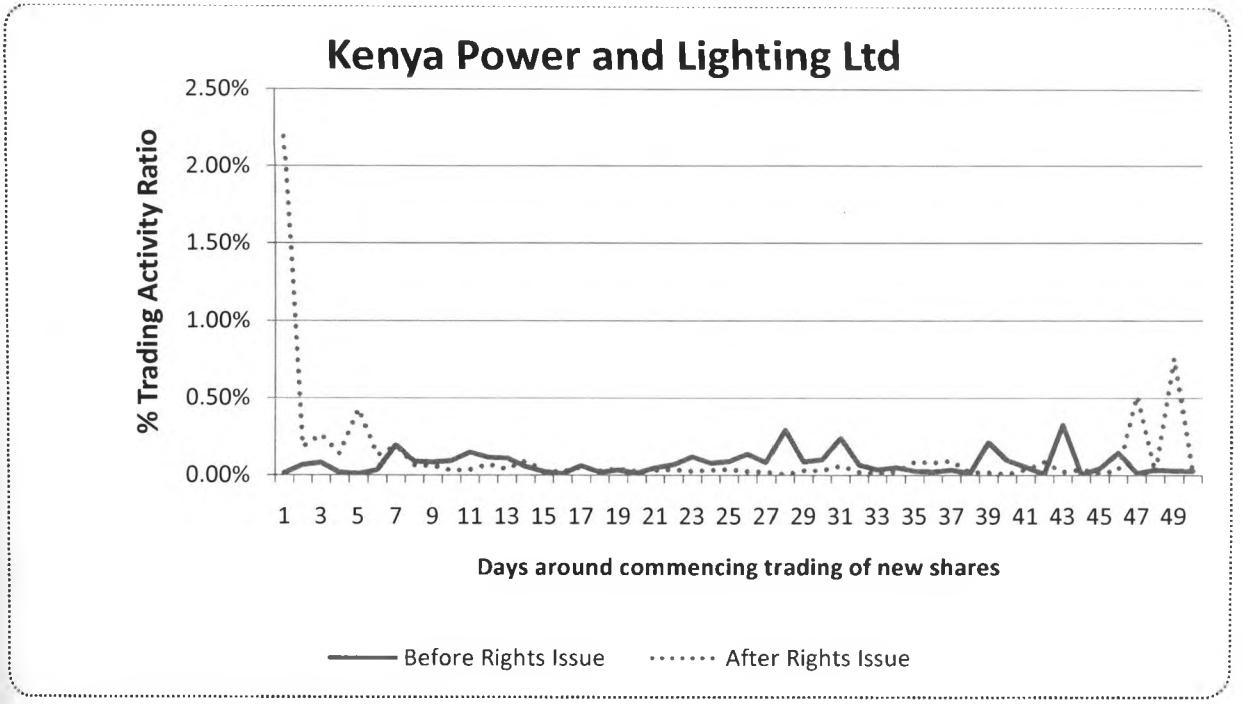
Trading Activity ration against days around rights issue .To test on the hypothesis, tables and charts are used to make representation for the ten companies to develop trends. Tables represent the percentage trading activity ratio against 50days after and 50days before commencing of trading of the new shares.

Charts will show how the commencement of trading affects the volumes traded hence providing information content or none on the company's share. The tables are attached as Appendix 3

Table 1(Appendix 3) has results on number of shares tradable and volume of shares traded for Kenya Power and Lighting Company .Shares considered are fifty days before and fifty days after commencing trading of the rights issues shares.

Below chart shows percentage trading activity ratio around period and presented in Figure 1.

Figure 1: Chart of percentage Trading Activity Ratio against Days around Rights issue

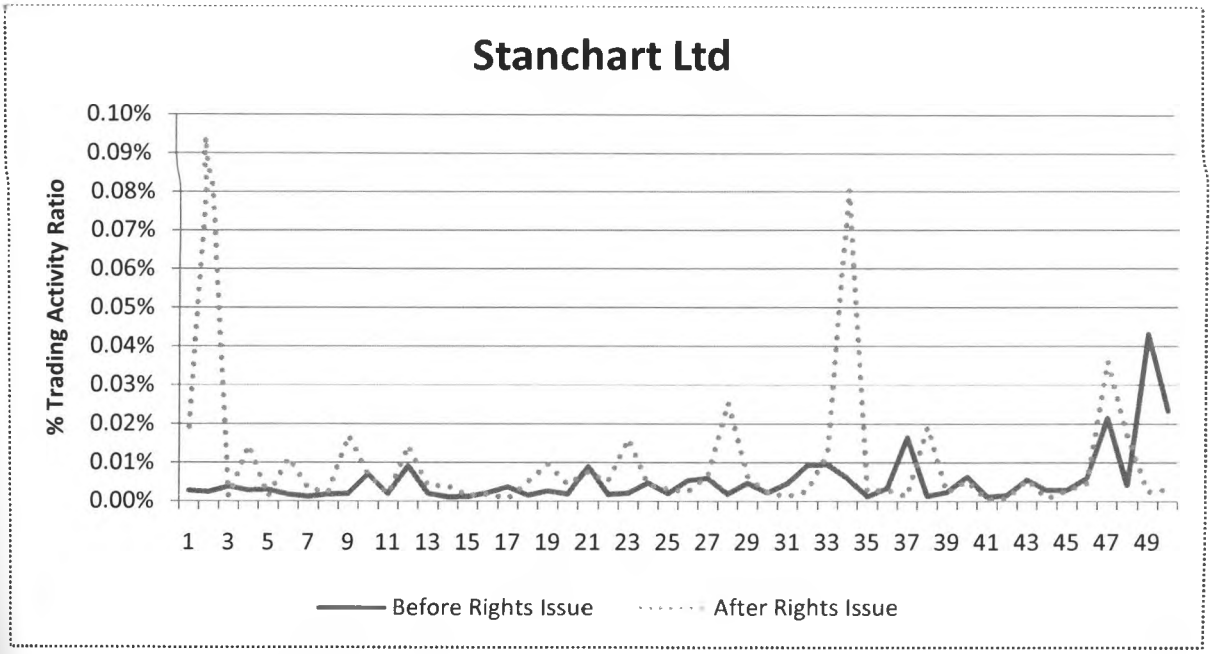


Source: Research Data

Figure 1 shows how market reacted before and after commencing trading. Chart shows an immediate increase on the week following commencing on the trading activity ratio. However, this levels out into the second week and again activity increases on the 46th and 50th day of trading when this trend increases.

From Table 2(Appendix 3), Figure 2 is plotted on number of tradable shares and volumes of shares traded fifty days before and fifty days after of Standard Chartered Bank Limited. The percentage activity ratio is calculated and plotted

Figure 2: Chart of percentage Trading Activity Ratio against Days around Rights issue

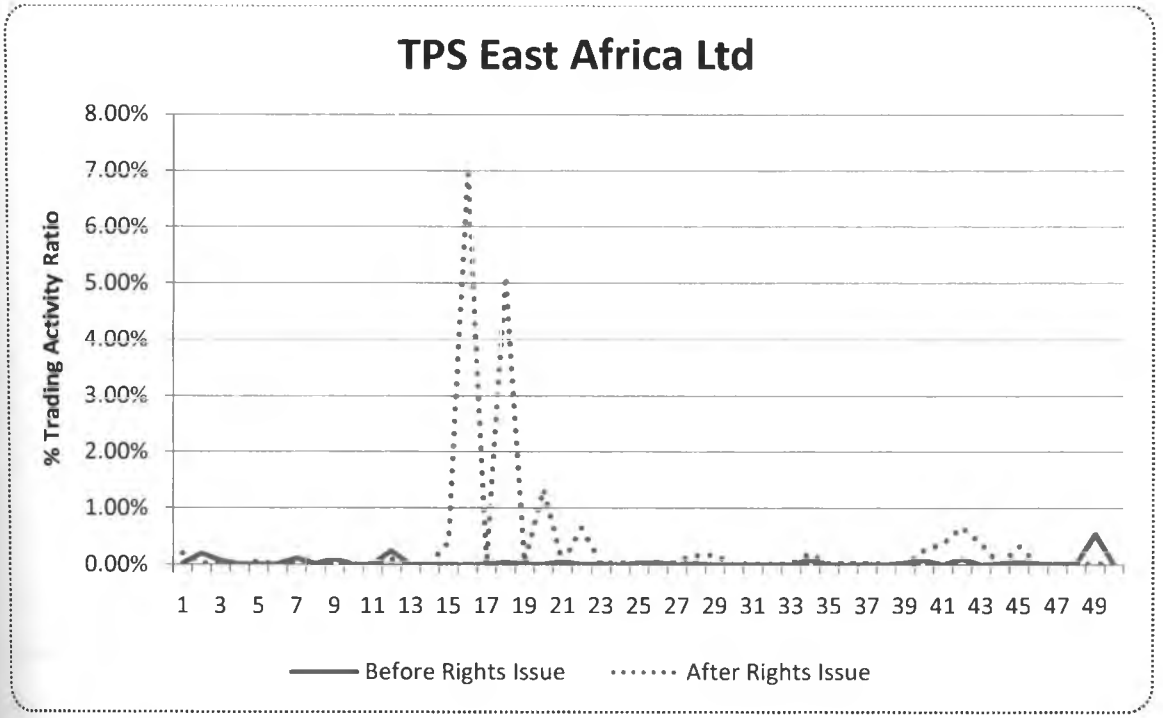


Source: Research Data

Figure 2 shows plotted chart of percentage trading activity ratio on days commencing trading of rights issues shares. Overall, highest increase was into the first week when an increase in trend in trading activity was noted. However, overall there was a noted increase in about all the days after rights issue commencing trading.

Below results from Table 3(Appendix 3) show number of shares tradable and volumes of shares traded fifty days before and fifty days after commencing of rights issues of TPS East Africa. The percentage trading activity ratio is calculated and represented as Figure 3.

Figure 3: Chart of percentage Trading Activity Ratio against Days around Rights issue



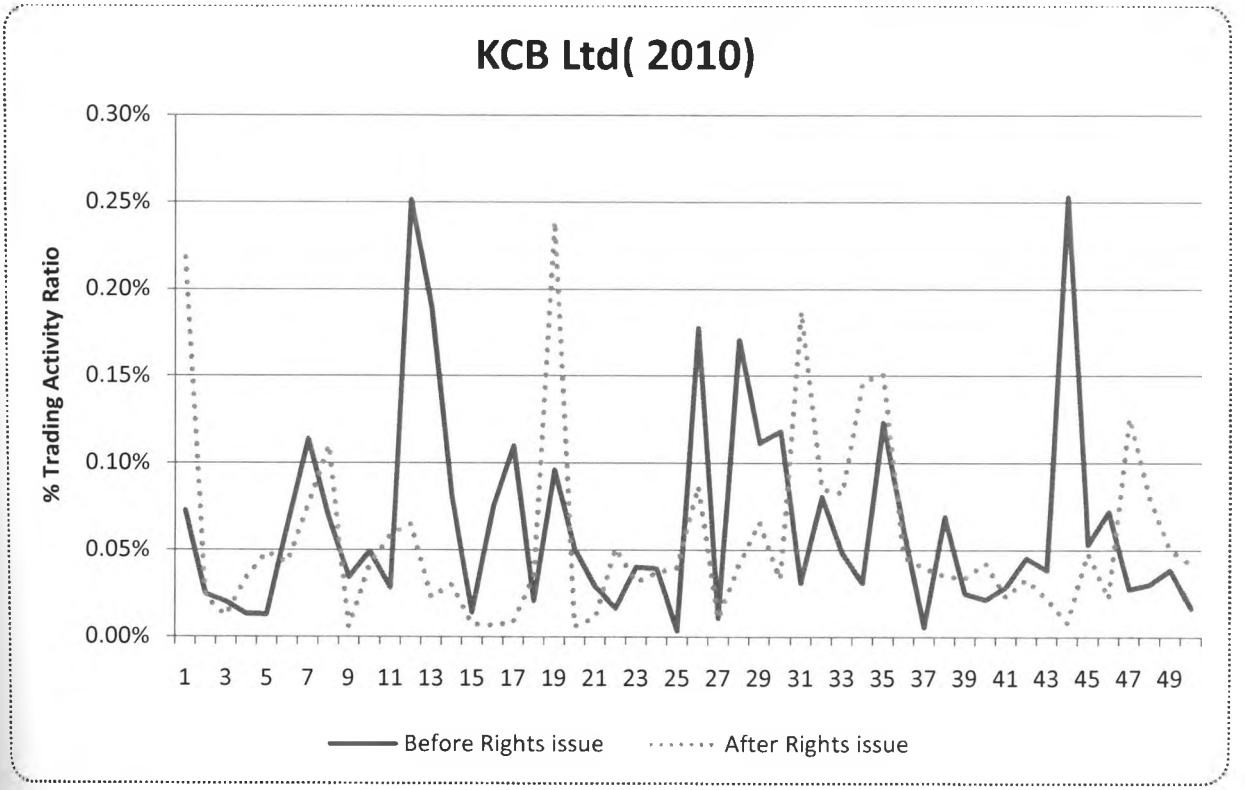
Source: Research Data

It shows reaction after and before rights issue shares commencing trading .Activity is higher after the 12th day and remains higher than before on most of the trading days. Particularly highest increase was between the 13th to 23rd days.

Activity after the 23rd day is noted to be slightly above or equal on all the other days compared to before the rights issue.

Below results from Table 4(Appendix 3) shows number of shares traded by Kenya Commercial Bank in 2010.Percenatge Trading Activity Ratio was calculated and Figure 4 represents the results.

Figure 4: Chart of percentage Trading Activity Ratio against Days around Rights issue



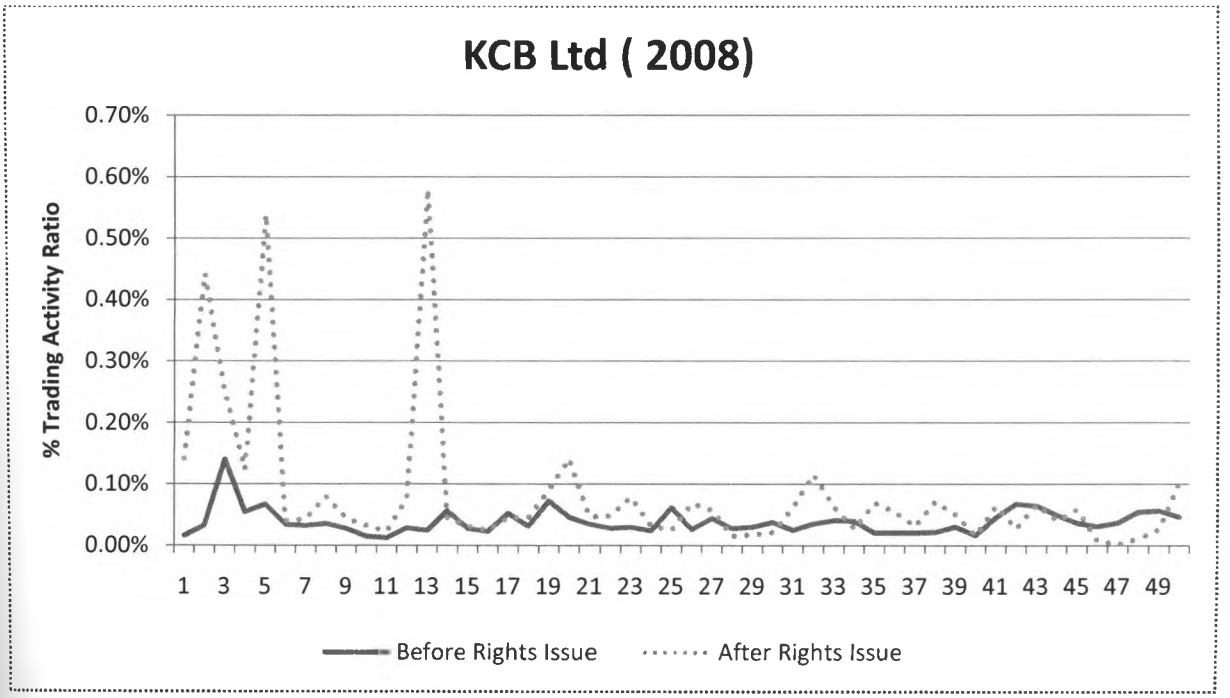
Source: Research Data

Figure 4 shows a chart on percentage trading activity ratio against days around commencing trading. Activity was particularly higher immediately after the commencement .This trend was however reduced and only increased on the 17th, 30th-37th day and 46th day compared to activity recorded before the rights issue.

Overall activity is sporadic on different days when comparing that before and after the rights issue.

Below results from Table 5(Appendix 3) present number of tradable shares traded fifty days before and fifty days after of Kenya Commercial Bank in 2008. Percentage trading activity ratio is calculated and chart below is plotted as Figure 5.

Figure 5: Chart of percentage Trading Activity Ratio against Days around Rights issue



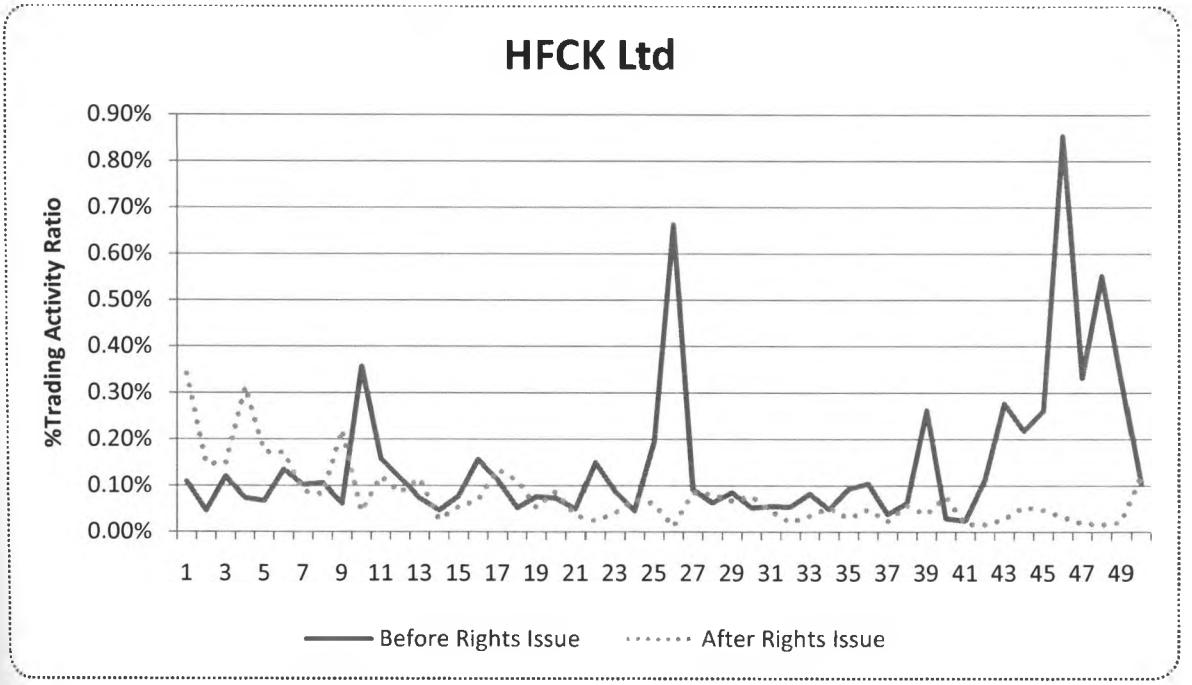
Source: Research Data

Figure 5 shows plotted chart after commencing trading. It shows activity before and after commencing trading on rights issue. Trading activity trend was higher after rights issue with the first 14 days experiencing highest increase in trading activity after commencement. For the 50 days after activity was noted to be higher than before the rights issue.

Overall activity is higher on almost all the days after commencing trading.

Below results from Table 6(Appendix 3) show percentage trading activity ratio against days after and before commencement of trading of new shares at the Nairobi Stock Exchange for HFCK Ltd. Figure 6 represents the table of results on this activity.

Figure 6: Chart of percentage Trading Activity Ratio against Days around Rights issue



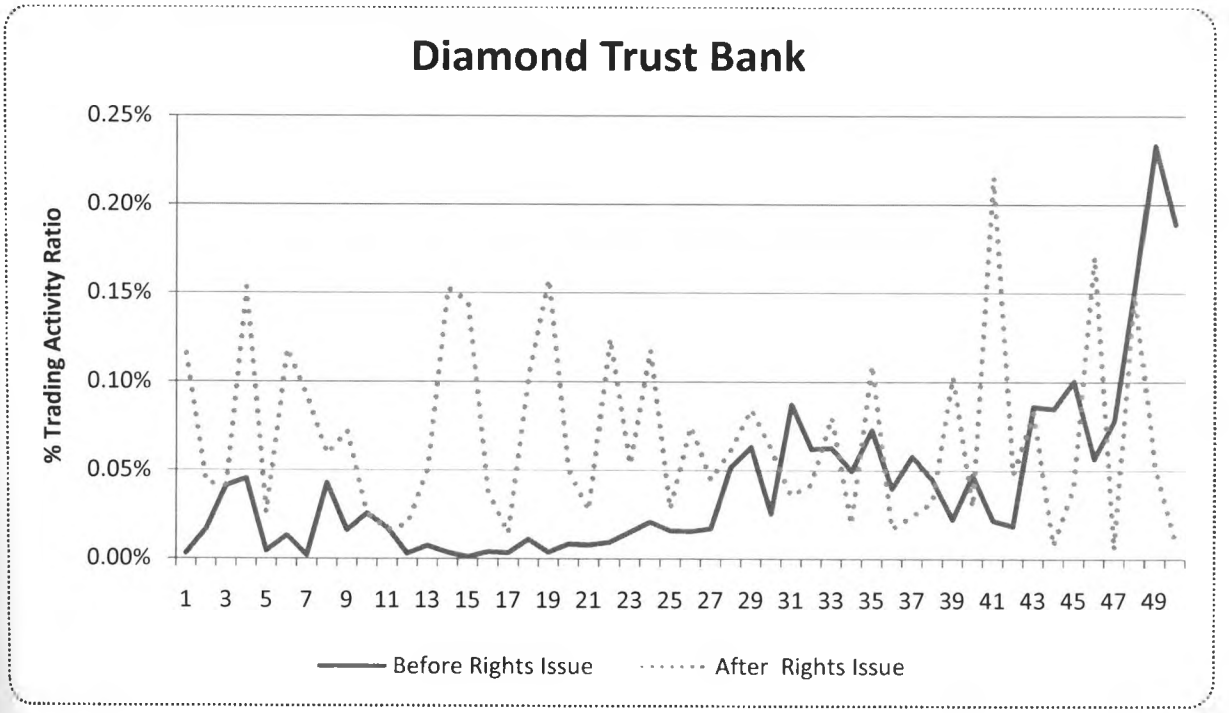
Source: Research Data

Trading Activity was higher for the first 7 days after commencing trading of new shares. This however slows down and activity remains low on all days preceding the commencement except on 9th, 17th and 39th day

Trading activity is noted to be only significantly higher after the rights issue first few days upon commencing trading but is overall lower on the rest of the days compared to before the rights issue.

Below results from Table 7(Appendix 3) show number of shares tradable and volume of shares traded fifty days before and after commencing of trading by Diamond Trust Bank Limited. Percentage trading activity ratio is calculated and this is plotted on chart as Figure 7.

Figure 7: Chart of percentage Trading Activity Ratio against Days around Rights issue



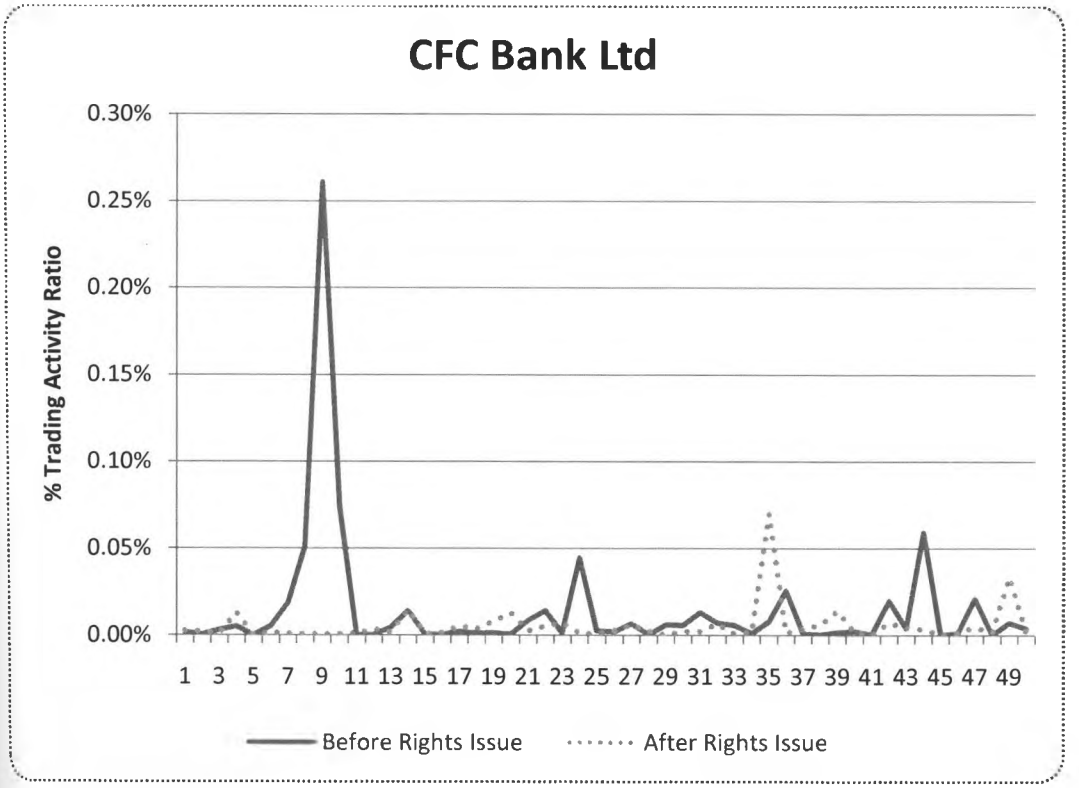
Source: Research Data

Figure 7 shows an increase in trading activity after commencement of trading of new shares in most of the days. Increase in trend was noted to be particularly high after commencing trading compared to before.

Activity after commencing is therefore noted to be significantly higher on all the days after the rights issue as compared to before the commencement.

Below results from Table 8 (Appendix 3) show number of shares tradable versus the volume of shares traded for CFC Bank Limited. Percentage trading activity ratio is calculated and Figure 8 below provided the results.

Figure 8: Chart of percentage Trading Activity Ratio against Days around Rights issue



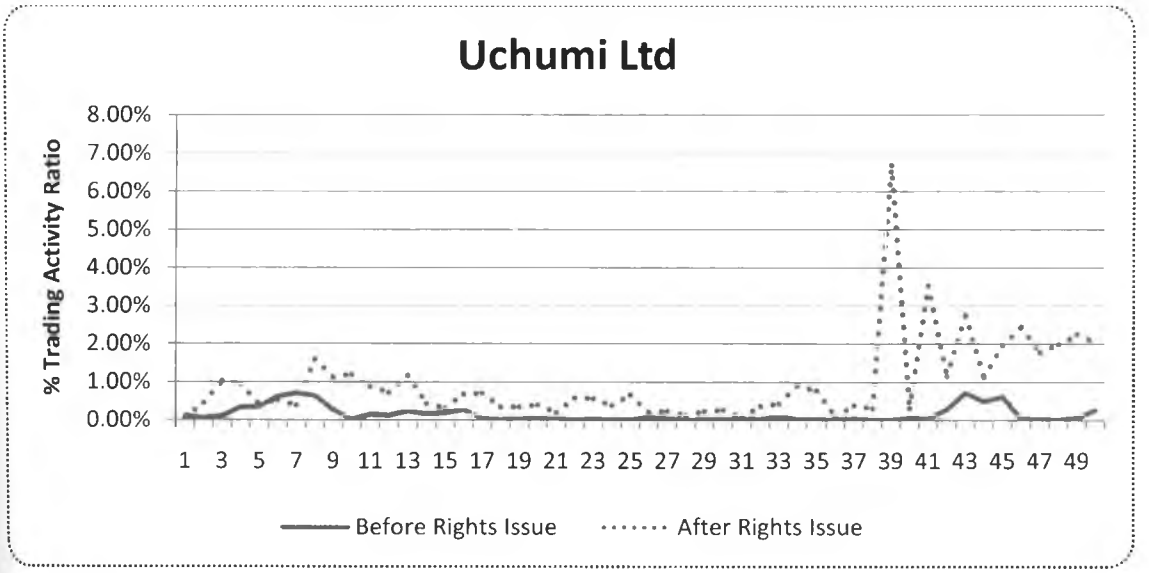
Source: Research Data

The chart provides percentage trading activity against days before and after commencing trading .Overall activity remains almost similar compared to before the commencing of trading on the new issues.

Trading activity is relatively similar after the rights issues apart from some days when trading after the commencement particularly increased. Increased activity was particularly increasing as the days after commencing trading tended to the 50th day.

Below results from Table 9(Appendix 3) are percentages of trading activity ratio against 50 days before and after commencing trading of Uchumi Limited rights issues. Results are represented as Figure 9. Trading activity ratio is calculated using the number of shares tradable and volumes of shares traded.

Figure 9:Chart of percentage Trading Activity Ratio against Days around Rights issue

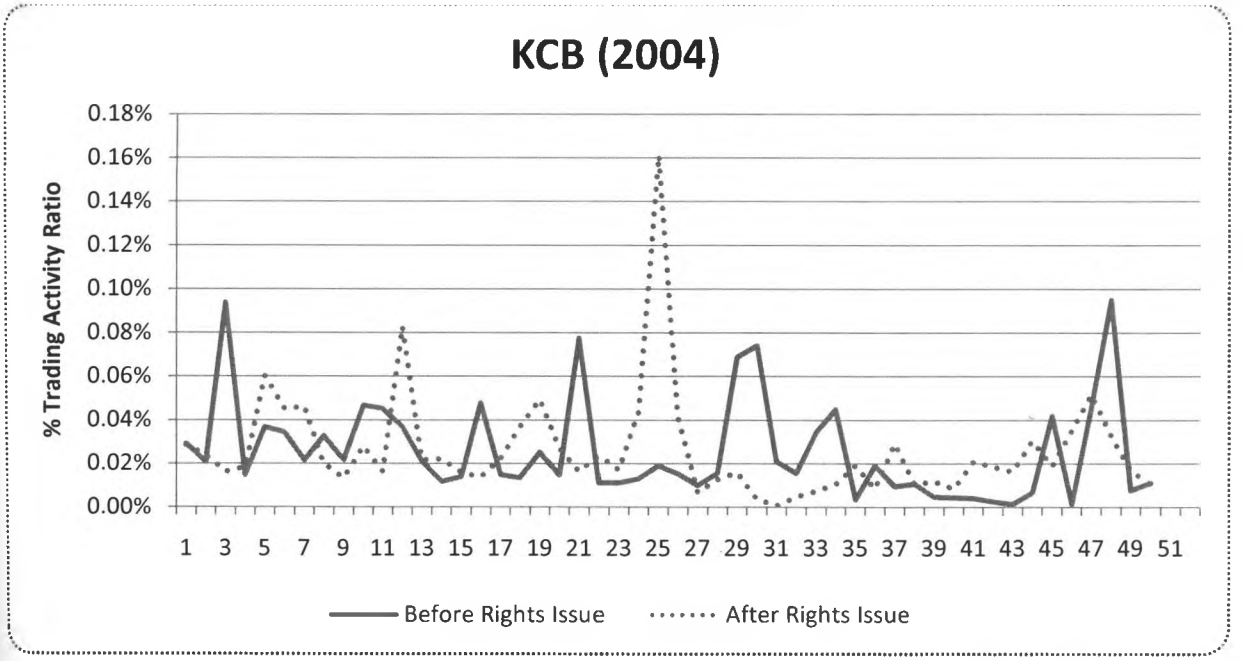


Activity reacted positively and an increase in trading activity is noted. There is particular highest increase in activity from the 38th to 50th day.

There is a noted significant increase in levels of trading after commencing trading on all the days and this trend in noted to increase as the days tend to the 50th day.

Below results from Table 10(Appendix 3) present number of tradable shares and volume shares traded fifty days before and after commencing trading of Kenya Commercial Bank in 2004.The percentage trading activity ratio was calculated and the results plotted in Figure 10.

Figure 10:Chart of percentage Trading Activity Ratio against Days around Rights issue

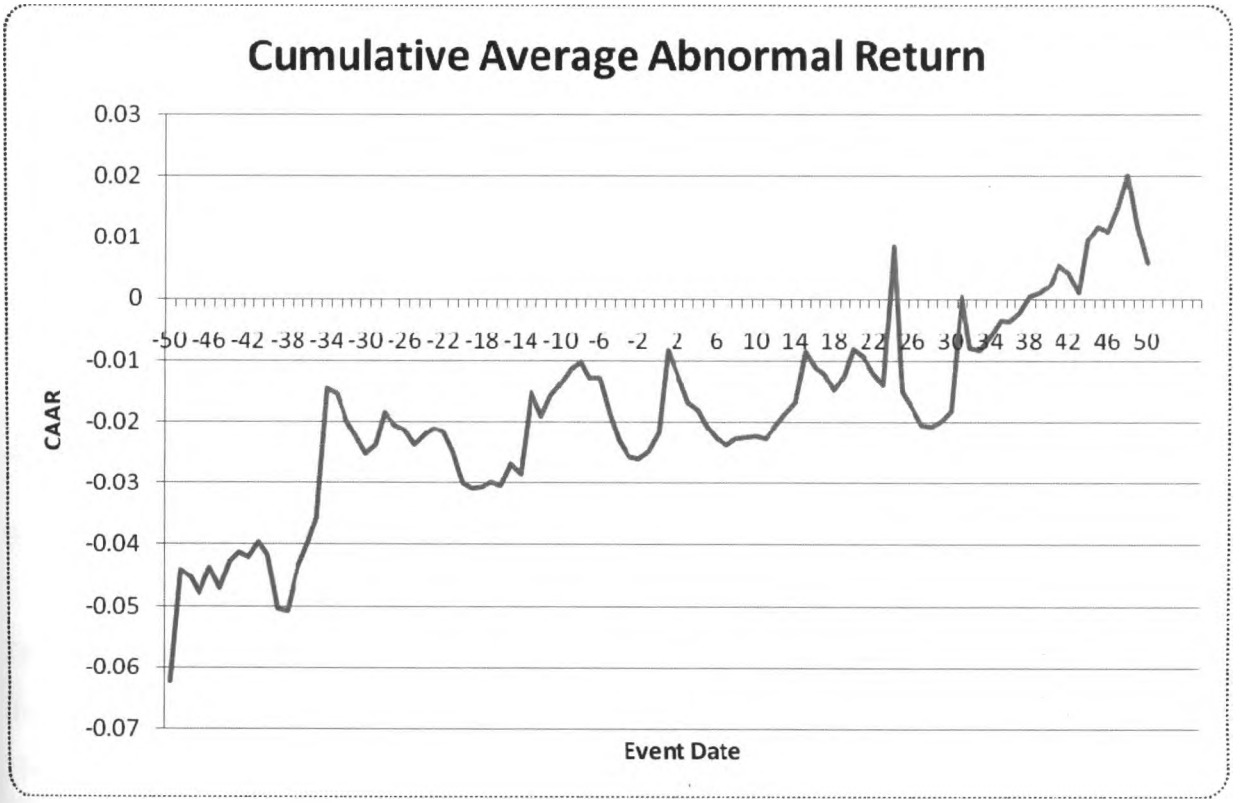


Source: Research Data

Figure 10 shows plotted percentage trading activity ratio against days around rights issues. It shows reaction on days before and after commencement of trading. From the results, there is an increase in trading activity after the rights issues in most of the days compared to before the rights issue. Particularly, highest increase in noted on 23rd to 27th day after rights issue.

The daily average abnormal returns before and after commencing of trading of the rights issue were calculated and presented as Appendix 4 for the 10 companies. Figure 11 shows a graph plotted of cumulative average abnormal return of rights issues over the period before and after commencement trading.

Figure 11:Chart of Cumulative Average abnormal Return and Regression Analysis



Source: Research Data

Regression Analysis

Regression Statistics	
Multiple R	0.860348
R Square	0.740199
Adjusted R Square	0.737575
Standard Error	15.00974
Observations	101

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	63546.07	63546.07	282.0606	9.8082E-31
Residual	99	22303.93	225.2922		
Total	100	85850			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95*	*Upper 95%*
Intercept	-29.1542	2.289988	-12.7312	1.44E-22	-33.69807169	24.6104
X Variable 1	-1577.67	93.93885	-16.7947	9.81E-31	-1764.066248	1391.28

Source: Research Data

From the Figure 11, there is a noted significant increase on the event day which is also the commencement date of trading of the new shares on the abnormal average returns. The cumulative average abnormal return indicates an increase in trend and close with a positive return compared to the start which is negative.

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0. Introduction

This chapter presents a summary of the findings and limitations of the study as regards to the main objective of the study. Based on these findings, conclusions are drawn and recommendations on the way forward made. Main

5.1 Summary of Findings and Conclusions

5.1.1 Summary of Findings

This study was conducted with the objective of achieving the objectives of analyzing the level of information content that rights issues contain and how market reacts to this upon commencement of trading of the new shares.

To achieve these objectives, the trading activity ratio was used together with the rate of abnormal returns to calculate the cumulative abnormal return of each of the companies. From the study results, it was generally noted that volumes of shares traded after companies rights issues commenced trading was higher. Trading activity on the respective counter was also higher after the commencement of trading compared to before the new shares. The disparity before and after commencing trading was found to have a larger increase in trading activity immediately except for TPS East Africa and CFC Bank where trading activity was similar or lower for the first few days after commencing trading.

Generally, the results there was a positive effect on number of shares traded upon commencing trading of rights issue shares at the securities market. The Kenyan market

was found to respond positively to commencement of trading of new rights issue share. Activity of volumes of shares traded increased after the rights issues compared to before. This is constituent with the semi strong form of efficient market hypothesis by Fama(1970), that all relevant publicly available information is quickly reflected on the market price. A rights issue while raising funds for the company is interpreted by investors as having a sound financial background and an optimistic future for growth.

5.1.2 Conclusions

On the rights issue date there was a positive increase in average abnormal return from the previous day by 0.010597887 which was significant at 0.05% level. To track the average abnormal returns over the trading period, the cumulative average abnormal return was computed during the event period (Appendix 4). The results indicated a positive cumulative abnormal return over the period of study.

5.2 Recommendations

Given that rights issues has a relationship with trading activity levels, the study concluded that shareholders of companies issuing rights should exercise their rights as this signals a future increase in shareholder value. Majority of companies offering rights use the new capital to build on future earnings or cost saving opportunities.

With the recent spikes in interest rates, debt financing is becoming highly unlikely and more companies are seeking to raise more capital via capital markets. Listed companies seeking to raise more capital should consider rights issues as it increase level of shareholder wealth and investor confidence as opposed to debt. However, caution should be taken as an under subscription of the same can lower investor confidence into the future

For emerging markets, intraday volatility as noted over on days around event date provides arbitrage opportunities for investors. With an expected expansion of listed companies through rights issues, such events provide opportunities for positive returns for investor stocks.

High volatility in trading activity is a sign of investor nervousness while low volatility is a sign of investor confidence or even complacency and warning of market downturn. Overall noted increase in levels of cumulative abnormal return steadily over the period is a direct signal of increased confidence on firms conducting rights issues.

5.3 Limitations of the Study

There was a limitation due some companies data not having data on volumes traded pre and post event period. Challenge was more specific to companies that undertook rights issues before the 2007 general elections. This led to the use of 10 companies to avoid possible biases caused by the reduced investor confidence during this period.

Inconsistencies on this data as to when company rights issue prospectus indicating date of commencing trading vis a vis the actual date on the new shares was a challenge during the data collection period.

5.4 Suggestions for Further Research

Event date of choice for this study was taken as date when the new shares commenced trading of rights issues. A study on the date of announcement that company is going to conduct rights issues can be used as the event period for a similar study.

There has also been a noted introduction on Kenyan SACCO's into having rights issues to raise capital base. E.gStima Sacco in 2011. A research on the reasons why not only listed companies at the securities market of this mode of raising capital will form an informative research topic.

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APPENDICES

APPENDIX 1

Companies Listed on the NSE by Sector.

Agriculture Sector
Kakuzi Limited
Rea Vipingo Plantations Ltd
Sasini Tea and Coffee Limited 1

Commercial and Services
Access Kenya Group
Car and General (Kenya) Limited
CMC Holdings Limited
Kenya Airways Limited
Nation Media Group Limited
Scangroup Limited
Standard Group Limited
TPS (Tourism Promotion Services) Eastern Africa Limited (Serena Hotels)

Financials and Investments
Barclays Bank of Kenya Limited
CFC Stanbic Bank (Foniterly CFC Bank)
Diamond Trust Bank (Kenya) Limited
Equity Bank Limited
Housing Finance Company Limited
Centum Investment Company (ICDCI) Limited
Jubilee Holdings Limited
National Bank of Kenya Limited
Kenya Commercial Bank Limited
Kenya Reinsurance Corporation Ltd
NIC Bank Limited
Olympia Capital Holdings Limited
Pan Africa Insurance Company Limited
Standard Chartered Bank Kenya Limited

Industrial and Allied Sector
Athi River Mining Limited
Bamburi Cement Company Limited
British American Tobacco Kenya Limited
Crown Berger Kenya Limited
East African Cables Limited
East African Portland Cement Company
East African Breweries Limited
Eveready East Africa Limited
Kenya Oil Company Limited

BOC Kenya Limited
The Kenya Power & Lighting Co. Ltd
Kenya Electricity Generating Company (Kengen)
Total Kenya Ltd
Mumias Sugar Company Ltd
Sameer Africa Limited
Unga Group Limited

The Alternative Investment Market Segment (AIMS)
Eaagads Limited
Express Kenya Limited
Kapchorua Tea Company Limited
Williamson Tea Kenya Limited
Limuru Tea Company Limited

APPENDIX II

RIGHTS ISSUES

Company	Shares on issue	Type of issue	Year of issue	Offer price	Sum raised	Subscription level
Kenya orchards	7,400,000	Rights	2001	0.50	2,965,859.00	80%
Standard newspapers	76,871,154	Rights	2001	5.85	305,793,451.00	68%
Total Kenya	70,030,000	Rights	2001	18.00	1,260,354,708.00	100%
Express Kenya	38,400,000	Rights	2003	6.50	178,002,500.00	71%
KCB	50,000,000	Rights	2004	49.00	2,750,125,000.00	112%
Uchumi	120,000,000	Rights	2005	10.00	1,269,600,000.00	106%
CFC bank	12,000,000	Rights	2005	62.00	744,000,000.00	100%
DTB	15,527,343	Rights	2006	50.00	2,305,810,436.00	297%
Olympia capital	30,000,000	Rights	2007	14.00	428,400,000.00	102%
DTB	23,291,015	Rights	2007	70.00	2,902,060,469.00	178%
NIC Bank	16,482,910	Rights	2007	70.00	1,719,167,513.00	149%
HFCK	115,000,000	Rights	2008	20.00	2,369,00,000.00	103%
KCB	221,777,777	Rights	2008	25.00	8,122,024,075.00	146%
KCB	887,111,110	Rights	July 2010	17.00	12,500,000,000.00	82.5%
TPS East Africa	24,701,774	Rights	September 2010	48.00	1,185,685,152.00	135%
Standard chartered	15,109,323	Rights	October 2010	165.45	2,499,837,490.00	161%
KPLC	488,630,245	Rights	November 2010	19.50	9,830,340,000	103%
TOTAL	2,212,332,651				50,373,166,653	

**Year to date: Source: Capital Markets Authority, 2011*

Appendix 3

Table 1: KPLC 2010

Day	Volumes traded before Rights issue	Tradable shares before rights issue	Before Rights Issue	Day	Volumes traded after rights issue	Tradable shares after rights issue	After Rights Issue
1	92700	633024000	0.0146439945%	1	24576700	1121654245	2.1911119322%
2	420900	633024000	0.0664903700%	2	2061200	1121654245	0.1837642936%
3	506700	633024000	0.0800443585%	3	2944900	1121654245	0.2625497129%
4	105800	633024000	0.0167134263%	4	1557300	1121654245	0.1388395762%
5	62100	633024000	0.0098100546%	5	4815300	1121654245	0.4293034169%
6	213400	633024000	0.0337112021%	6	1437100	1121654245	0.1281232614%
7	1229500	633024000	0.1942264432%	7	2114200	1121654245	0.1884894574%
8	554200	633024000	0.0875480235%	8	713400	1121654245	0.0636024874%
9	533700	633024000	0.0843095996%	9	674500	1121654245	0.0601343955%
10	585100	633024000	0.0924293550%	10	331000	1121654245	0.0295099850%
11	940800	633024000	0.1486199575%	11	415900	1121654245	0.0370791625%
12	729900	633024000	0.1153036852%	12	1215300	1734637374	0.0700607527%
13	693700	633024000	0.1095851026%	13	658800	1734637374	0.0379791194%
14	353900	633024000	0.0559062532%	14	1608400	1734637374	0.0927225496%
15	154200	633024000	0.0243592660%	15	497400	1734637374	0.0286745811%
16	65000	633024000	0.0102681731%	16	373700	1734637374	0.0215434076%
17	390900	633024000	0.0617512132%	17	892400	1734637374	0.0514459110%
18	119700	633024000	0.0189092357%	18	493200	1734637374	0.0284324555%
19	213600	633024000	0.0337427965%	19	733600	1734637374	0.0422912599%
20	90300	633024000	0.0142648620%	20	467300	1734637374	0.0269393481%
21	301000	633024000	0.0475495400%	21	552800	1734637374	0.0318683322%
22	427900	633024000	0.0675961733%	22	621900	1734637374	0.0358518737%
23	754400	633024000	0.1191739966%	23	464500	1734637374	0.0267779311%
24	494000	633024000	0.0780381155%	24	548500	1734637374	0.0316204417%
25	555000	633024000	0.0876744010%	25	658500	1734637374	0.0379618248%
26	867400	633024000	0.1370248205%	26	408400	1734637374	0.0235438257%
27	520600	633024000	0.0822401678%	27	369800	1734637374	0.0213185768%
28	1843100	633024000	0.2911579972%	28	102000	1734637374	0.0058801915%
29	550100	633024000	0.0869003387%	29	509700	1734637374	0.0293836630%
30	633500	633024000	0.1000751946%	30	506800	1734637374	0.0292164811%
31	1512100	633024000	0.2388693004%	31	1061200	1734637374	0.0611770515%
32	413600	633024000	0.0653371752%	32	351000	1734637374	0.0202347767%
33	233100	633024000	0.0368232484%	33	223400	1734637374	0.0128787724%
34	321700	633024000	0.0508195582%	34	418800	1734637374	0.0241433746%
35	170800	633024000	0.0269815994%	35	1510800	1734637374	0.0870960134%
36	150700	633024000	0.0238063644%	36	1396500	1734637374	0.0805067400%
37	219900	633024000	0.0347380194%	37	1610400	1734637374	0.0928378475%
38	103900	633024000	0.0164132797%	38	304300	1734637374	0.0175425714%
39	1334500	633024000	0.2108134921%	39	316700	1734637374	0.0182574182%
40	611800	633024000	0.0966472045%	40	149800	1734637374	0.0086358107%
41	325300	633024000	0.0513882570%	41	623300	1734637374	0.0359325822%
42	47700	633024000	0.0075352593%	42	1449100	1734637374	0.0835390740%
43	257700	79128000	0.3256748559%	43	366300	1734637374	0.0211168055%
44	4500	79128000	0.0056869882%	44	615500	1734637374	0.0354829205%
45	35000	79128000	0.0442321302%	45	235100	1734637374	0.0135532650%
46	114900	79128000	0.1452077646%	46	543600	1734637374	0.0313379619%
47	10900	79128000	0.0137751491%	47	8941900	1734637374	0.5154910262%
48	28700	79128000	0.0362703468%	48	243700	1734637374	0.0140490458%
49	23500	79128000	0.0296987160%	49	13179300	1734637374	0.7597726301%
50	21500	79128000	0.0271711657%	50	167100	1734637374	0.0096331373%
51	125700	79128000	0.1588565362%	51	376800	1734637374	0.0217221193%

	Table 2: Stanchart 2010						
Day	Volumes traded before Rights issue	Tradable shares before rights issue	Before Rights Issue	Day	Volumes traded after rights Issue	Tradable shares after rights issue	After Rights Issue
1	7300	271967810	0.00268414%	1	55000	287077133	0.01915861%
2	6400	271967810	0.00235322%	2	270100	287077133	0.09408621%
3	10300	271967810	0.00378721%	3	3400	287077133	0.00118435%
4	7500	271967810	0.00275768%	4	41400	287077133	0.01442121%
5	8100	271967810	0.00297829%	5	3400	287077133	0.00118435%
6	4700	271967810	0.00172815%	6	32200	287077133	0.01121650%
7	3200	271967810	0.00117661%	7	9400	287077133	0.00327438%
8	4700	271967810	0.00172815%	8	6500	287077133	0.00226420%
9	5100	271967810	0.00187522%	9	48900	287077133	0.01703375%
10	18900	271967810	0.00694935%	10	19700	287077133	0.00686227%
11	5300	271967810	0.00194876%	11	5300	287077133	0.00184619%
12	24600	271967810	0.00904519%	12	41100	287077133	0.01431671%
13	5400	271967810	0.00198553%	13	11500	287077133	0.00400589%
14	3000	271967810	0.00110307%	14	11200	287077133	0.00390139%
15	3200	271967810	0.00117661%	15	4400	287077133	0.00153269%
16	5800	271967810	0.00213261%	16	5200	287077133	0.00181136%
17	10000	271967810	0.00367691%	17	1700	287077133	0.00059218%
18	4200	271967810	0.00154430%	18	14400	287077133	0.00501607%
19	7200	271967810	0.00264737%	19	27400	287077133	0.00954447%
20	5000	271967810	0.00183845%	20	12400	287077133	0.00431940%
21	24300	271967810	0.00893488%	21	21700	287077133	0.00755894%
22	4700	271967810	0.00172815%	22	15100	287077133	0.00525991%
23	5700	271967810	0.00209584%	23	46300	287077133	0.01612807%
24	12900	271967810	0.00474321%	24	12100	287077133	0.00421490%
25	5400	271967810	0.00198553%	25	9000	287077133	0.00313505%
26	14700	271967810	0.00540505%	26	7200	287077133	0.00250804%
27	16200	271967810	0.00595659%	27	19000	287077133	0.00661843%
28	4900	271967810	0.00180168%	28	73100	287077133	0.02546354%
29	12700	271967810	0.00466967%	29	17900	287077133	0.00623526%
30	5800	271967810	0.00213261%	30	6600	287077133	0.00229903%
31	12500	271967810	0.00459613%	31	3200	287077133	0.00111468%
32	25100	271967810	0.00922903%	32	7600	287077133	0.00264737%
33	25600	271967810	0.00941288%	33	35300	287077133	0.01229635%
34	16400	271967810	0.00603013%	34	231100	287077133	0.08050101%
35	3300	271967810	0.00121338%	35	7500	287077133	0.00261254%
36	9200	271967810	0.00338275%	36	8800	287077133	0.00306538%
37	44700	271967810	0.01643577%	37	3400	287077133	0.00118435%
38	3600	271967810	0.00132369%	38	55000	287077133	0.01915861%
39	6200	271967810	0.00227968%	39	6200	287077133	0.00215970%
40	17200	271967810	0.00632428%	40	15000	287077133	0.00522508%
41	3000	271967810	0.00110307%	41	1100	287077133	0.00038317%
42	4200	271967810	0.00154430%	42	1600	287077133	0.00055734%
43	15000	271967810	0.00551536%	43	15900	287077133	0.00553858%
44	7800	271967810	0.00286799%	44	2300	287077133	0.00080118%
45	7800	271967810	0.00286799%	45	7600	287077133	0.00264737%
46	16100	271967810	0.00591982%	46	13300	287077133	0.00463290%
47	58500	271967810	0.02150990%	47	103700	287077133	0.03612270%
48	11300	271967810	0.00415490%	48	47800	287077133	0.01665058%
49	117000	271967810	0.04301980%	49	7000	287077133	0.00243837%
50	63200	271967810	0.02323804%	50	8800	287077133	0.00306538%
			53				

	Table 4: KCB 2010						
Day	Volumes traded before Rights Issue	Tradable shares before rights issue	Before Rights issue	Day	Volumes traded after rights issue	Tradable shares after rights issue	After Rights issue
1	1613000	2217777777	0.07273046%	1	6430800	2950169143	0.21798072%
2	552100	2217777777	0.02489429%	2	670500	2950169143	0.02272751%
3	451500	2217777777	0.02035822%	3	357000	2950169143	0.01210100%
4	298500	2217777777	0.01345942%	4	1011600	2950169143	0.03428956%
5	288400	2217777777	0.01300401%	5	1441100	2950169143	0.04884805%
6	1453300	2217777777	0.06552956%	6	1259600	2950169143	0.04269586%
7	2527600	2217777777	0.11396994%	7	2239200	2950169143	0.07590073%
8	1524300	2217777777	0.06873096%	8	3255000	2950169143	0.11033266%
9	765300	2217777777	0.03450752%	9	172600	2950169143	0.00585051%
10	1090400	2217777777	0.04916633%	10	1233200	2950259818	0.04179971%
11	630700	2217777777	0.02843838%	11	1740700	2950259818	0.05900158%
12	5576000	2217777777	0.25142285%	12	1915100	2950259818	0.06491293%
13	4215000	2217777777	0.19005511%	13	677600	2950259818	0.02296747%
14	1782000	2217777777	0.08035070%	14	887000	2950259818	0.03006515%
15	316100	2217777777	0.01425301%	15	221400	2950259818	0.00750442%
16	1653700	2217777777	0.07456563%	16	203900	2950259818	0.00691126%
17	2439600	2217777777	0.11000200%	17	252600	2950259818	0.00856196%
18	465700	2217777777	0.02099850%	18	1039600	2950259818	0.03523757%
19	2132700	2217777777	0.09616383%	19	7049800	2950259818	0.23895523%
20	1123700	2217777777	0.05066784%	20	183200	2950259818	0.00620962%
21	647000	2217777777	0.02917335%	21	327900	2950259818	0.01111428%
22	367000	2217777777	0.01654810%	22	1503700	2950259818	0.05096839%
23	894600	2217777777	0.04033768%	23	931800	2950259818	0.03158366%
24	877900	2217777777	0.03958467%	24	1085600	2950259818	0.03679676%
25	78700	2217777777	0.00354860%	25	1181600	2950259818	0.04005071%
26	3940600	2217777777	0.17768236%	26	2560500	2950259818	0.08678897%
27	241400	2217777777	0.01088477%	27	317100	2950259818	0.01074821%
28	3785300	2217777777	0.17067986%	28	1222100	2950259818	0.04142347%
29	2473400	2217777777	0.11152605%	29	1951200	2950259818	0.06613655%
30	2620900	2217777777	0.11817685%	30	986200	2950259818	0.03342756%
31	689500	2217777777	0.03108968%	31	5529600	2950259818	0.18742756%
32	1786700	2217777777	0.08056263%	32	2511100	2950259818	0.08511454%
33	1076700	2217777777	0.04854860%	33	2442900	2950259818	0.08280288%
34	688700	2217777777	0.03105361%	34	4324100	2950259818	0.14656675%
35	2733700	2217777777	0.12326303%	35	4445600	2950259818	0.15068503%
36	1364800	2217777777	0.06153908%	36	1372300	2950259818	0.04651455%
37	126000	2217777777	0.00568136%	37	1172500	2950259818	0.03974226%
38	1534600	2217777777	0.06919539%	38	1031800	2950259818	0.03497319%
39	556500	2217777777	0.02509269%	39	1004600	2950259818	0.03405124%
40	481600	2217777777	0.02171543%	40	1255600	2950259818	0.04255896%
41	637000	2217777777	0.02872244%	41	681200	2950259818	0.02308949%
42	1009800	2217777777	0.04553206%	42	983500	2950259818	0.03333605%
43	854300	2217777777	0.03852054%	43	649000	2950259818	0.02199806%
44	5608700	2217777777	0.25289729%	44	244100	2950259818	0.00827385%
45	1179200	2217777777	0.05317034%	45	1425100	2950259818	0.04830422%
46	1597400	2217777777	0.07202705%	46	658000	2950259818	0.02230312%
47	612500	2217777777	0.02761774%	47	3720800	2950259818	0.12611771%
48	672600	2217777777	0.03032766%	48	2342800	2950259818	0.07940996%
49	1179200	2217777777	0.03852054%	49	681200	2950259818	0.04830422%
50	1179200	2217777777	0.02872244%	50	983500	2950259818	0.00827385%
			55				

	Table 5:KCB 2008						
Day	Volumes traded before Rights issue	Tradable shares before rights issue	Before Rights Issue	Day	Volumes traded after rights issue	Tradable shares after rights issue	After Rights Issue
1	305791	1996000000	0.01532019%	1	3130600	2217777777	0.14115932%
2	639695	1996000000	0.03204885%	2	9790136	2217777777	0.44143900%
3	2797955	1996000000	0.14017811%	3	5500248	2217777777	0.24800717%
4	1084525	1996000000	0.05433492%	4	2733671	2217777777	0.12326172%
5	1330501	1996000000	0.06665837%	5	11940393	2217777777	0.53839447%
6	672196	1996000000	0.03367715%	6	887351	2217777777	0.04001082%
7	634240	1996000000	0.03177555%	7	951041	2217777777	0.04288261%
8	698860	1996000000	0.03501303%	8	1759376	2217777777	0.07933058%
9	542700	1996000000	0.02718938%	9	985164	2217777777	0.04442122%
10	286840	1996000000	0.01437074%	10	701151	2217777777	0.03161503%
11	234860	1996000000	0.01176653%	11	503010	2217777777	0.02268081%
12	563550	1996000000	0.02823397%	12	1686429	2217777777	0.07604139%
13	474780	1996000000	0.02378657%	13	12860002	2217777777	0.57985981%
14	1114670	1996000000	0.05584519%	14	945195	2217777777	0.04261901%
15	541762	1996000000	0.02714238%	15	696572	2217777777	0.03140856%
16	450351	1996000000	0.02256268%	16	541688	2217777777	0.02442481%
17	1033450	1996000000	0.05177605%	17	994129	2217777777	0.04482546%
18	614028	1996000000	0.03076293%	18	1009206	2217777777	0.04550528%
19	1448670	1996000000	0.07257866%	19	1997786	2217777777	0.09008053%
20	918796	1996000000	0.04603186%	20	3127465	2217777777	0.14101796%
21	680623	1996000000	0.03409935%	21	1032217	2217777777	0.04654285%
22	555127	1996000000	0.02781197%	22	1060864	2217777777	0.04783455%
23	580316	1996000000	0.02907395%	23	1735858	2217777777	0.07827015%
24	473842	1996000000	0.02373958%	24	689148	2217777777	0.03107381%
25	1234690	1996000000	0.06185822%	25	560343	2217777777	0.02526597%
26	510674	1996000000	0.02558487%	26	1498649	2217777777	0.06757435%
27	875675	1996000000	0.04387149%	27	1274207	2217777777	0.05745422%
28	543397	1996000000	0.02722430%	28	328593	2217777777	0.01481632%
29	594059	1996000000	0.02976247%	29	372095	2217777777	0.01677783%
30	744189	1996000000	0.03728402%	30	469508	2217777777	0.02117020%
31	492766	1996000000	0.02468768%	31	1376420	2217777777	0.06206303%
32	691233	1996000000	0.03463091%	32	2559938	2217777777	0.11542807%
33	809400	1996000000	0.04055110%	33	1376865	2217777777	0.06208309%
34	782360	1996000000	0.03919639%	34	586065	2217777777	0.02642578%
35	393206	1996000000	0.01969970%	35	1524502	2217777777	0.06874007%
36	399111	1996000000	0.01999554%	36	1211726	2217777777	0.05463694%
37	396400	1996000000	0.01985972%	37	681600	2217777777	0.03073347%
38	418710	1996000000	0.02097745%	38	1568288	2217777777	0.07071439%
39	587727	1996000000	0.02944524%	39	1094350	2217777777	0.04934444%
40	315109	1996000000	0.01578702%	40	335615	2217777777	0.01513294%
41	907698	1996000000	0.04547585%	41	1422353	2217777777	0.06413415%
42	1340100	1996000000	0.06713928%	42	589071	2217777777	0.02656132%
43	1286960	1996000000	0.06447695%	43	1469534	2217777777	0.06626155%
44	982760	1996000000	0.04923647%	44	898700	2217777777	0.04052255%
45	717589	1996000000	0.03595135%	45	1289208	2217777777	0.05813062%
46	600770	1996000000	0.03009870%	46	155290	2217777777	0.00700205%
47	727990	1996000000	0.03647244%	47	25695	2217777777	0.00115859%
48	1079800	1996000000	0.05409820%	48	232239	2217777777	0.01047170%
49	1115616	1996000000	0.05589259%	49	564555	2217777777	0.02545889%
50	920527	1996000000	0.04611859%	50	2253899	2217777777	0.10162871%
			56				

	Table 6: HFCK 2008						
Day	Volumes traded before Rights issue	Tradable shares before rights issue	Before Rights Issue	Day	Volumes traded after rights issue	Tradable shares after rights issue	After Rights Issue
1	125800	115000000	0.10939130%	1	785300	230000	0.34143478%
2	53474	115000000	0.04649913%	2	338900	230000	0.14734783%
3	138700	115000000	0.12060870%	3	340094	230000	0.14786696%
4	84300	115000000	0.07330435%	4	718581	230000	0.31242652%
5	77700	115000000	0.06756522%	5	396697	230000	0.17247696%
6	155350	115000000	0.13508696%	6	394907	230000	0.17169870%
7	118114	115000000	0.10270783%	7	202300	230000	0.08795652%
8	122600	115000000	0.10660870%	8	186600	230000	0.08113043%
9	70400	115000000	0.06121739%	9	507173	230000	0.22051000%
10	409900	115000000	0.35643478%	10	101376	230000	0.04407652%
11	182000	115000000	0.15826087%	11	276769	230000	0.12033435%
12	135350	115000000	0.11769565%	12	194600	230000	0.08460870%
13	84600	115000000	0.07356522%	13	265325	230000	0.11535870%
14	54600	115000000	0.04747826%	14	61503	230000	0.02674043%
15	89100	115000000	0.07747826%	15	125004	230000	0.05434957%
16	180440	115000000	0.15690435%	16	157854	230000	0.06863217%
17	129600	115000000	0.11269565%	17	310244	230000	0.13488870%
18	60700	115000000	0.05278261%	18	256600	230000	0.11156522%
19	87907	115000000	0.07644087%	19	122228	230000	0.05314261%
20	84600	115000000	0.07356522%	20	201250	230000	0.08750000%
21	57200	115000000	0.04973913%	21	82578	230000	0.03590348%
22	172440	115000000	0.14994783%	22	56486	230000	0.02455913%
23	101500	115000000	0.08826087%	23	95180	230000	0.04138261%
24	53200	115000000	0.04626087%	24	160350	230000	0.06971739%
25	224600	115000000	0.19530435%	25	141145	230000	0.06136739%
26	762069	115000000	0.66266870%	26	26452	230000	0.01150087%
27	105300	115000000	0.09156522%	27	197120	230000	0.08570435%
28	72674	115000000	0.06319478%	28	186596	230000	0.08112870%
29	98300	115000000	0.08547826%	29	153900	230000	0.06691304%
30	60780	115000000	0.05285217%	30	178450	230000	0.07758696%
31	63800	115000000	0.05547826%	31	104335	230000	0.04536304%
32	62900	115000000	0.05469565%	32	47708	230000	0.02074261%
33	94400	115000000	0.08208696%	33	80380	230000	0.03494783%
34	56700	115000000	0.04930435%	34	119416	230000	0.05192000%
35	107066	115000000	0.09310087%	35	68225	230000	0.02966304%
36	119930	115000000	0.10428696%	36	110846	230000	0.04819391%
37	44250	115000000	0.03847826%	37	52300	230000	0.02273913%
38	72075	115000000	0.06267391%	38	132155	230000	0.05745870%
39	302500	115000000	0.26304348%	39	88803	230000	0.03861000%
40	33850	115000000	0.02943478%	40	175825	230000	0.07644565%
41	28200	115000000	0.02452174%	41	38710	230000	0.01683043%
42	129500	115000000	0.11260870%	42	37141	230000	0.01614826%
43	318355	115000000	0.27683043%	43	65300	230000	0.02839130%
44	251550	115000000	0.21873913%	44	124300	230000	0.05404348%
45	300600	115000000	0.26139130%	45	108566	230000	0.04720261%
46	982250	115000000	0.85413043%	46	74182	230000	0.03225304%
47	382768	115000000	0.33284174%	47	42800	230000	0.01860870%
48	633900	115000000	0.55121739%	48	37850	230000	0.01645652%
49	375000	115000000	0.32608696%	49	48492	230000	0.02108348%
50	120900	115000000	0.10513043%	50	281300	230000	0.12230435%
			57				

	Table 7: Diamond Trust Bank						
Day	Volumes traded before Rights issue	Tradable shares before rights issue	Before Rights Issue	Day	Volumes traded after rights issue	Tradable shares after rights issue	After Rights Issue
1	3841	124218750	0.00309213%	1	161800	139746093	0.11578141%
2	20600	124218750	0.01658365%	2	60032	139746093	0.04295791%
3	51200	124218750	0.04121761%	3	58100	139746093	0.04157540%
4	56562	124218750	0.04553419%	4	213900	139746093	0.15306331%
5	5700	124218750	0.00458868%	5	35918	139746093	0.02570238%
6	16300	124218750	0.01312201%	6	165479	139746093	0.11841404%
7	2500	124218750	0.00201258%	7	127773	139746093	0.09143225%
8	53200	124218750	0.04282767%	8	82250	139746093	0.05885674%
9	20076	124218750	0.01616181%	9	100800	139746093	0.07213082%
10	32000	124218750	0.02576101%	10	35500	139746093	0.02540321%
11	21700	124218750	0.01746918%	11	22500	139746093	0.01610063%
12	3700	124218750	0.00297862%	12	27285	139746093	0.01952470%
13	9400	124218750	0.00756730%	13	69700	139746093	0.04987617%
14	4546	124218750	0.00365967%	14	213554	139746093	0.15281572%
15	1500	124218750	0.00120755%	15	202158	139746093	0.14466093%
16	5000	124218750	0.00402516%	16	52729	139746093	0.03773200%
17	4421	124218750	0.00355904%	17	19980	139746093	0.01429736%
18	13700	124218750	0.01102893%	18	144625	139746093	0.10349127%
19	4800	124218750	0.00386415%	19	220503	139746093	0.15778831%
20	10443	124218750	0.00840694%	20	70000	139746093	0.05009085%
21	9800	124218750	0.00788931%	21	38015	139746093	0.02720291%
22	11838	124218750	0.00952996%	22	173700	139746093	0.12429686%
23	18740	124218750	0.01508629%	23	74225	139746093	0.05311419%
24	25900	124218750	0.02085031%	24	164617	139746093	0.11779721%
25	19862	124218750	0.01598953%	25	39204	139746093	0.02805374%
26	19423	124218750	0.01563613%	26	104800	139746093	0.07499315%
27	21458	124218750	0.01727436%	27	62473	139746093	0.04470465%
28	64850	124218750	0.05220629%	28	86206	139746093	0.06168759%
29	78600	124218750	0.06327547%	29	118275	139746093	0.08463564%
30	31890	124218750	0.02567245%	30	86206	139746093	0.06168759%
31	108550	124218750	0.08738616%	31	50220	139746093	0.03593660%
32	77300	124218750	0.06222893%	32	58649	139746093	0.04196826%
33	77975	124218750	0.06277233%	33	112013	139746093	0.08015466%
34	61700	124218750	0.04967044%	34	27417	139746093	0.01961915%
35	90500	124218750	0.07285535%	35	153392	139746093	0.10976479%
36	49550	124218750	0.03988931%	36	23500	139746093	0.01681621%
37	71899	124218750	0.05788096%	37	33900	139746093	0.02425828%
38	55700	124218750	0.04484025%	38	44600	139746093	0.03191502%
39	27867	124218750	0.02243381%	39	144000	139746093	0.10304403%
40	58958	124218750	0.04746304%	40	41600	139746093	0.02976827%
41	27300	124218750	0.02197736%	41	301795	139746093	0.21595953%
42	23156	124218750	0.01864131%	42	66600	139746093	0.04765786%
43	106847	124218750	0.08601519%	43	115250	139746093	0.08247100%
44	105400	124218750	0.08485031%	44	10902	139746093	0.00780129%
45	124751	124218750	0.10042848%	45	56100	139746093	0.04014424%
46	70400	124218750	0.05667421%	46	238736	139746093	0.17083555%
47	97338	124218750	0.07836015%	47	7600	139746093	0.00543843%
48	189063	124218750	0.15220166%	48	208800	139746093	0.14941384%
49	289850	124218750	0.23333836%	49	72860	139746093	0.05213741%
50	234346	124218750	0.18865590%	50	14600	139746093	0.01044752%
			58				

	Table 8: CFC Bank 2005						
Day	Volumes traded before Rights Issue	Tradable shares before rights issue	Before Rights Issue	Day	Volumes traded after rights issue	Tradable shares after rights issue	After Rights Issue
1	2700	144000000	0.00187500%	1	3961	156000000	0.00253910%
2	800	144000000	0.00055556%	2	3361	156000000	0.00215449%
3	4469	144000000	0.00310347%	3	1800	156000000	0.00115385%
4	7400	144000000	0.00513889%	4	20300	156000000	0.01301282%
5	100	144000000	0.00006944%	5	350	156000000	0.00022436%
6	7700	144000000	0.00534722%	6	2482	156000000	0.00159103%
7	26800	144000000	0.01861111%	7	1890	156000000	0.00121154%
8	73200	144000000	0.05083333%	8	1200	156000000	0.00076923%
9	375882	144000000	0.26102917%	9	1000	156000000	0.00064103%
10	106505	144000000	0.07396181%	10	1600	156000000	0.00102564%
11	600	144000000	0.00041667%	11	1763	156000000	0.00113013%
12	500	144000000	0.00034722%	12	5624	156000000	0.00360513%
13	6500	144000000	0.00451389%	13	3000	156000000	0.00192308%
14	20170	144000000	0.01400694%	14	22715	156000000	0.01456090%
15	748	144000000	0.00051944%	15	1494	156000000	0.00095769%
16	1000	144000000	0.00069444%	16	2593	156000000	0.00166218%
17	3296	144000000	0.00228889%	17	8177	156000000	0.00524167%
18	1982	144000000	0.00137639%	18	5700	156000000	0.00365385%
19	2150	144000000	0.00149306%	19	12314	156000000	0.00789359%
20	1072	144000000	0.00074444%	20	20046	156000000	0.01285000%
21	12300	144000000	0.00854167%	21	4251	156000000	0.00272500%
22	20552	144000000	0.01427222%	22	8520	156000000	0.00546154%
23	2000	144000000	0.00138889%	23	11207	156000000	0.00718397%
24	64294	144000000	0.04464861%	24	2200	156000000	0.00141026%
25	3954	144000000	0.00274583%	25	1600	156000000	0.00102564%
26	3144	144000000	0.00218333%	26	4651	156000000	0.00298141%
27	9776	144000000	0.00678889%	27	9416	156000000	0.00603590%
28	1000	144000000	0.00069444%	28	3965	156000000	0.00254167%
29	8766	144000000	0.00608750%	29	350	156000000	0.00022436%
30	8365	144000000	0.00580903%	30	3778	156000000	0.00242179%
31	19088	144000000	0.01325556%	31	3625	156000000	0.00232372%
32	10527	144000000	0.00731042%	32	10181	156000000	0.00652628%
33	8336	144000000	0.00578889%	33	1500	156000000	0.00096154%
34	1622	144000000	0.00112639%	34	2836	156000000	0.00181795%
35	11390	144000000	0.00790972%	35	109382	156000000	0.07011667%
36	37011	144000000	0.02570208%	36	2270	156000000	0.00145513%
37	1629	144000000	0.00113125%	37	6000	156000000	0.00384615%
38	804	144000000	0.00055833%	38	9571	156000000	0.00613526%
39	2596	144000000	0.00180278%	39	22000	156000000	0.01410256%
40	3379	144000000	0.00234653%	40	2470	156000000	0.00158333%
41	1000	144000000	0.00069444%	41	504	156000000	0.00032308%
42	28625	144000000	0.01987847%	42	11200	156000000	0.00717949%
43	5846	144000000	0.00405972%	43	6657	156000000	0.00426731%
44	85004	144000000	0.05903056%	44	5515	156000000	0.00353526%
45	438	144000000	0.00030417%	45	900	156000000	0.00057692%
46	2206	144000000	0.00153194%	46	2474	156000000	0.00158590%
47	30300	144000000	0.02104167%	47	7200	156000000	0.00461538%
48	300	144000000	0.00020833%	48	3000	156000000	0.00192308%
49	10500	144000000	0.00729167%	49	52200	156000000	0.03346154%
50	5846	144000000	0.00405972%	50	2408	156000000	0.00154359%
			59				

	Table 9: Uchumi 2005						
Day	Volumes traded before Rights issue	Tradable shares before rights issue	TAR Before Rights Issue	Day	Volumes traded after rights issue	Tradable shares after rights issue	TAR-After Rights Issue
1	66973	59999964	0.11162173%	1	97809	180000000	0.05433833%
2	33776	59999964	0.05629337%	2	802815	180000000	0.44600833%
3	60560	59999964	0.10093339%	3	1841225	180000000	1.02290278%
4	197922	59999964	0.32987020%	4	1685850	180000000	0.93658333%
5	205745	59999964	0.34290854%	5	735113	180000000	0.40839611%
6	366374	59999964	0.61062370%	6	924310	180000000	0.51350556%
7	419181	59999964	0.69863542%	7	680770	180000000	0.37820556%
8	379605	59999964	0.63267538%	8	2852254	180000000	1.58458556%
9	158485	59999964	0.26414183%	9	2021676	180000000	1.12315333%
10	9888	59999964	0.01648001%	10	2136254	180000000	1.18680778%
11	84233	59999964	0.14038842%	11	1586868	180000000	0.88159333%
12	69925	59999964	0.11654174%	12	1285484	180000000	0.71415778%
13	138916	59999964	0.23152681%	13	2086960	180000000	1.15942222%
14	92281	59999964	0.15380176%	14	777424	180000000	0.43190222%
15	109577	59999964	0.18262844%	15	572077	180000000	0.31782056%
16	160543	59999964	0.26757183%	16	1217303	180000000	0.67627944%
17	24844	59999964	0.04140669%	17	1268099	180000000	0.70449944%
18	2630	59999964	0.00438334%	18	607662	180000000	0.33759000%
19	11000	59999964	0.01833334%	19	608676	180000000	0.33815333%
20	20900	59999964	0.03483335%	20	710869	180000000	0.39492722%
21	10300	59999964	0.01716668%	21	347244	180000000	0.19291333%
22	2700	59999964	0.00450000%	22	1046865	180000000	0.58159167%
23	9165	59999964	0.01527501%	23	1009281	180000000	0.56071167%
24	3000	59999964	0.00500000%	24	686880	180000000	0.38160000%
25	1780	59999964	0.00296667%	25	1187463	180000000	0.65970167%
26	39549	59999964	0.06591504%	26	359246	180000000	0.19958111%
27	15622	59999964	0.02603668%	27	418525	180000000	0.23251389%
28	550	59999964	0.00091667%	28	227181	180000000	0.12621167%
29	1111	59999964	0.00185167%	29	411582	180000000	0.22865667%
30	1650	59999964	0.00275000%	30	458855	180000000	0.25491944%
31	18727	59999964	0.03121169%	31	140133	180000000	0.07785167%
32	8700	59999964	0.01450001%	32	636100	180000000	0.35338889%
33	56778	59999964	0.09463006%	33	779892	180000000	0.43327333%
34	7889	59999964	0.01314834%	34	1642590	180000000	0.91255000%
35	7235	59999964	0.01205834%	35	1376297	180000000	0.76460944%
36	2500	59999964	0.00416667%	36	164909	180000000	0.09161611%
37	16550	59999964	0.02758335%	37	692744	180000000	0.38485778%
38	3100	59999964	0.00516667%	38	553184	180000000	0.30732444%
39	3000	59999964	0.00500000%	39	12027917	180000000	6.68217611%
40	27441	59999964	0.04573503%	40	553282	180000000	0.30737889%
41	21468	59999964	0.03578002%	41	6353558	180000000	3.52975444%
42	165815	59999964	0.27635850%	42	2069726	180000000	1.14984778%
43	426895	59999964	0.71149209%	43	4943812	180000000	2.74656222%
44	292556	59999964	0.48759363%	44	2021689	180000000	1.12316056%
45	368094	59999964	0.61349037%	45	3529280	180000000	1.96071111%
46	19725	59999964	0.03287502%	46	4398018	180000000	2.44334333%
47	12850	59999964	0.02141668%	47	3185654	180000000	1.76980778%
48	5300	59999964	0.00883334%	48	3563468	180000000	1.97970444%
49	34500	59999964	0.05750003%	49	4039989	180000000	2.24443833%
50	160130	59999964	0.26688349%	50	3696368	180000000	2.05353778%
			60				

	Table 10:KCB 2004						
Day	Volumes traded before Rights Issue	Tradable shares before rights issue	TAR-Before Rights Issue	Day	Volumes traded after rights issue	Tradable shares after rights issue	TAR-After Rights Issue
1	43617	149600000	0.02915575%	1	56827	199600000	0.02847044%
2	31187	149600000	0.02084693%	2	47764	199600000	0.02392986%
3	140320	149600000	0.09379679%	3	32110	199600000	0.01608717%
4	22049	149600000	0.01473864%	4	36743	199600000	0.01840832%
5	54847	149600000	0.03666243%	5	120542	199600000	0.06039178%
6	51545	149600000	0.03445521%	6	90052	199600000	0.04511623%
7	32148	149600000	0.02148930%	7	92052	199600000	0.04611824%
8	48853	149600000	0.03265575%	8	39241	199600000	0.01965982%
9	32522	149600000	0.02173930%	9	26454	199600000	0.01325351%
10	69890	149600000	0.04671791%	10	55855	199600000	0.02798347%
11	67707	149600000	0.04525869%	11	32522	199600000	0.01629359%
12	54997	149600000	0.03676270%	12	165485	199600000	0.08290832%
13	31750	149600000	0.02122326%	13	43170	199600000	0.02162826%
14	17603	149600000	0.01176671%	14	44242	199600000	0.02216533%
15	20819	149600000	0.01391644%	15	31661	199600000	0.01586222%
16	71560	149600000	0.04783422%	16	27577	199600000	0.01381613%
17	22251	149600000	0.01487366%	17	44206	199600000	0.02214729%
18	20038	149600000	0.01339439%	18	73848	199600000	0.03699800%
19	37869	149600000	0.02531350%	19	98633	199600000	0.04941533%
20	22108	149600000	0.01477807%	20	53939	199600000	0.02702355%
21	116075	149600000	0.07759024%	21	32754	199600000	0.01640982%
22	16585	149600000	0.01108623%	22	46868	199600000	0.02348096%
23	16585	149600000	0.01108623%	23	34236	199600000	0.01715230%
24	19422	149600000	0.01298262%	24	87110	199600000	0.04364228%
25	28342	149600000	0.01894519%	25	322042	199600000	0.16134369%
26	22960	149600000	0.01534759%	26	82135	199600000	0.04114980%
27	14892	149600000	0.00995455%	27	13382	199600000	0.00670441%
28	23367	149600000	0.01561965%	28	25394	199600000	0.01272244%
29	103015	149600000	0.06886029%	29	31483	199600000	0.01577305%
30	110955	149600000	0.07416778%	30	7425	199600000	0.00371994%
31	31376	149600000	0.02097326%	31	1440	199600000	0.00072144%
32	23256	149600000	0.01554545%	32	9360	199600000	0.00468938%
33	51463	149600000	0.03440040%	33	14915	199600000	0.00747244%
34	67208	149600000	0.04492513%	34	20994	199600000	0.01051804%
35	5255	149600000	0.00351270%	35	38168	199600000	0.01912224%
36	28311	149600000	0.01892447%	36	16892	199600000	0.00846293%
37	14243	149600000	0.00952072%	37	58279	199600000	0.02919790%
38	15992	149600000	0.01068984%	38	20901	199600000	0.01047144%
39	7142	149600000	0.00477406%	39	23576	199600000	0.01181162%
40	6602	149600000	0.00441310%	40	16719	199600000	0.00837625%
41	6163	149600000	0.00411965%	41	41448	199600000	0.02076553%
42	3973	149600000	0.00265575%	42	36852	199600000	0.01846293%
43	2240	149600000	0.00149733%	43	32616	199600000	0.01634068%
44	9983	149600000	0.00667313%	44	60810	199600000	0.03046593%
45	62672	149600000	0.04189305%	45	37524	199600000	0.01879960%
46	2169	149600000	0.00144987%	46	70458	199600000	0.03529960%
47	68897	149600000	0.04605414%	47	103454	199600000	0.05183066%
48	142109	149600000	0.09499265%	48	65103	199600000	0.03261673%
49	11647	149600000	0.00778543%	49	34003	199600000	0.01703557%
50	16757	149600000	0.01120120%	50	9360		0.01047144%
			61				

	Appendix 4											
Day	Company A	Company B	Company C	Company D	Company E	Company F	Company G	Company H	Company I	Company J	Average Abnormal Return	Cummulative Average Abnormal Return
-50	0.037197957	0.002279645	-0.000757463	-0.0001817	-0.00043	0.037197957	-0.002084838	0.006742474	0.000475587	-0.00710759	0.006109439	0.006109439
-49	0.008500925	0.002287486	0.00491816	-0.0001807	0.040792016	0.008500925	-0.001117671	-0.01488981	0.003246717	-0.007018006	0.005758629	0.011868069
-48	0.006624641	0.002295393	0.001534781	-0.0001796	0.025364322	0.006624641	-0.00139793	0.024571033	0.004400052	-0.006930976	0.008401806	0.020269874
-47	-0.028395244	0.002303368	0.001546923	-0.0001786	0.008417076	-0.028395244	-0.000576865	-0.018414072	0.006532063	-0.006846394	-0.005042488	0.015227387
-46	-0.007453701	0.002311412	0.001559194	-0.0001776	-0.010310363	-0.007453701	-9.46903E-05	-0.015053576	0.003349136	-0.006764161	-0.004174189	0.011053198
-45	-0.011776857	0.002319526	0.011425882	-0.0001765	-0.002162953	-0.011776857	-0.001116956	0.007100015	-0.002391705	0.034453505	0.000801737	0.011854934
-44	-0.002494055	0.003244912	-0.000735578	-0.0001755	-0.021943268	-0.002494055	-6.00749E-05	0.007409442	-0.005863777	-0.00081041	-0.002107732	0.009747203
-43	-0.015782113	-0.00124178	-0.000739151	-0.0264916	-0.010452346	-0.015782113	-0.000314953	-0.005534048	-0.002661866	-0.00081101	-0.008650856	0.001096347
-42	0.002319723	0.003804919	-0.003905598	0.02614365	-0.012268598	0.002319723	-0.000323653	0.007939848	-0.002081701	0.014630027	0.003387184	0.004483531
-41	0.015834604	0.00383068	0.008864816	-0.0001724	-0.007889675	0.015834604	-0.001355203	-0.011379271	-0.002392568	-0.00819476	0.001104793	0.005588324
-40	-0.002218095	0.002145927	-0.007179655	-0.0001714	-0.009842756	-0.002218095	0.000785783	-0.005413616	-0.005824506	-0.015488465	-0.003127687	0.002460637
-39	0.002326396	0.002151844	-0.000765716	-0.0001704	-0.005905887	0.002326396	-0.000171708	-0.006673669	-0.008346501	0.02521127	-0.001315591	0.001145045
-38	-0.002178875	0.007357661	-0.000763717	-0.0001694	-0.003273205	-0.002178875	-0.004055778	-0.000720182	0.001936418	-0.030347394	-0.000543357	0.000601689
-37	-0.015204129	-0.001302403	-0.00078426	-0.0001684	-0.00043	-0.015204129	-0.003892878	0.002168817	-0.004342691	0.014630027	-0.002801893	-0.002200205
-36	0.006649532	0.002178791	-0.000776308	-0.0001674	-0.002678155	0.006649532	-0.003446148	-0.011300674	0.005219853	0.034453505	-0.001362909	-0.003563113
-35	-0.001542641	0.000441394	-0.000762277	-0.0001664	-0.007416674	-0.010504544	-0.001906162	0.021746123	-0.005924822	-0.006764161	0.000204494	-0.003358619
-34	-0.005253839	0.000435303	-0.003927214	-0.0001654	-0.010252004	-0.001864721	-0.001080056	-0.001495623	0.00520237	0.001936418	-0.002621388	-0.005980007
-33	-0.001427415	0.007475277	0.00563605	-0.0001644	-0.011478147	0.002325123	-0.001566391	-0.017976244	0.00364372	-0.00193894	-0.002249819	-0.008229826
-32	-0.001391358	0.00758871	0.005710478	-0.0001634	-0.007295108	-0.001834081	0.000655261	-0.001719865	0.000438581	-0.005583304	0.000420285	-0.007809541
-31	-0.008661403	-0.029166147	0.087681189	-0.0001625	-0.001754662	0.00233284	-0.000258359	-0.000885246	0.000438581	-0.005473738	0.008255302	0.000445761
-30	-0.018863007	0.003818322	-0.098872283	-0.0460198	-0.000957491	0.002338507	-0.001100288	0.009901515	-0.004360302	-0.004674205	-0.018698788	-0.018253027
-29	-0.00449908	-0.001254577	-0.010212136	0.01647618	-0.000435751	-0.009904643	0.003411611	-0.008178382	-0.001149335	0.006252655	-0.001442528	-0.019695555
-28	0.023193613	0.000438581	0.008626761	0.00049536	-0.008117145	-0.013449522	-0.001066161	0.007041075	-0.002719939	-0.034334706	-0.000861579	-0.020557134
-27	0.027992404	-0.002928059	-0.010186481	0.00815958	0.000518861	0.006254293	-0.002101219	0.001072847	0.006778758	0.004071501	0.000112832	-0.020444302
-26	0.013816256	-0.002902162	0.008722749	0.00493409	-0.001848693	0.026498967	-0.001170889	-0.013588028	0.00687269	0.006216752	0.002949433	-0.017494869
-25	-0.005336516	-0.014284675	-0.000737626	0.00048719	-0.002742923	0.036794014	-0.002537586	0.000997986	0.00043858	-0.01458907	0.002568054	-0.014926815
-24	-0.027113776	0.000438581	0.152761136	0.00048833	-0.005272707	0.002359785	-0.002120446	0.016982788	0.003691738	-0.006348038	0.023662495	0.008735681
-23	-0.02191408	-0.001166945	-0.152392429	0.00049473	-0.000960082	0.00232973	-0.000631559	-0.005466772	0.005364469	-0.006261896	-0.022541904	-0.013806223
-22	-0.004348782	0.002044108	0.00050519	0.00048957	0.009284632	-0.006551909	-0.001431951	0.008614451	0.015560612	-0.006178225	0.001850584	-0.011955639
-21	-0.010734331	-0.001166945	0.002469493	0.00611304	0.017877989	-0.006402242	-0.000507144	0.001423978	0.003871756	-0.006096921	0.002829738	-0.0091259
-20	0.002335784	0.000438581	0.002523928	0.0027582	0.004661831	-0.001903067	-0.001318017	0.001125758	0.0021654	-0.006017885	0.001183889	-0.007942011
-19	0.002331455	0.000438581	-0.00079084	0.00276998	-0.009316545	-0.022493845	0.000345418	-0.001802898	0.001817182	-0.005941024	-0.004407164	-0.012349175
-18	0.022085971	-0.002754775	0.005822819	-0.0017838	-0.013117429	-0.005657186	-0.000331769	0.001586569	0.003035202	-0.005866248	-0.002319367	-0.014668543
-17	0.026583487	-0.001149335	0.002551914	0.01201038	-0.006898231	0.002298554	-0.000487698	0.011758848	0.001443797	-0.005793475	0.002869205	-0.011799338
-16	0.005911299	0.005219853	0.012795487	0.00049251	-0.005465395	0.002352389	-0.000559662	-0.009904579	0.000785538	-0.005722624	0.000698658	-0.01110068
-15	-0.004788208	0.000438581	0.031405088	-0.0064547	-0.007918389	0.006298287	-0.000915754	-0.004518306	0.002203764	-0.00565362	0.002619258	-0.008481422
-14	-0.0081379	0.002044108	-0.046525865	-0.0006553	-0.004993217	-0.005583461	-0.001628805	-0.000230473	0.001025249	-0.001542641	-0.008224716	-0.016706138
-13	-0.024410356	-0.005948218	0.002574949	0.00049215	-0.004303042	-0.00158145	-0.00114093	-0.002661901	0.000877628	-0.005253839	-0.001795492	-0.01850163
-12	-0.007283818	0.00682538	-0.004116601	0.00049006	-0.002020656	-0.001542641	0.000570513	-0.013538298	-0.000680741	-0.001427415	-0.001904606	-0.020406236
-11	-0.000823364	0.002050065	-0.004072565	0.00048851	-0.002341022	-0.005253839	0.000311395	-0.007445625	0.000276234	-0.001391358	-0.002323297	-0.022729534
-10	0.002329021	0.000438581	0.009273081	-0.0006586	-0.003028471	-0.001427415	0.000907046	-0.002114534	-0.000529365	-0.008661403	0.000484241	-0.022245292
-9	-0.00079409	-0.001172903	0.002646554	0.00163731	-0.003939512	-0.001391358	0.001028696	-0.000313086	-0.001684147	-0.018863007	-0.0002149	-0.022460192
-8	0.003244912	-0.007530345	-0.000761621	-0.0006555	0.000622577	-0.008661403	0.001104404	0.014527029	0.00026786	-0.00449908	-0.000193552	-0.022653744
-7	-0.00124178	-0.001137807	-0.000764568	0.0013028	-0.002691872	-0.018863007	0.001510746	0.01380339	-0.000647993	0.023193613	-0.000977188	-0.023630932
-6	0.003804919	0.018101789	0.002663584	-0.0026105	-0.001828088	-0.00449908	0.001842492	-0.006293909	-0.000280614	0.027992404	0.001053755	-0.022577177
-5	0.00383068	0.007043948	-0.000765553	-0.0074008	0.002077342	0.023193613	0.001209415	-0.00807854	-0.000280614	0.013816256	0.001874963	-0.020702214
-4	0.002145927	-0.015890203	-0.00419028	0.01065274	-0.0032682	0.027992404	-0.000712482	0.004313927	0.000785538	-0.005336516	0.002699701	-0.018002513
-3	0.002151844	-0.012196331	0.016673305	0.00277846	-0.003891194	0.013816256	0.002875879	-0.01123645	-0.000529365	-0.027113776	0.001259989	-0.016742524
-2	0.00735766	0.03274302	0.002818442	0.00279277	-0.00179759	-0.005336516	0.000440427	-0.000321814	-0.001684147	-0.02191408	0.004476963	-0.012265561
-1	-0.001302403	0.000438581	0.040609355	0.00747526	-0.000715201	-0.027113776	-0.000899439	0.008992645	0.015834604	-0.004348782	0.004112489	-0.008153072
0	0.002178791	-0.009507529	-0.056304851	0.00048976	-0.002374853	-0.02191408	-0.000736068	-0.004380901	-0.002218095	-0.010734331	-0.013532646	-0.021685718
1	0.000441394	-0.006067825	-0.007665597	0.00049426	0.000475587	-0.004348782	-0.001471733	-0.001959224	0.002326396	0.002335784	-0.002934759	-0.024620477
2	0.000435303	-0.001172903	0.002681744	0.00165561	0.003246717	-0.010734331	-0.000781415	-0.004378012	-0.002178875	0.002331455	-0.001354656	-0.025975133
3	0.007475277	0.005291084	-0.007596796	0.00049529	0.004400052	0.002335784	-0.007075327	0.006277193	-0.015204129	0.022085971	0.000589611	-0.025385521
4	0.00758871	0.003703968	-0.010851824	-0.0029868	0.006532063	0.002331455	0.007612249	0.010765342	0.006649532	0.026583487	0.002443779	-0.022941742
5	-0.029166147	0.005383163	-0.004066397	-0.0029536	0.003349136	0.022085971	6.58582E-05	0.006897832	-0.010504544	0.005911299	0.004394566	-0.018547176
6	0.003818322	0.002099365	0.009194056	0.00392284	-0.002391705	0.026583487	0.000561523	0.001553651	-0.001864721	-0.004788208	0.005931888	-0.012615288
7	-0.001254577	0.005459382	-0.000772314	-0.0029585	-0.005863777	0.005911299	-0.000474865	-0.002327696	0.002325123	-0.0081379	-0.000146639	-0.012761927
8	0.000438581	0.002125163	0.012918182	0.00048891	-0.002661866	-0.004788208	0.000907223	0.009716394	-0.001834081	-0.024410356	0.002672257	-0.01008967
9	-0.002928059	0.002131739	-0.004227638	0.00740294	-0.002081701	-0.0081379	-9.19363E-05	-0.003383538	0.00233284	-0.007283818	-0.001198291	-0.01128796
10	-0.002902162	0.000438581	0.016788268	-0.0064114	-0.002392568	-0.024410356	-0.002114977	0.001536358	0.002338507	-0.000823364	-0.002366585	-0.013654545
11	-0.014284675	-0.001254577	0.002825532	0.00050362	-0.005824506	-0.007283818	-0.003316973	-0.000823521	-0.009904643	0.002329021	-0.002167749	-0.015822294
12	0.000438581	-0.001248002	-0.004392007	-0.0040437	-0.008346501	-0.000823364	-0.001333212	-0.001820615	-0.013449522	-0.00079409	-0.003143914	-0.018966209
13	-0.001166945	0.002125163	0.010126237	-0.0028755	0.001936418	0.002329021	-0.00278962	0.016803096	0.006254293	0.037197957	0.003950688	-0.015015521
14	0.002044108	-0.009584044	-0.004444473	-0.0650628	-0.00193894	-0.00079409	-0.001022639	-0.010439245	0.026498967	0.008500925	-0.013326604	-0.028341125
15	-0.001166945	-0.012574962	0.006597484	0.00049265	-0.005583304	0.002334482	0.01240457	0.008258142	0.036794014	0.006624641	0.001704152	-0.026637974
16	0.000438581	-0.004342691	-0.004454694	0.00048874	-0.005473738	0.00547627	-0.010530865	-0.007151968	0.002359785	-0.028395244	-0.003712707	-0.03035068
17	0.000438581	0.005219853	-0.00074411	-0.004316	-0.004674205	0.011882225	-0.00010569	-0.003303017	0.00232973	-0.007453701	0.000565579	-0.029785101
18	0.000475587	-0.005924822	-0.000781151	0.00049485	0.006252655	-0.007205318	-0.000421519	0.002439978	-0.006551909	-0.011776857	-0.000735047	-0.030520147
19	0.003246717	0.00520237	0.014211156	0.00048835	-0.034334706	0.011892831	-0.000571952	0.001630925	-0.006402242	-0.002494055	-0.000211575	-0.030731723
20	0.004400052	0.00364372	-0.000651435	0.00529083	0.004071501	0.002286715	0.000416714	-0.009921761	-0.001903067	-0.015782113	0.000733755	-0.029997968
21	0.006532063	0.000438581	-0.00083381	-0.0043067	0.006216752	0.025480781	0.000552953	0.008677644	-0.022493845	0.002319723	0.005175172	-0.024822796
22	0.003349136	0.000438581	0.006944476	0.00049262	-0.01458907	0.030392291	-0.00038472	0.00011688	0.000475587	0.015834604	0.003344437	-0.021478359
23	-0.002391705	-0.004360302	-0.000749085	0.00049046	-0.006348038	0.013370183	3.29308E-05	0.000113448	0.003246717	-0.002218095	0.000364228	-0.021114131
24	-0.005863777	-0.001149335	-0.00460912	0.00049245	-0.006261896	0.006128427	-0.000894829	0.000109989	0.004400052	0.002326396	-0.000883473	-0.021997605
25	-0.002661866	-0.002719939	-0.000759867	0.00048941	-0.006178225	-0.001383829	-0.001440014	0.000106502	0.006532063	-0.002178875	-0.001697995	-0.023695599
26	-0.002081701	0.006778758	0.010872621	0.00048726	-0.006096921	0.006057628	-0.00041398	0.000102987	0.003349136	-0.015204129	0.002541193	-0.021154406
27	-0.002392568	0.00687269	0.003172761	0.01014429	-0.006017885	-0.008761559	5.14263E-05	9.94443E-05	-0.002391705	0.006649532	0.000794453	-0.020359953
28	-0.005824506	0.00043858	0.015595576	0.00048877	-0.005941024	0.00233615	0.00041293	9.58731E-05	-0.005863777	-0.001254577	0.001918122	-0.018441831
29	-0.008346501	0.003691738	-0.020963718	-0.0091622	-0.005866248	-0.004887579	0.00078308	9.22731E-05	-0.002661866	-0.004342691	-0.005187522	-0.023629353
30	0.001936418	0.005364469	-0.027564053	0.01504706	-0.005793475	0.002327361	0.000573361	0.000088644	-0.002081701	0.005219853	-0.001422376	-0.025051729
31	0.001936418	0.015560612	-0.000820976	0.0054555	-0.005722624	0.005948492	-0.00070565	8.49854E-05	-0.002392568	-0.005924822	0.0028286	-0.022223109
32	-0.00193894	0.003871756	-0.000836557	0.01110148	-0.00565362	0.005967206	0.002637707	8.12971E-05	-0.005824506	0.00520237	0.002452753	-0.019770357
33	-0.005583304	0.0021654	0.014279327	0.00511641	-0.005586393	0.013429512	0.001817182	7.75787E-05	-0.008346501	0.00364372	0.004471288	-0.015299069
34	-0.005473738	0.00043858	-0.024218939	0.05440816	-0.005520874	-0.023119325	0.003035202	7.38298E-05	0.001936418	0.000438581	0.000728091	-0.014570978
35	-0.004674205	0.00043858	-0.00710759	0.00284062	-0.005456999	-0.138227271	0.001443797	0.00007005	-0.00710759	0.000438581	-0.020856973	-0.035427951
36	0.006252655	0.00043858	-0.007018006	0.00167186	-0.005394708	-0.020070714	0.000785538	6.62391E-05	-0.007018006	0.001936418	-0.004217316	-0.039645267
37	-0.034334706	0.000438829	-0.006930976	-0.0018658	-0.005333941	-0.01666841	0.002203764	6.23966E-05	-0.006930976	-0.00193894	-0.004013448	-0.043658715
38	0.004071501	0.00043931	-0.006846394	-0.0030123	-0.005274644	-0.035472167	0.001025249	5.85221E-05	-0.006846394	-0.005583304	-0.007011775	-0.05067049
39	0.006216752	0.002174591	-0.006764161	0.0004907	-0.005216763	0.010951331	0.000877628	5.46153E-05	-0.006764161	-0.005473738	0.000366849	-0.050303642
40	-0.01458907	-0.001296858	0.034453505	-0.0018342	-0.00516025	0.036198745	-0.000680741	5.06758E-05	0.034453505	-0.004674205	0.008818697	-0.041484945
41	-0.006348038	0.001271396	-0.00081041	-0.0264558	-0.005105055	0.04419865	0.000276234	4.67032E-05	-0.00081041	0.006252655	0.001917388	-0.039567557
42	-0.006261896	0.001344397	-0.00081101	-0.0059944	-0.005051133	-0.005333221	-0.000529365	0.000042697	-0.00081101	-0.034334706	-0.002333148	-0.041900704
43	-0.006178225	0.000441069	0.014630027	-0.0101046	-0.004998442	0.007478976	-0.001684147	0.000038657	0.014630027	0.004071501	0.000828791	-0.041071913
44	-0.006096921	-0.003020194	-0.00819476	0.00049332	-0.004946938	0.004923431	0.000267863	3.45826E-05	-0.00819476	0.006216752	-0.001491814	-0.042563727
45	-0.006017885	-0.011458843	-0.015488465	0.00049246	-0.004896582	0.001062564	-0.000647993	3.04734E-05	-0.015488465	-0.01458907	-0.004415198	-0.046978925
46	0.005941024	0.000439167	0.02521127	0.00049392	-0.004847337	0.002869471	-0.000280614	2.63291E-05	0.02521127	-0.006348038	0.003416029	-0.043562895
47	-0.005866248	0.002119045	-0.030347394	0.00047656	-0.004799166	0.002870174	-0.000280614	2.21492E-05	-0.030347394	-0.006261896	-0.004277035	-0.04783993
48	-0.005793475	-0.001241423	0.014630027	0.00577149	-0.004752035	0.00287088	0.000785538	1.79332E-05	0.014630027	-0.006178225	0.002583201	-0.045256729
49	-0.005722624	0.002112817	0.034453505	0.00048847	-0.004705909	-0.023119325	-0.000529365	1.36807E-05	0.034453505	-0.006096921	0.001244839	-0.04401189
50	-0.00565362	0.022889143	-0.006764161	0.00049123	-0.004660757	-0.138227271	-0.001684147	3.04734E-05	-0.006764161	-0.006017885	-0.01827507	-0.06228696