

**THE EFFECT OF PROFIT WARNING ANNOUNCEMENTS ON
SHARE PRICE MOVEMENT FOR FIRMS LISTED AT THE NAIROBI
SECURITIES EXCHANGE**

BY

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DECLARATION

This research project has been submitted for the fulfilment of my Master in Business

Administration Finance thesis: -



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

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DEDICATION

I am dedicating this project to my family for the trust they have put on me, and my goal is to achieve my MBA.

ABSTRACT

The study's main purpose was to establish the effects of profits warnings on stock price movement at the Nairobi Stock Exchange. The research blends quantitative and qualitative data to provide you with relevant and accurate information. For the research purpose, the population involved 24 companies over the period 2018 to 2020. The study relied on NSE's daily market reports, news media websites and secondary data from stockbrokers. This data was collected from publicly traded publicly traded financial statements, the NSE website and the Capital Markets Authority website. Secondary data from the NSE database on daily prices and company news and data published on the internet and in print media were used. The data was analyzed using an event methodology. The findings revealed that profit warnings announcements have an unfavorable effect on stock returns since 75% of the expected and actual returns of the companies declined preceding the announcement. The implication of profit warning announcements on abnormal, standardized cumulative abnormal and cumulative normal returns largely depend on the firm issuing the announcement. The returns demonstrate huge variations throughout the event period.

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ABBREVIATIONS

PEAD	-	Post Earnings Announcement Drift
NSE	-	Nairobi Share Exchange
GDP	-	Gross Domestic Product
FOREX	-	Foreign Exchange Rate
E M H	-	Efficient Market Hypothesis
E T S	-	Electronic Trading System
C A R	-	Cumulative Abnormal Return
S C A R	-	Standardized Cumulative Abnormal Return
A R	-	Abnormal Return
E R	-	Expected Return

CHAPTER ONE

INTRODUCTION

1.1 Introduction and background

In a market with more speculators, the impact of profit warning is high as investors with a holding in a firm which issues a profit warning may sell-off if their main intention was to make capital gains. Firms that give wrong information than what investors expect will make investors make misguided decisions in the market (Bodie, et al 2009). Profit warning's main purpose is to warn investors that the profit of a listed company for a particular financial quarter is expected to be below actual target. Investors should know that there are chances of getting a loss when purchasing or selling the listed companies' shares at the time.

Financial managers will find shares more attractive to invest in if the amount of capital they put in gives high returns (Nyabundi 2013). The share prices highlight the apportioning of the economic resources from fund managers to listed companies (Fama, 1970), (Holland & Stoner 1996). Earnings expectations affect the company's share prices. Earnings estimates of listed firms are a good indicator to investors as it enables them to assess a company's income and revenue position with regards to the earnings estimates. Therefore, it impacts the fund manager's decision of buying and selling the shares. Holland & Stoner (1996).

Profit warnings are tipped to be a great risk when you own a share. If the company issues a profit warning, there should be no surprise that is after the announcement to see the share prices fall. Forecasts will be revised downwards as will the estimate of future profits a company can make. Political uncertainty, poor credit uptake, and poor weather conditions featured as the main reason

as firms listed at the Nairobi Securities Exchange (NSE) issued a profit warning. In Kenya 17 companies issued profit warnings for the financial year ending December 2019, just showing how gloom the economy was expected to be in the year 2019. Listed firms that issue profit warnings often means that their earnings will reduce by at least 25 percent in comparison with the previous financial year's results.

1.1.1 Profit Warning Announcement

Profit warning Announcement can be described as a public announcement pronounced by a listed firm to the company's shareholders warning that the profits for the specified financial period shall be subjacent than had been anticipated (Bulkley & Herrerias, 2004). Profit-warning announcements bring out a strong bleak market reverberation that is not susceptible to seeing the warning but only once the announcement has been made public. Profit warnings can also be expanded as earnings predictions made by senior management of a firm that alerts investors of an anticipated revenue shortfall in reference to the applicable ethos that is before the mandatory earnings announcements that is when the profit announcement is made (Malkiel, 2003).

The profit warning is announced just before the required anticipated earnings announcement. The verdict to issue a profit warning might appear as counterproductive for a firm as it immediately erodes shareholder value as reflected in the share price. Jensen (2005) argues that equity overvaluation, because of information asymmetry, might have an adverse effect on firms. One of the bigger shortfalls of owning a share as an investor is Profit Warnings. For an owner of shares in a company surprises of share value reducing due to profit, warnings are not news. But what is the next move when a listed firm issues a profit warning? The response is purely informed by the prevailing circumstances and the motive behind it. Some can mean money-making opportunity or loss-making situation. The profit warning can be classified into,

qualitative and quantitative techniques.

A quantitative warning is the warning announcement which deals with getting the exact number of earnings estimations as it relies on dealing with numbers. For the qualitative, it deals with assumptions of the projected earnings. (Tserendash and Xiaojing, 2010).

Studies have been done on the profit warnings with regards to share price movement and are focused on the methodology called standard event study, that overlooks the adverse effects of the announcements on share price betas and the residual variance (Cam and Ramiah 2014; Brown et al. 1988; Zolotoy 2011; Corrado and Jordan 1997; Lui et al. 2009; Cyree and DeGennaro 2002; Savickas 2003), a lack that deters the test for (EMH). After adjustments of the share's beta that is after the occurrence of the profit warning announcement, the beta is known to give wrong abnormal returns estimates. Moreover, many studies contend that overlooking the condition where the variance of the error term and residual value largely varies in a regression model may direct to a partisan market model parameter estimates and test statistics that are conflicting (Angria 1989; Corhay and Tourani-Rad 1994). Bollerslev et al. (1988) and Klemkosky and Martin (1975) were in the contention that whatever the shareholders expected had some dependency on available information at a chosen period and their persistent re-estimation of factors' returns, makes highly volatile assets betas to be inconsistent within the specified period. Coherent with this forecasting, many researchers found that estimated betas show statistically significant time variation (Harvey 1989; Ferson and Korajczyk 1995; Faff et al. 2000). Some studies have demonstrated that alterations in betas are more definite whenever there is a news announcement.

1.1.2 Share Prices Movement

Share Movement shows the movement (in and out) of the shares due to sale to customers, transfer, sales return, or stocking in inventories. Stock price movements are a natural feature of disclosure. These disclosure-centric price fluctuations can be behavior-based, trade-based, or information-based. (Allen and Gale,1992). There are a few measures of share price movement, and each has its properties and benefits during an analysis of returns. The selected period for which share returns are dictated depends on the analyst, but the financial analyst carries out their measures of share movements on a day-to-day basis, weekly, monthly, and yearly depending on their preferences. (Fama, 1970), the market price of a given share should match its intrinsic value.

Share markets attract foreign investment and a rise in domestic resource mobilization, increasing the availability of more resources to be invested in the developing third world. An efficient market can be well accessed by the level of performance of the share market. Constant liquidity is a visible feature, also free entrance and exit by investors. This requires a sizeable amount or levels of transactions (Yartey and Adjasi, 2007). In the neoclassical investment model's investment and share, prices are analyzed. The future valuation of a listed company is considered by fund managers when making a choice on where to invest their money. The relationship between share price and investment should be correlated. Share returns are the earnings for the period, the anticipated rate of inflation, and the unpredictability of the return after investing in shares (Reilly and Brown 2003). Lakonishok and Levi (1982) argue that competition among buyers require them to compensate sellers for the delays. Rational investors, therefore, bid the observed price above that which would be observed if settlement effects were absent. However, it has been established that share markets may not utilize information and may deviate away from their fundamental value for period extensions, and vice versa is the contrary that share prices that

are not based on fundamentals may not go well with investment decisions.

1.1.3 Profit Warning announcement and share price movement

The market refutes profit warnings because the market interprets such news as bad news. The purpose of the study the movement of share prices after profit warning announcements as demonstrated by a fall in abnormal returns around the event window. Senior management usually issues the warning if financial targets seem too optimistic or unpredictable changes in economic conditions transpire. Investors can easily pick up such information that shows a decline in the attainment of target returns by a firm.

Using the efficient market hypothesis (Fama, 1970) share prices should be inclusive of historical and current information that are present in the market. For example, a firm issues a profit warning statement to investors that there will be a decline in returns lower than the expected financial target, if investors observe this information as new and value accordant, an unfavorable share price reaction that is a downward movement after the announcement can be witnessed. Moreover, the importance of a profit warning has been seen in various studies and research (Church & Donker, 2010; Bulkley & Herrerias, 2005; Jackson & Madura, 2003;), who gave strong affirmation of negative AR (Abnormal Return).

More evidence was provided where, after the negative announcement the share price returns also drifted downwards (Bernard & Thomas, 1990; Ball & Brown, 1968). The best reaction for this predicament is that the NSE doesn't positively consume this new information, since the warnings categories as unplanned earnings information. The ordinary explanation for this occurrence is the market under reaction Bulkley and Herrerias (2005). There is a relationship between profit warnings and earning announcements that have surprises. The differentiating factor is that earning's announcements have a specific date and profit warnings are unpredictable

(Bhana, 2005). This led to the detection of post-earnings-announcement drift (PEAD). PEAD is the occurrence that share returns drop following a negative earnings announcement (Louhichi, 2008). PEAD in this study is the continuous downward movement of share prices due to a profit warning announcement and from that, a prediction of future prices can be done.

A market in a weak form (EMH), Fama (1970) the share prices include pertinent information but if the event of profit warnings causes abnormal returns due low reaction by investors to the information this brings about a downward price movement, this means a fall in price and that the market did not pick the information as positive. If profit warnings lead to negative ARs, this will greatly affect the unpredictable nature of share prices experienced in an efficient market bring about the need for this research. The post-earnings announcement drift (PEAD) is taken to be the way prices move as a counter-reaction to profit warning announcements for close to a year after the announcement Ball and Brown (1968). That is, if the declared returns are below (above) the market forecast, the AR for the share are taken to be below (above) forecasted returns for some time. The theory of EMH Fama (1970) explains that the share prices change rapidly to current new information but Empirical evidence, through research carried out by (White, Sondhi, & Fried, 2012) shows that share prices hold on for some time after the news circulation.

1.1.4 The Nairobi Securities Exchange.

The Nairobi Securities Exchange (NSE) is the main share exchange of Kenya. It is a market involved in the exchange for example of shares of publicly quoted companies, treasury bills, and bonds (NSE 2015). Its formation goes back to 1954 after being established as an overseas share exchange while Kenya with the concession of the London Share Exchange. It has the responsibility of developing and regulating the securities market. The Capital Market Authority

is an authority charged with the responsibility of safeguarding the investor's interests by ensuring that various regulations on capital markets are adhered to as stipulated in the CMA Act (Cap 495A). It essentially helps in creating a reliable, orderly, and efficient market trading platform. In 2006 NSE was automated and further on in 2012, its demutualization was a major event that positively positioned it to enhance liquidity in the market and facilitate information and allocation efficiency.

NSE-listed companies must post information regarding profit warnings, including requirements by the CMA and NSE using ways that allow stakeholders to make informed decisions on the examination of a company's performance. In Kenya with reference to the fifth schedule to the Capital Markets (Securities) (Public Offers, Listing and Disclosures) Regulations, 2002 states that the issuing firm shall communicate all the material regarding the profit warning, from this the earnings usually have at least 25% shortfall in comparison to the previous year's earnings (CMA CIRCULAR NO.6 2016).

A listed company is required by regulations to make public announcements within 24 hrs of the happening of the events. Further regulation requires that any communication to the public and to shareholders should be factual and shall be submitted and acknowledged by the authority before circulation. NSE has been shown to exhibit several anomalies amongst them pre- and post-earnings announcement which causes erratic fluctuations in the share price. Warning announcements have also been evidenced to cause erratic movements in security prices.

1.2 Research Problem

Profit warnings announcements have dominated by listed companies that are in financial Services, manufacturing, and trade sector over the last economic cycle. The companies include

Bamburi Cement, UAP Holdings, Sameer Africa, HF Group, Britam Holdings, Deacons, Sanlam, and Kenya Power Company. The profit warning has its strengths and weakness when announced. Careful consideration is required in the process by the companies on the type of profit warning and its information content as it can alter the share value.

Research shows that while such announcements are necessary for listed firms, they lead to a drop in share price that can take up to 15 days or more to recover. Medlin Njoki (2017) of the University of Nairobi, the effect of the profit warning can still be felt 15 days after the announcement as investors mull over their stake in the company. She studied 28 companies that issued profit warnings from 2012 to 2016, which included Kakuzi, Kapchorua Tea, National Bank, Standard Chartered, and Family Bank, among others. The study found that there were high negative abnormal returns and cumulative abnormal returns after profit warning announcement, This implies that the profit warning announcement doesn't have a good effect on share prices (downward movement) and that the market takes too long to recover from the effect, the description for this incident is the markets' low reception to the announcement. Since profit warnings can be described as earnings surprises and the only difference is that predicting the time cannot be done. The only thing that differentiates earnings surprises from profit announcements is that earnings surprises have a specific date of announcement (Bhana, 2005).

Research have been done on the relationship between the publication of the profit warning and share price movement, the study technique chosen was the quantitative method. Taking an example of international studies that have been carried out, Clare (2001), Bulkley & Herrerias (2004), Skinner (1994), Helbok & Walker (2003), Collett (2004), Kasznik and Lev (1995). Their study involved collection of data, which is for daily share prices to get individual share returns

and eventually calculate the extent to which the profit warning initiated the negative reactions in the NSE. They managed to quantify and test theories on the correlation between the profit warning and share returns. In this project, will scrutinize the share price movement pre and post profit warnings announcements.

In Kenya, various local studies have been carried out to check market reactions to various corporate announcements. Maina (2014) Lusweti (2014), Kiiro (2006), Kuria (2007), Ndirangu (2008), Cherono (2010) who checked on different types of information contained in the announcements for example cash dividend announcements and cross border listing announcement.

Therefore, the gap identified is to congregate the profit warnings announced by listed companies in our very own NSE, included also are the daily share prices before and after the event period this is to enable us to monitor the price movements. Using the event study methodology, the study involved the effect of the announcement on the gradual movement of the share price either negatively or positively. This study embarked on a quantitative method of analysis for the research strategy for this thesis since its dealing with numbers and need to quantify the price trend. Therefore, this research dealt with daily closing share prices and finally determining the abnormal returns and viewing the price changes (movements). As previously mentioned, the qualitative method that is for example using interviews to collect data could not be applicable to test this theory to answer the research questions and also obtain the research purpose that is, the effects of profit warnings announcement on share price movement for NSE listed companies in Kenya?

1.3 Research Objective

To analyze the effects of profit warnings announcements on the share price movement of firms quoted at the Nairobi Stock Exchange

1.4 Value of the Study

The research is an asset to the following participants: Firms' managers, investors, researchers and academicians, governing bodies, financial analysts, and fund managers.

The main aim is to look at profit warnings that are issued by firms at the NSE. Furthermore, is to find out if the information provided from the profit warnings has any direct impact on the share prices. This research will reduce the level of surprises during the actual earnings announcement since the profit warning prepares the market for negative news.

Profit warnings are of 2 types quantitative or qualitative ones. Good relationships are eventually created by companies that give profit warnings. Wise investment decisions are made by investors who follow these profit warnings, stopping them from overreacting or underreacting to the announcements made by the companies they have invested in. Another additional advantage for long-term investors is that once you have proof that the business of the company has been deteriorating then a profit warning is treated as a short-term setback and an opportunity for an investor to buy more shares.

The researchers and tutorial community will use the results of this study as a citation for additional research and as a basis for deliberation with listed companies. It can also be taken for reference for study and analysis. This also provides material for researchers to see variations if any across developing markets and creating more opportunity for further research.

This information assists normal investors in making decisive decisions in capabilities and

irregularities. Further to this the investors will have broad thinking on what to buy and what to sell.

The advantage of profit warnings to policy is that it gives a clear indicator to the government regarding the performance of the economy which gives a policymaker the chance to come up with policies that can stimulate the economy towards growth and stability.

This research adds some major contribution to the field of finance that is the results from this study fuel more deep throat studies to be carried out on this topic and hence open more doors on areas that need to be studied and researched on.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This study draws the basis from several areas. When it comes to share price, there are various theories that make the prices move over time.

2.2 Theoretical Framework

Various theories have been used to explain this phenomenon of share price behavior, Random Walk theory and Efficient Market Hypothesis.

2.2.1 The Random Walk Theory

Random walk is the stochastic process found by successive summation of independent, normally distributed random variables (Kearl Pearson, 1905). In Random Walk Theory, share prices operate in an autonomous way; there is independence amidst past historical prices and future share prices. That is why the behavior of prices is erratic based on historical prices Fama (1970). As indicated above, the concept of share prices following a random walk is linked to that of the EMH. The basis is that investors react promptly to any informational advantages they have, eventually removing profit chances. Hence, prices entails the available information and profit is unlikely to be realized from information-based trading (Lo and MacKinley, 1999). This results to a scenario where the higher the market efficiency, the higher the likelihood for price changes.

Security price changes are independent overtime for a specific share price that is, fluctuates around its intrinsic value. The analogy behind the random walk theory depends on the hypothesis that the continuous price changes for a share price are independent.

The random walk theory hypothesizes that the share markets are efficient, whereby there are many participants in a contest with one another to forecast future prices and information is readily available. In this scenario, share prices include all information either historical or current and any news that is to come would be considered as well, hence the price of a share is usually close to its intrinsic value. The intrinsic value can also change but this may be due to competition that will bring about new information in the market that will initiate changes in its value (Seelenfreud, 1968; Robert, 1959; Fama, 1970).

2.2.2 The Efficient Market Hypothesis

Share prices acclimatize expeditiously to the new information and the current prices reflect historical current and future news (Eugene Fama 1970) . EMH is split into 3 areas weak, semi-strong, strong. The Weak Form EMH says that historical information is priced in securities. Theoretical analysis of securities can give a fund manager the upper hand to get more returns that are more than market averages on interim basis, but there are no "patterns" that exist. As such, our take on this is that fundamental analysis doesn't give a long-term upper hand and technical analysis gives a negative result.

For Semi-Strong form, it shows that not even critical analysis can give an upper hand to a fund manager and that share price is comprised of current information. Strong form of EMH hypothesis says that all information both private and public, is included on the share price and that no financial markets expert can outdo the market. A strong form of the EMH does not assure us those fund managers are not able of making abnormally high returns because there is always some defect included in the averages.

Comparatively, some researchers have been carried out in the third world in comparison with developed ones. In developed countries, markets pick information promptly and they are immediately reflected in prices and the biggest question is the weight that holds for the two forms that is, weak form of EMH and semi-strong form. Studies on this subject are minimal and the conclusions of EMH research on developing countries have diverse outcomes (Ayadi 1983, 1984; Omole 1997; Dickinson & Muragu 1994; Matome 1998; Osei 1998; Adelegan, 2004 and Osei 2002).

2.3 Factors that determine Share Price Movement

The distinct need for a share market is to support the expansion of a country's industry and Economy and it is also the quantification tool that shows the performance of the Kenyan economy. The share index is the clear indicator that is used, example a consistent rise shows the expansion of the economy, while drops on the index indicate poor performance of the Kenyan economy in some cases economic instability (Garza-Garcia and Yu, 2010). Diverse studies show that the expansion of a county's economy indicates the growth of a country, variables like GDP, (FDI) Foreign Direct Investment, Inflation, Interest rate, Money supply, Forex rate, and among others (Masila, Aduda, and Onsongo, 2012).

The movements in the share prices are affected by the previously mentioned factors.

2.3.1 Interest Rates

Interest is the price that a commercial bank charges for a loan. When interest rates are low, the requirement for capital increases, and the subsequent demand for shares rises. Conversely, high interest brings about a drop in the need for capital and share demand lowers.

2.3.2 Dividends

A dividend is a distribution of a company's earnings to shareholders in the form of cash payments or additional shares that are fully paid out. Dividends show the movement of shares. Share prices move upwards whenever listed companies declare dividends. If the dividends declared are below expectations that investors wanted there will be a decline in share prices movement downwards.

2.3.3 Economy

In the economy, there are periods known as booms and depressions. During boom economic periods share prices tend to be at their highest while during low economic periods that is depression share prices are at their lowest. Once economic recovery kicks in a gradual rise in price is witnessed. Yao, Dzhumashev and Jakob (2011) in their research stated that share price has a positive and significant correlation with stock returns hence stock returns translate to economic growth. However, other research done by Ritter (2005) and Wade (2013) indicate that although stock returns are related to economic growth. There is no clear consensus as this relationship is typical during periods of high production volatility.

2.3.4 Investors

Market participants have influences on share prices. When investors expect prices to move up, they buy more (bull market) on the contrary if they expect prices to go down, they buy less (bear market). Fund managers and investors use the share indices as an ideal guideline to compare market returns against their returns that they have made in the share market. Despite several studies being carried out, none has been done on less developed markets (Aduda, Masila, and Onsongo, 2012). Their findings suggest that methods of getting share price are differing and adverse. From the basic philosophy stock prices are determined by the power of the supply and demand market, to the econometric models (share prices determined by many economic elements), there are various ways of thinking (Garza-Garcia and Yu, 2010).

2.4 Empirical Review

Many researchers have investigated the effect of profit announcements on share prices.

2.4.1 International Evidence

Profit warnings are a discretionary proclamation issued by listed companies to divulge that the management expects revenue to be lower than initially anticipated. Market reactions to this news have mostly been taken to be negative, this was researched by Fayed A. Elayan (2009), Ph.D. Thomas O. Meyer (2010), the hypothesis that was tested involved the timings of the announcements and when they were carried out or published. This situation was called the market timing hypothesis where the announcements were made on days where investors could not act immediately like for example on Friday 's aftermarkets have closed. Opposed to this expectation, Friday is taken to be not a good day to make a profit warning and the cumulative average abnormal return does not have a lesser negative impact in comparison to other days. Management may also be making profit warnings to safeguard themselves against shareholder lawsuits. Both univariate and multivariate, evidence that corresponds to this concept is developed and is found to be significant. Just to mention, the market reaction has a less negative impact, if management announces earlier also when done more than once (quarterly) rather than once annually. Information asymmetry between managers and investors can be taken into consideration when predicting, which profit warning publication has a higher negative market reaction.

2.4.2 Local Evidence

In Kenya various studies have been carried regarding this topic Gathoga (2016), assessed profit warning announcements and share returns he found out that profit warning leads to a fall in the expected returns of the listed company that gave the profit warning announcement. The uniqueness identified from the study is that he tested for 4 financial quarters where he witnessed the decline in share prices but on the last and final quarter experienced an upward movement in

the share price.

Lusweti (2014) researched the impact of profit warning on the share price of companies listed at the NSE. The period of the test was 2008 up to 2013. The results were that when profit warnings were released earlier in the financial year there was some positivity attached in that better results were expected as the year winded up.

Maina (2014) did the same study as similar to Gathogo (2016) but tested using a descriptive design. The results where that the returns had a high dependence on the issuing company that is listed at the NSE.

2.5 Conceptual Framework

The relationship between the dependent and independent variables is shown below.

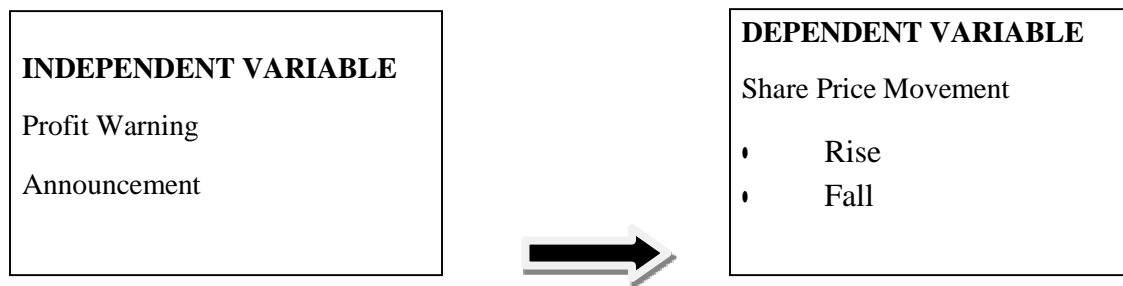


Figure 2.51: Conceptual Framework

2.6 Summary of Literature Review

Random walk theory and EMH theory play a major role at a securities Exchange. These two theories have shown the expected reaction of fund managers when news is published. The intervening variables identified are macro-economic such as interest rate, dividends. The empirical literature shows that there is an impact of the profit announcement on share price movement.

The studies done in Kenya and internationally had some conflict regarding share price movement. From various kinds of research based on markets in developed countries and there is low empirical evidence on the levels of profit warning on share price movement in developed countries especially Africa. This study based on data gathered from the NSE seeks to evaluate the effects more clearly.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter will look at the methods during the research. It explains the research design, population, data collection method data analysis. The test for the movement of share returns and movement was accomplished using descriptive design using an event study, which is picked as the most efficient method to carry out the study. An event study is a statistical technique that assesses how the value of a listed company is affected by an event.

3.2 Research Design

Event study is the most reliable method to use, when studying impact of events such as profit warning announcements on share prices of how it makes share prices move. The assumption on this basis is that prices react to the event in study. (Mackinlay ,1997 bowman, 1983) studied this financial market mechanism using financial data. The plus side of event study is to enable us to monitor or see the movement of share prices during the announcement with use of a shorter time period.

If the profit announcement affects the share price example drop or rise in value, it will be measured using AR (Abnormal Return). To calculate AR, you should understand that they are the returns over the benchmark returns. In simple words, abnormal returns are share returns less the benchmark returns. The benchmark could be any market index or portfolio against which you want to measure the performance of the shares you are studying (Bowman, 1983, p.561).

At this point the period to test is selected, estimation period including the event date. The duration of the period of test is not as long as the estimation period, differences are expected depending on the selected interval. Brown & Warner (1985) selected the estimation period to compute a share's Beta value. An estimation period of 90 days is chosen to get the α and β by regressing the index's returns to the share's returns. A parameter estimation period of 120 days is the best choice Brown & Warner (1985), because the day to day returns data for the 100 days just before the profit warning announcement are enough in getting a gauge for acceptable returns. But for this research an estimation period of 90 days and a test period of 10 days. An event window of 10 days clearly brings out the impact of the profit warning. The window starts 5 days just before the publication date to 5 days after the event [-5,+5]. From this the test period is small and clearly brings out the impact of the profit warning announcement.

3.3 Population Study

The Population study constituted of listed companies in the NSE, that issued profit warnings between 01/01/2018 to 31/12/2020. Population of study where 24 listed firms which publicly trade at the NSE.

3.4 Data Collection Methods

The data used for the research paper is secondary data from NSE historical reports, the data collected was inclusive of the announcement, details of the company and the line of trade, the date, main reason for the profit warning announcement and the daily share prices picked between 01/01/2018 to 31/12/2020.

3.5 Data Analysis and Presentation

Data analysis was executed using event study approach (Campbell et, al. (1997). The initial requirement is to collect share price data for the stated days, for listed firms issuing profit warnings and the index to be studied. When engaging this type of study researchers focus on returns and not actual share price. The prices are henceforth converted into natural logarithm returns using the indicated formulae:

$$R_t = \text{LN} (P_t/P_{t-1}) \quad (\text{i})$$

P_t = Present share price

P_{t-1} = Past days share price

Return is speculated if the profit warning announcement had not been published. In this scenario simple regression analysis is used to get the expected return, with the parameters being established in the period of estimation, persistent with an equilibrium model which is the market model methodology (MacKinlay, 1997) mostly used as gauge in event studies. Strong (1992), the market model makes no definite hypothesis regarding how to establish equilibrium security prices and our assumption is to get returns based on:

$$E (R_{i,t}) = \alpha_{i,t} + \beta_{i,j} R_{m,t} \quad (\text{i})$$

Hence the simple regression is tested using the returns on a given share i and the returns of a share market index m . The market model equated by:

$$E (R_{i,t}) = \alpha_{i,t} + \beta_{i,j} R_{m,t} \quad (\text{ii})$$

Where:

$E (R_{i,t})$ = Expected Return at time t

$\beta_{i,j}$ = Share's Beta value

$R_{m,t}$ = Return on share market index m at time t

AR is used in event study to show the events aftermath. Further, a gauge for actual returns is essential to confirm the presence of AR which is the actual observed return on the share sample, i less the anticipated normal returns, $E(R_i, t)$, for the subsequent days of the profit warning announcement (Seiler, 2003). Hence AR are estimated using a method called risk-adjusted return, that is evaluated within the duration of announcement period on share prices of nominated companies that had profit warning announcements.

Thus, the abnormal return of a share i at time t is equated by:

$$AR_{i,t} = R_{i,t} - E(R_{i,t}) \quad (\text{iii})$$

$R_{i,t}$ = Actual return on share, i

$E(R_{i,t})$ = Expected return.

Looking at other successful event studies done, AR's are added up for the period. This is taken into consideration because of unpredictability of the actual date of the event and to be able to get the outcome of the profit warning announcement on the share price. The CAR for share i is evaluated as the aggregate of abnormal returns of a selected time period $[t, t+k]$ as indicated.

$$CAR_{i,t,t+k}^i = \sum_k AR_{i,t,t+k} \quad (\text{iv})$$

The CAR for every category which refers to the average cumulative abnormal return of CAR For all findings from announcement time t to $t+k$ is equated by.

$$\overline{CAR}_{t,t+K}^j = \frac{1}{N_j} \sum_{n=1}^{N_j} CAR_{t,t+K}^n \quad (\text{v})$$

A test statistic is an estimation of the chances that the actual value of the estimator is not zero. It checks some characteristics of the sample data by using the statistical hypothetical test. The greater the absolute value of t, the more likely the actual parameter value will be more than zero.

$$t_{CAR} = \overline{CAR}_{it} / \left(\sigma(CAR_{it}) / \sqrt{n} \right)$$

(vi)

Where

σ = standard deviation of the CAR;

n = observation.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

In this section, the implications of the analysis and the results of the study are presented in relation to the purpose of the study. The first part of this chapter provides an overview of the methods used to analyze information. The second part contains important tables and diagrams that show the results of the study and help explain the by-products of data analysis. The last part provides an overview of the results and a clarification of the results.

4.2 Descriptive Statistics

The study's objective was to establish the effects of profit warnings on stock price movement at the NSE. To attain this study goal, event study methodology is applied for twenty-four profit warning events in Kenya as attached in appendix one for the period 1st January 2018 to 31st December 2020. This study analyzes securities market performance, and the company stock prices pre and post profit warnings announcements.

Secondary data used was retrieved from the NSE and evaluated in Excel format. The study looked at how the Nairobi security exchange and specific company stocks have been fairing on during a profit warning announcement.

4.3 Return Trends on Profit warning Announcement

Figures 4.1 to 4.24: below presents the movements in actual return, expected return, for the specific companies during the profit warning period.

Figure 4.1: Britam 2019 returns movements during Profit Warning Announcement

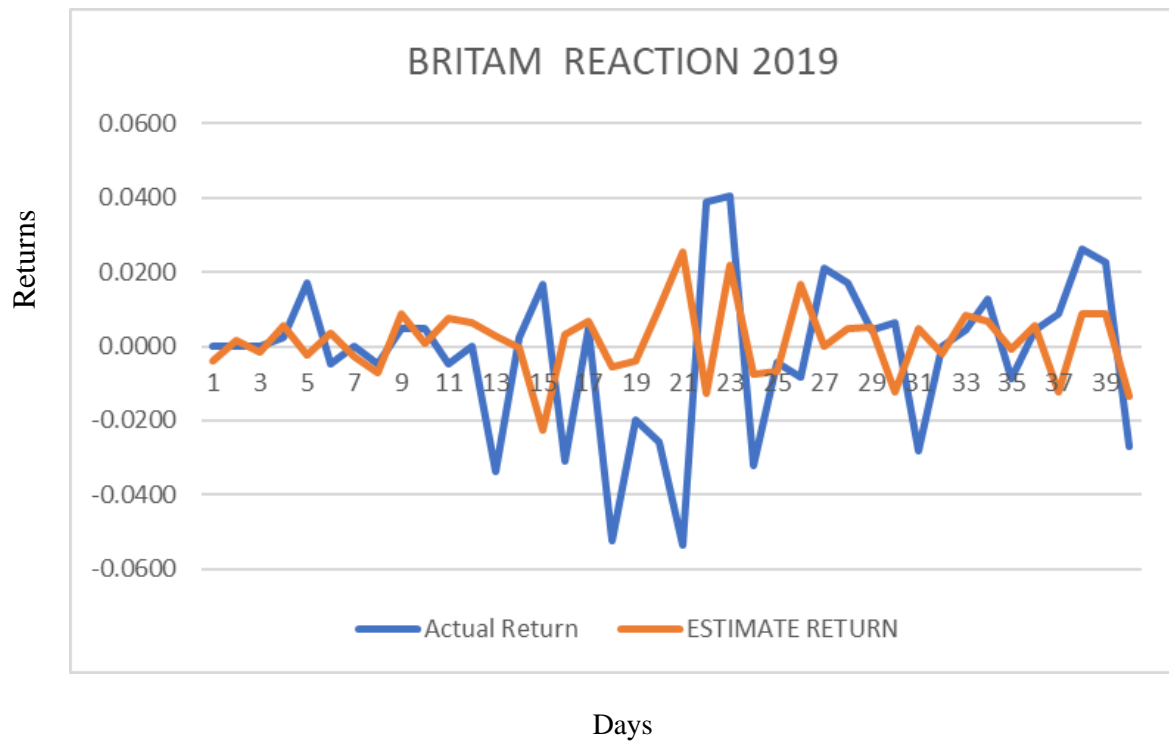


Figure: 4.1: above presents the returns for Britam in 2019. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.2: Britam 2018 returns movements during Profit Warning Announcement

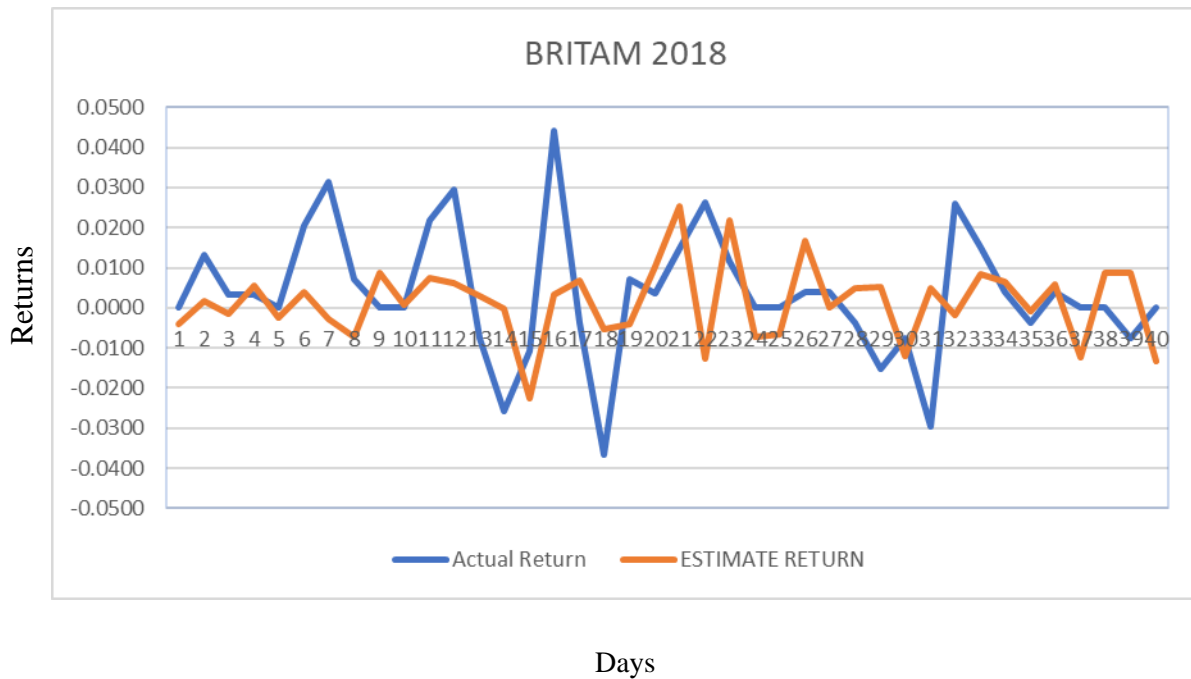


Figure: 4.2: Presents the returns for Britam in 2018. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the news. The actual returns climb a day before the news and abruptly fall on the event day and rise for 2 days after which the returns assume an ordinary fluctuation tendency.

Figure 4.3: Housing Finance 2018 returns movements during Profit Warning Announcement

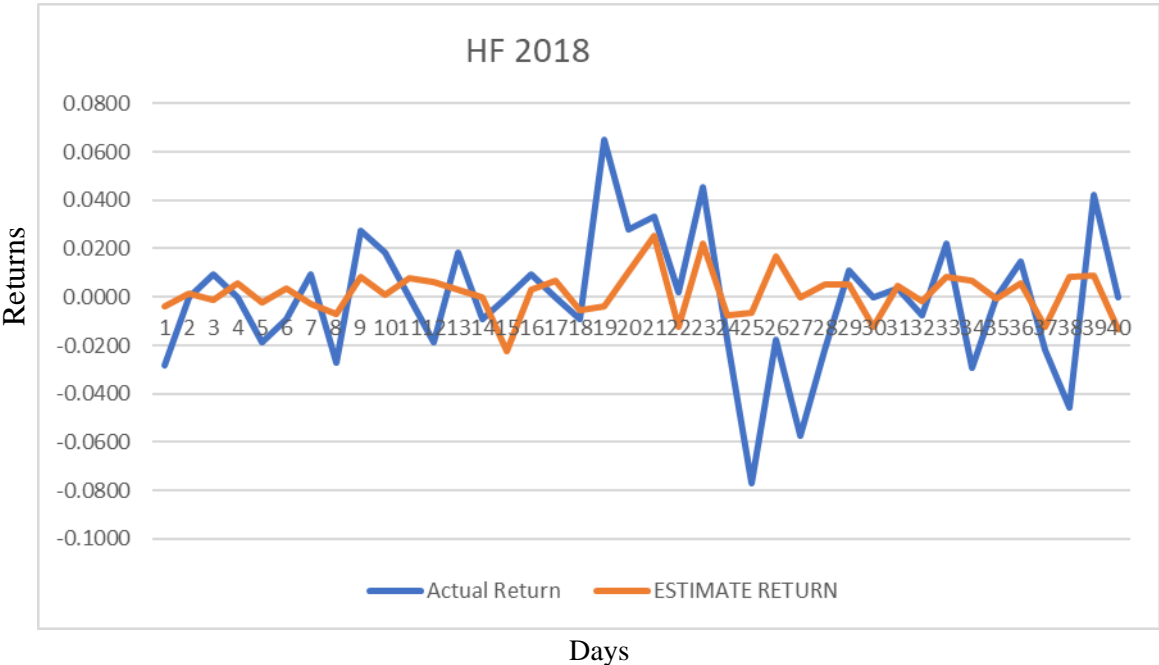


Figure: 4.3: Presents the returns for Housing Finance in 2018. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the news. The actual returns move upwards two days prior the news then fall abruptly on the declaration day then rise a day after.

Figure 4.4: KPLC 2018 returns movements during Profit Warning Announcement

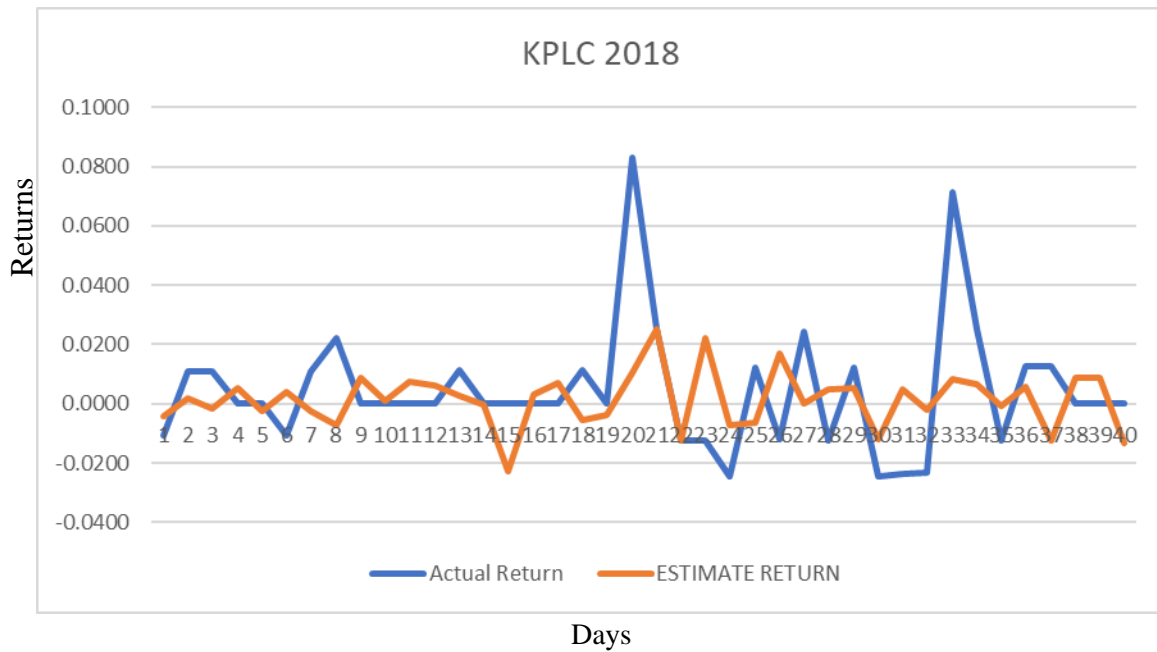


Figure:4.4: above presents the returns for KPLC in 2018. The actual returns and expected returns have no uniformity. The actual returns show a stable value up to the day preceding the pronouncement, then climbs day before, then drops on the declaration day then upholds a shifting trend across the event window.

Figure 4.5: Sanlam 2018 returns movements during Profit Warning Announcement

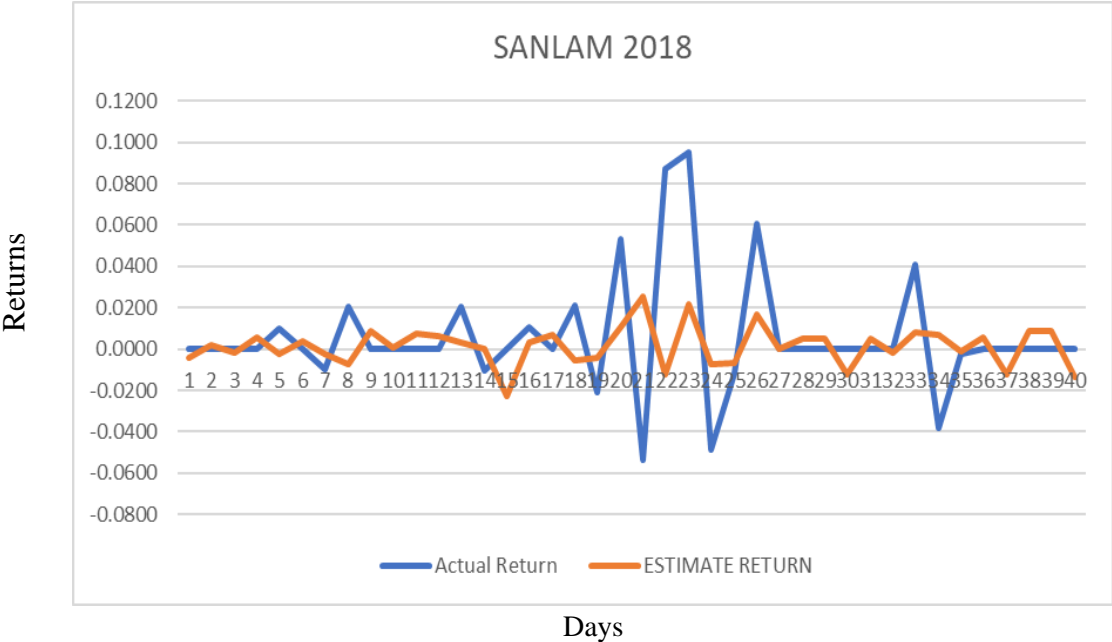


Figure:4.5: above presents the returns for SANLAM. The actual returns and expected returns have no uniformity. The actual returns indicate a constant value up to the day preceding the pronouncement, then climbs pre- announcement, then plummets on the declaration day then upholds a shifting trend across the event window.

Figure 4.6: Bamburi 2018 returns movements during Profit Warning Announcement

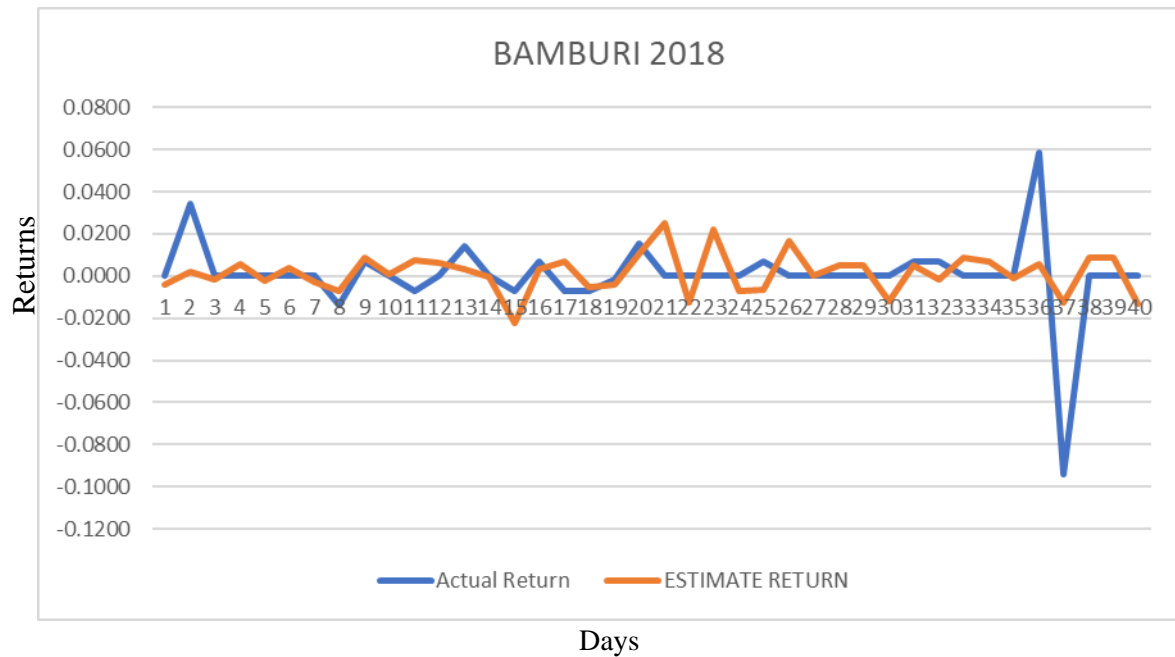


Figure: 4.6 above presents the returns for BAMBURI in 2018. The actual returns and expected returns have no uniformity. The actual returns rise slightly before announcement day then move downwards after the announcement.

Figure 4.7: Absa 2020 returns movements during Profit Warning Announcement

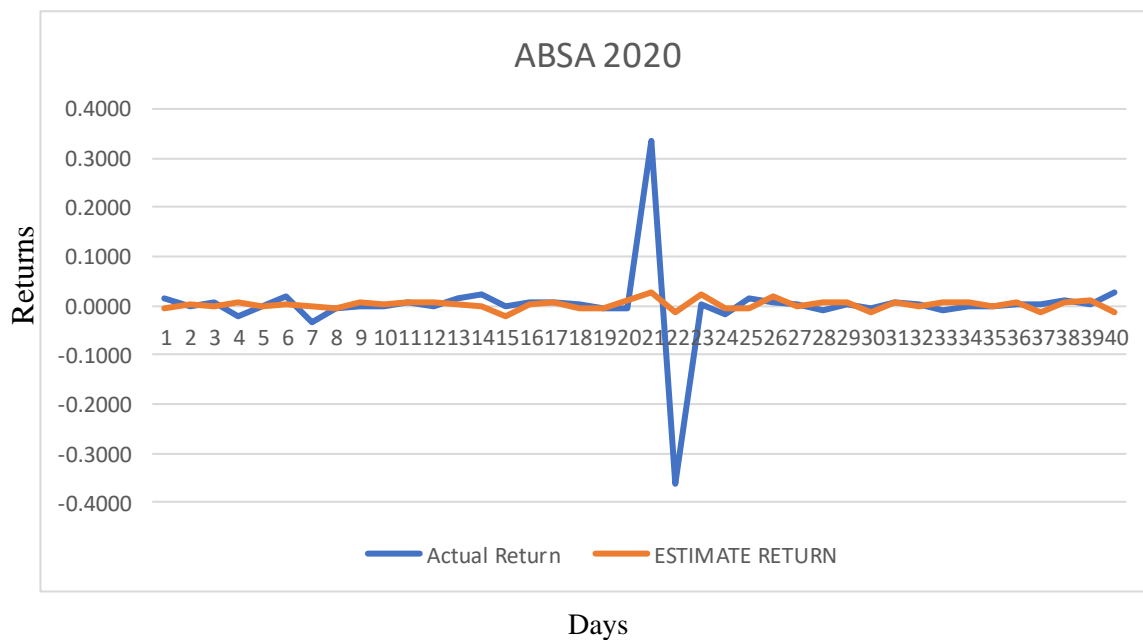


Figure: 4.7 above presents the returns for ABSA in 2020. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.8: BOC 2019 returns movements during Profit Warning Announcement

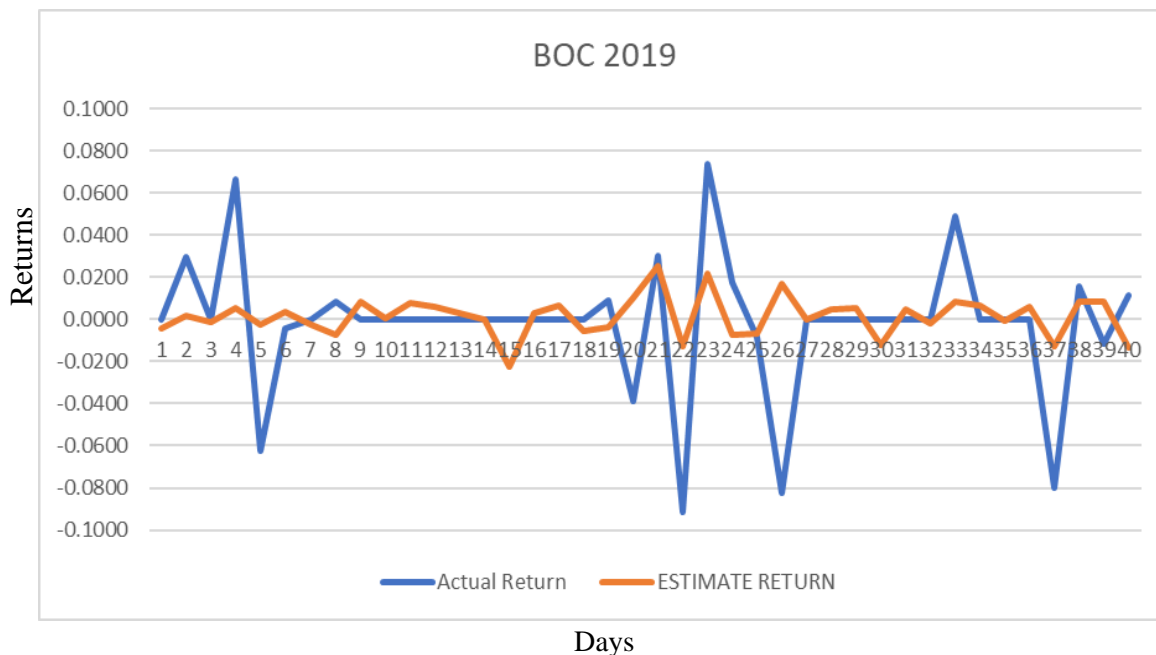


Figure: 4.8: above presents the returns for BOC in 2019. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.9: CIC returns movements during Profit Warning Announcement

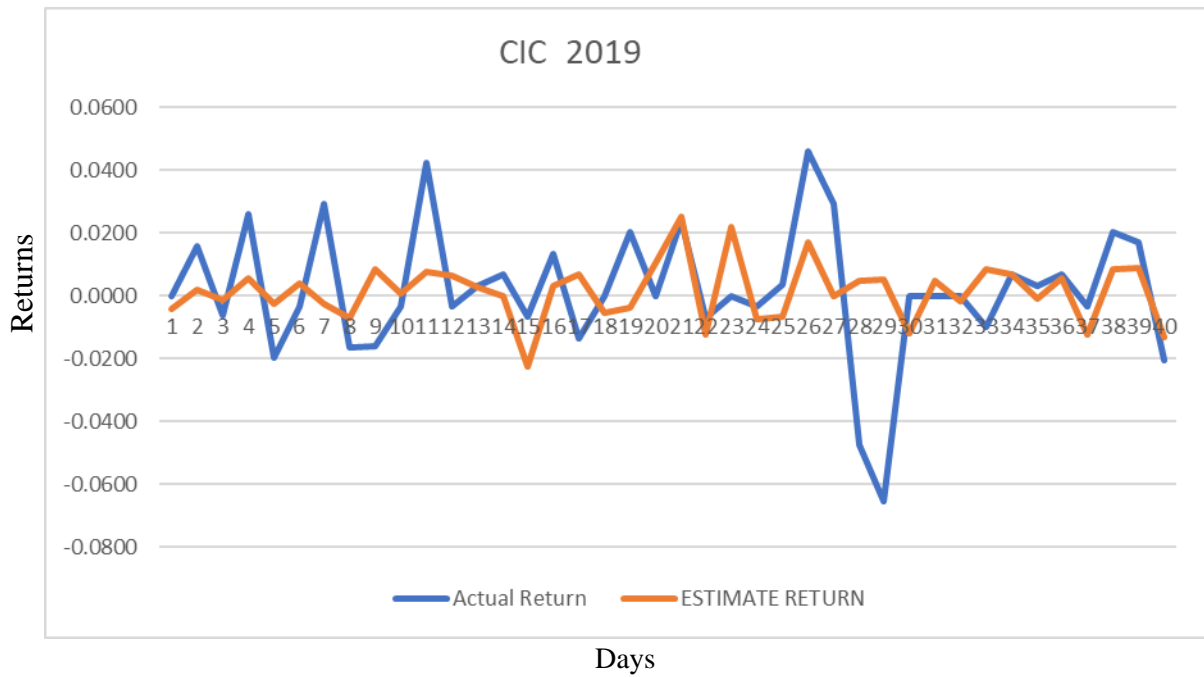


Figure: 4.9 above presents the returns for CIC in 2019. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.10: Crown returns movements during Profit Warning Announcement

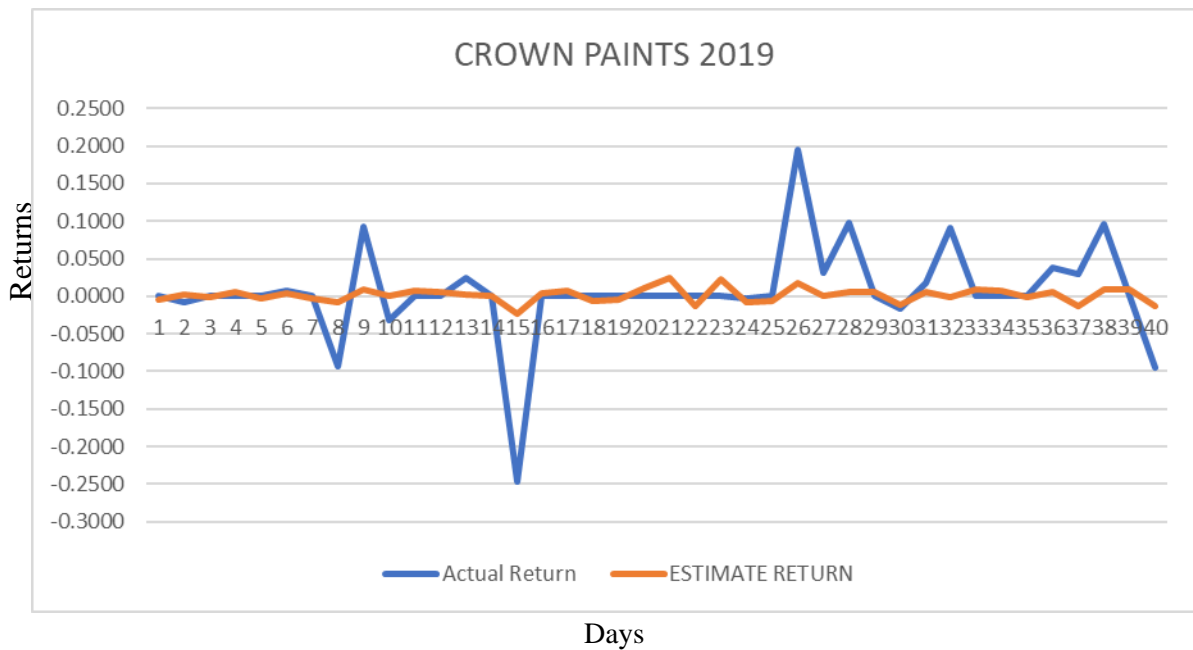
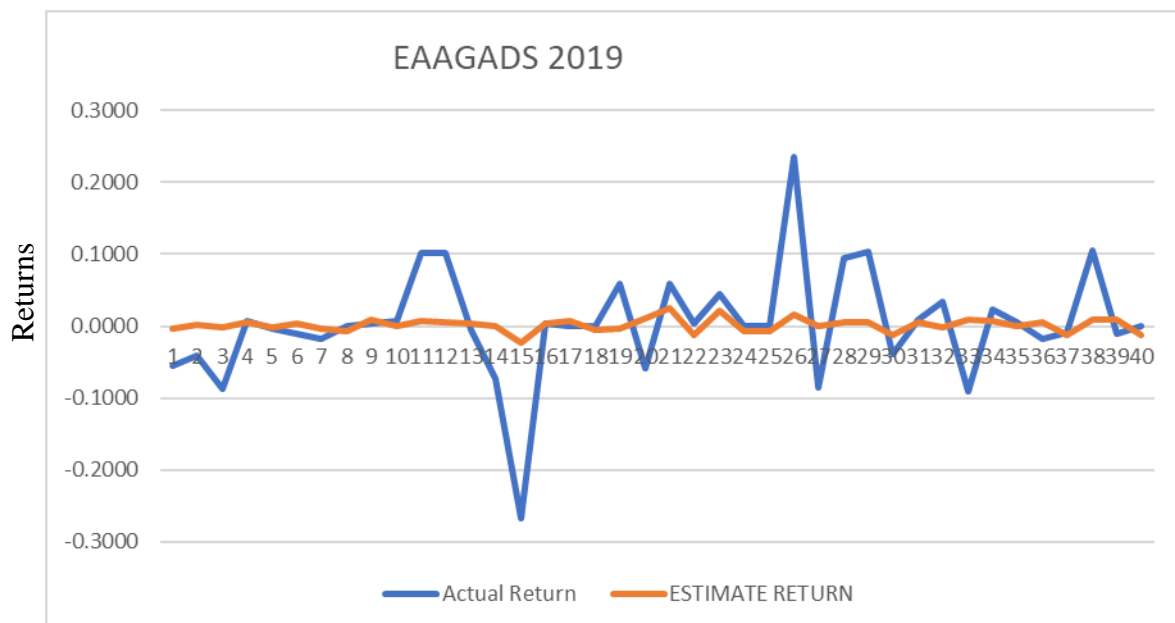


Figure: 4.10 above presents the returns for Crown Paints 2019. The actual returns and expected returns have no uniformity. The actual returns experience some slight movements downwards after the announcement.

Figure 4 .11: Eaagads returns movements during Profit Warning Announcement



Days

Figure: 4.11 above presents the returns for EAAGADS in 2019. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.12: EABL returns movements during Profit Warning Announcement

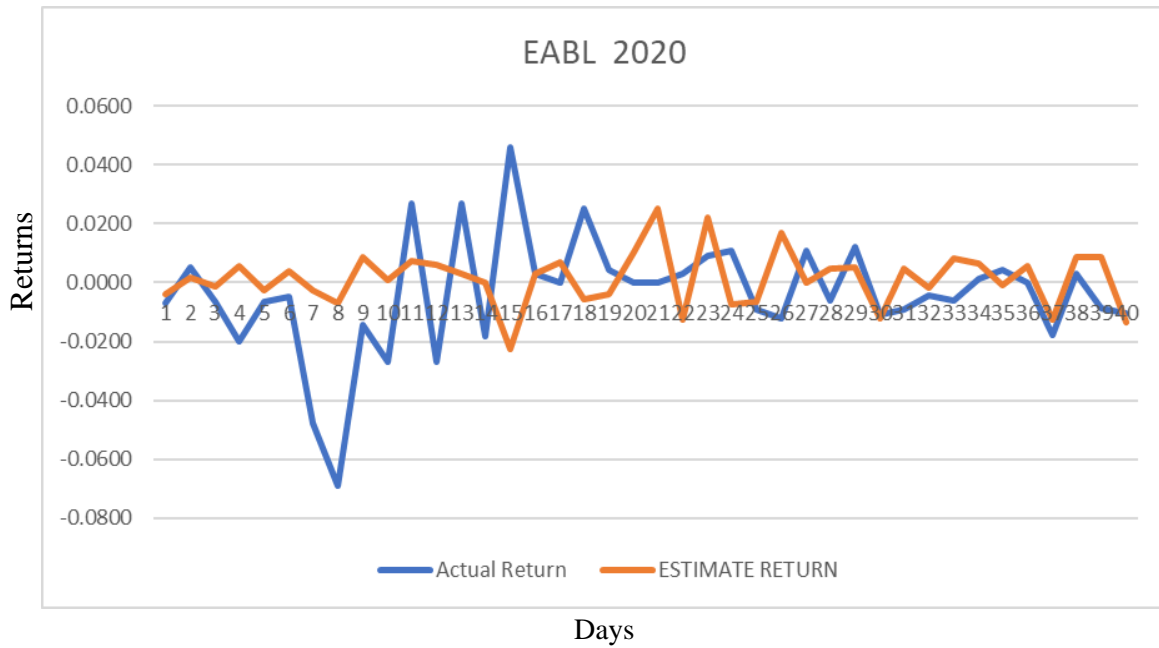


Figure: 4.12 above presents the returns for EABL 2020. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.13: East African Cable returns movements during Profit Warning Announcement

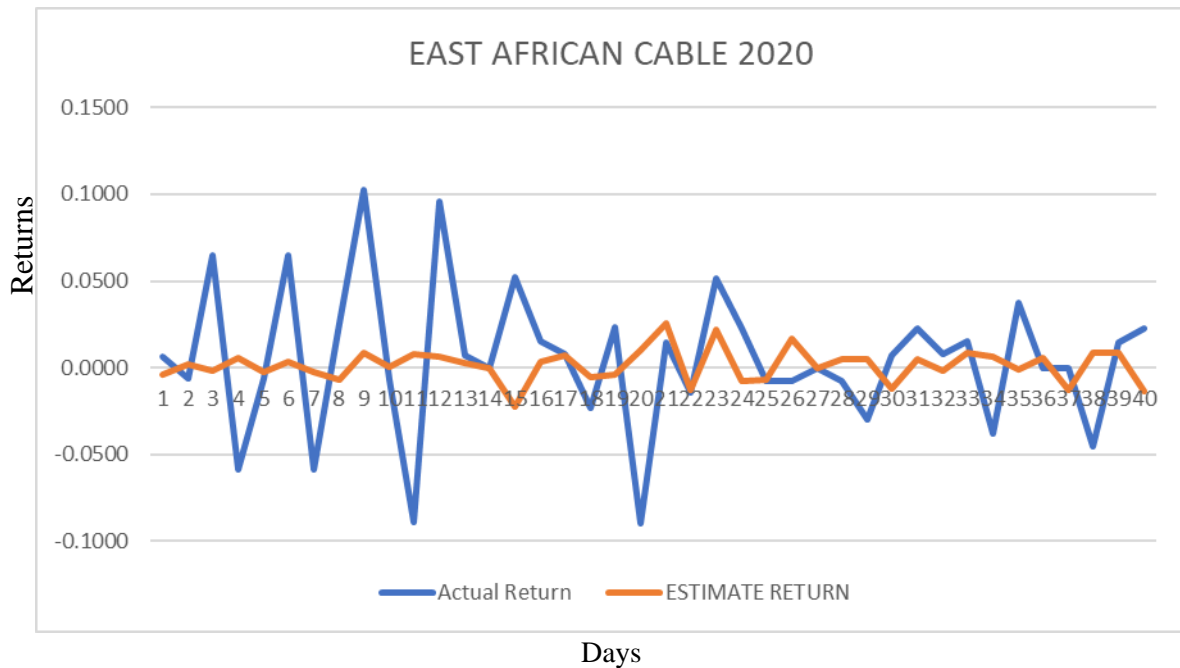


Figure: 4.13 above presents the returns for East African Cables 2020. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.14: East African Portland's returns movements during Profit Warning Announcement

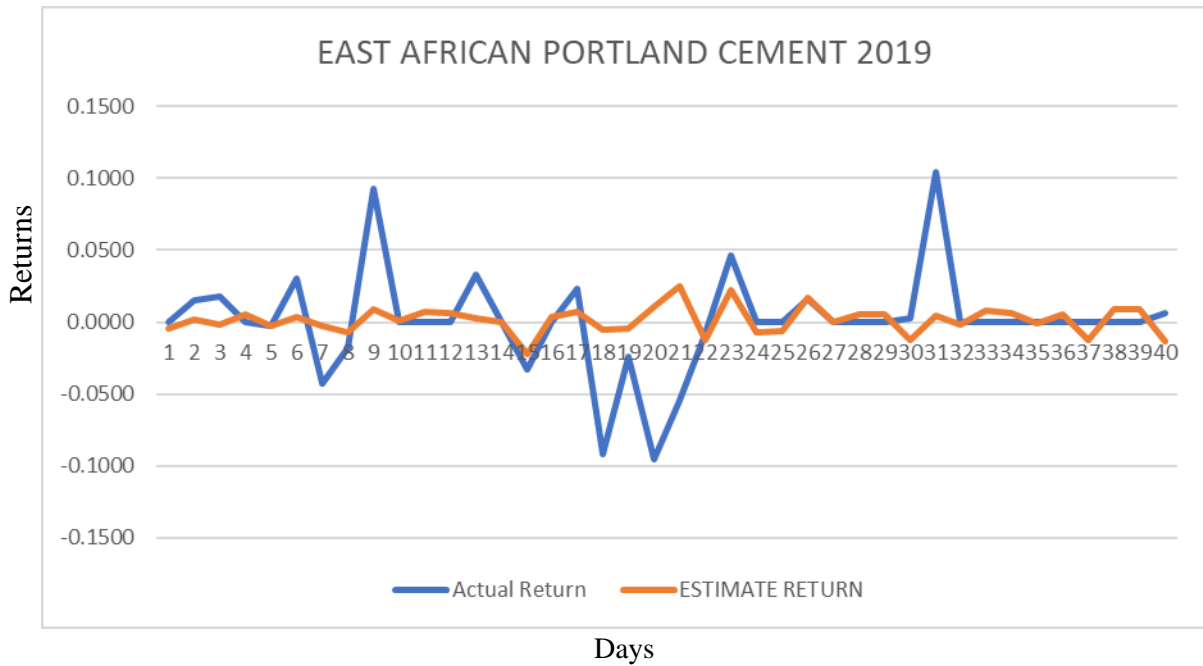


Figure: 4.14 above presents the returns for East African Portland Cement in 2019. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.15: Home Africa returns movements during Profit Warning Announcement

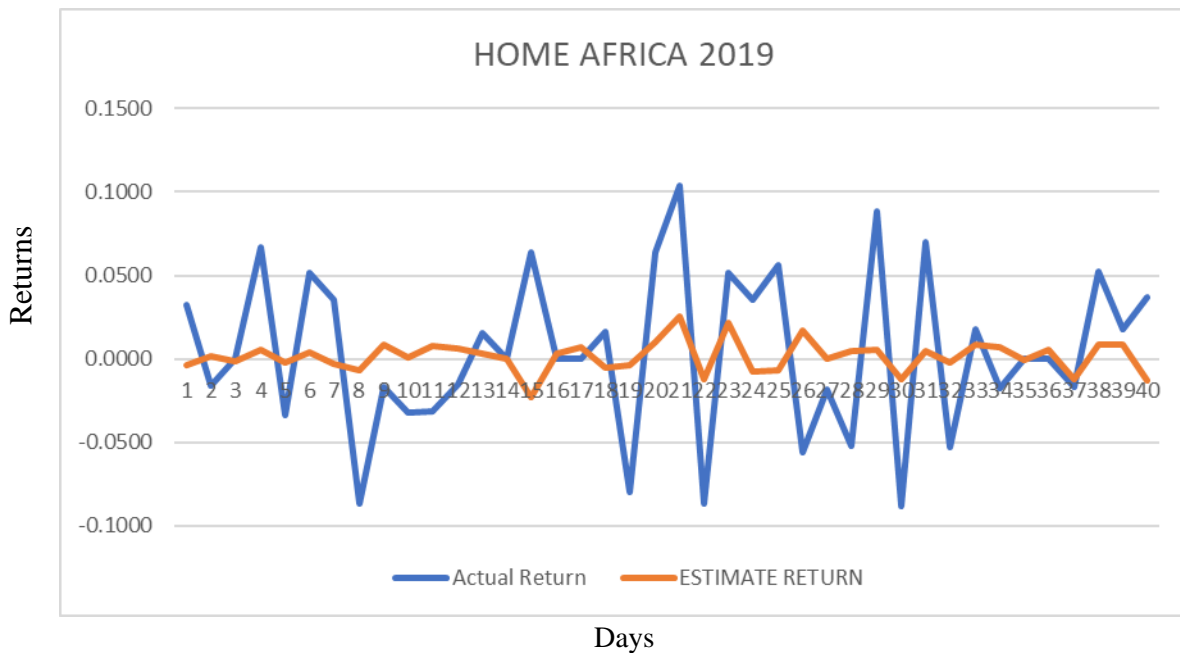


Figure: 4.15 above presents the returns for Home Africa 2019. The actual returns and expected returns have no uniformity. There is an unfamiliar movement of Average return of the shares but afterward, we can witness a drop one day after the announcement date.

Figure 4.15: Kapchorua Tea returns movements during Profit Warning Announcement

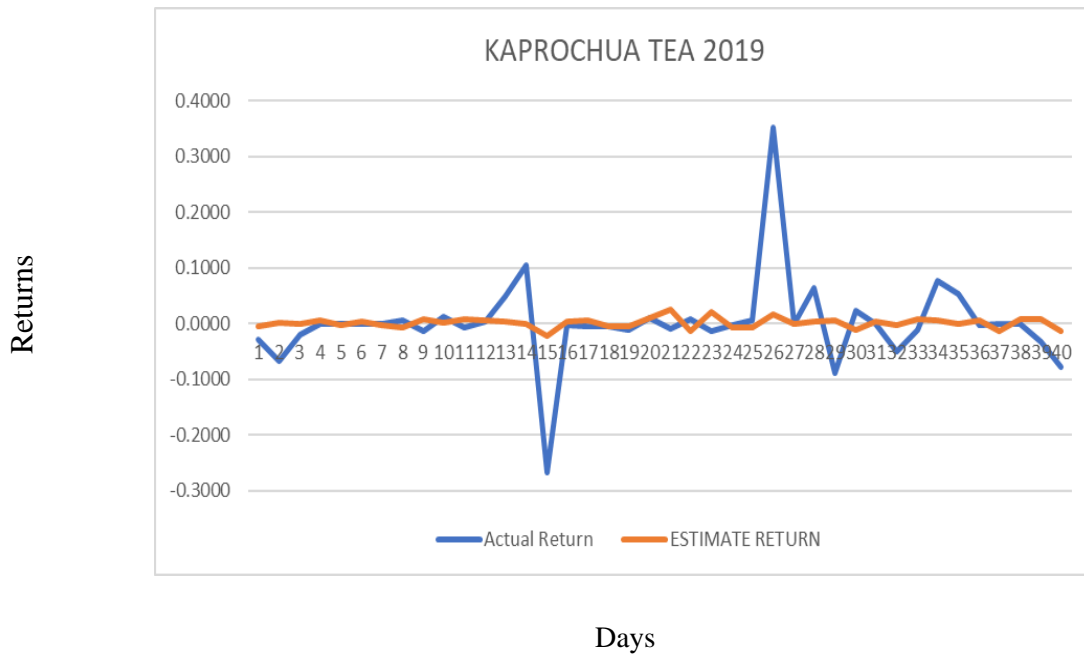


Figure: 4.16 above presents the returns for Kapchorua Tea in 2019. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.16: KQ returns movements during Profit Warning Announcement

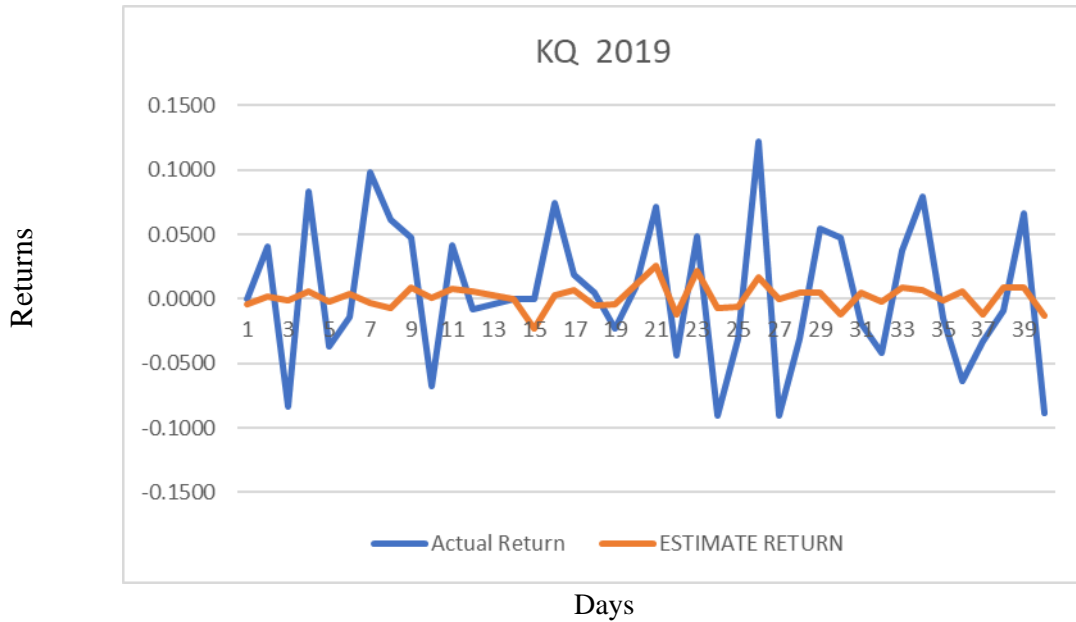


Figure: 4.17 above presents the returns for KQ in 2019. The actual returns and expected returns have no uniformity. The actual returns moved upwards after the announcement but dropped a day after announcement after the announcement.

Figure 4.18: KPLC returns movements during Profit Warning Announcement

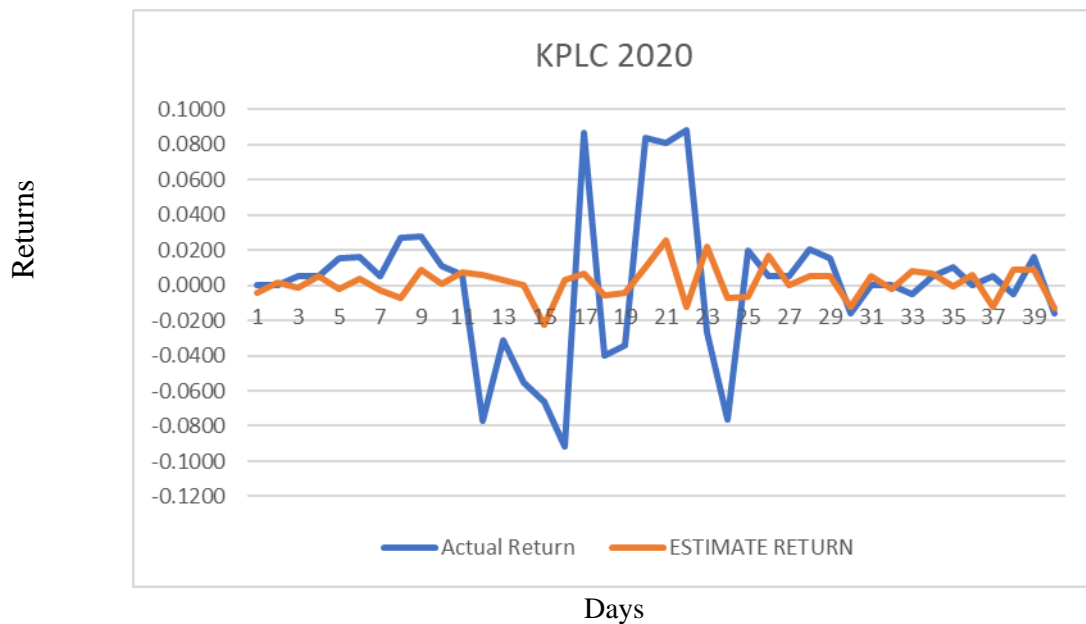


Figure: 4.18 above presents the returns for KPLC 2020. The actual returns and expected returns have no uniformity. The actual returns sight adjustment downwards after the announcement.

Figure 4.19: KPLC returns movements during Profit Warning Announcement

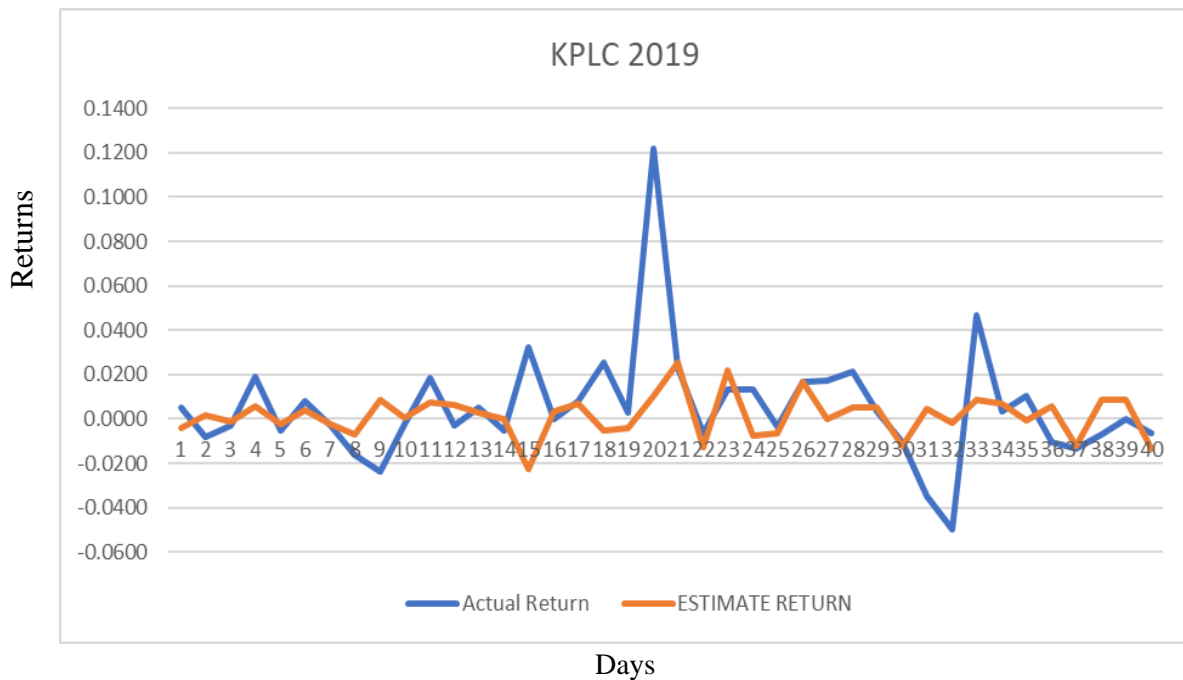


Figure: 4.19 above presents the returns for KPLC in 2019. The actual returns and expected returns have no uniformity. The actual returns have an unexpected jump upwards after the announcement then had a sharp drop a day after the announcement.

Figure 4.20: Kenya Re returns movements during Profit Warning Announcement

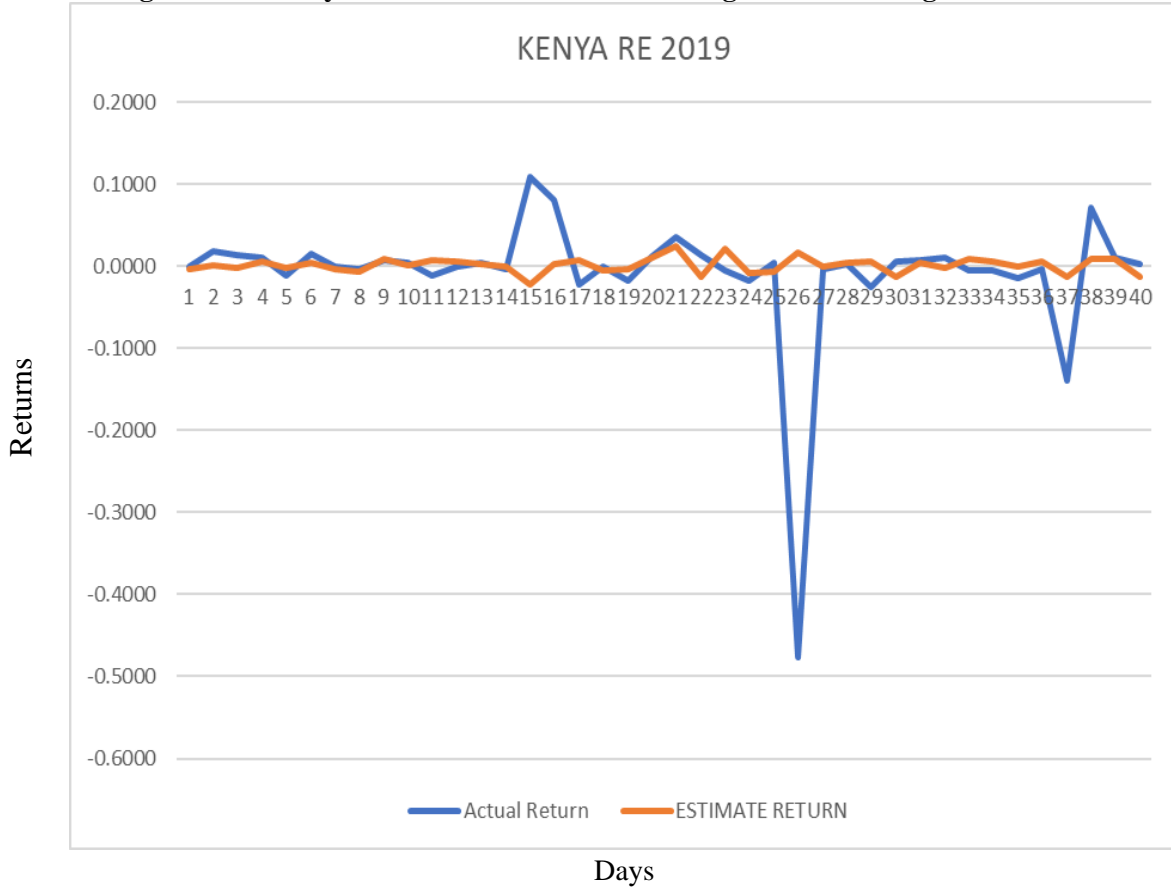


Figure: 4.20 above presents the returns for Kenya Re in 2019. The actual returns and expected returns have no uniformity. The actual returns moved gradually upwards during the announcement than a day later dropped.

Figure 4.21: NSE returns movements during Profit Warning Announcement

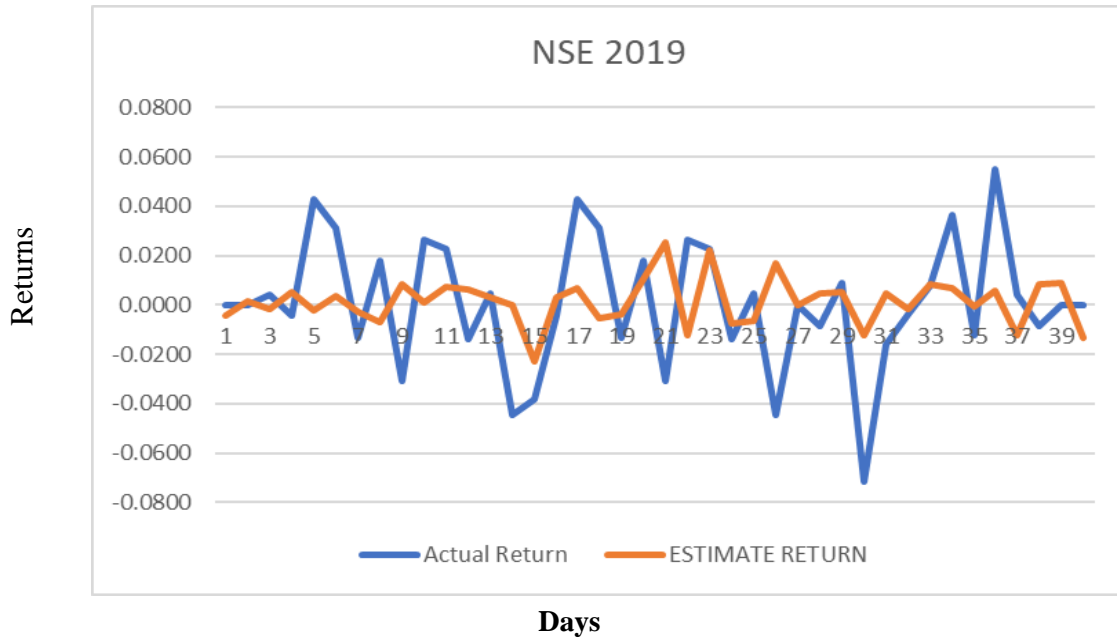


Figure: 4.21 above presents the returns for NSE in 2019. The actual returns and expected returns have no uniformity. The actual returns moved gradually upwards during the announcement then a day later dropped.

Figure 4.22: Standard Group returns movements during Profit Warning Announcement

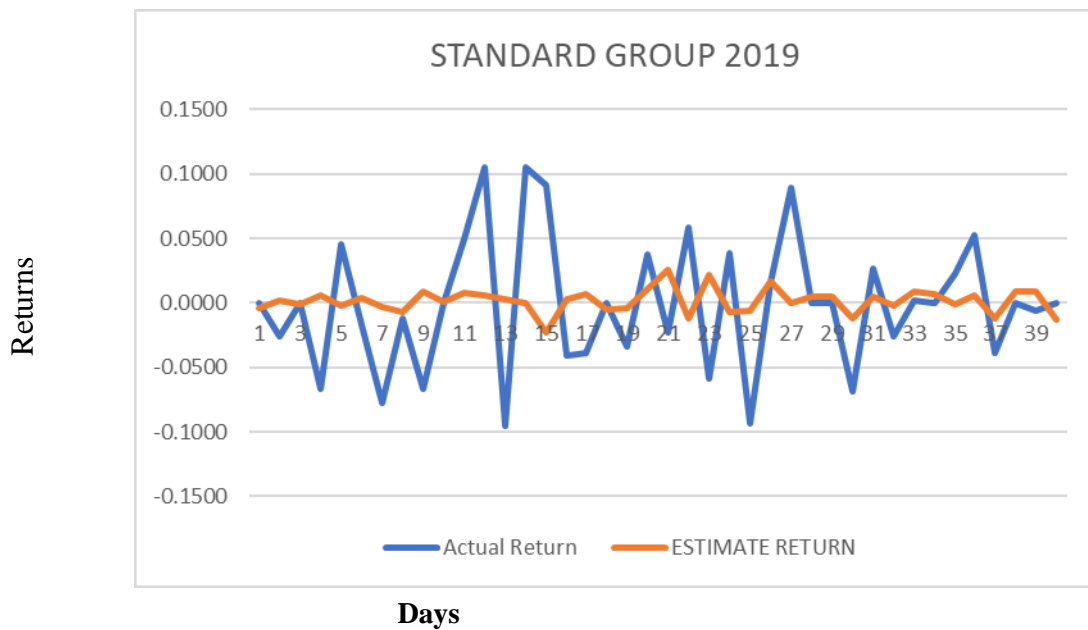


Figure: 4.22 above presents the returns for Standard Group in 2019. The actual returns and expected returns have no uniformity. The actual returns moved gradually upwards during the announcement then a day later dropped.

Figure 4.23: Unga Group returns movements during Profit Warning Announcement

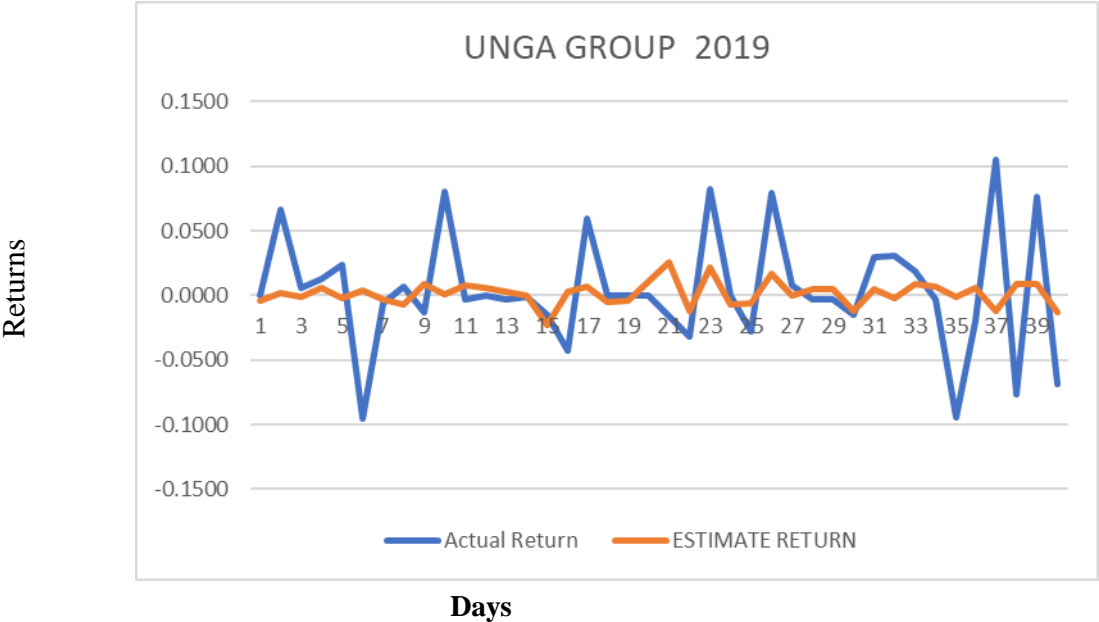


Figure: 4.23 above presents the returns for Unga Group in 2019. The actual returns and expected returns have no uniformity. The actual returns have a negative drop after the announcement.

Figure 4.24: Williamson Tea returns movements during Profit Warning Announcement

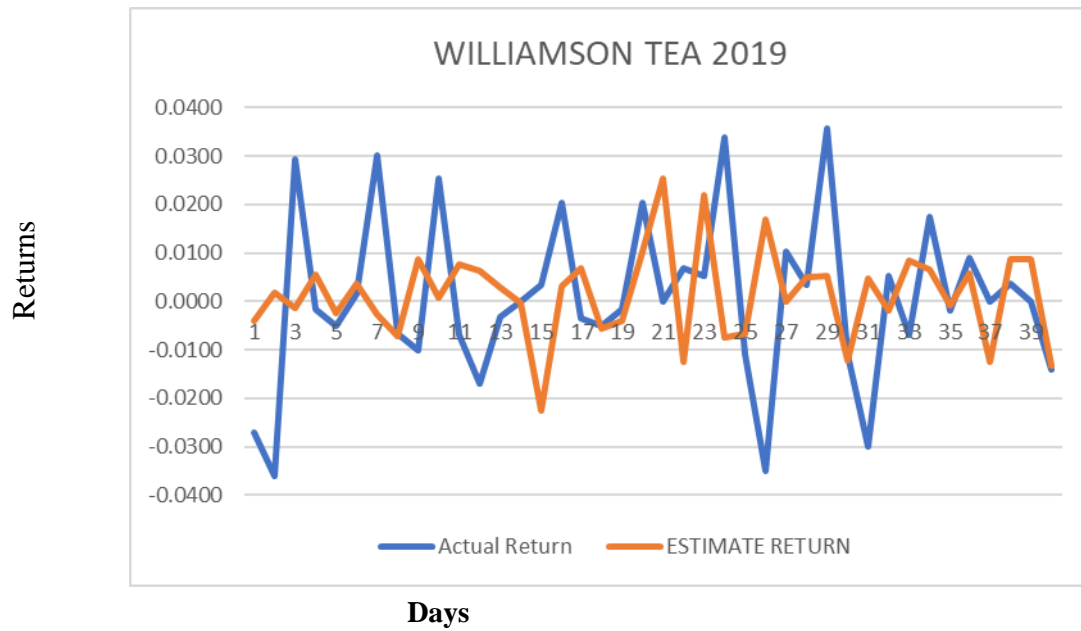


Figure: 4.24 above presents the returns for Williamson Tea in 2019. The actual returns and expected returns have no uniformity. The actual returns moved gradually upwards during the announcement then a day later dropped.

4.4 Tests of Significance

A parametric t-test was used to form the statistical significance of the abnormal returns (AR), cumulative abnormal returns (CAR), and standardized cumulative abnormal returns (SCAR) over the event window period.

This study investigates the following hypothesis

Null Hypothesis (H_0):

Profit warnings announcement does not affect the movement of a share price at the Nairobi Securities Exchange

Alternate Hypothesis (H_A):

Profit warnings announcement affects the movement of returns of a share price at the Nairobi Securities Exchange.

Table 4. 1: Descriptive Statistics for Abnormal Returns

COMPANY	N	PROFIT WARNING	STANDARD DEVIATION	SQR ROOT	Standard error mean
Britam Holdings Limited	24	01/03/2019	0.021	6.325	0.003
Crown Paints	24	25/01/2019	0.063	6.325	0.010
East African Portland Cement	24	03/06/2019	0.036	6.325	0.006
Kenya Re	24	20/03/2019	0.084	6.325	0.013
Unga Group	24	28/02/2019	0.045	6.325	0.007
Kapchorua Tea	24	18/07/2019	0.079	6.325	0.013
Williamson Tea	24	29/03/2019	0.017	6.325	0.003
Home Africa	24	26/07/2019	0.049	6.325	0.008
Kenya Power	24	19/09/2019	0.026	6.325	0.004
Eaagads	24	31/03/2019	0.076	6.325	0.012
BOC Kenya	24	20/11/2019	0.033	6.325	0.005
Standard Group	24	12/02/2019	0.051	6.325	0.008
Nairobi Securities Exchange	24	13/12/2019	0.026	6.325	0.004
CIC Insurance Group	24	18/12/2019	0.021	6.325	0.003
Kenya Airways	24	18/12/2019	0.055	6.325	0.009
Britam Holdings	24	01/05/2018	0.016	6.325	0.003
HF Group	24	12/01/2018	0.027	6.325	0.004
Kenya Power	24	22/10/2018	0.022	6.325	0.003
Sanlam	24	28/08/2018	0.029	6.325	0.005
Bamburi Cement	24	12/03/2018	0.019	6.325	0.003
Absa Bank Kenya	24	23/12/2020	0.080	6.325	0.013
East African Breweries Limited	24	16/05/2020	0.019	6.325	0.003
Kenya Power and Lighting Company	24	16/06/2020	0.041	6.325	0.006
East African Cables	24	25/11/2020	0.041	6.325	0.007

The descriptive statistic for the variables is given as the number of observations (N), the mean, and the standard deviation for the twenty-four profit warning announcement events for the various companies. For all 24 events, the standard error of the sample mean of the AR is relatively small, which means that it is a good representation of the population mean.

T-test on Abnormal Returns

Figure 4.25: Britam Holdings Limited 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Britam Holdings Limited</u>	<u>1/3/2019</u>
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	<u>-0.00196406</u>	<u>0.001441143</u>
<u>Variance</u>	<u>0.000448767</u>	<u>0.00008886</u>
<u>Observations</u>	<u>40</u>	<u>40</u>
<u>Pearson Correlation</u>	<u>-0.05713974</u>	
<u>Hypothesized Mean Difference</u>	<u>0</u>	
<u>df</u>	<u>39</u>	
<u>t Stat</u>	<u>-0.90971048</u>	
<u>P(T<=t) one-tail</u>	<u>0.184281671</u>	
<u>t Critical one-tail</u>	<u>1.684875122</u>	
<u>P(T<=t) two-tail</u>	<u>0.368563342</u>	
<u>t Critical two-tail</u>	<u>2.02269092</u>	

Figure 4.26: Crown Paints 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Crown Paints</u>	<u>25/01/2019</u>
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	<u>0.005629043</u>	<u>0.001441143</u>
<u>Variance</u>	<u>0.004014164</u>	<u>0.00008886</u>
<u>Observations</u>	<u>40</u>	<u>40</u>
<u>Pearson Correlation</u>	<u>0.542271739</u>	
<u>Hypothesized Mean Difference</u>	<u>0</u>	
<u>df</u>	<u>39</u>	
<u>t Stat</u>	<u>0.450593416</u>	
<u>P(T<=t) one-tail</u>	<u>0.327388888</u>	
<u>t Critical one-tail</u>	<u>1.684875122</u>	
<u>P(T<=t) two-tail</u>	<u>0.654777777</u>	
<u>t Critical two-tail</u>	<u>2.022690920</u>	

Figure 4.27: East African Portland Cement 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>East African Portland Cement</u>	<u>03/06/2019</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	<u>0.000445116</u>	<u>0.001441143</u>
<u>Variance</u>	<u>0.001262772</u>	<u>0.00008886</u>
<u>Observations</u>	<u>40</u>	<u>40</u>
<u>Pearson Correlation</u>	<u>0.162302437</u>	-
<u>Hypothesized Mean Difference</u>	<u>0</u>	-
<u>df</u>	<u>39</u>	-
<u>t Stat</u>	<u>-0.178683165</u>	-
<u>P(T<=t) one-tail</u>	<u>0.429555749</u>	-
<u>t Critical one-tail</u>	<u>1.684875122</u>	-
<u>P(T<=t) two-tail</u>	<u>0.859111498</u>	-
<u>t Critical two-tail</u>	<u>2.022690920</u>	-

Figure 4.28: Kenya Re 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Kenya Re</u>	<u>20/03/2019</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	<u>-0.008017496</u>	<u>0.001441143</u>
<u>Variance</u>	<u>0.006979153</u>	<u>0.00008886</u>
<u>Observations</u>	<u>40</u>	<u>40</u>
<u>Pearson Correlation</u>	<u>-0.217253463</u>	-
<u>Hypothesized Mean Difference</u>	<u>0</u>	-
<u>df</u>	<u>39</u>	-
<u>t Stat</u>	<u>-0.694934057</u>	-
<u>P(T<=t) one-tail</u>	<u>0.245608236</u>	-
<u>t Critical one-tail</u>	<u>1.684875122</u>	-
<u>P(T<=t) two-tail</u>	<u>0.491216472</u>	-
<u>t Critical two-tail</u>	<u>2.022690920</u>	-

Figure 4.29: Unga Group 2019 T-test

t-Test: Paired Two Sample for Means	Unga Group	28/02/2019
-	-	-
	Actual Return	Estimate Return
Mean	0.003614531	0.001441143
Variance	0.002064883	0.00008886
Observations	40	40
Pearson Correlation	0.198605799	-
Hypothesized Mean Difference	0	-
df	39	-
t Stat	0.308631621	-
P(T<=t) one-tail	0.379622206	-
t Critical one-tail	1.684875122	-
P(T<=t) two-tail	0.759244411	-
t Critical two-tail	2.022690920	-

Figure 4.30: Kapchorua Tea 2019 T-test

t-Test: Paired Two Sample for Means	Kapchorua Tea	18/07/2019
-	-	-
	Actual Return	Estimate Return
Mean	0.001449681	0.001441143
Variance	0.006289088	0.00008886
Observations	40	40
Pearson Correlation	0.416008081	-
Hypothesized Mean Difference	0	-
df	39	-
t Stat	0.000711751	-
P(T<=t) one-tail	0.499717866	-
t Critical one-tail	1.684875122	-
P(T<=t) two-tail	0.999435733	-
t Critical two-tail	2.022690920	-

Figure 4.31: Williamson Tea 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Williamson Tea</u>	<u>29/03/2019</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
Mean	0.000694489	0.001441143
Variance	0.000293926	0.00008886
Observations	40	40
Pearson Correlation	-0.049209334	-
Hypothesized Mean Difference	0	-
df	39	-
t Stat	-0.236498589	-
P(T<=t) one-tail	0.407141784	-
t Critical one-tail	1.684875122	-
P(T<=t) two-tail	0.814283569	-
t Critical two-tail	2.022690920	-

Figure 4.32: Home Africa 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Home Africa</u>	<u>26/07/2019</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
Mean	0.00432107	0.001441143
Variance	0.002446831	0.00008886
Observations	40	40
Pearson Correlation	0.279917062	-
Hypothesized Mean Difference	0	-
df	39	-
t Stat	0.381904403	-
P(T<=t) one-tail	0.352302682	-
t Critical one-tail	1.684875122	-
P(T<=t) two-tail	0.704605364	-
t Critical two-tail	2.022690920	-

Figure 4.33: Kenya Power and Lighting Company 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Kenya Power and Lighting Company</u>	<u>19/09/2019</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	<u>0.005092159</u>	<u>0.001441143</u>
<u>Variance</u>	<u>0.000662937</u>	<u>0.00008886</u>
<u>Observations</u>	<u>40</u>	<u>40</u>
<u>Pearson Correlation</u>	<u>0.232781212</u>	-
<u>Hypothesized Mean Difference</u>	<u>0</u>	-
<u>df</u>	<u>39</u>	-
<u>t Stat</u>	<u>0.913609946</u>	-
<u>P(T<=t) one-tail</u>	<u>0.183267824</u>	-
<u>t Critical one-tail</u>	<u>1.684875122</u>	-
<u>P(T<=t) two-tail</u>	<u>0.366535648</u>	-
<u>t Critical two-tail</u>	<u>2.022690920</u>	-

Figure 4.34: Eaagads 2019 T -test

<u>t-Test: Paired Two Sample for Means</u>	<u>Eaagads</u>	<u>31/03/2019</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	<u>0.003165816</u>	<u>0.001441143</u>
<u>Variance</u>	<u>0.005842329</u>	<u>0.00008886</u>
<u>Observations</u>	<u>40</u>	<u>40</u>
<u>Pearson Correlation</u>	<u>0.529368869</u>	-
<u>Hypothesized Mean Difference</u>	<u>0</u>	-
<u>df</u>	<u>39</u>	-
<u>t Stat</u>	<u>0.151726519</u>	-
<u>P(T<=t) one-tail</u>	<u>0.440092406</u>	-
<u>t Critical one-tail</u>	<u>1.684875122</u>	-
<u>P(T<=t) two-tail</u>	<u>0.880184812</u>	-
<u>t Critical two-tail</u>	<u>2.022690920</u>	-

Figure 4.35: BOC Kenya 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>BOC Kenya</u>	<u>20/11/2019</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
Mean	-0.001717847	0.001441143
Variance	0.00107835	0.00008886
Observations	40	40
Pearson Correlation	0.290426833	-
Hypothesized Mean Difference	0	-
df	39	-
t Stat	-0.635814588	-
P(T<=t) one-tail	0.264305471	-
t Critical one-tail	1.684875122	-
P(T<=t) two-tail	0.528610943	-
t Critical two-tail	2.022690920	-

Figure 4.36: Standard Group 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Standard Group</u>	<u>12/02/2019</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
Mean	-0.001274786	0.001441143
Variance	0.002627611	0.00008886
Observations	40	40
Pearson Correlation	-0.117610039	-
Hypothesized Mean Difference	0	-
df	39	-
t Stat	-0.322882614	-
P(T<=t) one-tail	0.374254468	-
t Critical one-tail	1.684875122	-
P(T<=t) two-tail	0.748508937	-
t Critical two-tail	2.022690920	-

Figure 4.37: Nairobi Securities Exchange 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Nairobi Securities Exchange</u>	<u>13/12/2019</u>
-	-	-
-	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	0.000847539	0.001441143
<u>Variance</u>	0.000690218	0.00008886
<u>Observations</u>	40	40
<u>Pearson Correlation</u>	0.096350931	-
<u>Hypothesized Mean Difference</u>	0	-
<u>df</u>	39	-
<u>t Stat</u>	-0.138823248	-
<u>P(T<=t) one-tail</u>	0.445152099	-
<u>t Critical one-tail</u>	1.684875122	-
<u>P(T<=t) two-tail</u>	0.890304198	-
<u>t Critical two-tail</u>	2.022690920	-

Figure 4.38: CIC Insurance Group 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>CIC Insurance Group</u>	<u>18/12/2019</u>
-	-	-
-	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	0.001724822	0.001441143
<u>Variance</u>	0.000431575	0.00008886
<u>Observations</u>	40	40
<u>Pearson Correlation</u>	0.24554249	-
<u>Hypothesized Mean Difference</u>	0	-
<u>df</u>	39	-
<u>t Stat</u>	0.087103696	-
<u>P(T<=t) one-tail</u>	0.465517393	-
<u>t Critical one-tail</u>	1.684875122	-
<u>P(T<=t) two-tail</u>	0.931034787	-
<u>t Critical two-tail</u>	2.022690920	-

Figure 4.39: Kenya Airways 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Kenya Airways</u>	<u>18/12/2019</u>
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	0.00521887	0.001441143
<u>Variance</u>	0.003072287	0.00008886
<u>Observations</u>	40	40
<u>Pearson Correlation</u>	0.454705071	
<u>Hypothesized Mean Difference</u>	0	
<u>df</u>	39	
<u>t Stat</u>	0.461009133	
<u>P(T<=t) one-tail</u>	0.323676386	
<u>t Critical one-tail</u>	1.684875122	
<u>P(T<=t) two-tail</u>	0.647352773	
<u>t Critical two-tail</u>	2.022690920	

Figure 4.40: Britam Holdings 2019 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Britam Holdings</u>	<u>01/05/2018</u>
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	0.003539469	0.001441143
<u>Variance</u>	0.000255971	0.00008886
<u>Observations</u>	40	40
<u>Pearson Correlation</u>	0.161027785	
<u>Hypothesized Mean Difference</u>	0	
<u>df</u>	39	
<u>t Stat</u>	0.771017333	
<u>P(T<=t) one-tail</u>	0.22267146	
<u>t Critical one-tail</u>	1.684875122	
<u>P(T<=t) two-tail</u>	0.44534292	
<u>t Critical two-tail</u>	2.022690920	

Figure 4.41: HF Group 2018 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>HF Group</u>	<u>12/01/2018</u>
-	-	-
-	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	-0.001434251	0.001441143
<u>Variance</u>	0.000736018	0.00008886
<u>Observations</u>	40	40
<u>Pearson Correlation</u>	0.311172804	-
<u>Hypothesized Mean Difference</u>	0	-
<u>df</u>	39	-
<u>t Stat</u>	-0.704825138	-
<u>P(T<=t) one-tail</u>	0.242553625	-
<u>t Critical one-tail</u>	1.684875122	-
<u>P(T<=t) two-tail</u>	0.48510725	-
<u>t Critical two-tail</u>	2.022690920	-

Figure 4.42: Kenya Power and Lighting Company 2018 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Kenya Power</u>	<u>22/10/2018</u>
-	-	-
-	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	0.004397267	0.001441143
<u>Variance</u>	0.000462752	0.00008886
<u>Observations</u>	40	40
<u>Pearson Correlation</u>	0.219201134	-
<u>Hypothesized Mean Difference</u>	0	-
<u>df</u>	39	-
<u>t Stat</u>	0.869152115	-
<u>P(T<=t) one-tail</u>	0.195040817	-
<u>t Critical one-tail</u>	1.684875122	-
<u>P(T<=t) two-tail</u>	0.390081633	-
<u>t Critical two-tail</u>	2.022690920	-

Figure 4.43: Sanlam 2018 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Sanlam</u>	<u>28/08/2018</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	0.005578589	0.001441143
<u>Variance</u>	0.000836045	0.00008886
<u>Observations</u>	40	40
<u>Pearson Correlation</u>	0.127882894	-
<u>Hypothesized Mean Difference</u>	0	-
<u>df</u>	39	-
<u>t Stat</u>	0.894807366	-
<u>P(T<=t) one-tail</u>	0.188189749	-
<u>t Critical one-tail</u>	1.684875122	-
<u>P(T<=t) two-tail</u>	0.376379499	-
<u>t Critical two-tail</u>	2.022690920	-

Figure 4.44: Bamburi Cement 2018 T -test

<u>t-Test: Paired Two Sample for Means</u>	<u>Bamburi Cement</u>	<u>12/03/2018</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	0.000511963	0.001441143
<u>Variance</u>	0.000372507	0.00008886
<u>Observations</u>	40	40
<u>Pearson Correlation</u>	0.281981611	-
<u>Hypothesized Mean Difference</u>	0	-
<u>df</u>	39	-
<u>t Stat</u>	-0.310260178	-
<u>P(T<=t) one-tail</u>	0.379007554	-
<u>t Critical one-tail</u>	1.684875122	-
<u>P(T<=t) two-tail</u>	0.758015108	-
<u>t Critical two-tail</u>	2.022690920	-

Figure 4.45: Absa Bank Kenya 2020 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>Absa Bank Kenya</u>	<u>23/12/2020</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	<u>0.001180477</u>	<u>0.001441143</u>
<u>Variance</u>	<u>0.006327938</u>	<u>0.00008886</u>
<u>Observations</u>	<u>40</u>	<u>40</u>
<u>Pearson Correlation</u>	<u>0.443276415</u>	-
<u>Hypothesized Mean Difference</u>	<u>0</u>	-
<u>df</u>	<u>39</u>	-
<u>t Stat</u>	<u>-0.021737339</u>	-
<u>P(T<=t) one-tail</u>	<u>0.491384158</u>	-
<u>t Critical one-tail</u>	<u>1.684875122</u>	-
<u>P(T<=t) two-tail</u>	<u>0.982768315</u>	-
<u>t Critical two-tail</u>	<u>2.022690920</u>	-

Figure 4.46: East African Breweries Limited 2020 T-test

<u>t-Test: Paired Two Sample for Means</u>	<u>East African Breweries Limited</u>	<u>16/05/2020</u>
-	-	-
	<u>Actual Return</u>	<u>Estimate Return</u>
<u>Mean</u>	<u>-0.003762957</u>	<u>0.001441143</u>
<u>Variance</u>	<u>0.000378036</u>	<u>0.00008886</u>
<u>Observations</u>	<u>40</u>	<u>40</u>
<u>Pearson Correlation</u>	<u>-0.01587592</u>	-
<u>Hypothesized Mean Difference</u>	<u>0</u>	-
<u>df</u>	<u>39</u>	-
<u>t Stat</u>	<u>-1.51381755</u>	-
<u>P(T<=t) one-tail</u>	<u>0.069067477</u>	-
<u>t Critical one-tail</u>	<u>1.684875122</u>	-
<u>P(T<=t) two-tail</u>	<u>0.138134953</u>	-
<u>t Critical two-tail</u>	<u>2.022690920</u>	-

Figure 4.47: Kenya Power and Lighting Company 2020 T-test

t-Test: Paired Two Sample for Means	Kenya Power and Lighting Company	16/06/2020
-	-	-
	Actual Return	Estimate Return
Mean	0.000515482	0.001441143
Variance	0.001675684	0.00008886
Observations	40	40
Pearson Correlation	0.267581168	-
Hypothesized Mean Difference	0	-
df	39	-
t Stat	-0.148317793	-
P(T<=t) one-tail	0.4414281	-
t Critical one-tail	1.684875122	-
P(T<=t) two-tail	0.882856201	-
t Critical two-tail	2.022690920	-

Figure 4.48: East African Cables 2020 T-test

t-Test: Paired Two Sample for Means	East African Cables	25/11/2020
-	-	-
	Actual Return	Estimate Return
Mean	0.004842672	0.001441143
Variance	0.001693395	0.00008886
Observations	40	40
Pearson Correlation	-0.074200884	-
Hypothesized Mean Difference	0	-
df	39	-
t Stat	0.50155153	-
P(T<=t) one-tail	0.309401325	-
t Critical one-tail	1.684875122	-
P(T<=t) two-tail	0.618802651	-
t Critical two-tail	2.022690920	-

For the outcomes, we shall apply $P(T \leq t)$ two-tail, that is the p-value for the two-tailed form of the t-test. Since the p-values are greater than the accepted significance level of 0.05, we can accept the null hypothesis. Our sample data upholds the hypothesis that there is a downward movement of the share price after the announcement this can be viewed from the table results Figure: 4.25 to 4.48.

4.4.1 T-test on Abnormal Returns

This output gives the t-test value, the degrees of freedom, and the two-tailed significance. The P-value is greater than 0.05 and thus the null hypothesis is accepted. The findings establish that at a 5% level of significance, that event - day abnormal returns (AR) are statistically significant for the profit warning announcement.

The P values for abnormal returns are all greater than 0.05 thus the null hypothesis was not rejected suggesting that at a 5% level of significance, that event - day abnormal returns (AR) were statistically significant for the profit warning announcement.

4.4.2 Test of Significance on Cumulative Abnormal Returns

Table 4. 2: Descriptive Statistics for Cumulative Abnormal Returns

SCHEME	N	MEAN	STANDARD DEVIATION	CAR
Britam Holdings Limited	40	0.001964058	0.021184126	-0.004134859
Crown Paints	40	0.005629043	0.063357428	0.011850617
East African Portland Cement	40	0.000445116	0.035535504	0.000937086
Kenya Re	40	0.008017496	0.083541327	-0.016878939
Unga Group	40	0.003614531	0.045440984	0.007609538
Kapchorua Tea	40	0.001449681	0.079303769	0.003051961
Williamson Tea	40	0.000694489	0.017144263	0.001462082
Home Africa	40	0.00432107	0.049465456	0.00909699
Kenya Power	40	0.005092159	0.025747559	0.010720336
Eaagads	40	0.003165816	0.07643513	0.006664876
BOC Kenya	40	0.001717847	0.032838242	-0.003616521
Standard Group	40	0.001274786	0.051260225	-0.00268376
Nairobi Securities Exchange	40	0.000847539	0.02627201	0.001784292
CIC Insurance Group	40	0.001724822	0.020774372	0.003631204
Kenya Airways	40	0.00521887	0.055428218	0.010987095
Britam Holdings	40	0.003539469	0.015999099	0.007451514
HF Group	40	0.001434251	0.027129659	-0.003019475
Kenya Power	40	0.004397267	0.02151168	0.009257403
Sanlam	40	0.005578589	0.028914449	0.011744397
Bamburi Cement	40	0.000511963	0.019300436	0.001077817
Absa Bank Kenya	40	0.001180477	0.07954834	0.002485214
East African Breweries Limited	40	0.003762957	0.019443152	-0.007922014
Kenya Power and Lighting Company	40	0.000515482	0.040935123	0.001085226
East African Cables	40	0.004842672	0.04115088	0.010195099

Descriptive statistics of the variables are presented as number of observations (N), mean and standard deviation for twenty-four profit warning disclosure events for different companies.

For all 24 events, the standard error of the sample mean for the cumulative abnormal return

(CAR) is relatively small, suggesting that they are sufficiently representative of the population mean.

Table 4.3: One-tailed t-test

T-test on Cumulative Abnormal Returns	
COUNT	24
MEAN	0.003035
STD DEV	0.007085
std err	0.001446
hyp mean	-
alpha	0.050
tails	1.000
df	23.000
t stat	2.10
p-value	0.023523
t crit	1.713872
sig	yes

From table 4.3. above, the p-values for the cumulative abnormal returns are all less than 0.05, thus the null hypothesis is rejected as the individual stock returns for these companies deviated significantly from their means on profit warning announcement.

4.4.3 Test of Significance on Standardized Cumulative Abnormal Returns

Table 4. 4: Descriptive Statistics for Standardized Cumulative Abnormal Returns

COMPANY	N	PROFIT WARNING	SCAR
Britam Holdings Limited	24	05/01/2018	0.35174992
Sanlam	24	28/08/2018	0.18536733
Kenya Power	24	22/10/2018	0.26051139
HF Group	24	01/12/2018	-0.0361435
Bamburi Cement	24	03/12/2018	0.02371906
Britam Holdings Limited	24	03/01/2019	-0.0521395
Crown Paints	24	25/01/2019	0.69122929
Unga Group	24	28/02/2019	0.1538354

East African Portland Cement	24	06/03/2019	0.03639512
Kenya Re	24	20/03/2019	-0.220827
Williamson Tea	24	29/03/2019	0.04452377
Eaagads	24	31/03/2019	0.13002043
Kapchorua Tea	24	18/07/2019	0.11616778
Home Africa	24	26/07/2019	0.43789483
Kenya Power	24	19/09/2019	0.19340935
BOC Kenya	24	20/11/2019	-0.2260453
Standard Group	24	02/12/2019	-0.0989235
Nairobi Securities Exchange	24	13/12/2019	0.08294527
CIC Insurance Group	24	18/12/2019	0.1255844
Kenya Airways	24	18/12/2019	0.56926671
East African Breweries Limited	24	16/05/2020	-0.0995874
Kenya Power and Lighting Company	24	16/06/2020	0.05581531
East African Cables	24	25/11/2020	0.24905505
Absa Bank Kenya	24	23/12/2020	0.06039274

Table 4.5: One-tailed t-test

T-test on Standardized Cumulative Abnormal Returns	
COUNT	24
MEAN	0.1264257
STD DEV	0.2232508
std err	0.0455709
hyp mean	-
alpha	0.050
tails	1.000
df	23.000
t stat	2.77
p value	0.0053942
t crit	1.7138715
sig	Yes

From table 4.5 above, the p values for the standardized cumulative abnormal returns are all less than 0.05, thus the null hypothesis is rejected as the individual stock returns 24 for these companies deviated significantly from their means on profit warning announcement.

Table 4.6: Summary

Year	Company	AR	CAR	SCAR
05/01/2018	Britam Holdings Limited	0.0035	0.0075	0.3517
28/08/2018	Sanlam	0.0056	0.0117	0.1854
22/10/2018	Kenya Power	0.0044	0.0093	0.2605
01/12/2018	HF Group	-0.0014	0.0030	-0.0361
03/12/2018	Bamburi Cement	0.0005	0.0011	0.0237
03/01/2019	Britam Holdings Limited	-0.0020	0.0041	-0.0521
25/01/2019	Crown Paints	0.0056	0.0119	0.6912
28/02/2019	Unga Group	0.0036	0.0076	0.1538
06/03/2019	East African Portland Cement	0.0004	0.0009	0.0364
20/03/2019	Kenya Re	-0.0080	0.0169	-0.2208
29/03/2019	Williamson Tea	0.0007	0.0015	0.0445
31/03/2019	Eaagads	0.0032	0.0067	0.1300
18/07/2019	Kapchorua Tea	0.0014	0.0031	0.1162
26/07/2019	Home Africa	0.0043	0.0091	0.4379
19/09/2019	Kenya Power	0.0051	0.0107	0.1934
20/11/2019	BOC Kenya	-0.0017	0.0036	-0.2260
02/12/2019	Standard Group	-0.0013	0.0027	-0.0989
13/12/2019	Nairobi Securities Exchange	0.0008	0.0018	0.0829
18/12/2019	CIC Insurance Group	0.0017	0.0036	0.1256
18/12/2019	Kenya Airways	0.0052	0.0110	0.5693
16/05/2020	East African Breweries Limited	-0.0038	0.0079	-0.0996
16/06/2020	Kenya Power and Lighting Company	0.0005	0.0011	0.0558
25/11/2020	East African Cables	0.0048	0.0102	0.2491
23/12/2020	Absa Bank Kenya	0.0012	0.0025	0.0604

For the companies that issued profit warning announcements between 2018 and 2020, P values for abnormal returns are greater than 0.05 but for, cumulative abnormal returns and standardized cumulative abnormal returns are all less than 0.05. In this regard, the null hypothesis is accepted, suggesting that at a 5% level of significance, the information content of profit warning announcements is statistically significant. In other words, there is a significant difference in abnormal returns, cumulative abnormal returns, and standardized cumulative abnormal returns before and after the profit warning announcements.

4.4 Hypothesis Summary

Null Hypothesis (H_0): Profit warnings announcement has no effect on the movement of share prices at the Nairobi Securities Exchange.

Alternate Hypothesis (H_1): Profit warnings announcement influences the movement of share prices at the Nairobi Securities Exchange.

The significance level for the t-test is 5% (95% confidence level). The significance number is less than the critical value set at 5% (0.05), the conclusion should be that the information content of the profit warning is significant. This means that there exists a substantial difference in abnormal returns before and after the profit warning announcement. On the other hand, the study concludes that earnings warning announcements do not affect the movement of stock prices.

4.5 Summary and Interpretation of Findings

The study aims to see the results of profit warning announcements on the share value movement of corporations listed at the NSE. The graphical analysis explained in this chapter the AR's and ER's customarily digress from the routine tendencies before the noticed announcement. 75% of the companies' returns decline during the break of the news while 25% of the companies had a positive increase.

From the tabular analysis, the AR's, CAR's, and SCAR's increase or decrease in a varying inclination. The lack of a common observable movement of these returns indicates that the reception of the returns to profit warnings announcement is altered by a batch of aspects that are clear-cut to the company making the announcement.

The T-test analysis on the AR's, CAR's, and SCAR's showed that, at a 5% level of significance, the information content of the profit warning was not statistically significant. This means there is an insignificant difference in AR's, CAR's, and SCAR's returns pre- and post-the-profit warning announcements. In this regard, the null hypothesis is not rejected.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This last chapter contains a summary of the results of Chapter 4, conclusions and recommendations for the results. It also points to restrictions that arise in relation to the purpose of the investigation and suggestions for further investigation.

5.2 Findings Summary

This study requirement is to establish the effects of profit warning announcements on the movement of stock prices at the NSE. The increase and decrease in returns of the companies because of profit warning announcements can be linked to the decisions of investors as explained by the EMH. Under this theory, share prices include all information either historical or current and any news that is to come would be considered as well, hence the price of a share is usually close to its intrinsic value.

The intrinsic value can also change but this may be due to competition that will bring about new information in the market that will initiate changes in its value (Seelenfreud, 1968; Robert, 1959; Fama, 1970). In the study, 75% of the profit warning announcements were interpreted negatively, thus, resulting in a decrease in returns, hence a downward movement in share prices. The generally negative response of returns around the profit warning announcement date is persistent with the findings of Jackson and Madura (2003).

They concluded that the earnings warning provoked strong market backlash during the announcement period. They found that the announcement of a profit warning provokes a

strong negative market reaction that is insensitive to the timing of the warning. Profit warnings should adversely affect stock returns under efficient market conditions, so this study found that 25% of those who had a positive impact on stock returns were profit warning information. Actions on information that show that it can be explained by the position that it is not freely available to all market participants.

The lack of a common observable movement of abnormal returns, cumulative abnormal returns, and standardized cumulative abnormal returns point towards a multiplicity of factors specific to the company, other than profit warnings, that interact to influence returns. According to Nyabundi (2013), profit warnings do not form the sole information in the market. He argues that stock prices reflect other types of information that could also have effects on returns, for example, dividend announcement (Merton and Rock, 1985).

This is further supported by T-test analyzes performed on 24 outcomes exhibiting a 5% significance level (95% confidence level). The content of the earnings notification was not statistically significant. This means that there is little difference between the abnormal return, the cumulative abnormal return, and the standardized cumulative abnormal return before and after the warning. In this regard, the null hypothesis is not rejected.

In Kenya, the Capital Markets Authority requires publicly traded companies to disclose earnings warnings if they anticipate a 25% decline in projected earnings from previous year's earnings (Legal Notice No. 60 May 2002, p. CMA, p. 199). Some companies have already been penalized and may face sanctions for non-compliance with this requirement.

5.3 Conclusions

The study suggests that the profit warning announcements have a negative impact on share price returns, as 75% of a company's actual and projected earnings gradually declined after the news came out. The impact of the announcement of performance alerts for AR, CAR and SCAR is relevant to the company that issued the announcement. In theory, these returns show unpredictable trends over the duration of the event.

From the T-test analysis, we can conclude that there are no significant deviations in the AR's, CAR's, and SCAR's during the incident period. In efficient market conditions, the announcement of profit warnings is expected to adversely affect stock returns. However, information about the announcement may not be available to all market participants. Not enough information is consumed. This is an overview of some cases (25%) where the announcement of a profit warning had a positive impact on stock movement.

5.4 Recommendations

It is recommended that regulators need to be observant in imposition of regulation to companies and ensure satisfactory divulgence is done by firms because firms, this is because the companies fear the market will react negatively if it issues a detailed profit warning.

Secondly, firms that have issued more than one profit warnings should tread carefully to find the reasons affecting their performance since the profit warning are indicators to a hidden issue within the firm that needs to be resolved.

Also, potential investors, as well as stockbrokers and analysts, will hold on to shares in a troubled company in the hope they will recoup some of their losses, so they scrutinize profit warnings issued by firms as this affects the returns.

5.5 Limitations of the Study

The study had many constraints. First, there were other economic factors, both micro and macro, such as inflation, unemployment rate, interest rates, economic growth rate, GDP (gross domestic product), and government regulation which were prevalent at the time of the announcement. These factors were not given due consideration in the study, despite their importance as factors, that would have altered the stock price movement.

This study was centered on firms that issued profit warnings between the period 2018 and 2020 only, splitting up companies that did not issue would have increased the contrast of the company that issued the profit warning. There is a need to study the performance of the stock returns for the two scenarios for a better conclusion.

Thirdly, the study focused on 3 years from the year 2018 to 2020. Previous years were left out of the study. This study concentrated on the impact of profit warnings on the stock price movement of listed companies at the NSE alone. In addition, this study constricted itself to one corporate action only, the effect of profit warning on stock price movement, and not all other corporate actions that may affect stock returns such as dividends announcement, stocks split, bonus issue, earnings announcement, change of management, regional expansion, corporate restructuring, new debt, and diversification of operations to help investors decide whether to react positively or negatively to other information.

5.6 Suggestions for Further Research

There are loopholes for many other areas of future research on profit warnings. To issue a profit warning in the first quarter of the fiscal year and determine the effect of issuing it in the last quarter of the fiscal year, further research is needed to determine the effect of the timing of the profit warning. Such studies assist in studying the behavior of investors' expectations about profits if they are handled earlier in the first quarter of the financial year.

This study concentrated on corporates that gave profit warning announcements and are listed at the NSE. It would be preferable to conduct a study for all companies and review all other factors that will bring about more reaction in the market and invent ways to manage the effects.

It is also ideal for research to consider other economic factors, both macro and micro, that were prevalent at the time the profit warning was announced, such as inflation, unemployment, interest rates, economic growth, and GDP (gross domestic product). These factors are not included in the study, but they are important factors that can affect stock price movements.

It would prudent for the research to be done comparing the stock returns and performance of companies that issued a profit warning to those that did not disclose the expected fall in earnings. There is a need to study the two scenarios for a better conclusion.

Finally, studying other African markets would explain if the findings were fragmented, or it's spread across all countries.

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APPENDIX

LIST OF COMPANIES AND DATES OF PROFIT WARNING ANNOUNCEMENT

	<u>Company</u>	<u>Profit Warning Date</u>
1	Britam Holdings Limited	05/01/2018
2	Sanlam	28/08/2018
3	Kenya Power	22/10/2018
4	HF Group	01/12/2018
5	Bamburi Cement	03/12/2018
6	Britam Holdings Limited	03/01/2019
7	Crown Paints	25/01/2019
8	Unga Group	28/02/2019
9	East African Portland Cement	06/03/2019
10	Kenya Re	20/03/2019
11	Williamson Tea	29/03/2019
12	Eaagads	31/03/2019
13	Kapchorua Tea	18/07/2019
14	Home Africa	26/07/2019
15	Kenya Power	19/09/2019
16	BOC Kenya	20/11/2019
17	Standard Group	02/12/2019
18	Nairobi Securities Exchange	13/12/2019
19	CIC Insurance Group	18/12/2019
20	Kenya Airways	18/12/2019
21	East African Breweries Limited	16/05/2020
22	Kenya Power and Lighting Company	16/06/2020
23	East African Cables	25/11/2020
24	Absa Bank Kenya	23/12/2020

	PROFIT	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
	WARNING																					
Britam Holdings Limited	0.0000	0.0000	0.0000	0.0000	0.0024	0.0170	-0.0049	0.0000	-0.0049	0.0049	0.0049	-0.0049	0.0000	-0.0336	0.0224	0.0167	-0.0308	0.0047	-0.0525	-0.0198	-0.0258	
Crown Paints	0.0000	-0.0080	0.0000	0.0000	0.0000	0.0000	0.0080	0.0000	-0.0924	0.0924	-0.0317	0.0000	0.0000	0.0237	0.0000	-0.2469	0.0000	0.0000	0.0000	0.0000	0.0000	
East African Portland Cement	0.0000	0.0148	0.0000	-0.0428	0.0000	-0.0030	0.0308	-0.0428	-0.0178	0.0924	0.0000	0.0000	0.0000	0.0328	0.0000	-0.0328	0.0000	0.0228	-0.0914	-0.0238	-0.0953	
Kenya Re	0.0000	0.0178	0.0145	0.0000	0.0110	-0.0110	0.0147	0.0000	-0.0037	0.0074	0.0037	-0.0111	0.0000	0.0037	-0.0037	0.1091	0.0814	-0.0221	0.0000	-0.0173	0.0130	
Unga Group	0.0000	0.0662	0.0055	0.0000	0.0240	0.0240	-0.0953	0.0000	0.0065	-0.0029	0.0800	-0.0028	0.0000	-0.0028	-0.0014	-0.0151	-0.0426	0.0590	0.0000	0.0000	0.0000	
Kapchorua Tea	-0.0278	-0.0662	-0.0190	0.0000	0.0000	0.0000	0.0000	0.0000	0.0063	-0.0026	0.0126	-0.0063	0.0031	0.0485	0.1046	-0.2663	-0.0028	-0.0056	-0.0056	-0.0110	0.0110	
Williamson Tea	-0.0270	-0.0360	0.0294	0.0000	-0.0049	0.0000	0.0016	0.0301	-0.0068	-0.0001	0.0254	-0.0068	-0.0169	-0.0033	0.0000	0.0033	0.0208	-0.0034	-0.0051	-0.0017	0.0025	
Home Africa	0.0323	-0.0163	0.0000	0.0357	-0.0339	0.0513	0.0513	0.0357	-0.0870	-0.0165	-0.0323	-0.0313	-0.0153	0.0153	0.0000	0.0635	0.0000	0.0000	0.0165	-0.0800	0.0635	
Kenya Power	0.0054	-0.0081	-0.0027	0.0000	-0.0055	0.0082	0.0082	-0.0028	-0.0163	-0.0240	-0.0026	0.0186	-0.0027	0.0054	-0.0054	0.0326	0.0000	0.0083	0.0254	0.0029	0.1217	
Eagads	-0.0557	-0.0408	-0.0880	0.0000	0.0074	-0.0037	-0.0110	-0.0180	0.0000	0.0036	0.0072	0.1026	0.1009	-0.0044	-0.0722	-0.2680	0.0031	0.0000	0.0000	0.0583	-0.0583	
BOC Kenya	0.0000	0.0297	0.0000	0.0000	0.0668	-0.0625	-0.0043	0.0000	0.0087	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0087	-0.0087	
Standard Group	0.0000	-0.0258	0.0000	-0.0780	-0.0664	0.0450	-0.0171	-0.0780	-0.0121	-0.0667	0.0000	0.0496	0.1054	-0.0951	0.1046	0.0915	-0.0408	-0.0392	0.0000	-0.0340	0.0379	
Nairobi Securities Exchange	0.0000	0.0000	0.0042	0.0000	-0.0042	0.0426	0.0309	-0.0134	0.0179	-0.0310	0.0266	0.0227	-0.0137	0.0045	-0.0445	-0.0384	-0.042	0.0426	0.0309	-0.0134	0.0179	
CIC Insurance Group	0.0000	0.0160	-0.0064	0.0294	0.0260	-0.0195	-0.0032	0.0294	-0.0164	-0.0162	-0.0032	0.0424	-0.0033	0.0033	0.0067	-0.0067	0.0134	-0.0134	0.0000	0.0202	0.0000	
Kenya Airways	0.0000	0.0407	-0.0832	0.0978	0.0832	-0.0370	-0.0144	0.0978	0.0611	0.0473	-0.0681	0.0420	-0.0085	-0.0042	0.0000	0.0000	0.0748	0.0184	0.0047	-0.0231	0.0092	
1. Britam Holdings	0.0000	0.0133	0.0034	0.0314	0.0034	0.0000	0.0204	0.0314	0.0071	0.0000	0.0000	0.0217	0.0296	-0.0075	-0.0258	-0.0109	0.0441	-0.0038	-0.0368	0.0072	0.0036	
3. HF Group	-0.0282	0.0000	0.0093	0.0091	0.0000	-0.0185	-0.0091	0.0091	-0.0272	0.0272	0.0085	0.0000	-0.0185	0.0185	-0.0093	0.0000	0.0093	0.0000	-0.0093	0.0650	0.0281	
4. Kenya Power	-0.0107	0.0107	0.0108	0.0108	0.0000	0.0000	-0.0108	0.0108	0.0220	0.0000	0.0000	0.0000	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0113	0.0000	0.0829	
6. Safim	0.0000	0.0000	0.0000	-0.0101	0.0101	0.0101	0.0000	-0.0101	0.0202	0.0000	0.0000	0.0000	0.0000	0.0206	-0.0104	0.0000	0.0104	0.0000	0.0211	-0.0211	0.0535	
7. Bamburi Cement	0.0000	0.0344	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0139	0.0069	0.0000	-0.0069	0.0000	0.0139	0.0000	-0.0070	0.0070	-0.0070	-0.0069	-0.0117	0.0156	
Abisa Bank Kenya	0.0148	0.0000	0.0064	-0.0357	-0.0212	0.0000	0.0190	-0.0357	-0.0062	-0.0020	0.0000	0.0082	-0.0021	0.0166	0.0233	0.0000	0.0064	0.0087	0.0044	-0.0044	-0.0043	
East African Breweries Limited	-0.0067	0.0051	-0.0067	-0.0476	-0.0066	-0.0066	-0.0049	-0.0476	-0.0689	-0.0144	-0.0267	0.0267	-0.0267	0.0267	-0.0184	0.0469	0.0029	0.0000	0.0253	0.0045	0.0000	
Kenya Power and Lighting	0.0000	0.0000	0.0051	0.0053	0.0156	0.0156	0.0158	0.0053	0.0271	0.0279	0.0114	0.0057	-0.0774	-0.0314	-0.0552	-0.0661	-0.0916	0.0870	-0.0401	-0.0343	0.0836	
East African Cables	0.0063	-0.0063	0.0650	-0.0586	-0.0063	0.0650	0.0650	-0.0586	0.0256	0.1025	-0.0072	-0.0888	0.0960	0.0072	0.0000	0.0521	0.0154	0.0078	-0.0232	0.0232	-0.0856	