

**THE EFFECT OF EMPLOYEE BONUS PAYMENTS ON STOCK RETURNS FOR  
LISTED COMMERCIAL BANKS IN KENYA**

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## **DECLARATION**

I hereby declare that this research project is my original work and it has not been presented in any University or Institution for an award of a degree and that all the references cited in this study have been fully acknowledged.

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This Research project has been submitted for examination with my approval as the University supervisor.

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## **DEDICATION**

This work is dedicated to my wife Rebecca for your encouraging words and for believing that I could do this. To my daughter Mumba, I hope this work will encourage you to scale higher in seeking knowledge when you grow up.

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## **LIST OF ABBREVIATIONS**

<b>CAPM</b>	Capital Asset Pricing Model
<b>CBK</b>	Central Bank of Kenya
<b>EMH</b>	Efficient Market Hypothesis
<b>EPS</b>	Earnings Per Share
<b>ESOPs</b>	Employee Stock Ownership Plans
<b>FTSE</b>	Financial Times Stock Exchange
<b>NASI</b>	Nairobi All Share Index
<b>NPLs</b>	Non-Performing Loans
<b>NSE</b>	Nairobi Securities Exchange
<b>NYSE</b>	New York Securities Exchange
<b>PRP</b>	Performance-Related Pay
<b>P/E Ratio</b>	Price – Earnings Ratio

## **ABSTRACT**

Employee bonus schemes have been a predominant methodology used by most Kenyan banks to motivate the performance of their employees. True to the idea, banks have continued to report strong growths in their earnings, beating tough economic times and stringent regulations that have characterized the past decade. The objective of this study was to establish the effect of employee bonus payments on the stock returns of the listed banks in Kenya. An event study that focused on the five bonus payment events between 2011 and 2015 was conducted, analyzing the consequential effects of the event on the stock returns for the respective banks as per their historical stock prices data and comparing it to the market returns in the same period to establish whether any abnormal returns were earned. The study however found that employee bonus payments have a weak negative effect on the stock returns of the listed banks. The study further recommends that managers and human resource practitioners need to formulate other performance measures that can directly be linked to shareholder returns in order to enhance total employee commitment towards maximizing shareholder value.

## CHAPTER ONE: INTRODUCTION

### 1.1. Background of the Study

Over the past few decades, researchers have targeted their efforts in learning the idea of the firm. As noted by Baker, Jensen, & Murphy, (1988) majority of their efforts have targeted the relationship between markets and their different structures, the impact of firm-specific assets, corporate governance structures and the agency problems linked to the conflict of interest among the managers and shareholders of a firm. An integral factor that impacts on organizational behavior is the compensation structure of a firm that widely involves the management of human capital and compensation policies in specific. As a common industry practice, the adoption of performance-based compensation plans has been observed to motivate employees to achieving set objectives. The idea behind performance based pay is the logic of increasing pay for positive performance. As Banker, Lee, Potter, & Srinivasan, (2001) note that linking pay to performance has the potential of improving employee performance. However, an understanding of the motivational incentives is crucial to formulating a theory that is practicable in the real world situation, since they influence how employees behave in organizations.

This study is motivated by a rather “chicken and egg” question whether the success of top performing companies is attributed by the way they remunerate their workers or do they just have more money to pay them because of their success. From a human resource management perspective, there are potential benefits in linking financial incentives schemes to firm performance but is rather surprising to most scholars that firms resist introducing such schemes to have a motivational effect. However, it would also be important to take note of the adverse effects incentive schemes induce that impact to the productivity and morale of employees (Hamner, 1975). As pointed out by majority of scholars, most organizations however have a role to play in the design of appropriate compensation structures in order to achieve a desired level of organizational performance (Gomez-Mejia & Welbourne, 1988).

The concept of job satisfaction has transformed over the year. For a typical organization, a significant part of its value is pegged on its human resource as an asset. Modern companies have come to realize that their workers form their most important assets. The theoretical benefits of job satisfaction are evidently clear and numerous Human Resource Management (HRM) theories have

come up with several avenues that could improve firm value through job satisfaction. As Edmans, (2012) observes, firms listed on the “Best Companies to Work for in America” portrayed high levels of job satisfaction and subsequently reported increased long-run stock returns. However, it still remains unclear whether motivation techniques associated with employee bonuses do affect the value of returns in the stock market.

### **1.1.1. Employee Bonus Schemes**

A bonus is a periodic payment given to employees over and above their basic pay and is normally associated with the positive performance on the employees part in achieving certain set objectives or the organization achieving specific milestones. They form part of a long list of performance-related pay (PRP) meant to motivate workers and align their efforts closely to those the organization.

Majority of Kenyan firms have incorporated bonus structures in their employee contracts which have continued to grow and include employee stock ownership plans (ESOPs). The financial sector that includes banks, insurance and asset-management companies remain the largest payers of bonuses which are structured to move in line with corporate earnings and paid at the end of a defined period.

According to a study conducted by Hewitt, (2014) bonus plans and levels of payments are again increasing in the UK, albeit with stricter rules and better targets. Since the start of the financial crisis in 2008, bonuses had received a generally bad press and the financial services sector had seen regulators in both the UK and EU move in to cap and defer high annual bonus payments. Despite the increase, the payments were becoming increasingly hard to earn motivated by minimum corporate performance thresholds, such as profit levels, that most companies had been forced to adopt, which had to be achieved before any bonuses were awarded.

### **1.1.2. Stock Returns**

Total return on stock refers to all returns associated with a stock, including interest, dividends and capital gains (Siegel, 2008). Fischer & Jordan, (2002) defined return as the motivating factor in the investment process which also serves as the main measure of comparing alternative investments for investors. They document that return has two components; the first comprises of periodic dividends and interest on the investment. The second component is the volatility attributed by the change in

the security prices, also referred to as capital gain or loss (Fischer & Jordan, 2002). The stock market employs the use of stock indices to reflect the performance of the stock market. A stock index is usually an indicator of the average change in price of a number of listed shares on the stock market. The Nairobi Securities Exchange utilizes two indices; The NSE 20-Share Index which is a price weight index calculated as a mean of the top 20 best performing counters and the Nairobi Securities Exchange All Share Index (NASI) which is a price weight for all the traded counters of the day.

### **1.1.3. Effect of Employee Bonus Payments on Stock Return**

As a general expectation, motivated employees are likely to be more productive and work towards achievement of organization objectives than their less motivated counterparts. The stock market is known to respond to any relevant information in the market, at least according to the Efficient Market Hypothesis (EMH). With this in mind, we cannot afford to discredit the fact that information about employee bonus payouts may send positive signals to investors about the imminent profits making the stock more attractive. An important metric used to make such buy/ sell decision is an analysis on the Earnings per Share (EPS) and whether the target was met or not. A high EPS in relation to the stock price will send signals that the stock is undervalued and more investors will come to think of the stock being a good bet for future capital gains, buy more stock and drive up the price.

However, some scholars have differed on the premise that pay acts as a motivating factor in the work place. Herzberg, (1955) in his research on the motivation – hygiene factor theory observed that the real motivation comes from characteristics attributed to the job. Needless to say, the scholars opposed to PRP base their argument on the fact that it exaggerates the difference between the highest and the lowest paid workers, using CEO pay as an example of a steeply rising pay average.

### **1.1.4. Commercial Banks in Kenya**

According to the Central Bank of Kenya, a commercial bank is a company that carries on the business of banking in Kenya but does not include the Central Bank of Kenya. A critical role that commercial banks play is the allocation economic resources in any given country. They continuously convey much needed funds from depositors to investors as they cover the operational

costs they incur. In the recent past, the banking industry has reported exponential growth in profits, deposits, and assets as a result of significant advancements in technology which has in turn facilitated automation of most of the traditional branch services and expansion of their branch networks expansion both locally and regionally.

In order to keep up with the stiff competition brought about by new entrants, commercial banks have invested heavily in their human capital, recruiting professionals with broad educational backgrounds and vast career experiences to drive their growth. They have also been forced to redesign their compensation structures to enable them attract and retain this top talent. Most of these banks have adopted bonus schemes as part of their growing portfolio of employee reward programmes and have remained to be one of the biggest payers of bonuses to their employees. Ordinarily, these bonuses move in tandem with the growth in earnings hinting a relationship between the bonuses and performance.

Kenyan banks have continued to report the strongest growth, both in assets and earnings, over the period between 2011 and 2015 and have thus remained attractive to investors owing to their focus on profitability that resulted in high market returns. Much of this growth has been attributed to their ability to deploy a large proportion of their assets to lending owing to the high interest rate spreads. Historically, Kenyan banks have been observed to have the highest lending rates within the East African region and quite low operating costs owing to the low expense to interest income they reward on their deposits. As a result, they have managed to realize wide margins that enable them to absorb shocks resulting from the global financial crisis and the declining interest rates.

## **1.2. Research Problem**

Employee bonus plans as a form of reward for performance are meant to encourage productivity among employees and help align individual ambitions to those of the organization. The rules for distributing the rewards are contingent upon the levels of performance, skills, knowledge and competencies exhibited (Muchai, 2012). As much as they yield positive performance, the effectiveness of employee bonuses has also been put into question over the inequality they bring about, with the amount of reward differing across different hierarchies in an organization. Financial incentives cannot be ignored as contributors to the growing positive performance of commercial banks in Kenya and while any reasonable manager would be tempted to introduce the same, the incentives come with their adverse effects. Managers have been observed to engage in manipulation

of earnings in order to maximize the present value of the payments from their bonus plans (Holthausen, Larcker, & Sloan, 1995) and as such create an agency problem in their short-termism approach. With this in mind, the effect of these bonus payouts on the ultimate goal of the firm would be an interesting topic to study.

The rationale underlying performance-related pay are the theories of motivation and the effect of financial rewards on an individual's performance which subsequently influences the performance of the organization as a whole. Consistent with market trends and the overall economic performance, most commercial banks in Kenya have continued to report growth in their financial performance, at least in the last decade. The motivating factors behind this strong performance have been cited as both internal/ bank specific factors and external/ macroeconomic factors (Ongore & Kusa, 2013). The employees of the respective banks have also a pivotal role in the success reported over the years and it has been of key importance to the management of these institutions to maintain a highly motivated staff to drive this growth. Mohrman & Odden, (1996) observes a direct link between the health of workers and the remuneration structure of an organization pointing out an increase in production as a result of maximum work performance owing to good health. In a follow up study, Perry, Mesch, & Paarlberg, (2006) state that performance incentives will in deed improve job performance, but their efficacy is pegged upon organizational conditions. However, a study conducted by Heinrich, (2005) concluded that incentive systems and structures among government employees were not achieving their desired outcome of aligning the goals of the government employees to work in the interest of the public they serve.

Several studies on executive compensation in Kenyan commercial banks have been carried out. Molonko, (2004) studied the relationship between board structure, board compensation and firm profitability among kenyan banks and observed a strong correlation between board compensation and firm profitability. While studying the Performance-Based Compensation Practices among Commercial Banks in Kenya, Muchai, (2012) observed that most commercial banks in Kenya had in place performance based compensation practices. She also observed that bonus employee bonus schemes were the main compensaton systems used. Another study conducted by Busaule, (2014) that aimed at establishing the relationship between financial performance and executive compesation of commercial banks in Kenya found no significant relationship between the two and hence recommended banks needed to implement strategies to peg directors pay to the firm's performance.

Osoro & Jagongo in 2013 attempted to find out the investors' perspectives on the NASI and the NSE 20 Share indices as market performance indicators at the NSE and concluded that there was no significant difference in the operation of the two indices. While their study sought to find out whether the NSE 20 share index as a performance indicator was indeed biased as perceived by most market participants, this study seeks to refine the academic knowledge so far by adding a new variable and utilizing the indices to provide statistics on market returns comparative to the actual returns realized on the selected stocks.

Kenyan banks have continued to be among the top companies that pay hefty bonuses to their employees and top executives as they reward their shareholders with high returns. Investors have also exuded their confidence in the banks stocks as evidenced from the high volume traded in the market. A possible reason for this could be the low trading P/E ratios as compared to the market P/E ratio evidenced by the growing earnings even as the share prices suffered and this seem to suggest the stocks may be undervalued. While much of the employee compensation schemes are limited to cash, majority of these banks disclosures on the payouts are generally aggregated on their books as the total expense incurred inform of salaries and bonuses with no clear measure on the basis of computation. This study seeks to fill the research gap to the idea behind employee incentives and in particular to answer the question: "What is the effect of employee bonus payments on stock returns for listed Commercial Banks in Kenya?"

### **1.3. Research Objectives**

To establish the effect of employee bonus payments on stock returns for commercial banks listed on the Nairobi Securities Exchange.

### **1.4. Value of the Study**

This study will be of great value in providing guidelines in policy formulation to address the perennial challenges in human capital management and eventually impact positively on employee performance in organizations. With the adoption of performance contracts in most banks, the findings of this study will be of key interest to managers in planning for the deliverables and performance metrics for their staff and essentially aiding them in employing strategies to get better employee performance.



The study will also be of great value to banks and especially their top management, aiding their decision when declaring bonuses to their employees at the expense of earnings generated for the shareholders. It will help in conveying a solid argument and justification for the bonuses they declare to be distributed to the employees while aid in policy making and keeping track of the organizations key objective to maximize shareholders' wealth.

It will be of benefit to shareholders and donors funding financial institutions in understanding the array of factors affecting performance and sustainability of financial institutions. Of key importance, the findings of this study will help both shareholders and financiers in holding the management accountable for their decisions while checking on their discretion for selfish gain at the expense of the organization. It will also aid investors in making investment decisions for diversifying their portfolios and maximizing the returns on their investment.

Finally, the study will be of value to the government and other stakeholders in formulating policies to safeguard depositors and also their interest in these financial institutions. While the study may appear to have been done before, this new study will bring to light new variables in a unique socio-political, economic and legal environment.

## **CHAPTER TWO: : LITERATURE REVIEW**

### **2.1. Introduction**

In this chapter, the researcher aims at reviewing literature and other relevant information that will help achieve the objectives of the study. A critical examination of all relevant literature relating to pertinent problems will be done to establish the facts behind those theories. The literature reviewed focuses mainly on the relationship, if any, between employee bonuses as part of financial incentives and shareholder returns for listed commercial banks in Kenya while at the same time and attempting to link studies done in the past with this study to establish gaps for further research.

### **2.2. Theoretical Review**

The following are the theories explaining the relationship between employee bonuses and shareholder returns for listed commercial banks.

#### **2.2.1. Reinforcement Theory**

Proposed by Skinner in 1938, this theory asserts that individuals behave in a manner dependent on the outcomes of their behavior. Individuals will tend to repeat certain behaviors that results in positive outcomes while refraining from those that result in negative outcomes. In his behavioral studies, Skinner introduced the term “Operant Conditioning” to indicate that organisms in his experiments operated freely on the environment rather than the being triggered by the experimenter to produce the desired response. According to Skinner, positive reinforcement would happen once a desirable event or stimulation is produced as a result of a behavior and therefore the behavior will increase. Negative reinforcement on the other hand will happen when the frequency of an observed behavior increases as a result of a deterrent. In the same respect, positive punishment will happen when the probability of a behavior recurring in future is decreased as a result of a response to a stimulus from the punishment. When there is total removal of the stimulus, negative punishment is deemed to have occurred as it decreases the probability of similar circumstances in future.

It is argued that human behavior is influenced by factors external to an individual as the consequences of any form of behavior will influence subsequent behavior. Punishments will tend to act as a deterrent while rewards will increase the likelihood of a behavior being repeated. The application of this theory into compensation management explains why employee performance

improves once monetary rewards are introduced (Gerhart, Minkoff, & Olsen, 1995). Similarly, poor performance is observed in instances where employees don't receive a reward for exceptional performance. Reinforcement theory therefore intrinsically argues that motivation is a factor of behavior and personal characteristics, emotions and even expectations do not play a role in influencing behavior. However, similar studies done by other scholars have observed the perception of these outcomes play a role in influencing the motivation of individuals (Cole, 2004).

### **2.2.2. Expectancy Theory**

This theory derives its existence from the works of Tolman, (1951) and Lewin, (1938) who observed behavior as purposeful, goal oriented and largely influenced by the conscious actions of individuals. It purports that the outcomes of certain behaviors influence the choice of behavior to an individual and hence the basis for motivation. However, it was until 1964 when the first systemic design of the expectancy theory as it related to the workplace was developed. In his paper, Vroom argued that workers are driven by the attractiveness of the outcomes attached to a particular task and will tend opt for those behaviors that will drive them closer to their desired rewards thus implying that the energy invested by an employee will be highly dependent on the value attributed to the outcome.

Porter & Lawler, (1986) extended this theory to include the influence of unique employee characteristics such as individual skills and abilities on actual job performance. They expounded on the link between performance and satisfaction, proposing that the quality of the rewards influences performance. A key modification to the original theory is a feedback loop they incorporated to factor the influence of employees learning from their past experiences. In this case, superior performance that was not accompanied by a reward will negatively influence future employee effort while destroying the credibility of the reward system to the employee.

A number of scholars have furthered their research in the basic expectancy theory to incorporate new research findings and new theoretical developments. Lawler in 1971 follows up his earlier work with a critique on Vroom's work by pointing out the simplicity of the expectancy theory as deceptive as it assumes that employers can increase the productivity of their workers by enticing them with rewards. In a review of recent literature, Kanfer, (1990) identifies several factors that have a direct influence on work motivation such as dispositional and organizational influences, task characteristics and action settings among others.

### **2.2.3. Equity Theory**

This theory owes its existence to the works of Adams in (1963) who attempted to explain how employees respond to perceived unfairness at work. Adams argued that when people feel treated fairly, they more or less are likely to be motivated to perform better. The complete opposite happens in the case of unfair treatment at the workplace. Several studies have tried to explain the basic equity theory, observing that individuals review their outcomes against their perceived cost in effort and in situations where they feel unfairly treated portray a manner of cognitive disillusion that prevents them from improving their performance. Experiments done in the past have supported this “equity norm” with results showing that individuals would cognitively prefer fair or equitable treatment. Leventhal, Allen, & Kemeigor, (1969) proposed that individuals may at times cognitively misrepresent their inputs at the expense of achieving equity. Further research has also suggested that people find it easier to alter insights on the behavior of others rather than their own behavior.

Another area of equity theory research focuses on how individuals try to resolve instances of perceived inequity by altering their performance. The basic hypothesis with regard to underpayment is that workers will tend to alter their inputs to restore equity as observed by Pritchard, (1969) in his experiments. Several field studies carried out by Carrell & Dittrich, (1976) and Telly, French, & Scott, (1971) have also supported the idea that employees will use turnover to restore balance in equity as proposed by the theory. Perceived inequity by employees in an organization was observed to significantly influence turnover and absenteeism. Most compensation structures wrongly assume that overpayment is a means of performance motivation and thus have not accurately explained how individuals react to inequity when faced with an overpayment situation.

### **2.2.4. Motivation-Hygiene Theory**

This theory was developed by Herzberg, (1966) who observed employee motivation as a factor experienced when workers face challenging but enjoyable work conditions that allow for personal growth and development. Herzberg distinguished job satisfaction and job dissatisfaction as two different factors that are completely unrelated arguing that the opposite of satisfaction is not dissatisfaction, but rather, no satisfaction. According to Herzberg, motivation factors bring about job satisfaction and while hygiene factors bring about dissatisfaction. The motivation factors that include growth and advancement, recognition and achievement, are considered to be basic needs for every worker and hence the responsibility of the society’s businesses to provide them and help their

employees to self-actualize. Hygiene factors that comprise of company policy, supervision, salary etc. on the other hand operate to create dissatisfaction among employees

A number of behavioral scientists have agreed with Herzberg with respect to the achievement of the employee motivation factors. However, some behavioral scientist have differed in opinion arguing that there is more to employee motivation than the factors stressed by Herzberg. Hackman & Oldham in (1976) critiqued Herzberg's theory by purporting the original model to being a methodological one. They argue that individual characteristics are not factored in the model thus wrongly assuming that all employees respond in a similar way to the changes in the motivation-hygiene factors. In addition to this, they raise a valid concern in the inability to measure the motivation and hygiene factors as specified by Herzberg in his theory.

### **2.2.5. Efficient Market Hypothesis Theory**

The efficient-market hypothesis (EMH) was developed by Fama, (1970) who argued that stocks will trade at their fair value, making it impossible for capitalize on the gains from the stocks as a result of information asymmetry. The theory asserts that security prices will always reflect all available information relevant to the stocks. According to Cunningham, (1994), security prices appear to be random in a manner making it difficult to predict future prices based on the historical trend and as such the EMH attempts to explain this 'random walk' by relating the price volatility of market securities to their sensitivity to information about that security.

Malkiel in 1991 distinguished three forms of market efficiency. In the weak form of market efficiency, security prices reflect all historical information making it impossible for investors to yield capital gains through technical analysis. In the semi-strong form of market efficiency, security prices reflect all publicly available information in addition to all historical information about a security making it impossible to yield any abnormal profits through fundamental analysis. The strong form of market efficiency finally asserts that market securities will not only reflect all publicly available information but also private information relevant to a company making it impossible to make abnormal profits from insider information

As much as the EMH assumes the existence of perfect markets, the theory fails to hold in the real world scenario. Our markets are burdened with transaction costs coupled with minimal information for accurate decision making and a myriad of irrational investor expectations. As much as the EMH

appears to hold true, well at least to some extent of the semi-strong form of efficiency, the perfect market assumptions, being the core assumptions of the EMH, do not hold true in the real world. The advent of the insider trading scandals of the 1980s disqualified the strong form of efficiency much in advance. The weak form of efficiency has been tested to provide the much required empirical evidence in support of the assumption as observed by Fama , (1970). The semi-strong form of market efficiency provides the most support for the EMH with numerous event studies showing stock prices responding quickly to announcements and other events related to a company.

### **2.2.6. Portfolio Theory**

Primarily an investment theory put forth by Markowitz, (1952), the Portfolio Theory postulates that investors can construct an "efficient frontier" of optimal portfolios that offer the maximum possible expected return from an array of investments. According to the theory, spreading the risk through diversification can help risk-averse investors maximize their expected returns at a given level of market risk. Characteristics unique to a security are not enough to assure an investor of the expected return as a keen analysis of how the security co-varies with other securities is also important. Ultimately, risk is significantly reduced by holding a portfolio of different unrelated stocks rather than holding one.

In 1952. Markowitz formulated the mean variance portfolio theorem which suggested that expected returns are maximized by holding variance constant and vice versa. This ultimately led to the formation of an efficient frontier through which investors could easily choose their desired portfolios depending on their risk appetite. The mean variance theory has remained the cornerstone of modern portfolio theory and according to Elton & Gruber, (1997) its prolonged use is as a result of two main reasons. To start with, the theory itself avails large data sets to the investor making no suggestions whether additional data will be of benefit in making the portfolio more attractive. Secondly, the implications of the theory are widely known to be well developed and intuitive to the investors simplifying the portfolio analysis process.

However, despite its obvious relevance to investors, portfolio theory has been criticized questioning whether it is an ideal investment tool as its model of financial markets does not match the real world in many ways. For starters, risk is a measure of stock variation from the expected returns and consequently considers upside movement as equally bad as the downside one. However, as investors heavily cushions their investments from downside risk, hardly do they consider upside risk

as potentially harmful to their portfolios. In a study conducted by Murphy, (1977), actual returns for low risk securities appear to be higher than expected than for high risk securities suggesting no relationship between risk and return.

### **2.3. Determinants of Stock Returns**

The level of return realized or expected from an investment is dependent on number of variables. The determinants are discussed below.

#### **2.3.1. Liquidity**

Liquidity with reference to securities relates to the ease of transferring stocks from one investor to another. Securities with high trading volumes are regarded as more liquid than those with low trading volumes. It is highly dependent on the investor's ability to buy and sell stocks with ease in the market and the more liquid a stock is the higher the returns. A study conducted by Amihud & Mendelson, (1986) found out that low liquidity investments produced higher returns for their holders than those requiring high liquidity. They found a negative correlation between the bid-ask spreads as a percentage of stock price with the stock attributes that reflect liquidity. Liquidity is also measured by annual turnover, which is simply the number of shares traded divided by the stock's outstanding shares. The bid-ask spreads for high turnover stocks tend to be lower with a low prices and high trading volumes relative to the size of the firm (Dalgaard, 2009).

#### **2.3.2. Macroeconomic Variables**

Macroeconomic factors have also been observed to affect stock returns. Aroni, (2011) observed that high interest rates and inflation rates had a negative correlation on stock prices with a general rise in interest rates driving away savings from the stock market to bank deposits while rising inflation rates reducing expected cash inflows from investments leading to investors shying away from the market. He however observed a strong positive correlation between exchange rates and stock prices with an appreciation of the local currency increasing liquidity and in turn encouraging more activity at the stock market. In a similar study, Olweny & Omondi, (2011) found similar results emphasizing that macro-economic factors affect stock return volatility at the NSE.

### **2.3.3. Size**

Banz, (1981) in his study examining the relationship between market capitalization and a firm's stock return revealed that firms with low market capitalization tend to outperform large capitalized stocks. Banz observes that investors would have earned excess returns in the period between 1936 – 1973 by holding small stocks as small firms are considered riskier than large firms. In line with market forces, downward pressure will be exerted on the security prices of the small firms providing their investors with higher returns. Fama & French in 1992 confirm that the size effect discussed by Banz is most prominent but also observes that stocks with a high book equity value in comparison to their market value tend to outperform stocks with low book equity to market value in various periods.

### **2.3.4. Price-Earnings Ratio**

Basu, (1977) experimented on market efficiency by examining the relationship between price-earnings ratios for stocks and their returns. He divided the stocks into five P/E classes and determined the risk and returns for portfolios of high and low P/E ratio stocks. From his study, Basu discovered that when P/E as a performance measure is adjusted for risk, stocks with low P/E ratios generated high returns as compared to stocks with high P/E ratios. This was based on the fact that high growth firms usually enjoy high P/E ratios as compared to low growth firm. For this reason, investors tend to overestimate their growth potential and subsequently overvalue the stocks of these firms as compared to low growth firms. Goodman & Peavy III, (1983) while studying the effects of P/E on various adjustments for firm size and industry effects observed similar results to those of Basu, (1977).

### **2.3.5. News and Media Reports**

Media reports, press briefings and selected items of news have been observed to investor decisions and behavior. Dulwich in 2006 analyzed the impact of BBC news reports on the security price changes for the FTSE 100 index traded in NYSE and found out that around 12% of major news announcements caused stock price volatility. The study also found that 31 news reports resulted into a change in daily stock return after a news event. Managers too have been known to hold private information which at times grants them a strategic advantage over their competitors. Disclosing



intricate details would be beneficial to all rival firms that in turn would minimize the benefit of the investment and cost a great deal.

## **2.4. Empirical Review**

An empirical review is an analysis of available studies related to topic of concern. It enables the researcher gain a good understanding of the subject under study. In this study, empirical review has been categorized into international evidence and local evidence.

### **2.4.1. International Evidence**

Despite the numerous studies done on bonus and merit pay systems, inconclusive findings have clouded much of the research conclusions on this debatable subject with its efficiency being put to question as researchers find no link between merit pay and performance. Kopelman & Reinharth, (1982) for instance observed a strong link between employee productivity and rewards for performance in their study of branch offices for a financial services organization with subsequent performance increasing with the magnitude of the reward. In contrast however, Pearce, Stevenson, & Perry, (1985) in their study of bonus plans in social security branch offices found merit pay to be unrelated to subsequent branch performance and thus concluded that merit pay was not motivational.

Annual bonus contracts are typically based on accounting performance as evidenced by early studies on compensation that found a strong positive correlation between the two. According to Lambert & Larcker, (1987), the relationship between merit compensation and reported earnings was observed to be much stronger than that between stock returns and merit compensation. Consequently, early studies focused on how bonus contracts could be used to induce managers to improve performance based on their choice of accounting procedures. This was attributed to the close tie between executive compensation and firm performance and was prone to exploitation by top management who would at times maximize their compensation by selecting income decreasing accounting practices.

Smith & Watts in 1992 discovered a positive correlation between incentive compensation and the growth of firm with their study outcomes suggesting that managers' actions for firms with more investment opportunities are not readily observable by the shareholders as they lack the knowledge

to observe all instruments at play. They thus form an argument that a large proportion of firm value is represented by available investment opportunities and shareholders will tend to tie the managers' compensation to increases in firm value so as to induce conscious effort by the managers to exploit available opportunities that will increase firm value. In summary, their ideas tend to imply the conscious use of incentive compensation as a firm grows.

A review of recent studies done relating to executive compensation has generated empirical evidence on the measures used in the estimation of compensation schemes. Prendegast, (1999) in his study on the relationship between stock performance and the agent welfare found that it was difficult to establish whether there existed an optimal compensation scheme. This was due to the fact that that majority of the factor that influences compensation schemes remain unobserved to the researcher. Factors such as the return on effort and the risk aversion level of work that help determine the optimal wage rate per unit of output remained unknown to the researcher. However, while the results of this study appear to be correct, the study was criticized for its poor methodology of testing the agency theory.

Decisions made by employees are highly dependent on the relative cost and benefit they assign to tasks in relation to available alternatives. For firms, they adjust this decision problem by attaching rewards to behavior that is beneficial to their cause. As studied by Rayton, (1999b) on the relationship between compensation and security performance, the average pay per hour of employees working in manufacturing firms in the U.S represented a performance elasticity of around 0.1. This meant that the doubling of firm value would cause a 10 percent increment in pay. Other scholars such as Ang & Fatemi, (1995) find similar results reporting performance elasticities of 0.1 for firms based in the United Kingdom. In a subsequent review, Rayton, (2000) observes that employees maximize firm value if in return they receive an increase in utility for such positive behavior. Such incentives are usually measured by the magnitude of the performance-pay link, with an increase in this magnitude being translated as to imply decreased agency costs.

#### **2.4.2. Local Evidence**

A study conducted by Musyoka, (2007) finds an insignificant negative relationship between executive compensation and bank performance and as a result it indicates that among the large Kenyan banks accounting measures of performance are not key considerations in determining executive compensation. In his study that surveyed accounting based measures of performance on

thirteen banks designated by the CBK as large banks, he further notes that in the large banking segment, size is a key determinant executive compensation with a negative correlation to compensation. The negative relation between the two appears to suggest that executive compensation schemes were capped to some measure in order to maximize shareholder returns and align the interests of the directors to those of the firm owners in line with the agency theory.

It has been widely acclaimed that heavy investment in education and training is crucial in improving the output and performance of employees as evidenced by Wanyama and Mutsotso, (2010) who added to the growing empirical research evidence suggesting that the assertions are indeed credible. In their study on the relationship between capacity building and employee productivity on performance of commercial banks in Kenya, they surveyed responses from key informants of all the banks in Kakamega Central District and observed a linear positive relationship between capacity building and employee performance concluding that the two are related. They found direct positive relationship between customer service variables (such as satisfaction and loyalty), employee variables (such as commitment, loyalty and internal service quality) and financial performance of banks in the region and concluded that the levels of employee and customer satisfaction affects business performance as translated by financial results.

A number of researchers have however downplayed the magnitude of financial incentives on employee and firm performance, tending to focus more on personal attributes as drivers of performance. Atambo, Kabare, Munene, and Nyamwamu, (2012), find a strong correlation between employee recognition and output of hospital workers. In their study in which they sampled responses from doctors, clinical officers and nurses of the Kenyatta National Hospital public wing, they argue that if well utilized, employee recognition can be a means of improving individual and organizational performance. They duly note that money is an important incentive in enhancing employee output but the impact of various forms of personal recognition is more effective in improving employee output

Cash bonuses have also been observed to have an insignificant effect on company performance. According to Njanja, Maina, Kibet, and Kageni, (2013), cash bonuses were observed to only cause workers to be happy and prevent the feeling of dissatisfaction in them but not having any significant effect on employees' performance. In their study on the effect of reward on employee performance at Kenya Power and Lighting Company in Nakuru, they attempted to find out from the respondents their perception of cash bonuses as performance motivators. They observed that in as much as

bonuses were used to reward employee performance, there was an unspoken expectation that these bonuses would act as motivators to improve employee performance in the subsequent year. They subsequently concluded that cash bonuses had no significant effect on employee performance because those who had had been awarded and those who had not perceived the bonuses as having the same effect on performance; hence not having any significant effect on performance.

Ogutu, (2014) while studying the perception of the influence of incentives on employee job performance in the Ministry of Education in Kenya observed that employee rewards caused satisfaction that influenced performance. While goals and feedback clearly boosts performance, adding an incentive will enhance job interest and persistence. The study surveyed the responses of 45 respondents on the perception of the influence of incentives on job performance and thus concluded that well-designed pay plans based on group performance can increase productivity.

## **2.5. Conceptual Framework**

From discussion this far, the underlying link between employee bonus payments and stock returns is the desire to induce employee motivation by introducing a reward and subsequently improving their performance/ output at the work place. Most of the theories on employee motivation have made a modest attempt in explaining employee behavior at the workplace, with significant contributions by Skinner's reinforcement theory on behavior and Vroom's systematic formulation of the expectancy theory and its relation to the work place. Both of these scholars arrived at a common basis of motivation as being the main driver for performance and as Adams, (1963) argues, conditions of underpayment or overpayment can influence subsequent behavior of employees.

As much as the consequences of employees' current period actions tend to occur in future and don't reflect in current period's accounting numbers, the notion of efficient markets has been the subject of rigorous academic research for more than a century. The stock market has been observed to be affected by a multitude of factors with the "random walk" theory proposed by Fama, (1970) gaining widespread acceptance. Employee bonus payments are based on positive returns by the firms that trickles down to individual employee contribution to overall firm performance. Whether this information is of any effect to the future market performance of stock prices as a result of conscious actions by market participants is a subject for further academic research.

Figure 2.1: Conceptual Model



Source: Researcher

## 2.6. Summary of Literature Review

There still exists no consensus on what is the relationship between employee bonus payments and financial performance and their subsequent effect on stock returns. Much of the theoretical literature has focused on the behavioral aspects of workers as drivers of performance in the organization and basing their intrinsic value for reward as the motivation to perform. The challenge with this is that the interests of workers must be aligned with those of the organization to avoid an agency conflict just as Holthausen, Larcker, and Sloan, (1995) cited. The empirical literature has further provided a better understanding of the theories at work, linking the relationship between PRP and performance in different studies conducted. Much of the empirical literature has however focused on the performance of top management and executives, leaving out the impact on the lower level workers who form a valuable asset as human capital.

The theoretical literature has been of great help in understanding compensation structures and practices of different firms, with the empirical evidence highlighting the aspects that are seem most relevant. However, a significant challenge posed by the literature has been the excessive focus on executive contracts whose outputs are easily measured and observed. Most workers don't hold jobs like these but are instead evaluated on a criterion which is subjective and firms choose the evaluation method and set the compensation scales based on those evaluations.

In line with the inconclusive results from these studies, there still exists a knowledge gap on whether employee bonus payments have any impact on the stock returns of listed organizations which the findings of this study will help address. Most studies have established a positive relation between performance and pay but however there have been conflicting results on the impact of pay on performance, which this study aims to clarify.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1. Introduction**

This chapter presents the methodology to use to carry out the study. It describes the research design, data collection methods and data analysis model used in the attempt to establishing the relationship between employee bonus payments and stock returns for listed commercial banks in Kenya.

### **3.2. Research Design**

The research adopted an event study model to study the effects of employee bonus payment on the returns of listed commercial banks. An event study model is a research design that studies the impact of an event on the value of a firm (Mackinlay, 1997). The benefit of such a study is the ability to observe the effects and magnitude of the event in the security prices. In this case, the event study measured the impact of the specific event (employee bonus payment) on the value of the firm, which in this was the stock return. The study population comprised of all the banks listed on the NSE between 2011 and 2015 therefore representing the whole market.

### **3.3. Data Collection**

Primary data on when the respective banks paid out their employee bonuses was collected through questionnaires administered to key informants within the different banks to determine the exact dates when the bonuses were paid, and consequently forming the event date. To determine the stock returns, the study utilized secondary data on the daily closing stock prices for the individual stocks as per the NSE database to determine the actual stock return and compared it to the market return as per the Nairobi All Share Index (NASI) around the dates when the bonuses were paid to establish whether any abnormal returns were realized.

### **3.4. Event Period Specification**

The date of the event (bonus payment) was assigned day  $t=0$ . The event period subsequently fell between five days before and five days after the event.

### 3.5. Data Analysis

The aim was to establish whether there are any abnormal returns after the date of the event.

#### 3.5.1. Analytical Model

The appropriate model for the expected return on the market depends on the information available (Merton, 1980). For example, in the absence of any other information, one might simply use the historical sample average of realized returns on the market.

The market return (MR) for this study was based on the NASI as Osoro and Jagongo, (2013) observed that the NASI is more accurate and representative of the underlying market position than the NSE 20 Share Index. The daily return for the market index (NASI) will be computed as follows;

$$R_{mt} = \frac{NASI_t - NASI_{t-1}}{NASI_{t-1}}$$

Where;

$R_{mt}$  = Market Return at time  $t$

$NASI_t$  = NASI index at time  $t$

$NASI_{t-1}$  = NASI index at time  $t-1$

The daily individual returns on the securities will be calculated as follows;

$$R_{it} = \frac{P_t - P_{t-1}}{P_{t-1}}$$

Where:

$R_{it}$  = Return of stock  $i$  at time  $t$

$P_t$  = Price of security at time  $t$

$P_{t-1}$  = Price of security at time  $t-1$

The abnormal return was the difference between the actual return and the expected return and will take the following form;

$$AR_{it} = R_{it} - R_{mt}$$

Where;

$AR_{it}$  = Abnormal Return for security  $i$  at time  $t$

Once abnormal returns are estimated, the average abnormal return across firms in a common event time was computed as follows;

$$AAR_t = \frac{\sum_{i=1}^N AR_{it}}{N}$$

Where;

$AR_{it}$  = Abnormal Returns for  $i$  securities at time  $t$

$N$  = Number of banks in the study

The average abnormal returns were then summed up over a particular time period ( $L$  days around the event time) to find the Cumulative Abnormal Return as follows;

$$CAR_k = \sum_{l=1}^L AAR_l + CAR_{k-1}$$

Where;

$CAR_k$  = Cumulative Abnormal Return for the  $k^{\text{th}}$  period

$AAR_l$  = Average Abnormal Return over  $l$  days

### **3.5.2. Test of Significance**

The test for significance was done on the Abnormal Return and Cumulative Abnormal Return and using a standard t-test statistic at 95% confidence interval for the period before and after the event



## CHAPTER FOUR: DATA ANALYSIS, RESULTS AND INTERPRETATION

### 4.1. Introduction

This chapter will present the analysis and findings of the research. The objective of the study was to study the effect of employee bonus payments on stock returns for listed commercial banks in Kenya. The abnormal returns of all the listed banks were analyzed and the Average Abnormal Returns (AAR) and the Cumulative Average Abnormal Returns (CAR) computed. The study also compared the 5-day period before and after the event, utilizing line graphs to plot the trend in movement of the stock returns to better understand the period in question and the corresponding performance of the market.

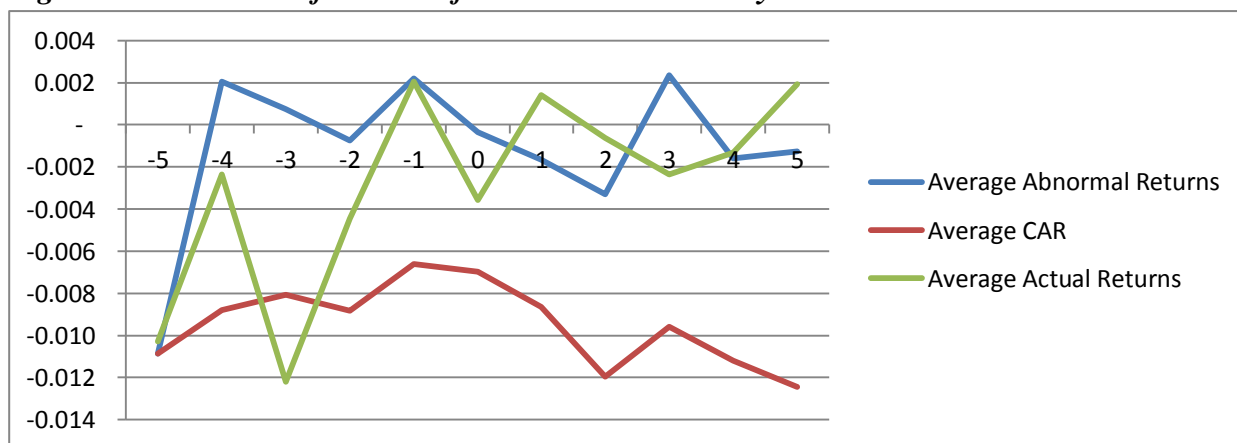
### 4.2. Findings

The study examined the cross sectional distribution of returns around the event window to establish whether any abnormal returns were realized with response to the event.

#### 4.2.1. Returns Before and After the Bonus Payment Date

This section presents the graphical presentation of the trends in abnormal returns before and after the bonus payment date. The average actual return, average abnormal return and the cumulative abnormal returns (CAR) are plotted to observe the movement of the returns before and after the event date.

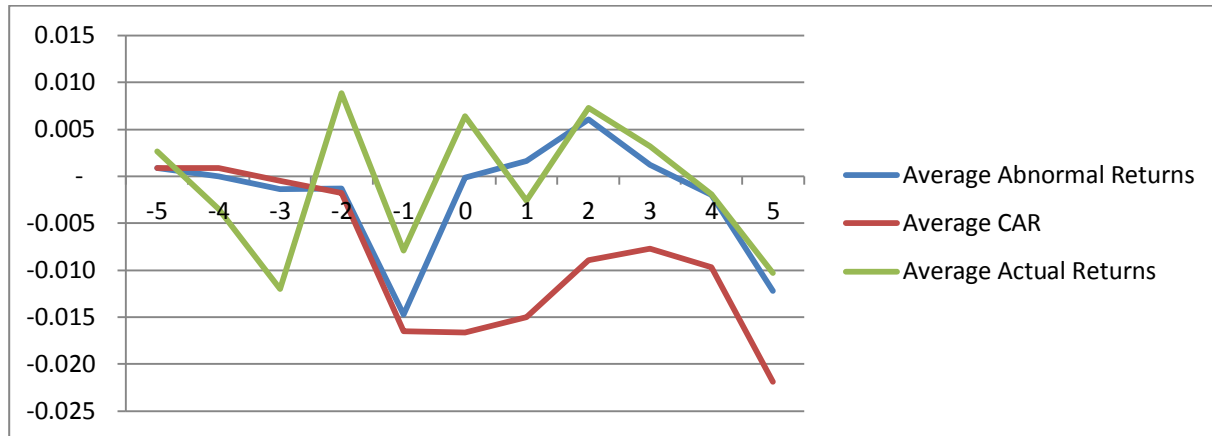
*Figure 4.1: Returns Before and After the 2011 Bonus Payment Date*



Source: Research Findings

In the days leading up to the event date, the returns observed were on the increase with a sharp increase in the average actual returns a day before the payment date. The average abnormal returns experienced a sharp increase four days before the 2011 payment date and a slight dip on the date of the event. The CAR was observed to be on a general downward trend recording negative returns throughout the event window with a decline on day 0 of the event and subsequently dipping further.

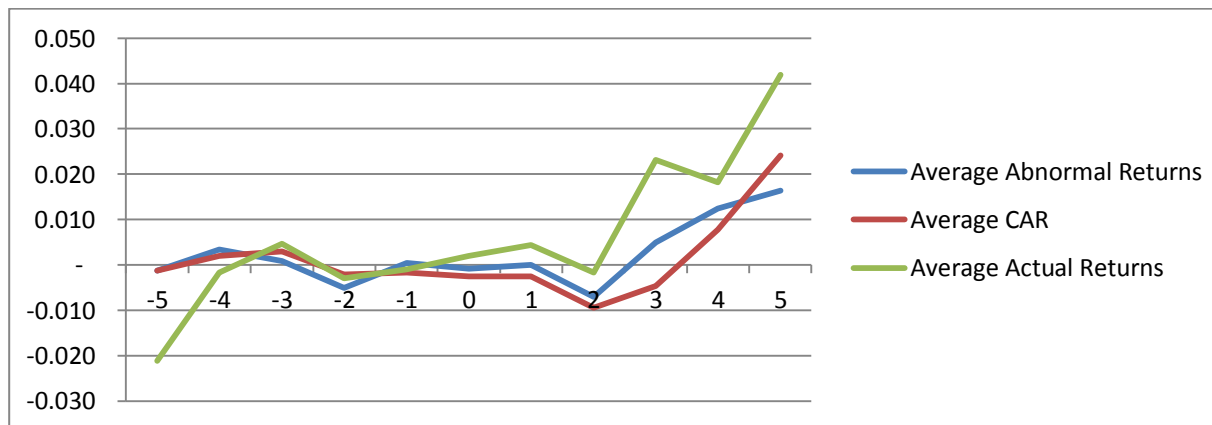
**Figure 4.2: Returns Before and After the 2012 Bonus Payment Date**



**Source: Research Findings**

Similar to the previous year, returns in the days leading to the event recorded erratic movements with the average actual returns observed to increase on day 0 of the event and declining to the negative thereafter. The average abnormal returns and the CAR generally seemed to follow a similar trend recording an increase in the returns on the bonus payment date and the days thereafter. However, both returns record a decline from day 3 after the event and follow a similar trend thereafter.

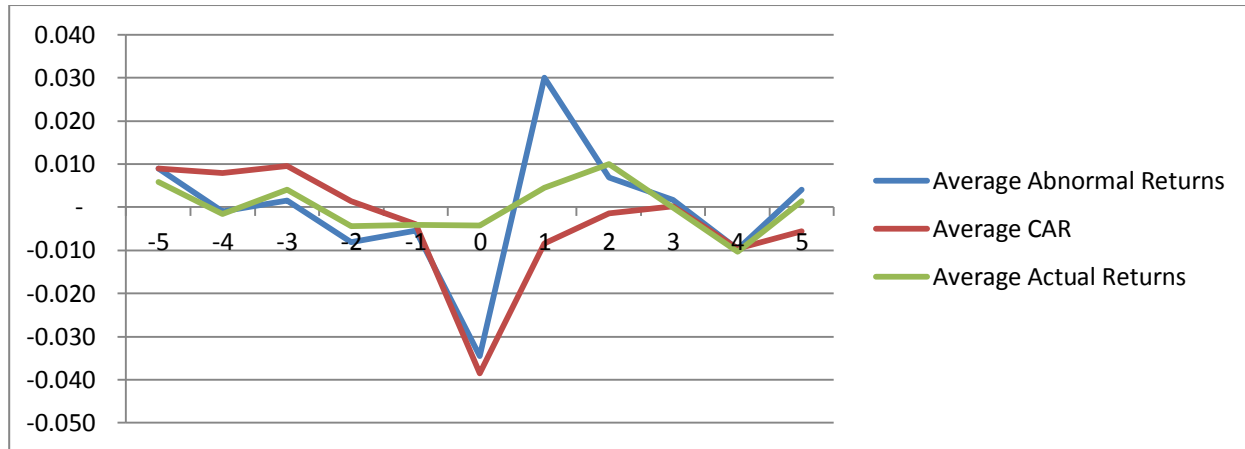
**Figure 4.3: Returns Before and After the 2013 Bonus Payment Date**



**Source: Research Findings**

Unlike the previous years, all the returns seemed to be on a similar trend reporting almost zero returns on the days leading to the event but recording a sharp increase on day 2 following the event.

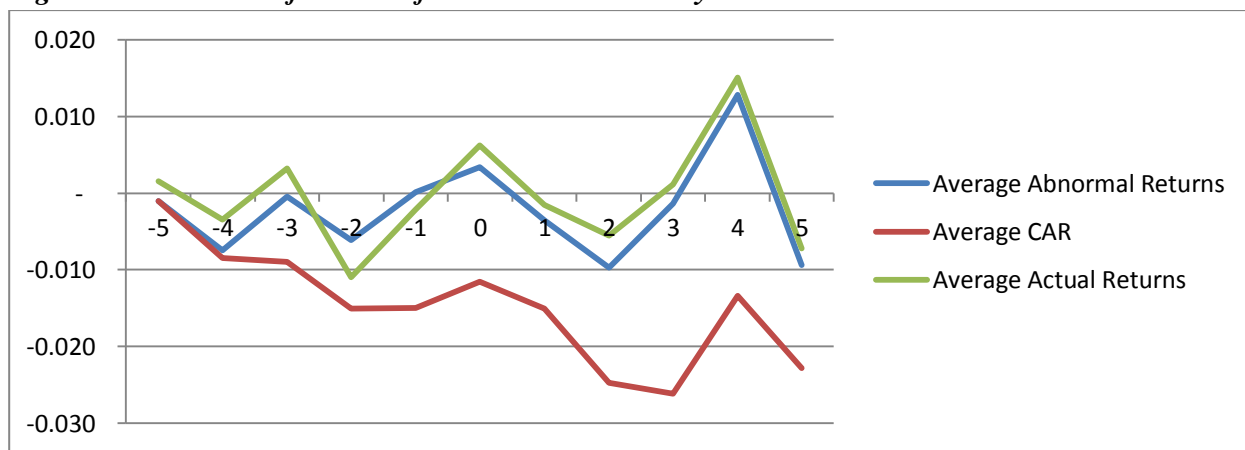
**Figure 4.4: Returns before and after the 2014 Bonus Payment Date**



**Source: Research Findings**

In 2014, average actual returns were observed to be on a general downward trend on the days leading to the event. There was a general increase in returns for the two days following the event but a general decline thereafter. The average abnormal returns and the CAR also recorded a general decline in the days leading to the event with a sharp decline into the negative on the day of the event. A sharp rise in both returns was observed on day 1 after the event but thereafter a decline in the returns.

**Figure 4.5: Returns Before and After the 2015 Bonus Payment Date**



**Source: Research Findings**

The actual returns and the average abnormal returns were observed to closely move together, both recording an increase on the event date but dipping into the negative thereafter. A sharp increase is recorded after day 2 of the event but is quite short-lived as it dips into the negative after day 4. The CAR appeared to be on a general downward trend recording negative returns throughout the event period.

#### 4.2.2. Descriptive Statistics

This section presents the descriptive statistics as the number of observations (N), the mean and the standard deviation for the five payment events over the various years for the individual banks and for the overall industry.

**Table 4.1: One Sample Statistics - 2011 to 2015**

	N	Mean	Std. Deviation	Std. Error Mean
Average Abnormal Return 2011	11	-.0048	.00605	.00182
Average Abnormal Return 2012	11	-.0072	.01106	.00333
Average Abnormal Return 2013	11	.0003	.00764	.00230
Average Abnormal Return 2014	11	-.0032	.01890	.00570
Average Abnormal Return 2015	11	-.0043	.00665	.00201

**Source: Research Findings**

For all the five events, the standard errors for the mean of the abnormal return are relatively small implying that they adequately represent the population mean. All the means apart from the average abnormal returns in 2013 had negative means implying that the bonus payment event had a negative effect on the returns.

**Table 4.2: Group Statistics before and After the Bonus Payment Date**

Event		N	Mean	Std. Deviation	Std. Error Mean
Barclays	Before	25	-.003722	.0127339	.0025468
	After	25	-.009084	.0285324	.0057065
Diamond Trust	Before	25	-.003803	.0171521	.0034304
	After	25	-.010376	.0262031	.0052406
Kenya Commercial Bank	Before	25	.003354	.0109091	.0021818
	After	25	-.001682	.0136034	.0027207
National Bank	Before	25	-.003760	.0341123	.0068225
	After	25	-.001104	.0437229	.0087446
NIC Bank	Before	25	-.007807	.0186830	.0037366
	After	25	-.003430	.0231620	.0046324
CFC Bank	Before	25	-.001549	.0218397	.0043679
	After	25	.000325	.0246396	.0049279
Standard Chartered Bank	Before	25	-.007200	.0156844	.0031369
	After	25	-.000800	.0157903	.0031581
Cooperative Bank	Before	25	.000448	.0199589	.0039918
	After	25	.001072	.0169943	.0033989
Equity Bank	Before	25	-.004862	.0109852	.0021970
	After	25	.000366	.0127790	.0025558
Housing Finance Bank	Before	25	-.005851	.0167715	.0033543
	After	25	.001764	.0146011	.0029202

**Source: Research Findings**

On average, most banks were observed to have negative average abnormal returns implying that the market returns were higher than the stocks' returns. National bank, NIC bank, CFC Bank, Standard Chartered Bank, Cooperative Bank, Equity Bank and Housing Finance Bank all recorded higher abnormal returns after the event implying a positive effect on the abnormal returns. KCB recorded a positive return of .00035 before the event and a negative return of -0.00168 after the event implying a negative effect of the event. The average abnormal returns of Barclays Bank and DTB also experienced similar effects recording lower returns after the bonus payment date than the returns before.

#### **4.2.3. Test of Significance**

The study conducted a one sample t-test to determine whether the abnormal returns were significantly different from zero (0).

Ho: Return not significantly different from 0

Ha: Return significantly different from 0

The study also conducted an independent statistic test to establish whether the average returns prior to the event were significantly different from the average returns post the event

Ho: No significant difference between the return after and before the event date

Ha: There is significant difference between the return after and before the event date

**Average Abnormal Returns**

**Table 4.3: One Sample Test - 2011 to 2015**

	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Average Abnormal Return 2011	-2.617	10	.026	-.00477	-.0088	-.0007
Average Abnormal Return 2012	-2.173	10	.055	-.00725	-.0147	.0002
Average Abnormal Return 2013	0.124	10	.904	.00028	-.0048	.0054
Average Abnormal Return 2014	-0.570	10	.581	-.00325	-.0159	.0094
Average Abnormal Return 2015	-2.144	10	.058	-.00430	-.0088	.0002

**Source: Research Findings**

The T-test results show that the P values for 2012, to 2015 of 0.055,0.904, 0.581 and 0.058 respectively were greater than 0.05 indicating that the abnormal returns did not deviate significantly from their means on payment of the employee bonuses hence the alternate hypothesis is rejected. The P value for 2011 of 0.26 which was less than 0.05 seemed to suggest that the returns had statistical significance to the event.

**Pre and Post Bonus Payment Mean on Abnormal Returns (next page)**

**Table 4.4: Independent Samples Test for Equality of Means - Pre Event and Post Event**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Barclays	Equal variances assumed	5.281	.026	.858	48	.395	.0053616	.0062490	-.0072029	.0179261
	Equal variances not assumed			.858	33.196	.397	.0053616	.0062490	-.0073493	.0180725
Diamond Trust	Equal variances assumed	.874	.355	1.049	48	.299	.0065732	.0062635	-.0060205	.0191669
	Equal variances not assumed			1.049	41.377	.300	.0065732	.0062635	-.0060728	.0192192
Kenya Commercial Bank	Equal variances assumed	.402	.529	1.444	48	.155	.0050352	.0034875	-.0019768	.0120472
	Equal variances not assumed			1.444	45.837	.156	.0050352	.0034875	-.0019854	.0120558
National Bank	Equal variances assumed	.416	.522	-.239	48	.812	-.0026560	.0110912	-.0249563	.0196443
	Equal variances not assumed			-.239	45.319	.812	-.0026560	.0110912	-.0249904	.0196784
NIC Bank	Equal variances assumed	.712	.403	-.736	48	.466	-.0043776	.0059516	-.0163441	.0075889
	Equal variances not assumed			-.736	45.942	.466	-.0043776	.0059516	-.0163579	.0076027
CFC Bank	Equal variances assumed	.029	.865	-.285	48	.777	-.0018736	.0065851	-.0151138	.0113666
	Equal variances not assumed			-.285	47.318	.777	-.0018736	.0065851	-.0151187	.0113715
Standard Chartered Bank	Equal variances assumed	.015	.902	-1.438	48	.157	-.0064000	.0044512	-.0153498	.0025498
	Equal variances not assumed			-1.438	47.998	.157	-.0064000	.0044512	-.0153498	.0025498
Cooperative Bank	Equal variances assumed	.031	.860	-.119	48	.906	-.0006240	.0052428	-.0111653	.0099173
	Equal variances not assumed			-.119	46.810	.906	-.0006240	.0052428	-.0111722	.0099242
Equity Bank	Equal variances assumed	.298	.587	-1.551	48	.127	-.0052280	.0033703	-.0120045	.0015485
	Equal variances not assumed			-1.551	46.942	.128	-.0052280	.0033703	-.0120085	.0015525
Housing Finance Bank	Equal variances assumed	.509	.479	-1.712	48	.093	-.0076148	.0044474	-.0165568	.0013272
	Equal variances not assumed			-1.712	47.107	.093	-.0076148	.0044474	-.0165612	.0013316

**Source: Research Findings**

The P values for all the banks apart from Barclays Bank were observed to be greater than 0.05 suggesting an insignificant difference in the abnormal return before and after the event. Barclays bank had a P value of 0.26 suggesting that equal variances were not assumed and hence implying significant differences in the returns for the bank before and after the bonus payment dates. However, as shown in Table 5 below, all the banks in general had a rather high P value of 0.714 implying that there was insignificant difference between the abnormal returns before and after the event and therefore we reject the alternate hypothesis.

**Table 4.5: Independent Samples Test - Overall**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Average Abnormal Return	Equal variances assumed	.136	.714	-.434	48	.666	-.00118	.00272	-.00665	.00429
	Equal variances not assumed			-.434	47.277	.666	-.00118	.00272	-.00665	.00429

**Source: Research Findings**

### 4.3. Interpretation of the Findings

An analysis of the means before and after the event suggest that all the banks with the exception of Cooperative bank were observed to record negative returns before or after the event. Barclays bank, Diamond Trust Bank and KCB all reported a decrease in returns after the event suggesting a negative effect on stock returns. KCB reported a positive return before the event and a negative return after the event suggesting that the market returns after the event were higher than the stock returns. NBK, NIC, CFC SCB, Cooperative, Equity and Housing Finance Banks all recorded increases in returns after the event with only CFC, Cooperative, Equity and Housing Finance Banks reporting positive returns after the event of 0.003, 0.0010, 0.003 and 0.0017 respectively. This seems to suggest that the event had a positive effect on the returns of these banks.

The study further analyzed the average abnormal returns of all the banks being studied and pointed out the negative returns recorded in 2011, 2012, 2014 and 2015 of -0.048, -0.0072, -0.0032 and -0.0043 suggesting that the event had a negative effect on the banks' stock returns on the respective years. Drawing from the conclusions above, this would seem to suggest that the average returns before the event were significantly higher than the returns after the event, further implying a



negative effect on stock returns. A positive return of 0.003 was only recorded in 2013 which was quite a small effect on the overall returns for the five event periods studied.

A test of significance administered on the variable under study seemed to suggest a significant effect of the bonus payment event on the stock returns observed in 2011, with a p value of 0.026 being observed as compared to a significance level of 0.05. Nonetheless, the remaining four events returned a p value of 0.055, 0.904, 0.581 and 0.058 which were all higher than the 0.05 significance level being tested and hence suggesting that the abnormal returns observed were insignificant to the employee bonus payment event that was under study.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1. Introduction**

This study examined the effect of employee bonus payments on the stock returns of listed commercial banks in Kenya. This chapter summarizes the findings based on the objective of the study and draws conclusions based on these findings. The chapter will further suggest recommendations for further research highlighting any challenges that were encountered in the course of the study.

### **5.2. Summary**

The objective of the study was to establish the effect of employee bonus payments on the returns of listed commercial banks. Based on the results, the abnormal return mean for 2013 was 0.0003 pointing to a positive effect of the bonus payment event on the stock returns for that year. The means for the abnormal returns for 2011, 2012, 2014 and 2015 were -0.0048, -0.0072, -0.0032 and -0.0043, suggesting a negative effect of the bonus payment event on the stock returns for the four years.

A test of significance on the average abnormal return showed a p value of 0.026 in 2011 suggesting that the equity returns deviated significantly from their means in that year. The p values for 2012, 2013, 2014 and 2015 were 0.055, 0.904, 0.581 and 0.058 respectively, all which were greater than 0.05 pointing to no statistical significance of the bonus payment event on the stock returns for the banks.

A test of the pre-event and post-event means also seemed to suggest that equal variances were assumed with an overall p value of 0.714 which was greater than the 0.05 significance level being tested concluding that we reject the alternate hypothesis

### **5.3. Conclusion**

From the research findings presented in the previous chapter, the study focused on data for the 5 year period between 2011 and 2015 and established that employee bonus payments had a negative insignificant effect on the stock returns of the banks listed on the Nairobi Securities Exchange. The

general trend observed before and after the event varied across the days in the event window and generally suggested instances where negative abnormal returns were realized. The statistical tests performed however suggested that the abnormal returns observed were insignificant to the bonus payment event under study and a further analysis of the abnormal return means before and after the event suggested an insignificant difference between the two means. The study therefore concludes that the bonus payment event had a weak negative effect on stock returns for the listed bank as observed from the reaction of the banks over the 5 events under study. This tends to suggest that the information on employee bonus payments is not relevant to the stock market as it doesn't affect the decisions that investors make.

#### **5.4. Recommendations for Policy and Practice**

From the above conclusion, the study recommends that policy makers and human resource practitioners formulate other avenues other than employee bonus schemes that could influence shareholder returns in the stock market in line with the agency principle of shareholder wealth maximization. As an outright assumption, employee bonuses are used to motivate workers to improve performance and work towards shareholder wealth maximization. However, the results of this study found no significant effect on the stock returns as a result of the bonus payment event.

#### **5.5. Limitations of the Study**

The research relied heavily on secondary data for the historical prices which was quite costly to obtain given their costly quotes that the NSE gave and bearing in mind the financial limitations to conduct the study.

Most of the banks also in the study also were not willing to undertake the survey as listed out in the questionnaire for data collection given their policies on confidentiality. The researcher had to rely on his contacts within the different banks to source for the information which was time consuming.

#### **5.6. Suggestions for Further Research**

The current study period only covered an event window of 11 days in attempt to observe any abnormal returns as a result of the bonus payment event. Researches interested in this field of study should further consider a wider event period to establish whether similar results will be observed.

The study was also limited to the listed commercial banks in the Nairobi Securities Exchange. Further research to the reaction of other listed companies that have employee bonus schemes should be conducted to study the effect of employee bonuses paid on the stock returns.

As a proxy, the study relied on stock returns as the measure of performance and utilized event study to be able to observe the effect at a point in time when these bonuses are paid. Further research to observe other proxies of performance such as Return on Equity and Return on Assets should be conducted to establish whether the results will be any different from the ones in this study.

## REFERENCES

- Adams, S. J. (1963). Towards an Understanding of Inequity. *The Journal of Abnormal and Social Psychology*, 67, 422-436.
- Amihud, Y., & Mendelson, H. (1986). Liquidity and stock returns. *Financial Analysts Journal* 42, 43-48.
- Ang, J. S., & Fatemi, A. (1995). The Alignment of Management and Employee Compensations: The Case of U.K. Firms. *Journal of Multinational Financial Management*, 5, 73-85.
- Aroni, J. M. (2011). *Factors Influencing Stock Prices for Firms Listed in the Nairobi Securities Exchange*. Jomo Kenyatta University of Agriculture & Technology.
- Atambo, W. N., Kabare, K., Munene, C., & Nyamwamu, W. B. (2012). Enhancing the Role of Employee Recognition Towards Improving Performance: A Survey of Kenyatta National Hospital, Kenya. *International Journal of Arts and Commerce*, 7.
- Baker, G. P., Jensen, M. C., & Murphy, K. J. (1988). Compensation and Incentives: Practice vs. Theory. *Journal of Finance* 43, 593-616.
- Banker, R. D., Lee, S.-Y., Potter, G., & Srinivasan, D. (2001). An Empirical Analysis of Continuing Improvements following the Implementation of a Performance-based Compensation Plan. *Journal of Accounting & Economics* 30.
- Banz, R. W. (1981). The Relationship between Return and Market Value of Common Stocks. *Journal of Financial Economics* 9, 3-18.
- Basu, S. (1977). Investment performance of common stocks in relation to their price-earnings ratios: A test of the efficient market hypothesis. *The Journal of Finance*, 32(3), 663-682.
- Bhagat, R., & McQuaid, S. J. (1982). Role of subjective culture in organizations: A review and directions for future research. *Journal of Applied Psychology*, 67, 653 - 685.
- Bhandari, L. C. (1988). Debt/Equity Ratio and Expected Common Stock Returns: Empirical evidence. *The Journal of Finance*, 43(2), 507-528.
- Busaule, D. M. (2014, October). The Relationship Between Financial Performance and Executive Compensation of Commercial Banks in Kenya. *Research Project*. University of Nairobi.
- Carrell, M. R., & Dittrich, J. E. (1976). Employee Perceptions of Fair Treatment. *Personnel Journal*, 55, 523 - 524.
- Central Bank of Kenya. (n.d.). Retrieved 07 12, 2016, from Central Bank of Kenya Web site: <https://www.centralbank.go.ke/index.php/banksupervision>

- Cole, G. A. (2004). *Management Theory and Practice*. Cengage Learning EMEA.
- Cunningham, L. A. (1994). 'From Random Walks to Chaotic Crashes: The Linear Genealogy of the Efficient Capital Market Hypothesis. *The George Washington Law Review*, 546,551.
- Dalgaard, R. (2009). *Liquidity and stock returns*. Copenhagen Business School.
- Dulwich, E. (2006). *The impact news has upon stock price volatility: An investigation into the impact major BBC news reports have upon the FTSE 100*. . Aarhus School of Business.
- Edmans, A. (2012). The Link Between Job Satisfaction and Firm Value, With Implications for Corporate Social Responsibility. *Academy of Management Perspectives*, 26 (4).
- Elton, E. J., & Gruber, M. J. (1997). Modern portfolio theory, 1950 to date. *Journal of Banking & Finance* 21, 1749-1759.
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25, (2), 383-417.
- Fama, E., & French, K. R. (1992). The Cross-section of Expected Stock Returns. *Journal of Financial Economics*, 47, 427-465.
- Fischer, D. E., & Jordan, R. J. (2002). *Security Analysis and Portfolio Management, 6th Edition*. Prentice Hall.
- Gerhart, B. A., Minkoff, H. B., & Olsen, R. N. (1995). Employee Compensation: Theory, Practice, and Evidence . *Centre for Advanced Human Resource Studies (CAHRS) Working Paper Series*, 5.
- Gibson, J. L., Ivancevich, J. M., & Donnelly, J. H. (1976). *Organizations: Behavior, Structure, Processes*. Business Publications.
- Gomez-Mejia, L. R., & Welbourne, T. M. (1988). Compensation Strategy: An Overview and Future Steps. *HR Human Resource Planning*, 11.
- Goodman , D. A., & Peavy III, J. W. (1983). Industry Relative Price-Earnings Ratios as Indicators of Investment Returns. *Financial Analysts Journal*, 39(4), 60-66.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through design of work. *Organisational behaviour and human performance*, 16, 250-279.
- Hamner, C. W. (1975). How to Ruin Motivation with Pay. *Compensation & Benefits Review* 7, 17-27.
- Haugen, R. A., & Heins, J. A. (1975). Risk and the rate of return on financial assets: Some old wine in new bottles. *Journal of Financial and Quantitative Analysis* 10, 775-784.

- Heinrich, C. J. (2005). *False or Fitting Recognition? The Use of High Performance Bonuses*. Paper presented at the 8th Public Management Research Conference, September 29-October 1, Los Angeles, CA.
- Herzberg, F. I. (1966). *Work and the nature of man*. Cleveland: World Publishing.
- Hewitt A. (2014). *European Bonus & Sales Compensation Survey*.
- Holthausen, R. W., Larcker, D. F., & Sloan, R. G. (1995). Annual bonus schemes and the manipulation of earnings. *Journal of Accounting and Economics* 19, 29 - 74.
- Homans, G. C. (1961). *Social Behavior: Its Elementary Forms*. Routledge & Kegan Paul.
- Kanfer, R. (1990). Motivation Theory and Industrial and Organizational Psychology. *Handbook of Industrial and Organizational Psychology*, 1, 75 - 170.
- Kopelman, R., & Reinharth, L. (1982). The effect of merit-pay practices on white collar performance. *Compensation & Benefits Review*, 14, 30-40.
- Lambert, R. A., & Larcker, D. F. (1987). An Analysis of the use of Accounting and Market Measures of Performance in Executive Compensation Contracts. *Journal of Accounting Research*, 25, 81-125.
- Lawler, E. E. (1971). *Pay and Organizational Effectiveness: A Psychological View*. New York: McGraw-Hil.
- Lawler, E. E. (2000). *Rewarding excellence: Pay strategies for the new economy Vol.III*. San Francisco: Jossey-Bass.
- Leventhal, G. S., & Michaels, J. W. (1969). Extending the Equity Model:. *Journal of Personality & Social Psychology*, 12, 303-309.
- Leventhal, G. S., & Michaels, J. W. (1969). Extending the Equity Model: Perception of Inputs and Allocation of Reward as a function of Duration and Quantity of Performance. *Journal of Personality & Social Psychology*, 12, 303-309.
- Leventhal, G. S., Allen, J., & Kemelgor, B. (1969). Reducing Inequality by Reallocating Rewards. *Psychometric Science*, 14, 295 - 297.
- Lewin, K. (1938). *The Conceptual Representation and the Measurement of Psychological Forces*. Duke University Press.
- Mackinlay, C. A. (1997). Event Studies in Economics and Finance. *Journal of Economic Literature*, 35, 13-39.
- Malkiel, B. G. (1991). Efficient Market Hypothesis. In J. Eatwell, M. Milgate, & P. Newman, *The World of Economics* (pp. 211-218). Palgrave Macmillan UK.

- Markowitz, H. (1952). Portfolio Selection. *The Journal of Finance*, 7(1), 77-91.
- Merton, R. C. (1980). On Estimating the Expected Return on the Market. *Journal of Financial Economics* 8, 323-361.
- Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology*, 62(2), 237-240.
- Mohrman, M., & Odden, P. (1996). Motivating employees in a new governance era: the performance paradigm revisited. *Public Administration Review*, 66.
- Molonko, I. K. (2004). Board Structure, Board Compensation and Firm Profitability: Evidence from the Banking Industry. *MBA Research Project, University of Nairobi*.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1983). Employee- organization Linkages: The Psychology of commitment, absenteeism, and turnover. *The American Journal of Sociology*, 1315 - 1317.
- Muchai, P. W. (2012, November). Performance Based Compensation Practices among Commercial Banks in Kenya. *Research Project. University of Nairobi*.
- Murphy, M. J. (1977). Efficient markets, index funds, illusion, and reality. *The Journal of Portfolio Management* 4., 5-20.
- Musyoka, L. (2007). *The Relationship between Executive Compensation and Firm Performance in Kenyan Banking Industry*. MBA Research Project: University of Nairobi.
- Njanja, W. L., Maina, R. N., Kibet, L. K., & Kageni, N. (2013). Effect of Reward on Employee Performance: A Case of Kenya Power and Lighting Company Ltd., Nakuru, Kenya. *International Journal of Business and Management*, 8, 41-49.
- Odhiambo, O. A. (2006, November). Executive Compensation and Corporate Performance in Kenya: A Survey of Listed Companies at the Nairobi Stock Exchange. *University of Nairobi*.
- Ogutu, W. K. (2014). *Perception of the Influence of Incentives on Employee Job Performance in the Ministry of Education in Kenya*. MBA Research Project: University of Nairobi.
- Olweny, T., & Omondi, K. (2011). The Effect of Macro-Economic Factors on the Stock Return Volatility in the Nairobi Stock Exchange. *Economics and Finance Review*, 1, 34-48.
- Ongore, V. O., & Kusa, G. B. (2013). Determinants of Financial Performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237-252.
- Osoro, C., & Jagongo, A. (2013). Investors Perceptives on the NASI AND THE NSE 20 Share Index as Performance Measurement Indicators at the Nairobi Securities Exchange In Kenya. *International Journal of Humanities and Social Science*, 3 (18), 153-162.



- Pearce, J. J., Stevenson, W. B., & Perry, J. L. (1985). Managerial compensation based on organizational performance: A time series analysis of the effects of merit pay. . *Academy of Management Journal*, 28, 261-278.
- Perry, J. L., Mesch, D., & Paarlberg , L. (2006). Motivating Employees in a New Governance Era: The Performance Paradigm Revisited\*. *The Premier Journal of Public Administration*, 66 (4), 93-94.
- Pfeffer, J. (1998). *The human equation: Building profits by putting people first.* . Boston: Havard Business Press.
- Porter, L. W., & Lawler, E. E. (1968). *Managerial Attitudes and Performance.* University of California Press.
- Porter, L. W., Lawler, E. E., & Hackman, R. J. (1975). *Behavior in Organizations.* New York: McGraw-Hill.
- Prendegast, C. (1999). The Provision of Incentives in Firms. *Journal of Economic Literature*, 37(1), 7-63.
- Pritchard, R. D. (1969). Equity Theory: A Review and Critique. *Organization Behavior and Huma Performance*, 4, 176-211.
- Rayton, B. A. (1999b). The Residual Claim of Rank and File Workers. *Journal of Corporate Finance.*
- Rayton, B. A. (2000). Firm Performance and Compensation Structure: Performance Elasticities of Average Employee Compensation . *University of Bath School of Management Working Paper Series .*
- Sharma, R. N., & Sharma, R. K. (2006). *Advanced Educational Psychology.* Ne Dehli, India: Atlantic Publishers & Distributers.
- Siegel, J. J. (2008). *Stock for the Long Run, 4th Edition: The Definitive Guide to Financial Market Returns & Long Run Investment Strategies.* Mc Graw Hill.
- Skinner, B. F. (1938). *The Behavior of Organisms: An Experimental Analysis.* New York: Appleton-Century-Crofts.
- Smith, C. W., & Watts, R. L. (1992). The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies. *Journal of Financial Economics* 32, 263-292.
- Telly, C. S., French, W., & Scott, W. G. (1971). The relationship of inequity to turnover among hourly workers. *Administrative Science Quarterly*, 164-172.
- Thorndike, E. L. (1911). *Animal Intelligence: Experimental Studies.* New York: Macmillan.

- Tolman, E. C. (1951). *Purposive Behavior in Animals and Men*. Univ of California Press.
- Vroom, V. H. (1964). *Work and Motivation*. Oxford, England: John Wiley & Sons Inc.
- Wanyama, K. W., & Mutsotso, S. N. (2010). Relationship between capacity building and employee productivity on performance of commercial banks in Kenya. *African Journal of History and Culture*, 2(5), 73-78.
- Waweru, N. M., & Kalani, V. M. (2009). Commercial Banking Crises in Kenya: Causes and Remedies. *Global Journal of Finance and Banking Issues*, 3 (3).

## APPENDICES

### Appendix I: Questionnaire

Assessment of the impact of employee bonuses on stock returns. This study is purely academic and respondents are assured that whatever information is provided will be highly confidential.

#### Instructions:

Kindly tick the box/ fill in the gap that clearly expresses your view about a question.

#### Section A

Name of the Bank .....

The Department .....

#### Section B

1. Does the bank have in place an employee bonus scheme? Yes..... No.....
2. Are the bonuses paid annually? Yes..... No.....
3. Kindly indicate the date which bonuses were paid in the following years; If no bonuses were paid, kindly indicate NIL.

Year	Date
2011	.....
2012	.....
2013	.....
2014	.....
2015	.....

**Appendix II: Listed Commercial Banks in Kenya as at December 2015**

1. Barclays Bank Ltd
2. CFC Stanbic Holdings Ltd
3. I&M Holdings Ltd
4. Diamond Trust Bank Kenya Ltd
5. HF Group Ltd
6. KCB Group Ltd
7. National Bank of Kenya Ltd
8. NIC Bank Ltd
9. Standard Chartered Bank Ltd
10. Equity Group Holdings
11. The Co-operative Bank of Kenya Ltd

*Source: Nairobi Securities Exchange Website*

### Appendix III: Abnormal Returns per Bank

	BBK		DTB		KCB		NBK		NIC		CFC		SCB		COOP		Equity		HFCK	
2011	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return
-5	-0.01	-0.01	-	0.00	0.02	0.02	0.06	0.06	0.03	0.03	0.01	0.01	0.00	0.00	0.01	0.01	-	0.00	0.01	0.01
-4	-	0.01	-	0.01	0.01	0.02	-0.04	-0.03	0.01	0.02	0.03	0.03	-0.00	0.00	-0.03	-0.02	0.00	-0.01	-	-0.01
-3	-0.02	-0.00	0.01	0.01	-	0.02	0.05	0.03	0.02	0.00	0.02	0.00	0.02	0.00	0.01	0.01	0.00	0.00	0.01	0.01
-2	-0.02	-0.01	0.01	0.00	-	0.01	-0.01	-0.01	0.01	0.00	-	0.01	-	0.01	-0.01	0.00	-0.01	-0.02	0.01	0.01
-1	-	0.00	-	0.00	0.01	0.01	0.03	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
0	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.00	0.01	0.01	-	0.00	0.01	0.01	0.00	0.00	0.01	0.01
1	-	0.00	0.01	0.00	0.01	0.01	0.03	0.03	0.03	0.04	-	-0.00	-	0.00	-	0.00	0.01	0.01	-	0.00
2	0.01	0.01	0.01	0.01	-	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.01	0.02	-	0.00	0.02	0.02
3	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.00	0.01	0.01	-	0.00	-	0.00	-0.03	-0.02	0.01	0.00	-	0.00
4	-	0.00	-	0.00	-	0.00	-	0.00	-	0.00	0.01	0.01	-	0.00	0.00	0.00	0.01	0.01	0.01	0.01
5	-0.01	-0.01	0.01	0.01	0.01	0.01	-	0.00	-	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.02	0.02	0.02	0.02
	BBK		DTB		KCB		NBK		NIC		CFC		SCB		COOP		Equity		HFCK	
2012	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return	Stock Return	Abnormal Return
-5	-	0.00	0.04	0.04	0.01	0.01	0.03	0.03	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	-	0.00	0.02	0.01
-4	-0.02	0.01	-	0.01	-	0.01	-0.04	-0.03	0.01	0.00	-	0.01	0.01	0.01	0.01	0.01	-	0.00	0.01	0.01
-3	0.01	0.00	0.01	0.00	0.01	0.03	0.09	0.07	0.01	0.01	-	0.01	0.01	0.00	-	0.01	-	0.00	-	0.01
-2	0.02	0.03	0.06	0.05	0.04	0.02	0.01	0.00	0.01	0.02	-	0.01	0.01	0.02	0.00	0.01	0.01	0.01	-	0.01
-1	0.02	0.01	-	0.01	0.01	0.00	-0.01	-0.02	0.06	0.06	-	-0.01	-0.04	-0.05	-	-0.01	-0.01	-0.01	0.01	0.00
0	-	0.01	0.02	0.01	0.02	0.02	0.01	0.01	0.03	0.02	-	0.01	0.01	0.00	0.00	0.00	-	0.00	0.02	0.02
1	-0.11	-0.10	0.04	0.04	0.01	0.02	0.04	0.04	0.06	0.06	0.01	0.01	0.02	0.03	0.00	0.00	0.01	0.01	0.02	0.00

2	0.00	0.00	0.04	0.04	-	-	0.00	0.02	0.02	-	-	-	-	-	0.00	0.00	0.01	0.01	-	-
3	0.02	0.02	-	-	-	-	0.00	0.03	0.02	0.03	-	-	0.02	0.02	0.00	0.00	-	-	-	-
4	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	-	0.00	0.01	0.00	0.01	0.01	-	0.01	-
5	-	-	-	-	-	-	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.00	0.00	-	0.01	-
	<b>BBK</b>		<b>DTB</b>		<b>KCB</b>		<b>NBK</b>		<b>NIC</b>		<b>CFC</b>		<b>SCB</b>		<b>COOP</b>		<b>Equity</b>		<b>HFCK</b>	
<b>2013</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>
-5	0.04	0.02	0.03	0.01	0.02	0.00	0.02	0.00	0.04	0.02	0.01	0.03	0.03	0.00	0.03	0.01	0.01	0.00	-	0.00
-4	0.00	0.01	0.01	0.00	-	0.01	0.04	0.04	0.02	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.01
-3	0.02	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.02	0.02	0.04	0.03	0.01	0.01	0.01	0.00	-	0.00	-	0.01
-2	0.00	0.00	0.01	0.01	0.01	0.01	0.04	0.03	0.02	0.02	0.05	0.06	-	0.00	0.01	0.01	0.02	0.02	0.03	0.03
-1	0.00	0.00	-	0.00	-	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.02	0.02	-	0.00
0	-	0.00	-	0.00	-	0.00	0.01	0.01	-	0.00	0.01	0.01	0.01	0.01	0.00	0.01	-	0.02	0.01	0.02
1	0.00	0.00	0.01	0.00	0.01	0.01	0.10	0.11	0.01	0.00	0.06	0.06	0.01	0.00	0.01	0.00	-	0.00	0.03	0.03
2	-	0.01	0.01	0.01	0.03	0.02	0.04	0.05	0.02	0.01	0.03	0.03	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01
3	0.02	0.01	0.01	0.01	0.02	0.00	0.06	0.04	0.03	0.01	0.04	0.01	0.01	0.01	0.07	0.05	0.02	0.02	-	0.01
4	0.01	0.00	0.01	0.01	0.02	0.01	0.09	0.08	0.03	0.02	0.03	0.02	-	0.01	0.01	0.00	0.01	0.01	0.01	0.00
5	0.06	0.03	0.03	0.00	0.02	0.01	0.03	0.00	0.05	0.02	0.08	0.04	0.04	0.01	0.09	0.05	0.02	0.02	-	0.00
	<b>BBK</b>		<b>DTB</b>		<b>KCB</b>		<b>NBK</b>		<b>NIC</b>		<b>CFC</b>		<b>SCB</b>		<b>COOP</b>		<b>Equity</b>		<b>HFCK</b>	
<b>2014</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>
-5	0.00	0.00	0.02	0.03	-	0.00	0.01	0.01	0.02	0.02	-	0.00	0.01	0.01	-	0.00	0.02	0.02	0.01	0.00
-4	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	-	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.01
-3	0.00	0.01	0.02	0.03	-	0.01	0.03	0.03	-	0.01	-	0.01	0.01	0.00	0.06	0.06	0.04	0.02	-	0.00
-2	0.01	0.00	0.03	0.03	-	0.01	0.01	0.00	0.01	0.01	-	0.01	-	0.01	0.01	0.01	-	0.01	0.04	0.04
-1											-	-			-	-	-	-	-	-

	0.01	0.01	0.00	0.00	0.01	0.01	-	-	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.05
0	-	-0.04	-0.01	-0.05	-	-0.04	-0.01	-0.04	0.01	0.03	0.01	0.04	-	0.04	0.01	0.05	-	-0.01	-0.01	-0.01
1	0.02	0.05	0.03	0.00	-	0.03	-	0.03	-	0.03	-	0.03	0.02	0.05	-	0.03	-	-0.01	0.04	0.04
2	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.03	0.01	0.01	0.01	0.01	0.02	0.01	-	0.00	0.05	0.04	0.01	0.01
3	0.01	0.01	-	0.00	0.01	0.01	0.08	0.08	0.01	0.01	0.05	0.05	0.01	0.01	-	0.00	0.02	0.01	-	0.00
4	0.01	0.00	-	0.00	-	0.00	-	0.00	0.04	0.04	0.05	0.05	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.00
5	0.04	0.03	0.01	0.02	-	0.00	0.04	0.05	-	0.00	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
	<b>BBK</b>		<b>DTB</b>		<b>KCB</b>		<b>NBK</b>		<b>NIC</b>		<b>CFC</b>		<b>SCB</b>		<b>COOP</b>		<b>Equity</b>		<b>HFCK</b>	
<b>2015</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>	<b>Stock Return</b>	<b>Abnormal Return</b>
-5	0.00	0.00	0.00	0.00	-	0.00	0.01	0.01	-	0.00	0.02	0.02	0.01	0.01	0.01	0.01		0.00	0.01	0.00
-4	0.00	0.00	0.01	0.02	-	0.00	0.03	0.03	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.02		0.00	0.01	0.00
-3	0.00	0.01	0.00	0.00	0.01	0.00	0.04	0.04	0.01	0.00	0.02	0.02	0.00	0.01	0.01	0.01		0.01	0.02	0.02
-2	-	0.01	-	0.01	-	0.01	0.02	0.01	0.02	0.01	0.01	0.00	0.03	0.02	-	0.01		0.01	0.04	0.03
-1	-	0.00	-	0.00	0.01	0.01	0.01	0.01	-	0.00	0.01	0.01	0.02	0.02	-	0.00		0.00	0.01	0.01
0	0.00	0.00	0.01	0.02	-	0.00	0.02	0.02	0.02	0.02	0.01	0.01	0.05	0.04	-	0.00		0.00	0.03	0.02
1	-	0.00	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	-	0.00	0.01	0.01	0.01	0.01		0.00	0.01	0.02
2	0.01	0.02	-	0.00	-	0.00	0.03	0.03	0.02	0.02	-	0.00	0.01	0.01	0.01	0.01		0.00	-	0.00
3	0.02	0.02	0.01	0.02	-	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-	0.00		0.00	0.01	0.02
4	0.01	0.01	0.00	0.01	0.01	0.00	0.10	0.10	0.01	0.00	-	0.00	0.02	0.02	-	0.00		0.00	-	0.00
5	0.06	0.06	-	0.00	0.01	0.01	0.01	0.01	-	0.00	-	0.00	0.00	0.00	0.01	0.01		0.00	-	0.00

Source: Research Findings

