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**ASSESSMENT OF EMPLOYEE PRODUCTIVITY AS A DETERMINANT OF
STOCK PERFORMANCE OF KENYAN LISTED COMPANIES OFFERING
EMPLOYEE SHARE OWNERSHIP PLANS**



Submitted to the Strathmore University Business School in partial fulfillment of the requirements for the Degree of Master of Commerce (MCOM) at Strathmore University

Strathmore Business School

June, 2019

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Strathmore University

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ABSTRACT

The study sought to assess whether Employee Productivity is a determinant of stock performance of Kenyan listed companies offering employee share ownership plans. The premise of the study is that, to be economically viable, an ESOP should be able to, through enhanced employee involvement and satisfaction and morale boosting to improve productivity. This should in turn lead to improved firm performance and thus benefitting both shareholders and employee owners by increasing their holdings value.

This study used stock performance to avoid results that could be occasioned by manipulation of financial data. It employed a mixed research design that included both descriptive and quantitative research designs and purposive sampling was used to pick nine listed companies with approved ESOPs and another nine companies without ESOPs, which acted as the control sample. Secondary data was obtained from the financial reports of the firms for the study period as well as the stock market and was used in running the regression model. The key variable tested was employee productivity while the moderating variable was the presence or absence of ESOPs and several controlling variables were added to the model to improve its predictability.

A t-test was used to check whether there is a significant difference in stock performance between companies with ESOPs and those without ESOPs listed at the NSE. The results showed that there is no significant difference between the stock performance of companies offering ESOPs and those not offering ESOPs listed at the NSE.

Panel data was used to examine the effect of employee productivity in the presence of moderating variable (ESOP) on stock performance of companies offering ESOPs at the NSE. To begin with, presence or absence of ESOP was added as a moderating variable to see if Employee Productivity in the midst of ESOP was a significant determinant of Stock performance of companies listed in the NSE. Secondly, to further investigate the effect of employee productivity on stock performance, control variables were added to the model to see how all the variables interact together to explain stock performance of listed companies with ESOPs at the NSE. A pooled OLS was adopted and a stepwise regression carried out to check the significance of the key variable alone and in the presence of the moderating variable and control variables. At 5% significance, the only significant variable was found to be Ln Profits. Although this was the only variable found to be statistically significant, the overall model was found not to be significant in that the key study variable in the model, Employee Productivity and the moderating variable, ESOP, were not significant.

Primary data was collected using questionnaires both for the management and the employees to supplement the results from the secondary data regression analysis. To check whether management satisfaction with employee productivity is stimulated by the adoption of ESOPs, a t-test was used to check the mean difference and from the results, it appears that the means of the management satisfaction between firms with ESOPs and those without ESOPs listed at the NSE are not statistically significantly different. The study also sought to find out whether employee satisfaction is stimulated by adoption of ESOPs and a t-test was used to check the mean difference and from the results, it appears that the means of the employee satisfaction between firms with ESOPs and those without ESOPs listed at the NSE are statistically significantly different. This now elucidates that although the questionnaire findings had both shown that employees were generally satisfied both in companies with and without ESOPs, the employees in firms with ESOP seem to enjoy significantly more satisfaction.



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DEDICATION

To the almighty God, your grace has always been sufficient.

To my dear parents, Steve Kiura and Mary Kiura, you're the best parents I would ever have asked for. You continue to inspire me to aspire for excellence and have nurtured in me the virtues of faith, love, hard work, patience, integrity and many other values that continuously build my character.

To my Lovely wife, Susan Karuri for the sacrifices you've made, the constant motivation and prayers for me to finish. To Jocelyn Karuri, for always reminding me to finish anything I start albeit tough times.



CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Locally, the study of employee productivity as a determinant affecting the stock performance of employee share ownership plans (ESOPs) by companies listed in NSE have remained largely untouched by rigorous analysis. Majority of the local studies on ESOPs (Nyambane, 2011; Odero, 2012; Nkubitu, 2013; Khisa, 2016) have mainly focused on investigating the effect of ESOPs on the financial performance of firms listed at the NSE. This study would provide answers as to whether employee productivity affects the stock performance of employee share ownership plans (ESOPs) companies listed in the Nairobi Securities Exchange.

According to Kato, Miyajima and Owan, (2016), the ESOPs most positive effects are as a result of a firms success being reflected in a higher equity price creating more wealth for employee owners of the stock. This arises from the notion of aligning employee goals to the goals of the shareholders of the firm. This better alignment should lead to more employee active participation and involvement in various productivity-enhancing activities that would lead to better firm financial performance.

In the early 1970s, the concept of Employee Share Ownership Plans (ESOPs) attracted Senator Russell Long who claimed that ESOPs build employee commitment which eventually leads to increased productivity and profits. (Naegele, Wickens & Herzer, 2010). He argued that legislation would increase corporate performance, ease workplace tensions, reduce wealth disparities and help build a better society (Park & Song, 2011).

In principle, ESOPs confer additional rights to employees than what is normally expected; these include rights to partake in company's profits, right to access financial information of the company and indeed access information regarding company management (Barnatan, 2011). These could bring about changes in attitudes and behavior of employees that may in turn be reflected in among others changes in productivity and financial performance at the company level (Naegele, Wickens & Herzer, 2010).

A number of studies have identified various determinants of the performance of ESOPs. For instance, Klein (2013) and Kruse et al. (2004) found a positive correlation between employee satisfaction levels and use of ESOPs in firms. However, Lavelle et al. (2012)

found no significant correlation between the level of employee satisfaction and adoption of ESOPs. On their part, Park and Song (2011), Kruse et al. (2004) and Kim & Ouimet (2014) reported a significantly positive relationship between employees' productivity and adoption of ESOPs though D'Art and Turner (2006) found a negative relationship. Regarding the influence of the dividend policy on adoption of ESOPs, studies by Pugh et al. (2010), Hallock et al. (2013) and Blasi et al. (2012) all found a significant positive relationship between the level of dividend pay outs and employees' desire to participate in ESOPs. However, on the contrary, Naegele et al. (2010) and Bova et al. (2015) found the level of dividend payouts not to be significantly related to adoption of employee share ownership plans.

Various studies have also intimated the relationship between various determinants and share valuation. Enekwe (2014) in Nigeria, Mukora (2014) and Tuigong (2015) in Kenya, Attah-Botchwey (2014) in Ghana, Masum (2014) in Bangladesh and Joshi (2012) in Nepal in their studies found that dividend policy had a significant positive effects on firms' stock prices. In general, however, dividend policy seems to positively influence adoption of ESOPs. Sharma (2011) found that EPS, DPS and BVP had significant impact on the market price of shares when he examined the effect of equity share price and the following variables; Dividend Per Share (DPS), Book Value Per (BVP), EPS, volume of sales, price earnings ratio and net worth.

Studies of management's satisfaction with employee productivity after adoption of ESOPs have been conducted by Park and Song (2011), Freeman (2007) and Kim and Ouimet (2014), Zhu et al. (2013) and Jones and Kato (2012). These studies found the company's management to be satisfied to a great extent with the level of employees' productivity after adoption of ESOPs. However, studies by Chen and Huang (2006) and D'Art and Turner (2006) showed that company managements were largely dissatisfied with the level of employee productivity in the ESOPs post adoption period and this was attributed to lack of employee productivity gains even after the adoption of ESOPs. On their part, Lavelle et al. (2012) found no significant change in the level of management's satisfaction with employee productivity in the ESOPs post adoption period. In general, there are mixed findings relating to the level of management's satisfaction with employee productivity after adoption of ESOPs, possibly linked to whether employees' productivity improves or remains unchanged after adoption of ESOPs.

In Kenya, ESOPs are recognized under Section 5 of the Income Tax Act as investment vehicles under the Capital Markets Act and many companies are now considering their

potential benefits (Nkubitu, 2013). A number of local studies have been conducted on ESOPs. Nyambane (2011), Odero (2012), Nkubitu (2013) and Khisa (2016) all studied the effects of ESOPs on financial performance of companies listed in the NSE. These studies have a common vulnerability in that in their study of ESOPs they used financial performance data extracted from the financial reports of the listed firms which can be manipulated by the firms' management and employees. Unlike the above studies, this research used stock returns (or share price appreciation) as a measure of ESOPs performance making the study free of possible manipulated data, as is the case with the former studies. Further, this study is critical in that it would investigate the significance of employee productivity as a determinant of stock performance of ESOP firms in the country, an area other local studies have not covered.

1.2 Statement of the Problem.

The price of a firm's stock in an efficient market follows its fundamental value. A company therefore, should have a higher market value of its stock due to the enhanced productivity created by ESOPs. It then follows, according to Kim and Ouimet (2014), that to be economically viable, ESOPs should lead to improved firm performance through enhanced employee involvement, employee satisfaction and morale boosting leading to improved productivity, which should then lead to improved firm performance, thus benefitting both shareholders and employee owners by increasing their holdings value.

Globally, various studies have identified various determinants to the performance of ESOPs. Conte and Tannenbaum (1978) did a study to compare the profitability of 30 ESOP firms with that of comparable sized firms from the same industry and found that firms with ESOPs were 1.7 times more profitable than the compared firms. Filbeck and Preece (2013) using data for the period 1997- 2009 examined the effect of employee productivity for Fortune's annual "best 100 companies to work for in America" survey, found that the average market-adjusted abnormal return on the event day of the release of the results to be highly significant.

Locally, Odero (2012), Nkubitu (2013) and Khisa (2016) studied effects of employee stock ownership plans on financial performance of companies listed in the NSE. Both Nkubitu (2013) and Khisa (2016) employed multi-regression analysis technique while Odero (2012) employed paired t-test in analysis. The findings of Nkubitu and Khisa were similar in that they revealed that ESOPS had a strong, positive and significant influence on the financial performance of ESOP companies listed in the NSE while the findings of

Odero deviated a bit as they indicated mixed results. Perhaps, the unique analysis method used by Odero caused the inconsistent results.

All these local studies focused on the effect of ESOPs on the financial performance of listed firms in Kenya. However, the local studies have a common vulnerability in that they used financial performance data extracted from the financial reports of the listed firms, which can be manipulated, by the firms' management and employees. The approach used in this study is alive to the fact of a possibility of financial report manipulation and has taken a different route by using stock market returns, which in the long run cannot be manipulated as per the efficient market hypothesis. There are several motivations behind this study. Firstly, the main reason for ESOP incorporation is to align the employees' interests with the interests of the shareholders and hence they should ideally have a positive effect on company performance and employee productivity. Therefore, it would be prudent to ascertain whether the companies with ESOPs have superior stock market performance compared to companies that have not incorporated ESOPs. Secondly, as ESOPs are deemed to increase employee productivity and sense of ownership of the company which would subsequently lead to increased firm performance, it would be interesting to see whether these contribute to superior stock performance of the company. Lastly, the existing local studies have not focused on the determinants of stock performance of Kenyan firms listed in the NSE that own ESOPs.

1.3 Objectives of the Study

1.3.1 General Objective

The study seeks to assess Employee productivity as a determinant of stock performance of Kenyan listed companies offering employee share ownership plans.

1.3.2 Specific Objectives

- i. To which extent is there a difference between stock performance of NSE listed companies offering and not offering ESOPs.
- ii. To which extent is there an association between employee productivity and stock performance in companies offering and not offering ESOPs in the NSE
- iii. To assess management satisfaction with employee productivity in companies with or without ESOPs listed at the NSE.
- iv. To assess employee satisfaction in companies with or without ESOPs listed at the NSE.

1.4 Research Questions

- i. What is the extent of the difference in stock performance between companies with or without ESOPs listed at the NSE?
- ii. What is the extent of the association between employee productivity as a determinant of stock performance of companies offering ESOPs and those not offering ESOPs listed at the NSE?
- iii. What is the extent management satisfaction with employee productivity in companies with or without ESOPs listed at the NSE?
- iv. What is the extent of employee satisfaction in companies with or without ESOPs listed at the NSE?

1.5 Scope of the study

The study was conducted among firms listed in the NSE including those with ESOPs and those without ESOPs. The study considered the firms' stock performances for a period of 5 years after the adoption of the ESOP and the study considered their stock performances in the ESOPs post-adoption period.

1.6 Significance of the study

1.6.1 Management of the listed firms

This study would be helpful to the management of the listed firms in Kenya as it highlights the determinants affecting the stock performance of ESOPs companies listed in the NSE. The findings may guide the listed firms in their financial decisions with respect to ESOPs and particularly in the context of maximizing staff productivity and firm financial performance. The study would also motivate management to create or affirm policies that maximize employee productivity in order to increase their shareholders wealth.

1.6.2 Researchers

This study also adds to the existing body of knowledge on the determinants affecting the stock performance of ESOPs companies listed in the NSE. As such, other interested scholars and academicians can use it as a basis for further research on the study subject.

1.6.3 Investors in the stock market

This study would be of significance to the investors who would want to compare whether employee productivity really impacts stock performance when coupled with employee ownership of the firm. This would help guide future investment decisions. Secondly, local studies of ESOPs have largely focused used financial performance data extracted from financial reports of listed firms, which can be manipulated. This study uses stock performance data that in the long run cannot be manipulated as per the Efficient Market Hypothesis.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter contains the theoretical framework of the study, empirical review, conceptual framework, research gaps and chapter summary.

2.2 Theoretical framework

There are several theories that may explain stock performance e.g. Portfolio theory, Capital Assets Pricing Model, Prospect Theory, the Dividend Relevance Theory, the Expectancy theory and the Efficient Market Hypothesis. This study was guided by the dividend relevance theory, the expectancy theory and the efficient market hypothesis theory, as described in the subsequent subsections.

2.2.1 Dividend Relevance Theory

The Dividend Relevance Theory (DRT) was developed by Gordon and Lintner (Gitman & Zutter, 2012). One of the important aspects is the argument that any investor is more likely to take the dividends that are available now rather than those promised at a future date. Lack of dividend distribution on the other hand or even lower than expected dividends leads to lack of certainty on the part of the investor thereby reducing the share value (Gitman & Zutter, 2012). DRT embraces both Walter's model and Gordon's model.

Walter's (1963) model relates relevance of dividend policy to share value and has three assumptions. Firstly, retained earnings are the only possible source of financing investments in the company. Secondly, the cost of capital and the rate of return on investments are constant and lastly, is that the company does not close down at any point in time (Al-Malkawi et al., 2010).

Walter's model is criticized for its simplicity due to its unrealistic assumptions that don't conform to the real world markets. The model does not factor in external financing for companies and all financing is done mainly through retained earnings, which isn't plausible in the real world. Secondly, the model assumes that r (rate of return) and k (cost of equity) are constant which is seldom rare.

Gordon (1963) is the other dividend relevance theory. In addition to Walter's model assumption, Gordon's model assumes that the growth rate of a firm is equal to the

product of the ratio of retention (b) and the rate of return (r). This ratio must be higher than the cost of capital k(e) and the rate of growth.

The Gordon model assumes that the company has no debt or external financing, has a constant internal rate of return and cost of capital, has perpetual earnings and the cost of capital is not greater than the growth rate of the firm. The model has been criticized for the unrealistic assumptions made, as it's faulty to assume that all the investments are made by retained earnings. The cost of capital and internal rate of returns cannot be constant as that means that the wealth of the shareholders is not optimized if the return is constant and business risks are not accounted for.

2.2.2 Expectancy Theory

Vroom developed the Expectancy Theory of motivation in 1964. This theory emphasized the need for firms to always acknowledge the relationship between rewards and performance in order to make sure that the employees desire and deserve those rewards. The theory explains the reasons individuals choose one behavioral option over another. The theory is anchored on the idea that human beings are motivated when they believe that their decision will lead to the outcome they desire (Redmond, 2010). The theory posits that in order for the employees to be motivated, they must perceive the link between outcomes and performance. Their behavior will therefore be guided by the outcomes they hope for (Torrington, 2009).

The expectancy theory has been criticized for its simplicity by various researchers. Lawler (1971) argued that it is not always the case that employees will increase productivity after being incentivized. Lawler proposed that whenever there are a number of outcomes, individuals will usually have a preference among them and the individual will choose their action(s) to achieve desired outcome.

This theory is relevant to the study as the employees are expected to positively modify their behavior as a result of award of ESOPs, which would be beneficial to them. In return the employees are expected to align their individual goals with the corporate goals. In relation to ESOPs this theory holds that award of ESOPs is intended to positively influence the employees' behaviors motivating them to increase their personal efforts towards their work which in turn enhance the organizational performance.

2.2.3 Efficient Market Hypothesis Theory

Eugene Fama developed the efficient markets hypothesis (EMH) in 1970. It posits that self-interested traders with private information are motivated to acquire and act on their information in order to gain profits, which contributes to more and more efficient market prices. The EMH theory holds that an investor cannot outperform the market because the stock price is a reflection of all available information (Lavelle et al., 2012).

It is therefore a hard to forecast the movement of the prices. In efficient markets, information disseminates randomly and hence the randomness in the occurrence of stock prices (Pugh et al., 2010). Arrival of new information is what drives the price changes and an efficient market has prices adjusting fast to new information. This surmises the argument that the current stock price is a reflection of all available information at that time. Due to randomness of information, security prices adjust before investors have time to trade and profit from new information (Sewell, 2012). EMH concludes that for a majority of investors, information vis a vis analysis payoff would likely not outweigh transaction costs and only a few investors at equilibrium can profit and outperform the market.

Critics of the EMH have taken issue with EMH by pointing out to renowned value investors like Warren Buffet who have over time outperformed the market. Events such as stock markets crash and insider trading have also cast doubt on EMH (Klein, 2013).

The EMH theory is relevant to this study given the fact that based on this theory stock market data cannot in the long run be manipulated as the market is deemed efficient and factors in all available information. This is unlike the use of financial statements, which can be manipulated by employees to boost performance of ESOPs hence, justify their higher share prices. For the purpose of this study, stock performance will be measured using stock returns of firms listed in the NSE, which is deemed to be a weak form of efficient market (Khisa, 2016).

2.3 Empirical Review

The empirical review consists of a review of existing literature and past studies done in the area of ESOPs based on the study objectives. This section therefore is structured into empirical literature on determinants of ESOPs and on stock performance of ESOPs firms.

2.3.1 ESOPs and Firm Performance

In a study of the keys to maximizing ESOP potential with focus on the determinants of a strong ESOP, King (2013) identified employee satisfaction, employee productivity and firm dividend policy decisions as some of the determinants associated with strong ESOPs. Studies by Park and Song (2011) and Kruse et al. (2004) both applied descriptive statistics and used primary data to explore the link between employees' productivity and adoption of ESOPs and the two studies results concurred that a positive relationship existed between employees' productivity and adoption of ESOPs. The studies pointed that to motivate the employees to work harder, it was better to tie their compensation to share ownership schemes. This way, the employees' feel like they work for themselves, since they are part owners of the company in turn spurring company performance. Most other studies (such as, Lavelle et al., 2012; Khisa, 2016; Kim & Ouimet, 2014) agree with these findings with the exception of D'Art and Turner (2006) who found a negative relation between employees' productivity and use of ESOPs.

Available literature indicates that ESOPs are likely to be found within companies where the employees have a high satisfaction with their employer. This is as evident by studies done by Klein (2013) and Kruse et al. (2004) who found a positive correlation between employee satisfaction levels and use of ESOPs in firms. However, Lavelle et al. (2012) found no significant correlation between the level of employee satisfaction and adoption of ESOPs.

Conte and Tannenbaum (1978) compared the profits of 30 ESOP firms with that of similar size but without ESOPs in the same products. They found that firms with ESOPs were 1.7 times more profitable than the compared firms. Rosen and Quarrey (1978) compared the rates of growth in sales volumes of 45 ESOP companies with their peers in the industry. They calculated the differences in their performance over a five-year periods before and after ESOP adoption and found that prior to instituting their ESOPs, the 45 companies grew more than their peers; annual sales grew by 1.89% more than the peers. After introducing ESOPs, sales growth was 5.4% greater. The conclusion was that ESOPs contributed greatly to corporate performance.

Using a sample of 750 firms listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange between 1996–2000, (Meng, et al, 2011) assessed the performance of ESOP and non-ESOP firms by controlling for firm and industry characteristics using panel data analysis method and found that the coefficient on the logarithm of total assets had a

significant impact on ROA, ROE and return on sales (ROS). Meng, et al, (2011) also conducted a study to find out if ESOP shares are valued higher than non ESOP shares based on the premise that since ESOPs are deemed to improve employee productivity, they would in turn lead to increased firm performance, which translates to benefits for shareholders and employees since it increases the value of their holding. In that regard, they compared stock valuation between the ESOP group and the non-ESOP group by evaluating the price of their IPOs. They discovered that the market did not react to valuing the new stock for both the ESOP and non-ESOP firms. The matched sample, to support the findings also indicated a non-significant variation in market capitalization of total shares traded in the two groups at the first-day closing price. The matched sample had removed size and industry heterogeneity between the two groups.

Beatty (1995) using a sample of 145 announcements of ESOP found a positive effect of ESOP on performance. Indeed, a study from Mehran, (1999) using 382 announcements of ESOP recorded between 1971 and 1995 to measure the impact of ESOPs on firm performance in the stock market corroborated this and found a cumulated stock exchange performance of 7% higher than those without ESOPs. This may be explained by the fact that investors look at such announcements with the optimism that ESOPs will mean better future performance for such firms.

2.3.2 Determinants of Stock Performance

The subject of determinants of stock performance has been debated for the longest time. Different researchers have identified various determinants depending on where the research was carried out.

Empirical studies suggest that EPS is a significant factor that influences the price of a share. Gordon (1959) and Collins (1957) who are the pioneers of the studies on elements and determinants of share price identified earnings as one of the dynamics influencing share prices. Beaver (2009), further, put forth that current period revenue present data to predict future periods' profits. The future periods' earnings, further, provide data that helps in the development of prospects in future. This gives data that enables a firm determine the share price.

Uwuigbe, Olusegun & Godswill (2012) examined the determinants of share prices in the Nigerian stock exchange market. Using the judgmental sampling technique, a total of 30 companies were selected and data (2006 to 2010) collected from the stock exchange and

annual reports of the firms. The researchers modeled the effects of financial performance, dividend payout and financial leverage on share price of listed firms. They concluded that financial performance and dividend payout positively affected share prices while financial leverage (proxied by debt-equity ratio) had a significant negative relationship with market value of share prices in Nigeria stock exchange.

Sharma (2011) found that EPS, DPS and BVP had significant impact on the market price of shares when he examined the effect of equity share price and the following variables; Dividend Per Share (DPS), Book Value Per (BVP), EPS, volume of sales, price earnings ratio and net worth. This was echoed by Nirmala et al (2011) who modeled share price as a function of several variables i.e. dividend, profitability, price-earnings ratio and leverage. They used data collected between 2000 and 2009. They used the panel unit root, panel co-integration, correlation and OLS tests. They discovered that dividend, price-earnings ratio and leverage were greatly influenced share prices. Dividend and price-earnings ratio has a positive relation with share price while leverage has a negative relationship.

Ebrahimi and Chadigani (2011) in a study about the relationship between earnings, dividends and stock prices. The population included all the Iranian companies using cross-sectional, pooled and panel data regression models for testing the effects caused by the selected variables found that in some years, the shareholders paid special attention to dividends and also price. Hashim, Shahid, Sajid and Umair (2013), in their study on why firms allocate dividends found that the reasons constituted to lowering the rise in agency costs between shareholders and managers reducing investor insecurity. The research also concluded that firms paying more dividends could easily access capital markets and dividends influence the stock's valuation.

Seetharaman and Raj (2011) found a solid positive connection between profit per share and stock costs. However, there was also a significant impact of earnings announcements on stock prices. Sare, Akuoko and Esumanba (2013) observed that earnings announcements carried weight when it came to investors making decision on share prices. They concluded that a higher current profit lessened instability about future money streams consequently a high payout proportion would decrease the cost of capital along these lines which would increase stock returns. Habib, Kiani and Khan (2012) saw that the profit yield and share costs emphatically relate however, payout proportion was adversely related. Profit approach affected share value unpredictability and that profit

flagging impact was likewise significant in deciding the share value instability, which influenced stock returns.

2.3.2.1 Employee Productivity and Stock performance

Antunovich and Laster (2010), employed data from the US survey for the years 1993-2006 gathered by Fortune Magazine. They established that stocks of the firms that were most admired posted positive abnormal returns of 3.2% in the following year and 8.3% over the following three years. This was concurred by Filbeck and Preece (2013) who used data for the period between 1997- 2009 examined the effect of employee productivity for Fortune's annual "best 100 companies to work for in America" survey and found that the average market-adjusted abnormal return on the event day of the release of the results was a highly significant 4%, while the average abnormal return for the following year was 11.8%.

Chung et al. (2009), on the other hand, found little evidence that firms with higher productivity outperform those with lower productivity on the stock exchange. Employing data for between 2000-2008 period, they examined the performance of only the extremely high ranked 10 firms and the extremely low ranked 10 firms, rather than the 50-firm portfolios employed by Antunovich and Laster (2010). Their results therefore, could have resulted from company-specific risks in their portfolios. Cox et al. (2004) and Graves and Waddock (1994) therefore conclude using UK and US data respectively, that poor productivity in a company will most likely not attract long-term institutional investors who hold the firm's stock because they will screen such firms very closely.

2.3.3 Management satisfaction with employee productivity

Regarding the level of management's satisfaction with employee productivity after adoption of ESOPs, a number of studies done have shown mixed results with some showing the management as being generally satisfied while others showing the management as being dissatisfied.

In a study of the motives and outcomes of broad-based employee stock ownership in United States conducted by Kim and Ouimet (2014), the study found the management to have been satisfied to a great extent with employees' productivity following the adoption of ESOPs. This was supported by Freeman (2007) who found that the management's level of satisfaction with employee productivity was significantly higher in the ESOPs post adoption period compared to the pre-adoption period. Similar findings were reported

by Park and Song (2011) in Malaysia, Zhu et al. (2013) in China and Jones and Kato (2012) in Japan - all of whom who reported that the company managements were generally satisfied with the level of employees productivity after adoption of ESOPs.

However, in a study of ESOPs and corporate R&D expenditures in Taiwan by Chen and Huang (2006) as well as in a study of profit sharing and employee share ownership in Ireland by D'Art and Turner (2006), it was found out that the management's level of satisfaction with employee productivity was significantly lower in the ESOPs post adoption period compared to the pre-adoption period. The two studies concluded that the company managements were largely dissatisfied with the level of employee productivity in the ESOPs post adoption period and attributed this to the lack of notable employee productivity gains after the ESOPs adoption. On their part, Lavelle et al. (2012) in Ireland found no significant change in the level of management's satisfaction with employee productivity in the ESOPs post adoption period.

2.3.4 Employee satisfaction in companies

Buchko (1992) carried out a study to examine the effects of ESOP on employee attitudes and turnover behavior over a long period of time. The results of the study revealed that employees with greater perceived influence due to ESOP ownership as well as those with greater financial stake in the ownership program felt more satisfied with the ESOP program, showed more commitment to the organization, were less likely to leave the firm for another. Klein (2013) also argues that in a firm with ESOPs, where the shareholders often get rewards for their ownership, staff retention was high. His study was based on 37 employee stock ownership plan (ESOP) companies with a population of 2804 employees.

Research carried out also showed that ESOPs are likely to be found within companies where the employees have a high satisfaction with their employer. This is evidenced by studies done by Klein (2013) and Kruse et al. (2004) who found a positive correlation between employee satisfaction levels and use of ESOPs in firms. However, Kim (1984) carried out a field experiment and in the study found that setting goals and feedback among employees, involving simultaneous behavior and outcome had a greater impact on sales performance than when each was assessed separately against performance. This was however not the case with employee satisfaction. Lavelle et al. (2012) support this by finding no significant correlation between the level of employee satisfaction and adoption of ESOPs

2.3.5 Stock performance of ESOPs firms

Studies have been done on the linkage between ESOPs adoption and stock performance of ESOP firms and the outcomes on the actual effect of ESOPs on stock performance were found to vary (Hallock et al., (2013).

Cin and Smith (2011) studied ESOP and participation in South Korea with a focus on the incidence, productivity effects and stock prospects using a descriptive design based on secondary data obtained publicly traded South Korean manufacturing firms. They found that an increase in an average ESOP from 2% to 3% of total shares would lead to an increase in output of 2.6%, which positively impacted, on the firms' stock performance. Similarly in a study of ESOPs and their effect on productivity in Huawei, Zhu et al. (2013) and applying econometric models on secondary data found that ESOPs had a significant positive effect on the stock performance of Huawei. However, in a study of whether employee share option scheme could improve firm's performance in Malaysian firms by Long et al. (2013) and which adopted a descriptive survey found that the deterioration in firms' stock performance was not arrested by ESOPs. Perhaps, the differences in these studies findings could be due to the differences in the data analysis models used. This study will seek to assess the stock performance of listed firms with ESOPs in the local context.

Pierce and Furo (2011) and Kim and Ouimet (2014) both evaluated the performance of ESOPs using the holding period yield (HPY) formula and concluded that the choice of stock prices movement as the measurement of stock performances was appropriate given that in efficient capital markets, the stock prices cannot be manipulated and reflect all the available information. As such they argued that the measure was more appropriate than other financial performance based parameters, which were at the risk of being easily manipulated to present the preferred value of a firm rather than the actual value.

Odero (2012), Nkubitu (2013) and Khisa (2016) all studied the effects of ESOP plans on financial performance of companies listed at NSE. Both Nkubitu (2013) and Khisa (2016) employed multi-regression analysis technique while Odero (2012) employed paired t-test in analysis. The findings of Nkubitu and Khisa were similar in that they revealed that ESOPs had a strong, positive and significant influence on the financial performance of ESOP companies listed in the NSE while the findings of Odero deviated a bit as they indicated mixed results. These studies have a common vulnerability in that in their study of ESOPs performance they used financial performance data extracted from the financial

reports of the listed firms which can be manipulated by the firms' management and employees. Unlike the above studies, the current study will use stock returns as a measure of ESOPs performance making the study free of possible manipulated data, as is the case with the former studies.

From the above empirical review it is evident that research on ESOPs performance varies in terms of the methodology used and findings. Some studies have indicated a positive impact; others have indicated a negative while others have found mixed results. The general conclusion however of majority of empirical studies is that adoption of ESOPs impacts positively on the stock performance of ESOP firms. The current study will be seeking to examine whether the stock performance of firms with ESOPs significantly differs from that of firms without ESOPs.

H₁: There's a difference in stock performance between companies that have ESOPs and those without ESOPs

The study is also seeking to examine whether there's a significant relationship between employee productivity and stock performance of companies offering ESOPs

H₁: There is a significant relationship between Employee Productivity and stock performance of companies offering ESOPs.

2.4 Research Gap

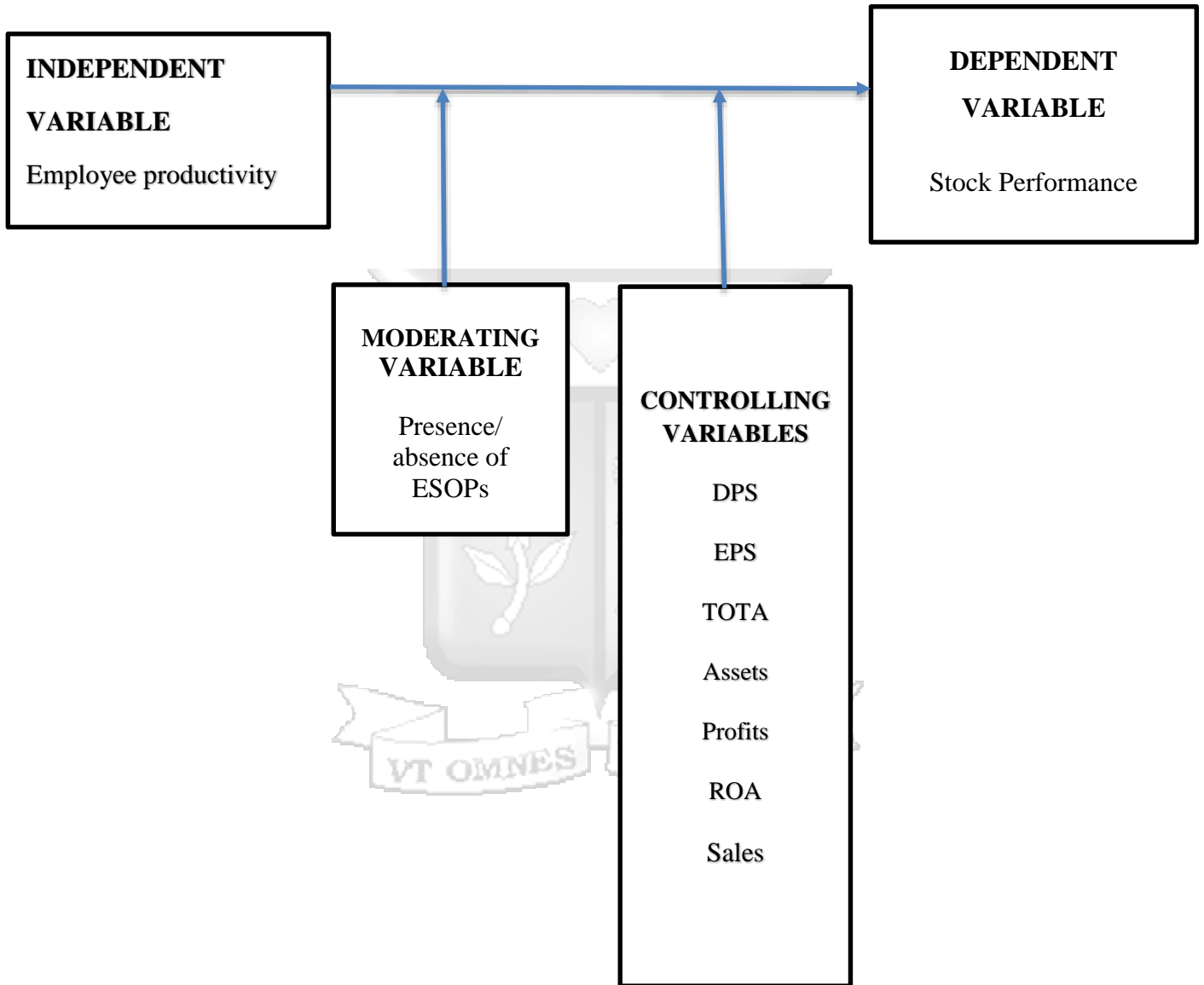
A number of local studies have been done focusing on employee share ownership plans. The studies by Nyambane (2011), Nkubitu (2013) and Khisa (2016) revealed that ESOPs had a strong, positive and significant influence on the financial performance of ESOP companies listed in the NSE while the study by Odero (2012) indicated mixed results. All these local studies focused on the effect of ESOPs on the financial performance of listed firms in Kenya. None of the local studies have focused on Employee productivity as determinant of stock performance of ESOPs firms listed in the NSE, which is the research gap that the current study seeks to fill.

2.5 Conceptual Framework

A conceptual framework is a tool of analysis used in research to organize ideas while showing the possible outcomes in a diagram (Mackau, 2003). The independent variables in the study were earnings per share, dividends per share, total asset turnover, return on assets, sales per employee (employee productivity), assets, profits and sales. As

evidenced from the literature review, these variables were expected to have a positive relationship with the dependent variable. A dependent variable is what is affected by the manipulation of the independent variable (Dale, 2001). In this study, stock performance returns were the dependent variable.

Figure 2. 1 Conceptual Framework



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents an outline of the research methodology in this study. It covers the research design, target population of the study, data collection procedure and the sources of the data, and the data analysis tools.

3.2 Research Philosophy

The researcher adopted a positivism approach (scientific method). This paradigm reflects a deterministic philosophy where there is always a cause-effect relationship (Creswell, 2003). The study was based on the principle of deduction as elucidated by positivism, whereby hypothesis was derived from the theory before data collection from the sample. The positivism paradigm is appropriate for this study as it makes it possible to measure the reactions of a large number of subjects as representative of some wider population.

3.3 Research Design

The study employed both descriptive and quantitative research design. A descriptive survey research design is used where a study seeks to describe, estimate population and predict the characteristics of certain groups (Cooper and Schindler, 2011). Descriptive research design is appropriate for this current study as it enables the generalization of study findings to a larger population as well as to describe the state of affairs as they exist without manipulation of variables (Kothari, 2004).

3.4 Population

Mugenda and Mugenda (2003) define a population as the entire group of individuals, events or objects having common characteristics. The study population comprised of all the firms currently listed in the Nairobi Securities Exchange, including those with ESOPs and those without ESOPs. This was so as to be able to compare their stock performances and thereby draw inferences. Currently, there are 67 firms listed at the NSE as indicated in the NSE's website in 2017. Of the 67 listed firms, ten have approved ESOPs while 57 have no ESOPs. The population distribution is as shown in Table 3.1.

Table 3. 1 Population Distribution

Category	Population Siz (Companies)	Population Siz (Respondents)	Proportion (Companies) %	Proportion Respondents %
Those with ESOPs	10	14,251	14.9	65.8
Those without ESOP	57	7,406	85.1	34.2
Total	67	21,657	100.0	100

Source: Survey Data

The population of the employees was 21,657 according to the financial reports of NSE (2016) and the gathered information from the HR Departments of the selected companies.

3.5 Sampling

Ngechu (2004) affirms the need of selecting a representative sample through making a sampling frame. Sampling can be done using various methods e.g. Simple Random, Stratified, Cluster, Systematic, Multistage and purposive Sampling. Purposive sampling was employed to ensure that the control sample companies were selected on the basis of market capitalization to ensure that the test sample companies were of similar features as the control sample companies (Salant & Dillman, 1994).

The study used purposive sampling to pick the nine listed companies with approved ESOPs (Appendix III) and another nine companies without ESOPs but which were from the same sector as those with ESOPs, which acted as the control sample. Safaricom was omitted, as there was no other company to compare with in the telecommunication sector.

Kothari (2004) indicated that control samples provide an effective way of evaluating a given attribute regarding the study subject. In this study, the choice of the matching firm was selected on the following basis: the firm was listed in the same year as the ESOP firm and it must be in the same sector classification as the ESOP firm. This was used for comparison with companies without ESOPs. According to Oso and Onen (2005), purposive sampling usually has a purpose in mind therefore the sample is selected including people of interest and excluding those who are not. The study sample thus comprised of 18 listed firms, 9 with ESOPs and 9 without ESOPs based on their trading

segment at the Nairobi Securities exchange. The sample size distribution was as shown on Table 3.2.

Table 3. 2 Sample Distribution

Category	Sample Size	Sample proportion %
Companies with ESOPs	9	50.0
Companies without ESOPs	9	50.0
Total	18	100.0

Source: Survey Data

The population of the employees was 21,657 according to the financial reports of NSE (2016) and the gathered information from the HR Departments of the other 9 selected companies without ESOPs.

3.5.1 Sample size Determination for employees

Mugenda and Mugenda, (2003) argue that if the population is above 10,000 individuals, 192 of them can be used as the sample size. They recommend the following formula:

The sample size was determined using statistical population surveys whereby:

$$N = Z^2 * pq / d^2$$

Where N = desired sample size (>10,000)

Z = Standard normal deviation equal to 1 at 95% confidence level.

P = Proportion of the target population having the particular characteristic being measured estimated at 0.5.

$$q = 1 - P$$

d = level of statistical significance (0.05)

$$N = 1.96^2 X 0.25 X 0.5/0.05^2$$

$$= 192$$

To have an equitable number, the 192 respondents were divided by the number of participating companies. Systematic sampling technique was used to obtain the respondents. The HR teams in the firms were asked to volunteer a list of employees whereby a respondent was volunteered after a specific interval count until the number of respondents targeted was obtained. Even though the contents of the questionnaire were revealed to the HR team for authentication, they were not revealed before hand to the respondents. According to Cooper and Schindler (2008) the systematic sampling technique is used for it's simplicity as well as it's ability to eliminate the problem of clustered selection.

3.5.2 Sample size Determination for management

To arrive at the target population of the senior managers, 2 senior managers conversant with ESOPs we selected. The targeted companies were 9 with ESOPs and 9 without this gave a total of 18 companies multiplied by 2 Senior Managers totaling to 36 participants. According to Yin (2003) a sample of 30 is desirable to ensure adequate data that allow for performance of bivariate and multivariate analysis. Thus, for this study a sample of 36 senior managers was arrived at.

3.6 Data Collection Methods

For the first and second specific objectives, the study used secondary data in the form of historical stock prices of the sampled listed firms to be extracted from the individual firms' and NSE databases. The study also collected Earnings per Share, Dividend per share, Net profit, Sales and Total Assets information from the annual reports released by the listed firms. The study used annual data as companies in Kenya release their financial results every quarterly, half year and annually. Annual results were preferred because they incorporate all the previous quarterly results released during the year. The study period covered a 5-year period, between 2012 and 2016. For the listed firms with ESOPs, the study considered their stock returns in the ESOPs post-adoption period. The choice of the 5-year period was based on the reason that the youngest ESOP among the listed firms was 5 years old.

For the third and fourth objective, the study used primary data in the form of a 5-point Likert scale based questionnaire (Appendix I & II). The primary data was obtained from the employees and senior management staff of the sampled listed firms in Kenya. The inclusion of the senior management staff as the study respondents was based on the

appreciation that decisions on adoption of ESOPs are discussed and made at the highest levels of management in the organizations. The study issued ten questionnaires in each of the sampled firms giving the study a sample size of 200 study respondents. Pretesting of the questionnaire was done among senior management staff of the listed firms in Kenya but who would not participate in the main study.

3.7 Data analysis

To assess whether there is a significant difference in stock performance between companies with or without ESOPs listed at the NSE, the stock returns are subjected to a normality test to determine whether to use a parametric method or non-parametric method. If the data follows a normal distribution, a t-test can be used to compare the mean difference of the stock returns between companies with ESOPs and the companies without ESOPs (Meng, Ning, Zhou and Zhu 2011). If the data does not follow the normal distribution, a non-parametric method (Mann-Whitney U) is used instead.

In order to evaluate the relationship between the study variables, panel data OLS regression analysis was employed. This model was deemed appropriate because panel data contains observations of multiple phenomena obtained over multiple time periods for the same firms or individuals (Hsiao, 2003) A diagnostic test is carried out to determine the appropriate model to use that is, Fixed effect model, Random effect model or pooled OLS. Hausmann test is conducted to test for fixed and random effect model. Chow test was used to test between fixed effect and pooled OLS. If the Pooled OLS is the best model a Stepwise regression process is applied to the model by adding variables and checking the significance of the variables.

The models to use to for objective 2 to check whether employee productivity is a significant determinant to stock performance is as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{1t} + u_{it}$$

The models to use to for objective 2 to check whether the moderating variable ESOP improves the model:

$$Y_{it} = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + u_{it}$$

The models to use to for objective 2 to check whether the moderating variable ESOP and inclusion of control variables improve the model:

$$Y_{it} = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \beta_5 X_{5t} + \beta_6 X_{6t} + \beta_7 X_{7t} + \beta_8 X_{8t} + u_{it}$$

Where;

Y_{it} = Stock performance of firms with and without ESOPs (expressed as the natural logs of the returns)

β_0 = Constant

$\beta_1 - \beta_7$ = Coefficients of the independent variables

X_{1t} = Employee productivity (Revenue / number of employees)

X_{2t} = Presence or Absence of ESOPs

X_{3t} = Dividend per share (Dividends attributable to ordinary shareholders / Number of issued ordinary shares)

X_{4t} = Earnings per share (Earnings attributable to ordinary shareholders / Number of issued ordinary shares)

X_{5t} = Return on Assets, ROA (measured by Net Profits / Average of beginning and ending Total Assets)

X_{6t} = Sales (natural log of annual total sales)

X_{7t} = Profit (the natural log of annual total profits)

X_{8t} = Total Asset Turnover (Total annual sales/ Average of beginning and ending Total Assets)

u_{it} = Error term

it = where i is the individual dimension and t is the time dimension

3.8 Operationalization of Variables

Operationalization is the development of specific research procedures that would result in empirical observations representing the concepts (Wacker, 1998). Table 3.3 indicates how the study variables were operationalized.

Table 3. 3 Operationalization of Variables

Study variables	Proxy	Operationalization	Studies
Dependent variab	Y_{it}	Stock performance of firms with and without ESOPs	Pierce &Furo, 2011; Kim &Ouimet, 2014
		Natural log of (P_t / P_{t-1}) Where P_t is Stock price at time t	
	X_{1t}	Employee productivity	Lavelle et al., 2012; Hallock et al., 2013; Jones & Kato (2012)
	X_{2t}	Presence or Absence of ESOPs	Dummy Variable 1 = Presence 0 = Absence
	X_{3t}	Dividend per share	Dividends attributable to ordinary shareholders / Number of issued ordinary shares Joshi (2012); Attah-Botchwey (2014); Masum (2014)
	X_{4t}	Earnings per share	Earnings attributable to ordinary shareholders / Number of issued ordinary shares Zaredadeh (2010)
	X_{5t}	Return on Assets, ROA	Net Profits / Average Of beginning and ending Total Assets Meng, Ning, Zhou and Zhu (2011)
	X_{6t}	Sales	Natural log of annual Sales Rosen and Quarrey (1978)
	X_{7t}	Profits	Natural log of annual Total profits Conte and Tannenbaum (1978)
	X_{8t}	Total Asset Turnover	Total annual sales/ Average Of beginning and ending Total Assets Meng, Ning, Zhou and Zhu (2011)

3.9 Validity and Reliability of Research Instrument

3.9.1 Validity

Validity is the degree to which results obtained from the analysis of the data actually represent the phenomena under study (Mugenda & Mugenda, 2003). Convergent validity and discriminant validity were used to determine the validity for each group of related questions. Whereas convergent validity is concerned with the degree to which two measures of the same concept are correlated, discriminant validity is concerned with the degree to which conceptually similar concepts are distinct.

3.9.2 Reliability

Reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials (Nsubuga, 2006). Reliability of the survey instrument was estimated using Cronbach's Alpha Coefficient. A reliability of at least 0.70 at $\alpha = 0.05$ significance level of confidence was accepted. The questionnaire for the management had reliability of 0.717 while the employees' questionnaire had a reliability of 0.957 as evidenced by the results of reliability in chapter 4. The two questionnaires were thus reliable for data collection.

3.10 Diagnostic Tests

3.10.1 Test for Normality

A histogram is used to check for normality by having a normal curve drawn on the histogram. If the histogram is well covered by the normality density curve it implies the data is normal.

3.10.2 Test for Multicollinearity

Multicollinearity occurs when one independent variable is perfectly or highly correlated with another independent variable or with a combination of two or more other independent variables. This either leads to inexistence of a unique least-squares solution for regression coefficients or because the marginal contribution of that independent variable is influenced by other independent variables, the estimates for regression coefficients can be unreliable.

The Variance Inflation Factor (VIF) is used to measure how much the variance of the estimated regression coefficient is "inflated" by the existence of correlation among the predictor variables in the model. A VIF of 1 means that there is no correlation among the k^{th} predictor and the remaining predictor variables, and hence the variance of estimated regression coefficient is not inflated at all. The general rule of thumb is that VIFs exceeding 4 warrant further investigation, while VIFs exceeding 10 are signs of serious multicollinearity requiring correction.

3.10.3 Test for Autocorrelation

Autocorrelation is a characteristic of data in which the error terms are correlated over time thereby violating the assumption of building a linear regression model. The Durbin Watson test is used to determine whether there's autocorrelation with the errors. In particular, the Durbin-Watson test is constructed as:

$$H_0: \rho = 0$$

$$H_a: \rho \neq 0.$$

So the null hypothesis of $\rho=0$ means that $\epsilon_t = \omega t$, or that the error term in one period is not correlated with the error term in the previous period, while the alternative hypothesis of $\rho \neq 0$ means the error term in one period is either positively or negatively correlated with the error term in the previous period.

3.10.4 Hausman Test

The Hausman Test identifies variables with values that are affected by other variables in the model thereby their presence causes OLS estimators to fail. The assumptions of OLS are that the predictor variable and the error term are not correlated. The Hausman test is a model misspecification test and in Panel data analysis can help choose between the fixed and random effects models. Fixed-effect Model is used whenever one is analyzing the impact of different variables over time and while assuming that something within the individual may bias the predictor or outcome variables (Greene, 2008). The random effects model on the other hand assumes variation across entities are random and uncorrelated with the predictor or independent variables. Random effects model has the advantage of being able to include time invariant variables. (Greene, 2008)

The null hypothesis of the Hausman test is that the preferred model is random effects.

The null hypothesis is that there is no correlation between the error term and the predictor variables. If the p value is less than 0.05, the null hypothesis is rejected (Chmelarova 2007).

The study used Chow Test to deterring the significance of the fixed effects present in the data set. Based on the F-Statistic and the P-value, we fail to reject the null hypothesis that there are no significant fixed/individual effects if P-value is greater than 0.05

3.11 Ethical Considerations

The researcher sought authority to conduct the study from Strathmore University and from the listed firms in Kenya. The researcher explained the purpose of the study to the listed firms in Kenya and sought their informed consent. The risk and benefit of the study was also communicated to the listed firms in Kenya. All information given herein was only be used for research purposes. The participation of the respondents was also voluntary.



CHAPTER FOUR: DATA ANALYSIS AND RESULTS

4.1 Introduction

The objective of the study was to assess whether employee productivity is a significant determinant in the stock performance of Kenyan listed companies with and without ESOPs. This was done using secondary data obtained from the annual reports of the companies being studied. The findings of the analysis of the study are presented in this chapter.

4.1.1. Results of Reliability

The questionnaire was tested for reliability using Cronbach's Alpha Coefficient which is a measure of internal coefficient. A reliability of at least 0.70 at $\alpha = 0.05$ significance level of confidence is acceptable. The results were as shown on Tables 4.1 (employee) and Table 4.2 (management)

Table 4. 1 Reliability of the Employees' Questionnaire

EMPLOYEE QUESTIONNAIRE	Cronbach's Alpha	No. Of Items
Role of the employee in the firm	0.70	4
Compensation	0.86	5
Employee Loyalty	0.71	3
Sense of Company Ownership	0.92	9
Company communication	0.88	5
Input from employees	0.89	3
Fairness at the work place	0.71	4
Employee Satisfaction	0.87	6
Employees' views of management and supervisor	0.82	8

Source: Survey Data

Table 4. 2 Reliability of the Management’s Questionnaire

Questionnaire Topic	Cronbach’s Alpha	No. Of Items
Satisfaction with the employee productivity in your company	0.819	8

Source: Survey Data

Both questionnaires were therefore reliable instruments of data collection since they had Cronbach’s Alpha Coefficients above 0.70.

4.2 Analysis of the significant difference in stock performance:

The first objective is to assess whether there is a significant difference in stock performance between companies with or without ESOPs listed at the NSE. . The hypothesis tested is

H₁ : There’s a difference in stock performance between companies that have ESOPs and those without ESOPs

To achieve this objective, stock returns were subjected to normality test to determine whether parametric method or non-parametric method should be applied. The null hypothesis is that the data has a normal distribution. The results of normality tests are presented in the table below.

Table 4. 3 Test of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Returns	0.133	90	0.000	0.942	90	0.001

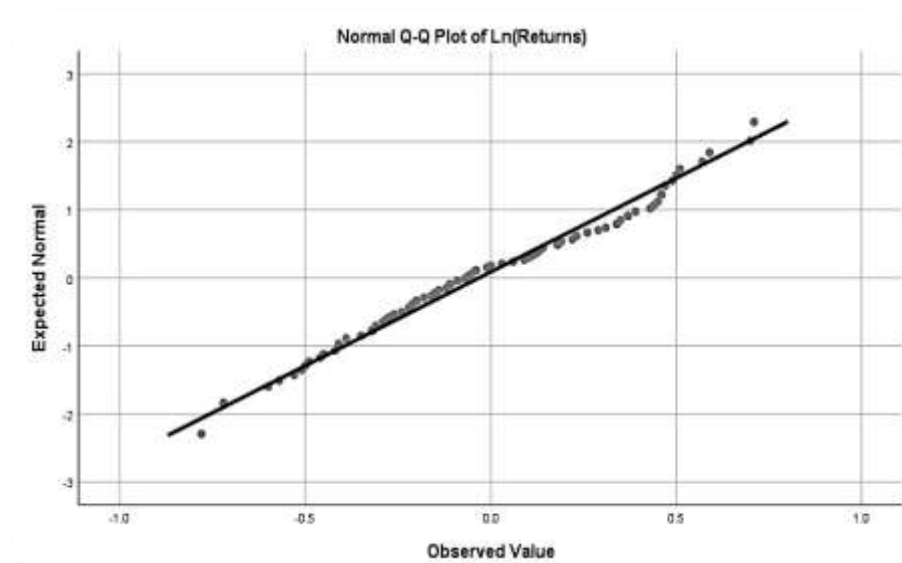
a. Lilliefors Significance Correction

Source: SPSS

From the table above, the null hypothesis is rejected (KS = 0.133, p value = 0.000 < 0.05) and we conclude that the stock returns don’t have a normal distribution. Since the stock returns didn’t have a normal distribution, the return data was transformed into the natural logarithmic format to convert it into a normal distribution. From the figure below, the

normal Q-Q plot shows that the variable Ln Returns has a normal distribution since the plots seem to largely fall along the straight line

Figure 4. 1 Normal Q-Q Plot of Ln Returns



Source: SPSS

To assess whether there is a significant difference in stock performance between companies with or without ESOPs listed at the NSE, the study carried out a t-test to compare the mean difference of the stock returns between the companies with ESOPs and the companies without ESOPs (Meng, Ning, Zhou and Zhu 2011). Lumley et al. (2002) elucidates that the t-test is robust to non-normality and that by the Central Limit Theorem, large data sets converge to normal distributions. The Null hypothesis for the t-tests was,

Ho: Means are not significantly different

Table 4. 4 Results of Independent Samples Test

		Independent Samples Test								
		Levene's Test for Equality of		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the	
Ln(Returns)	Equal variances assumed	4.112	0.046	0.428	88	0.67	0.03289	0.07684	-0.11981	0.18558
	Equal variances not assumed			0.428	84.891	0.67	0.03289	0.07684	-0.11988	0.18566

Source: SPSS

If the Sig. value of the t-test is greater than 0.05, (P-value test statistic) we do not reject the null hypothesis and conclude that the means are not significantly different. Therefore, from the results, it appears that the means of the stock returns between firms with ESOPs and firms without ESOPs listed at the NSE are not statistically significantly different because the value in the "Sig. (2-tailed)" row of 0.670 is greater than 0.05

4.3 Analysis of the effect of Employee Productivity on Stock performance

The second objective is to examine the effect of employee productivity in the presence of moderating variable (ESOP) on stock performance of companies offering ESOPs at the NSE. The hypothesis tested is;

H1: There is a significant relationship between Employee Productivity and stock performance of companies offering ESOPs.

To achieve this objective, we check which type of panel data model to use: whether pooling, fixed effects or random effects. To decide whether there were fixed or random effects in the model, the Hausman test was carried out using strata analysis software where the null hypothesis is that the preferred model is random effects vs. the alternative, the fixed effects (Chmelarova 2007). The Hausman test basically checks whether there is correlation between the error term and the regressors in the model. If the p value is less than 0.05, the null hypothesis is rejected.

4.3.1 Hausman Test: Fixed effect versus Random effect model.

Hypothesis:

H₀: The appropriate model is Random effects that is there is no correlation between the error term and the independent variables in the panel data model.

H₁: The appropriate model is fixed effects, that is, the correlation between the error term and the independent variables in the panel data model is statistically significant.

The results of the Hausmann tests are presented below.

$$\text{Chi}^2(12) = (b - B)' [(V_b - V_B)^{-1}] (b - B)$$

$$= 30.52$$

$$\text{Prob} > \text{Chi}^2 = 0.0023$$

(V_b - V_B is not positive definite)

From the results above, we reject the null hypothesis since p value = 0.0023 < 0.05 and conclude that the appropriate model is fixed effect model since there is statistically significant correlation between the error term and the independent variables in the panel data model.

4.3.2 F-Test: Pooled vs Fixed Effects

The study estimates a Chow Test to determine the significance of the fixed effects present in the data set. The results are shown below:

$$\text{F test that all fixed effects} = 0: \quad F(2, 70) = 0.13 \quad \text{Prob} > F = 0.8755$$

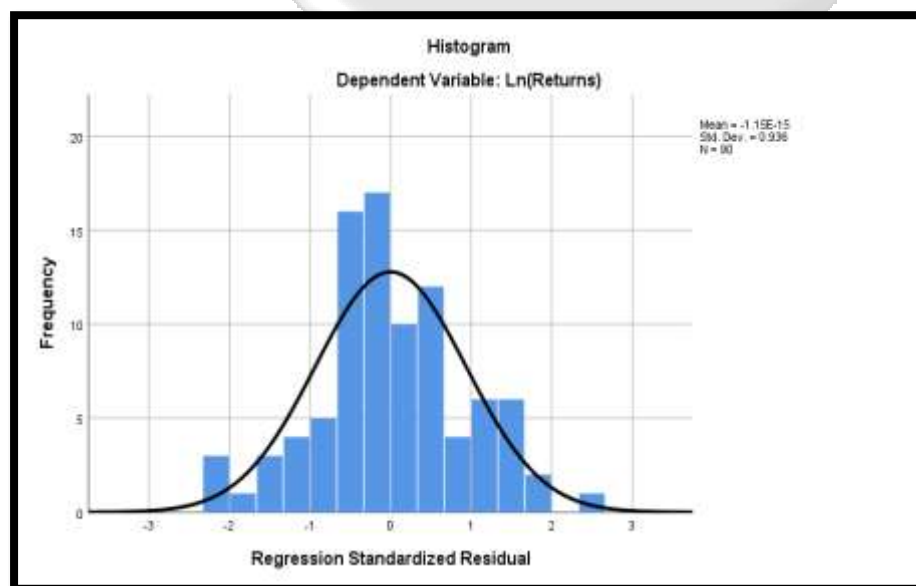
Based on the F-Statistic and the P-value provided above, we fail to reject the null hypothesis that there are no significant fixed/individual effects. This implies that a pooled OLS can be used instead of a fixed effects model which accounts for Individual effects.

Given the diagnostic tests estimated and discussed above, the study seeks to estimate a Pooled OLS which determines the effect of employee productivity in the presence of moderating variable (ESOP) on stock performance of companies offering ESOPs at the NSE. The model was first subjected to diagnostic tests to confirm the assumptions of a pooled OLS are adhered to. The results of Diagnostic Tests are shown below.

4.3.3 Test for Normality

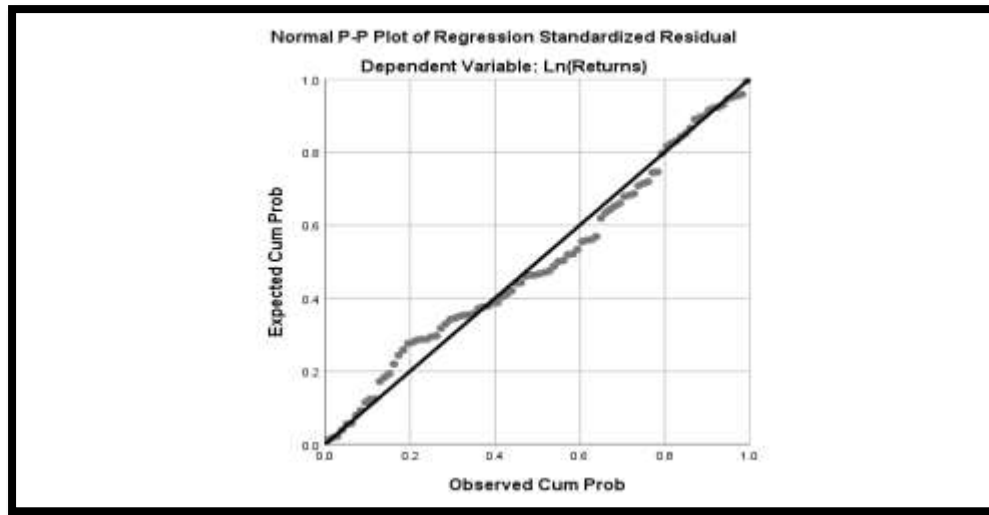
To check for normality of the data, a normality curve is drawn on the histogram. If the histogram is well covered by the normality density curve, this implies that the data is normal.

Figure 4. 2 Histogram depicting test for normality



Source: SPSS

Figure 4. 3 Normal P-P Plot of regression of Standardised residuals



Source: SPSS

From the two figures above, the histogram is well curved with Q-Q plot implying that the data is normal. Also, the normal P-P plot shows that the variable has a normal distribution since the plots seem to largely fall along the straight line.

4.3.4 Test for Multicollinearity

Variance inflation factor (VIF) was used to test whether presence of Multicollinearity is statistically significant. The table below provides the results of the Multicollinearity Check Using Tolerance and VIFs

Table 4. 5 Results of Test for Multicollinearity

Model	Variables	Collinearity Statistics	
		Tolerance	VIF
3	(Constant)		
	Sales/Employee	0.752	1.331
	ESOP Dummy	0.712	1.405
	DPS	0.376	2.659
	EPS	0.332	3.013
	TOTA	0.329	3.038
	Ln Sales	0.206	4.847
	Ln Assets	0.290	3.449
	Ln Profit	0.552	1.811

Dependent Variable: Ln (Returns)

Source: SPSS

From the table 4.3 above, The VIF < 10 hence we can conclude that the presence of Multicollinearity is not statistically significant.

4.3.5 Test for Autocorrelation

Autocorrelation refers to a situation where the residuals in our model are correlated which will have a negative influence in our model, that is, correct inference cannot be made. The hypothesis is;

H₀: There is no autocorrelation

H₁: There is autocorrelation

Durbin Watson statistic was used to test for autocorrelation. If the calculated Durbin Watson statistics is closer two, we do not reject the null hypothesis. Table 4.7 below presents Durbin Watson statistic.

Table 4. 6 Results of Test for Autocorrelation

Model Summary			
Model	R	Durbin-Watson	
3	.5	2.117	

Source: SPSS

Table 4.4 above shows that DW statistics = 2.117 \cong 2 hence we fail to reject the null hypothesis and conclude that there is no autocorrelation.

4.3.6 Test for Heteroscedasticity

Heteroscedasticity refers to situations where the variance is not constant which violates the assumptions of the error term. Lagrange Multiplier is used to test for the heteroscedasticity. It is calculated using R^2 from the auxiliary regression and multiplying it by the number of observations, that is, $TR2 \sim \chi^2(n)$ where n is the number of regressors in the auxiliary regression. The hypothesis is stated below;

H₀: The variance is constant

H₁: The variance is not constant

Table 4. 7 Results of Test for Heteroskedacity

<i>Model</i>	<i>R2</i>	<i>No. of observation:</i>	<i>LM</i>	<i>Tabulated value (X2) at 5%</i>
<i>1</i>	0.003147	90	0.283225	(1, 0.05) = 3.84
<i>2</i>	0.004472	90	0.402495	(2, 0.05) = 5.99
<i>Overall</i>	0.269774	90	24.2797	(11, 0.05) = 19.68

Source: SPSS

From table 4.7 above, the Lagrange Multiplier (LM) values are greater than Chi square tabulated values hence we fail to reject the null meaning the variance is constant and hence no heteroscedasticity.

A correlation matrix was also done to check whether the variables had a high amount of correlations, which might suggest that the regression estimates might be unreliable. The results (Appendix VI) suggest low correlation between the variables.

From the diagnostic tests above, it's clear that the assumptions of ordinary least square (OLS) method are met hence a pooled OLS was run. A stepwise regression was adopted to check the significance of the independent variables alone and in the presence of moderating variable and control variable. A stepwise regression with three steps was adopted. The variables were entered in the model as shown in the table below.

Table 4. 8 Stepwise Regression Models

Model	Variables Entered		Method
	Variables Entered	Variables Removed	
1	Sales/Employee ^b		Enter
2	Presence of ESOP		Enter
3	ROA , ln_assets, DPS , ln_sales , ln_profit, EP		Enter

a. Dependent Variable: Ln (Returns)

b. All requested variables entered.

Source: SPSS

From the table above, we come up with three models. The first model (Model 1) used sales to employee ratio as the independent variable and log returns as the dependent variable. In the second Model (Model 2), the moderating variable presence of ESOP was introduced to Model 1 and in the third Model (Model 3), the control variables were added to Model 2. The table below presents summary of the three models.

Table 4. 9 Model Summary

Model Summary										
Model	R	R Square	Adjusted Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.056 ^a	0.003	-0.008	0.36427	0.003	0.278	1	88	0.599	
2	.067 ^b	0.004	-0.018	0.36611	0.001	0.116	1	87	0.734	
3	.317 ^c	0.101	0.012	0.36063	0.096	1.444	6	81	0.208	1.688
a. Predictors: (Constant), Sales/Employee										
b. Predictors: (Constant), Sales/Employee, group										
c. Predictors: (Constant), Sales/Employee, group, ROA , In_assets, DPS , In_sales , In_profit, EPS										
d. Dependent Variable: Ln>Returns)										

Source: SPSS

The table above presents coefficient of correlation (R), Coefficient of determination (R Square), Adjusted R square, change in R square and significance of change in R squared. The R value explains what percentage of the model can be described by the data. In this case, 5.6% of the data can be used to explain the model 1, 6.7% explains model 2 and 31.7 % explains model 3. R square is used to explain the percentage of the independent variables that can be used to explain the dependent variable. In this case 0.3% of the sale employee ratio can be used to explain stock returns in mode1 1, 0.4% in model 2 and 10.1 % in model 3. Unexplained variation in model is $(100-10.1=89.9)$ %.

The change in R square was not significant in model 1 and model 2 (R^2 change=0.003, p value = 0.599 > 0.05 and (R^2 change=0.001 p value = 0.734 > 0.05) respectively.

In model 3 the change in R square was statistically significant (R^2 change=0.096, p value = 0.208 > 0.05) hence implying the presence of control variables was also not relevant in the model.

From Table above, 10.1% of the model is explained by the independent variables. Analysis of variance (ANOVA) was used to test whether the percentage explained by the independent variables is statistically significant that is the overall significance of the model. From our hypothesis,

H₀: The model is not significant

H₁: The model is significant

A summary ANOVA is presented in Table below.

Table 4. 10 Summary ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.037	1	0.037	0.278	.599 ^b
	Residual	11.677	88	0.133		
	Total	11.714	89			
2	Regression	0.052	2	0.026	0.195	.823 ^c
	Residual	11.661	87	0.134		
	Total	11.714	89			
3	Regression	1.180	8	0.147	1.134	.350 ^d
	Residual	10.534	81	0.130		
	Total	11.714	89			

a. Dependent Variable: Ln (Returns)

b. Predictors: (Constant), Sales/Employee

c. Predictors: (Constant), Sales/Employee, group

d. Predictors(Constant), Sales/Employee, group, ROA , Ln Assets, DPS , Ln Sales , Ln Profit, EPS

Source: SPSS

The study findings show that model 1 and model 2 were not statistically significant at 5% level of significance ($F=0.278$, $p \text{ value} = 0.599 > 0.05$ and ($F=0.195$, $p \text{ value} = 0.823 > 0.05$) respectively. Model 3 in this study was also not statistically significant. That is, we do not reject the null hypothesis and conclude that the model is not statistically significant at 5% significance level ($F \text{ value} = 1.134$, $p \text{ value} = 0.350 > 0.05$).

The regression coefficients as displayed in Table below were analyzed in order to establish the influence of the individual independent variables in the model and whether they are statistically significant. The t statistics and associated p value were examined and the decision rule was that, for a variable to be significant in explaining a dependent variable, the associated p value should be less than the critical p value which is set at 0.05 in this study.

Table 4. 11 Results of Regression Coefficients

Model		Coefficients ^a					Collinearity Statistics	
		Unstandardized Coefficients		t	Sig.	Tolerance	VIF	
		B	Std. Error					
1	(Constant)	-0.329	0.565	-0.582	0.562			
	Sales/Employee	0.019	0.036	0.527	0.599	1.000	1.000	
2	(Constant)	-0.308	0.571	-0.540	0.591			
	Sales/Employee	0.017	0.037	0.457	0.648	0.970	1.031	
	ESOPs Dummy	0.027	0.078	0.340	0.734	0.970	1.031	
3	(Constant)	-0.077	0.604	-0.127	0.899			
	Sales/Employee	0.006	0.041	0.140	0.889	0.792	1.263	
	ESOPs Dummy	0.021	0.085	0.250	0.803	0.806	1.241	
	DPS	0.000	0.017	-0.012	0.991	0.426	2.347	
	EPS	-0.004	0.012	-0.337	0.737	0.351	2.847	
	ROA	0.021	0.235	0.090	0.928	0.589	1.697	
	Ln_Sales	0.008	0.027	0.317	0.752	0.561	1.784	
	Ln_Assets	-0.025	0.027	-0.939	0.351	0.608	1.645	
	Ln_Profit	0.022	0.009	2.381	0.020	0.496	2.014	

a. Dependent Variable: Ln (Returns)**Source:** SPSS

From the table above, model 1 and model 2 did not have independent variables that were statistically significant in the model. Hence none of the independent variables were interpreted in terms of their effect in model. In Model 3, only one of the variables was statistically significant at 5% level of significance; Ln_Profits ($p = 0.02 < 0.05$). Although this variable was statistically significant, the overall model was not significant as well as the key variable in the model and the moderating variable were also not significant. Hence this results conforms to the results of objective one where there was no statistically difference in stock performance between companies with or without ESOPs listed at the NSE.

4.4 Results of Management Satisfaction with employee productivity

This section answers specific objective three. The management were required to indicate their opinion on certain statements. Their responses on indicators showing whether they were satisfied with employee productivity were rated on a scale of 1 to 5 where 1 – Not at all satisfied, 2 – Dissatisfied, 3- Indifferent, 4- Satisfied and 5 – Very satisfied. The mean results were calculated by summing all the individual scores of all the respondents of the questionnaire from the 5-point likert scale questionnaire and their averages gotten.

The mean scores reported were out of a score of 1 to 5 and the decimal points rounded off to the nearest integer. The questionnaire responses were aggregated to give an overall general indicator of the level of satisfaction and the results are as shown.

Table 4. 12 Overall Management Satisfaction with Employee Productivity

Satisfaction Level	Mean
With ESOPS	3.8
Without ESOPS	3.75
Overall mean	3.77

Source: Survey Data

Managers who had adopted ESOPs agreed that they were satisfied with their employee level of productivity, which was the same case with those without ESOPs. These findings shows that level of employee productivity is not necessarily stimulated by adoption of ESOPs although this can be validated further by testing their mean difference.

Table 4. 13 Results of t-test of Management Satisfaction with Employee Productivity

	Levene's Test for Equality of Variance		t-test for Equality of Means			
	F	Sig.	t	df	Sig.(2-tailed)	Mean Difference
Equal variances assumed	0.17	0.685	0.521	18	0.608	0.061
Equal variances not assumed			0.521	17.878	0.608	0.061

Source: SPSS

To assess whether there is a significant difference in means of management satisfaction between companies with or without ESOPs listed at the NSE, the study carried out a t-test to compare the mean difference of the overall satisfaction between the companies with ESOPs and the companies without ESOPs (Meng, Ning, Zhou and Zhu 2011). Lumley et al. (2002) elucidates that the t-test is robust to non-normality and that by the Central

Limit Theorem, large data sets converge to normal distributions. The Null hypothesis for the t-tests was,

Ho: Means are not significantly different

If the Sig. value of the t-test is greater than 0.05, (P-value test statistic) the means are not significantly different. Therefore, from the results, it appears that the means of the management satisfaction between firms with ESOPs and those without ESOPs listed at the NSE are not statistically significantly different because the value in the "Sig. (2-tailed)" row of 0.608 is greater than 0.05.

4.5 Results of Employee satisfaction

This section answers specific objective four. The employees were required to indicate their opinion on certain statements. Their responses on indicators showing whether they were satisfied were rated on a scale of 1 to 5 where 1 – Not at all satisfied, 2 – Dissatisfied, 3- Indifferent, 4- Satisfied and 5 – Very satisfied. The mean results were calculated by summing all the individual scores of all the respondents of the questionnaire from the 5-point likert scale questionnaire and their averages gotten.

The mean scores reported were out of a score of 1 to 5 and the decimal points rounded off to the nearest integer. The questionnaire responses were aggregated to give an overall general indicator of the level of satisfaction and the results are as shown.

Table 4. 14 Overall Employee Satisfaction

Satisfaction Level	Mean
With ESOPS	3.67
Without ESOPS	3.60
Overall mean	3.64

Source: Survey Data

To assess whether there is a significant difference in means of employee satisfaction between companies with or without ESOPs listed at the NSE, the study carried out a t-test to compare the mean difference of the overall satisfaction between the companies with ESOPs and the companies without ESOPs (Meng, Ning, Zhou and Zhu 2011). Lumley et

al. (2002) elucidates that the t-test is robust to non-normality and that by the Central Limit Theorem, large data sets converge to normal distributions. The Null hypothesis for the t-tests was,

Ho: Means are not significantly different

Table 4. 15 Results of t-test of Employee Satisfaction in Firms with and without ESOPs

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Returns	Equal variances assumed	5.455	0.022	-3.669	80.00	0	-0.21307
	Equal variances not assumed			-4.058	79.91	0	-0.21307

Source: SPSS

If the Sig. value of the t-test is greater than 0.05, (P-value test statistic) the means are not significantly different. Therefore, from the results, it appears that the means of the employee satisfaction between firms with ESOPs and those without ESOPs listed at the NSE are not statistically significantly different because the value in the "Sig. (2-tailed)" row of 0.00 is less than 0.05.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, the following will be presented; summary of the findings, conclusion, recommendations and suggestions for further study.

5.2 Summary of Findings

The study sought to assess whether Employee Productivity is a determinant of stock performance of Kenyan listed companies offering employee share ownership plans. It used secondary to determine the stock performance of the various firms with and without ESOPs listed at the NSE. Primary data was used to gather information on the management satisfaction with employee productivity after adoption of ESOPs and the employee satisfaction among companies listed at the NSE.

5.2.1 Discussions of the analysis of the significant difference in stock performance:

The results of the t-test to test whether there is a significant difference in stock performance between companies with ESOPs and those without ESOPs listed at the NSE showed that there is no significant difference between the stock performance of companies offering ESOPs and those not offering ESOPs listed at the NSE. These findings are supported by Meng et al. (2011) whose study found non-significant variation in market capitalization of total shares traded between firms with ESOPs and firms without ESOPs. Meng et al. (2011) had conducted a study to find out if ESOP shares are valued higher than non ESOP share shares based on the premise that since ESOPs are deemed to improve employee productivity, they would in turn lead to increased firm performance. Park and Song (2011) and Kruse et al. (2004) who concurred there is a positive relationship that exists between employee productivity and adoption of ESOPs. This could perhaps be as a result of the numerous company specific factors that affect the different firms in different ways like news of impending mergers and acquisitions, earnings reports, suspension of dividends, development of new innovative products or breaking into new markets or even the hiring or firing of company executives

5.2.2 Discussions of the analysis of the effect of Employee Productivity on Stock performance

The study used panel data to examine the effect of employee productivity in the presence of moderating variable (ESOP) on stock performance of companies offering ESOPs at the NSE. To begin with, ESOP was added as a moderating variable to see if Employee Productivity in the midst of ESOP was a significant determinant of Stock performance of companies listed in the NSE. Secondly, to further investigate the effect of employee productivity on stock performance, control variables were added to the model to see how all the variables interact together to explain stock performance of listed companies with ESOPS at the NSE. A pooled OLS was adopted as the assumptions of OLS were found not to have been violated after conducting the various tests for establishing OLS usage. A stepwise regression was adopted to check the significance of the independent variables alone and in the presence of moderating variable and control variable.

The R value explains the percentage of the model can be described by the data. From the run models, it can be seen that the R values are 5.6% for model 1, 6.7% explains model 2 and 31.7% explains model 3 respectively. R Square, explains the percentage of the independent variables that can be used to explain the dependent variable. In this case 0.3% of the sale employee ratio can be used to explain stock returns in model 1, 0.4% in model 2 and 10.1% in model 3.

The study findings also show that model 1, model 2 and model 3 were not statistically significant at 5% level of significance. From the analysis, Model 1 and Model 2 did not have independent variables that were statistically significant. This implies that none of the independent variables were interpreted in terms of their effect in model. Model 3 however had only one variable that was statistically significant at the 5% level of significance; Ln profits. Although Ln profit was statistically significant, the overall model wasn't significant as well as the key variable in the model, Employee Productivity and the moderating variable, ESOP. Hence these results conform to the results of objective one where there was no statistically difference in stock performance between companies with or without ESOPs listed at the NSE.

The variables tested were DPS, EPS, TOTA, Sales per employee, ROA, sales, assets and profits which represented share valuation indicators, productivity and return indicators and company control variables.

The results of this study support Chung et al. (2009), who found little evidence that firms with higher productivity outperform those with lower productivity on the stock exchange. Employing data for between 2000-2008 periods, they examined the performance of only the extremely high ranked 10 firms and the extremely low ranked 10 firms, rather than the 50-firm portfolios employed by Antunovich and Laster (2010). Their results therefore, could have resulted from company-specific risks in their portfolios. The findings are also in contrast to Park and Song (2011) and Kruse et al. (2004) who found a positive relationship that exists between employee productivity and adoption of ESOPs.

5.2.3 Assessment of Management Satisfaction with employee productivity

The study findings indicated that Managers who had adopted ESOPs were generally satisfied with their employee level of productivity, which was the same case as with those without ESOPs. These findings show that level of management satisfaction with employee productivity is not necessarily stimulated by adoption of ESOPs. This was further examined by testing their mean difference through the independent sample t-test. From the results of the t-test, it appears that the means of the management satisfaction between firms with ESOPs and those without ESOPs listed at the NSE are not statistically significantly different. This corroborates the earlier results of overall management satisfaction with employee productivity for both firms with and without ESOPs.

The findings are corroborated by the research of Kim and Ouimet (2014), whose study found the management to have been satisfied to a great extent with employees' productivity following the adoption of ESOPs. Similar findings were reported by Park and Song (2011) in Malaysia, Zhu et al. (2013) in China and Jones and Kato (2012) in Japan - all of whom who reported that the company managements were generally satisfied with the level of employees productivity after adoption of ESOPs.

5.2.4 Assessment of Employee Satisfaction

The study findings indicated that employees in firms that had adopted ESOPs agreed that they were generally satisfied with their firms policies geared towards employees' welfare and productivity, which was the same case in those without ESOPs. These findings show

that level of employee satisfaction is not necessarily stimulated by adoption of ESOPs. This was however further examined by testing their mean difference through the independent sample t-test. From the results, it appears that the means of the employee satisfaction between firms with ESOPs and those without ESOPs listed at the NSE are statistically significantly different. This now elucidates that although the questionnaire findings had both shown that employees were generally satisfied both in companies with and without ESOPs, the employees in firms with ESOP seem to enjoy significantly more satisfaction. This concurs with Klein (2013) and Kruse et al. (2004) who found a positive correlation between employee satisfaction levels and use of ESOPs in firms.

5.3 Conclusion

As the results of the analysis show that there is no significant difference in stock performance between companies with or without ESOPs listed at the NSE, the study therefore concludes that presence or absence of ESOPs does not influence the performance of stocks at the NSE. Perhaps presence or absence of ESOPs was not a good indicator of stock performance since the stock market was deemed to be efficient. This was however in conflict with previous studies. Iqbal and Hamid, (2010) argue that as the financial value of ownership accounts increases, employee attitudes become more positive, which, in turn improves the company performance.

The study findings also show that model 1, model 2 model 3 were not statistically significant at 5% level of significance. Our key variables were also found not to be statistically significant hence these results conform to the results of objective one where there was no statistically difference in stock performance between companies with or without ESOPs listed at the NSE. Economic theory suggests that, by itself, employee ownership is unlikely to have a large effect on worker effort and performance. Ownership must be combined with employee involvement and other policies that give workers the power to act on the incentives; and employee ownership firms and other organizations that rely on group incentives must battle against the tendency to free ride.

The study concludes that managers of both firms with and without ESOPs were satisfied with their employee level of productivity. This was further supported by an independent t-test that showed that there was no significant difference between the level of satisfaction by management with employee productivity in both firms with and without ESOPs. This could be due to management in both firms with and without ESOPs, instituting ancillary benefits such as medical cover and bonuses that lower their employee turnover and

increase their loyalty to their firms', which in turn raised their productivity. Better-satisfied workers produce more (Tsai *et al*, 2015).

The study also concludes that employees in firms that had adopted ESOPs and those that hadn't agreed that they were satisfied with their firms policies. However, this was contrasted by results of an independent t-test that the means of the employee satisfaction between firms with ESOPs and those without ESOPs listed at the NSE were statistically significantly different. From these findings, it appears that the employees in firms with ESOPs are generally more satisfied with their firms' policies than the employees in firms without ESOPs. Firms with ESOPs mostly institute policies that encourage fairness and give employees freedom to chart their own company goals and advice management whenever things in their company seem to be going wrong. This is corroborated by the responses from the questionnaires given to employees in both firms with and without ESOPs. Yoon and Suh (2013) also indicated that when employees are satisfied, they work harder and their services are of better quality. They are more willing to take part in activities organized by their employer firms as they feel part of those organizations.

5.4 Recommendations

This section deals with the recommendations based on the study findings.

5.4.1 Policy Recommendations

Since the study found no significant relationship between Employee productivity and stock performance of firms with ESOPs listed in the NSE, it would be prudent to investigate whether the free rider problem in firms with ESOPs would be an afflicting factor as well as democratizing employee ownership by giving workers a greater role in corporate governance through legal rights and workplace policies that increase access to information and participation in decision-making. Granted, listed firms will need to come up with better strategies of maximizing staff productivity and improving employee satisfaction.

5.4.2 Managerial Recommendations

The study discovered that not all employees were part of the ownership plans in companies that have ESOPs, the management of such companies ought to find out why such staff do not join so as to address their concerns.

5.4.3 Researchers Recommendations

Researchers may need to further evaluate previous studies done on ESOPs using panel data analysis instead of cross sectional analysis to further understand the effect of time in those models.

5.5 Limitations

This study was limited by poor cooperation from some respondents who were hesitant to fill the questionnaires. The researcher assured them that the information was for academic purposes only. Accessing some of the management staff was also challenging. This was addressed by adjusting the study schedule to that of the staff.

There was also a challenge in finding a matching sample for one of the companies with approved ESOPs Safaricom, which is the only company in the telecommunication sector at the NSE.

5.6 Suggestions for Further Research

Future research may need to find out whether employees in companies with ESOPs actually sign up for share ownership or is it just a policy in those firms. Again future research may examine the determinants of stock performance in companies with ESOPs while looking at them from before and after adoption. This can be done using a difference in difference test. There may be need to explore other factors influencing the stock performance of companies with ESOPs besides the factors envisaged in this study in order to establish a possible relationship or lack of it between them and stock performance. Further areas of research would be to find out whether employee ownership can give workers a greater role in corporate governance through legal rights and workplace policies that increase access to information and participation in decision-making.

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Appendix I: Questionnaire for Employees

Section A: General Information (tick where appropriate)

1. What is the name of your Company? _____

2. What is your Gender?

Male Female

3. What is your Age (in years)?

Less than 30 Between 30-40 Over 40

4. What is your Job position?

Senior Management Mid-level Management

Regular Staff Subordinate staff

Others (Specify) _____

5. How long have you been working with this Company?

0-5 yrs 5-10 yrs 10-15 yrs Over 15 yrs

6. Do you currently hold, or have you ever held shares in your company's Employee share ownership Scheme?

Yes No

Section B:

7. Role of the employee in the firm

Use a scale of 1 to 5 where 1 is Strongly disagree, 2 – Disagree, 3- Hardly agree, 4- Agree and 5 – Strongly Agree with regards to the following statements.

	1	2	3	4	5
Employees are mostly allowed to serve on Employee Involvement/welfare committee, team or task force					
Employees received regular training from the company					

The company allows us to set our own goals for the year					
The company allows groups/departments to set their own goals					
Employees are allowed to participate in the overall decision making of department and company					

8. Compensation

Using a scale of 1 to 5 where 1 is Very Dissatisfied, 2 – Dissatisfied, 3- Indifferent, 4- Satisfied and 5 – Very Satisfied, how satisfied are you with the following?

	1	2	3	4	5
Your base pay					
Your bonus and sharing of the bonus					
The insurance and pension benefits offered by the company					
Other employee benefits offered by the company					
Being made to feel like you are part of the company					

9. Employee Loyalty

Using a scale of 1 to 5 where 1 is Not at all likely, 2 – Hardly likely, 3- Not sure, 4- Likely and 5 – Very likely. If you were to see a fellow employee not working as hard as or as well as they should be, what would you do?

	1	2	3	4	5
Talk directly to the employee about it					
Speak to your supervisors or management about it with his work					
Do Nothing					
Do more than my fair share of work to help the employee					

10. Sense of Company Ownership

Use a scale of 1 to 5 where 1 is Strongly disagree, 2 – Disagree, 3- Hardly agree, 4- Agree and 5 – Strongly Agree with regards to the following statements.

	1	2	3	4	5
I feel like I am part of the company					
I am willing to work harder than I have to in order to help the company that					
I work for perform better than last year					
Employees at our company are very committed to the company and it's future					

11. Company communication

On a scale of 1 to 5 where 1 is Strongly disagree, 2 – Disagree, 3- Hardly agree, 4- Agree and 5 – Strongly Agree would you agree with the below statements?

	1	2	3	4	5
I'm satisfied with information shared by management and what is going on other departments					
I'm satisfied with information shared by management on what is going on in department					
There's good communication from managers to employees in the company					
There's good communication from employees to managers in the company					
The company clearly conveys its mission and direction to it's employees					

12. Input from employees

To what extent would you agree with the following statements where 1 is Strongly disagree, 2 – Disagree, 3- Hardly agree, 4- Agree and 5 – Strongly Agree?

	1	2	3	4	5
Employees at our company have a real influence over the direction of our company					
The company responds well to employees' suggestions					
The person I report to actively seeks my input					
The company encourages people to participate in decisions that affect their day-to-day work					
I feel encouraged to share new ideas with my colleagues and management					

13. Fairness at the work place

To what extent would you agree with the following statements where 1 is Strongly disagree, 2 – Disagree, 3- Hardly agree, 4- Agree and 5 – Strongly Agree?

	1	2	3	4	5
This company is generally very fair to its employees					
I receive my fair share of the company's successes					
The presence of a union greatly increases our chances of our voices being heard by the management					

14. Employee Satisfaction

To what extent would you agree with the following statements where 1 is Strongly disagree, 2 – Disagree, 3- Hardly agree, 4- Agree and 5 – Strongly Agree?

	1	2	3	4	5
I am satisfied with my current job and responsibilities					
Employees are generally satisfied working in this company					
I receive praise and recognition from my supervisors and management for an extraordinary efforts I put in					

15. Employees' views of management and supervisors

To what extent would you agree with the following statements where 1 is Strongly disagree, 2 – Disagree, 3- Hardly agree, 4- Agree and 5 – Strongly Agree?

	1	2	3	4	5
Our managers are held accountable for their decisions					
Employees at our company trust their senior managers					
Management team at our company benefit more from employee based incentives					
Employees at our company trust their supervisors					
People feel like they are too closely monitored by their immediate superiors					
The person I report to is very fair to me					

Thank you for taking your time to fill this form

Appendix II: Questionnaire for Management

Section A: General Information (tick where appropriate)

1. What is your Gender?

Male Female

2. What is your Age (in years)?

Less than 30 30-39 40-49 Over 40

3. For how long have you worked in the management of this company?

0-5 yrs 5-10 yrs 10-15 yrs Over 15 yrs

4. Do you currently hold, or have you ever held shares in your company's employee share ownership scheme?

Yes No

Section B: Management's satisfaction with employee productivity

5. To which extent has employee productivity improved in your company?

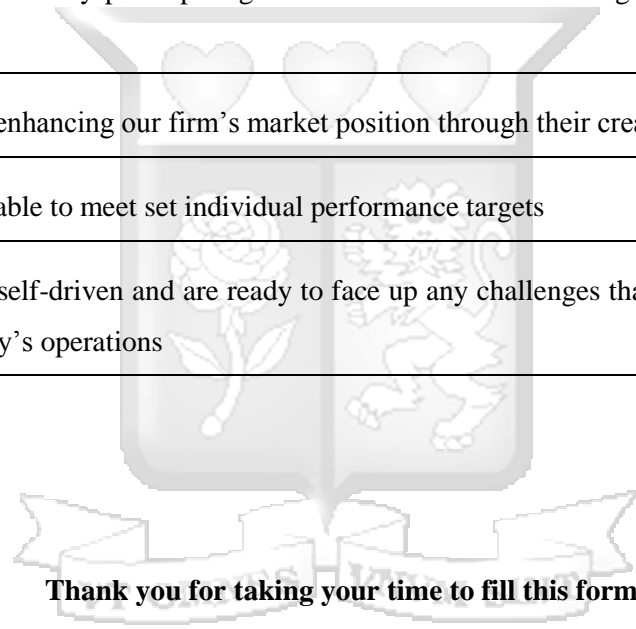
1	2	3	4	5
No extent	Poor extent	Fair extent	High extent	Great extent

6. To which extent are you satisfied with the level of employee productivity?

1	2	3	4	5
No extent	Poor extent	Fair extent	High extent	Great extent

7. Using a scale of 1 to 5 where 1 is Strongly disagree, 2 – Disagree, 3- Hardly agree, 4- Agree and 5 – Strongly Agree, indicate your level of agreement with the following statements regarding your satisfaction with the employees’ productivity in your company.

	1	2	3	4	5
Our employees are taking up more duties and responsibilities					
Our employees are helping the company achieve higher organizational goals					
The rate of employee turnover has declined					
The rate of employee absenteeism has also declined					
Our employees are actively participating in the overall decision making of the company					
Our employees are enhancing our firm’s market position through their creativity					
Our employees are able to meet set individual performance targets					
Our employees are self-driven and are ready to face up any challenges that may arise in our company’s operations					



Thank you for taking your time to fill this form

Appendix III: Sector comparison of listed

Companies with ESOPs	Companies Without ESOPs	NSE Sector Classification
East African Breweries Ltd	B.O.C Kenya Ltd	Manufacturing & Allied
Equity Group Holdings	National Bank of Kenya Ltd	Banking
KCB Group Ltd	The Co-operative Bank of Kenya Ltd	Banking
Housing Finance Group	NIC Bank Ltd	Banking
WPP Scangroup Ltd	TPS Eastern Africa Ltd	Commercial & Services
Standard Group Ltd	Nation Media Group Ltd	Commercial & Services
Kenya Airways Ltd	Express Kenya Ltd	Commercial & Services
Athi River Mining	Bamburi Cement Ltd	Construction & Allied
KenolKobil Ltd	Total Kenya Ltd	Energy & Petroleum



Appendix IV Management Summary Table

Level of Management Satisfaction with Employee Productivity

Report on level of Satisfaction	Mean Score (out of 5)	
	With ESOPs	Without ESOPs
Employees assuming more duties and responsibilities	3.5	3.58
Employees helping firm achieve organizational goals	4.2	3.75
Declining rate of employee turnover	3.6	3.25
Declining rate of employee absenteeism	3.4	3.50
Employees participation in overall decision making of the company	3.85	3.42
Employees enhancing firm's market position through their creativity	3.75	4.17
Employees meeting individual performance targets	3.95	4.00
Level of employees are self-driven and capabilities	4.05	4.08
Total	30.3	29.75
Average	3.79	3.719

Appendix V Employee Summary Table

Level of Employee Satisfaction

Report on level of Employee satisfaction	Mean Score (out of 5)	
	With ESOPs	Without ESOPs
Satisfaction with their role in the firm	3.718	3.532
Satisfaction with compensation and benefits offered by the firm	3.763	3.596
Satisfaction with sense of ownership of the firm	3.763	3.615
Satisfaction with management communication firm policies, mission and goals	3.718	3.532
Satisfaction with equality and fairness in the firm	3.85	3.42
Satisfaction with management and supervisors	3.75	4.17
Total	22.56	21.86
Average	3.76	3.64

Appendix VI Correlation Matrix Table

	Ln(Returns)	DPS	EPS	TOTA	ROA	Sales/Employee	Ln_sales	Ln_assets	Ln_profit
Ln(Returns)	1								
DPS	0.078	1							
EPS	0.121	0.736	1						
TOTA	0.091	-0.082	-0.085	1					
ROA	0.174	0.348	0.449	0.133	1				
Sales/ Employee	0.056	0.037	0.043	0.087	0.041	1			
Ln_sales	0.060	0.108	0.042	0.539	0.281	0.398	1		
Ln_assets	0.037	-0.040	0.036	-0.188	0.201	0.338	0.515	1	
Ln_profit	0.297	0.325	0.521	-0.050	0.564	0.174	0.178	0.362	1