

**THE EFFECT OF ADOPTION OF EMPLOYEE SHARE
OWNERSHIP PLANS ON FINANCIAL PERFORMANCE OF
FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE**

BY

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DECLARATION

I, Frederick Odero, do hereby declare that this research project is my original work and has not been, and is not currently being submitted for a degree in any other university.



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Date

Supervisor

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



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DEDICATION

This research project is dedicated to: my dearest wife Mediatrix Okello for her unwavering support. My dear sons Grant Okello and Ryant Gok Okello; may the sky always be the limit for you and my father Joseph Odero Gok for his love for education.

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To my dear wife. Mediatrix, thank you for the support you gave me during the period of my master's program.

Asante Sana

ABSTRACT

Employee Share Ownership Plans (ESOP) has its origins in the United States of America (Ilallock et al, 2003). Firms adopt ESOP to encourage workers to share in the capital of the firm through stock ownership, thus increasing employee organizational commitment. The use of ESOPs in Kenya has been on the rise leading to its recognition in Kenya under Section 5 of the Income Tax Act and as investment vehicles under the Capital Markets Act.

Studies conducted elsewhere in the world indicated that the effect of ESOP adoption had mixed results on the financial performance of firms. The objective of the study was to establish the effect of ESOP adoption on the financial performance of firms in Kenya. Few studies have been conducted in this area in Kenya.

The study used secondary data of firms listed at the NSE from various industries and sectors. Specifically the study used the annual reports and financial statements of listed firms at the NSE. The pre and post ESOP adoption ROA was calculated. The pre adoption ROA was then projected over a five year period. The resulting projected ROA was compared with the post adoption ROA using paired t test at 0.05 level of significance.

The findings of the study showed mixed results on the effect of adoption of ESOP on the financial performance of the firms. Some firms revealed positive effect on performance on adoption of ESOPs while others indicated no effect. The study recommends that firms should consider adopting ESOPs since it provides an avenue for employee's interest to be aligned with those of the company and therefore is useful in the effort to attract and retain top talent.

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ABBREVIATIONS AND ACRONYMS

- ESOPs - Employee Share Ownership Plans
- K.CB - Kenya Commercial Bank
- LBO - Leveraged Buy Outs
- NCEO - National Centre for Employee Ownership
- NSE - Nairobi Securities Exchange
- ROA - Return on Assets
- ROE - Return on Equity
- S&P - Standard and Poor

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Employee Share Ownership Plans (ESOP) has its origins in the United States of America (Hallock et al, 2003). Firms adopt ESOP to encourage workers to share in the capital of the firm through stock ownership, thus increasing employee organizational commitment and harmony between labour and management (Parks, 1991; in Hallock, 2003). In Kenya, ESOPs are recognized under Section 5 of the Income Tax Act and as investment vehicles under the Capital Markets Act and many companies are now considering their potential benefits. One of the benefits of ESOP adoption is increased financial performance of the adopting firms. It is in this light that the study aims to investigate the effect(s) of the adoption of Employee Share Ownership Plans (ESOPs) on the financial performance of firms listed at the Nairobi Securities Exchange (NSE).

1.1.1. Employee Share Ownership Plans

Several writers have defined ESOPs differently. According to Parks (1991) Employee Share Ownership Plans (ESOP) is a qualified retirement plan which must be accompanied by a qualified trust. Specifically, he defined ESOP as a defined contribution plan that is a stock bonus plan or a qualified stock bonus money purchase plan that must invest primarily in qualifying employer securities.

There are two types of ESOPs. Leveraged and unleveraged. The former suggests that ESOP borrows money to acquire employer shares and the stock is kept into a trust (employee stock ownership trust) (Bartkus, 1997), which has full control over the shares until the debt is paid while in the latter employees buy shares with money

from their own sources. Both leveraged and unleveraged ESOPs may be initiated by employees or by management. Typically, ESOPs are the results of "decisions undertaken unilaterally by management" (Gordon and Pound, 1990:528 cited in Bartkus, 1997). ESOP is a form of participation that offers employees an opportunity to participate in the ownership and also participation in decision-making as noted by Hallock *et al*(2003).

The concept of employee ownership has long history in the United States of America (Hallock et al. 2003). In the 1950's and 1960's the popularity of ESOPs gained political momentum when Senator Russell Long (D- Louisiana) became a major proponent of ESOPs, endorsing Kelso's reasoning and supporting legislation favorable to ESOPs. The philosophy of the ESOP was to encourage workers to share in the capital of the firm through stock ownership, thus increasing employee organizational commitment and harmony between labour and management (Parks, 1991; in Hallock. 2003). In the developed world particularly the United States, ESOP is divided into two. The first type is a stock bonus plan and the second type is a combination of stock bonus plan and money purchase plan. Lapin (anon) argued that the existence of ESOPs has been backed by passing of 12 major bills in the USA. The two most recent ones are: Tax Reform Act of 1984 and the Tax Reform Act of 1986. ESOPs are beneficial to the firm when it is used to reward employees, provide tax benefits and help fend for hostile takeovers in successful companies (Ivanon and Zaima, 2011).

Several scholars have written about the reasons for the rise in the adoption of ESOPs by corporations and entities in the United States of America. According to Adamson

(1993) employee ownership served to boost employee morale and increase productivity. Chen and Kensinger (1988) in Adamson (1993) suggested that providing ownership interest could motivate employees by aligning their interests with those of shareholders. As a result, employees increase their efforts at work and reduce on the job consumption of "perks". ESOPs serve to satisfy a broad mix of corporate motives, while at the same time provide corporations with tax benefits (Pugh *et al.*, 2000). The writer further stated that much of the dramatic growth in ESOPs can be attributed to the ESOP's role in mergers, acquisitions and leveraged buyouts (LBO's), and others were used for example as additional employee benefits, as a tax benefit, to buy stock off a major owner and as a strategy to save a troubled firm.

In the emerging markets and specifically India, the concept of ESOP has continued to be on the rise. ESOPs studies in India are not as old as of the USA. ESOP however, became popular in the information technology sector and were used as a short term incentives due to the boom in share prices in the Technology- Media- Telecom sectors in the years 2000 (Dhiman, 2008). The author further notes that there is no automatic link between ESOPs and firm performance.

In Africa and specifically South Africa. ESOPs have been used over time as employer benefit schemes and to promote staff empowerment programs. Locally in Kenya. ESOPs are becoming increasingly popular in the local market as schemes to provide employees with the opportunity to acquire or purchase shares in the company.

The adoption and implementation of ESOPs by both private companies and public listed entities have been on the rise in Kenya in recent years. The companies in Kenya

have utilized the ESOP concept in an effort to attract and retain top talent and also generate funds in the Securities Exchange. Further, ESOPs are now recognized under Section 5 of the Income Tax Act and as investment vehicles under the Capital Markets Act and many companies are now considering their potential benefits. In Kenya, in most cases, shares are allocated to ESOPs trusts and these are to vest to employees over a given period of time depending on the stipulated conditions as detailed in the various ESOP Trust Deeds. The employees with ESOP firms would get tax benefits from equity based compensations especially if the share prices appreciates and also since in Kenya, capital gains on stocks are not taxed (*Business Daily*, Friday August 5, 2011). Examples of listed entities that have implemented ESOP plans include AccessKenya Group Limited, KCB Bank Limited, Kenol Kobil Limited, East Africa Breweries Limited, Safaricom Limited. Housing Finance Corporation Limited and Scangroup Limited amongst others.

1.1.2. Financial Performance

The idea of financial performance or orientation was raised by French (1987) who argued that employees may approach ownership system with strictly an investment expectation. This view is also consistent with Jensen and Mecklings (1976) agency theory that financial incentives such as employee ownership may make interest of the employees align with those of the stockholders. Financial performance in this context refers to measuring the results of a firm's policies and operations in monetary terms.

These results are reflected in the firms return on assets or value added. In this paper, the financial performance would be measured in terms management efficiency ratios such as assets turnover, operating profit margins and operating profits relating to

assets. These efficiency ratios are indirect improvement in the firm's performance which could be attributed to the change of employee's perspective from that of being a worker to an owner, thus making them responsible and productive.

1.1.3. The Effect of ESOPs on the Financial Performance

Research linking ESOPs with firm performance vary in terms of their results. Some studies have indicated a positive impact while others have indicated a negative or nearly no relationship. The general conclusions however of the major empirical studies that have examined the relationship between adoption of ESOPs and firm performance, firm productivity and stock performance indicates that the impact of adoption of ESOP on the firm performance appear weak, but a positive association does exist.

The studies on the ESOP indicate that that financial performance will be affected by the implementation of an ESOP in several ways. First, ESOP serves to boost employee morale and may also strengthen incentives for management to make decisions in the employee/ owners best interest, leading to improved profitability through gains in labour productivity or reduction of labour costs. Chen and Kensinger (1988) suggest that providing ownership interest could motivate employees by aligning their interests with those of shareholders.

Secondly, workers may increase measures of management efficiency such as asset turnover, profit margins and return on assets resulting from the concept of reverse monitoring of managers by new owners (Pugh *et al.*, 2000). Taylor (1981) concurs with this and notes that ESOP implementation would enhance firm performance

through self and peer monitoring and establishment of 'reciprocal agency' between employees and managers.

Other writers have however indicated that ESOPs impede the efficient transfer of corporate control leading to the shareholders loss of potential takeover premium and also excessive consumption of firm resources by entrenched managers, thus leading to less than optimal performance by the firms.

1.1.4. Listed Companies that have Adopted ESOPs

The companies that have adopted ESOPs in Kenya spread across various industries and sectors including the financial services industries, manufacturing and Telecommunication and services. The listed entities in Kenya who have adopted ESOP's include AccessKenya Group Limited, KCB Bank Limited, Kenol Kobil Limited, East Africa Breweries Limited, Safaricom Limited. Housing Finance Corporation Limited. Scangroup Limited, The Standard Group, Equity Bank Limited and Athi River Mining Limited.

The ESOP concept is increasingly becoming popular amongst corporates in Kenya. The reason for adoption of ESOP by the Kenyan companies is largely attributed to the need to attract and retain top talent to drive the companies' long term performance and value creation. Equity based compensation is expected to reduce employee turnover and motivate workers (*Business Daily*, Friday August 5, 2011 page 8).

1.2 Research Problem

Employee Share Ownership Plans (ESOPs) is a defined contribution plan that invests primarily in qualifying employer securities. It also includes restricted stocks, stock options and stock appreciation rights. The adoption of ESOPs has continued to grow globally especially in the developed world. The dramatic growth has been attributed to various factors such as tax benefits, mergers, acquisitions and employee benefits (Pugh *et al.*, 2000) and employee motivational tool (Dhiman 2008). While the various reasons for adopting ESOPs are all potential sources of shareholder value, little evidence exists to show whether shareholders in ESOP firms realize any of these specified benefits in the long term (Dhiman 2008).

In the emerging markets and specifically India, ESOP was mainly used as short term employee incentives to enhance staff productivity in the technology sector boom in the years 2000 (Dhiman 2008). However, no clear link between the adoption of ESOP and the firm performance was identified. In Kenya, ESOPs are being used as schemes to provide employee benefits and also as investment vehicles. The schemes are largely motivational tools to attract and retain top talent. Equity based compensation locks in employees because only those who have served a company for a particular period qualifies for the incentive. This will help drive long term performance and value creation (*Business Daily*, Friday August 5, 2011). The motivational aspect is expected to augment the profitability performance of the company by reducing employee cost, minimize wastage and improve on company's management or operating efficiency.

Studies in other countries on the effect of adoption of ESOP have indicated mixed results. Despite growth in the adoption of ESOPs by firms in Kenya, few studies have been conducted to determine any effect(s) or relationship of adoption of the ESOP on the firm performance, hence the need to carry out this research. This study wished to answer this research question: Does the implementation and adoption of ESOP (whose main purpose is an employee benefit or investment vehicle) in publicly listed firms in Kenya, have an impact on the corporate financial performance?

1.3 Objective of the Study

The main objective of the study was to establish the effect of implementation of ESOP on financial performance of firms listed at the NSE. Specifically, the study addressed the following objectives:

- i. To determine pre and post adoption ROA of ESOP firms
- ii. To investigate the effect of ESOP adoption on the firms performance

1.4 Value of the Study-

Adoption of ESOP has been increasing in both developed and developing world. In Kenya, companies both public and private are increasingly adopting the equity based compensation as a way to attract and retain top talent. This study is useful at various levels as it provides insights into the effects of adoption of the ESOP and firm performance.

At the Organizational/ institutional level, this study provides information to the companies which are trying to retain their valued top talents at the institutions. Many institutions today are facing up to the challenges of attracting and retaining the

generation 'Y' employees, majority of whom are spending less than three years in any particular company (*Business Daily*, Friday August 5, 2011).

With the vision 2030 goal of the Government of Kenya, the research would inform policy that would help re-align the visions as espoused in Vision 2030 policy document in regard to the taxation and investment vehicles policy measures. Attracting and retaining innovators with adequate equity based compensation would be appropriate going forward.

Finally, the study makes a contribution into the body of research undertaken on the effect of adoption of HSOP on the financial performance of firms.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter is divided into three sections. The first section reviews the theoretical framework on which the study is premised. The second section discusses the reasons for the adoption of ESOPs. The third section covers the empirical reviews, i.e. literature that examine on the relationship between adoption of ESOP and firm performance.

2.2 Theoretical Review

The relationship of ESOPs to corporate performance can be examined in terms of agency theory. Agency theory suggests that public corporations are characterized by certain agency costs. These costs are incurred by shareholders, the true owners of the firm, who rely on managers of the company (agents) to manage the company in a way that will maximize returns. As a result, a separation of ownership and control exists. The degree to which managers use their abilities to maximize shareholders wealth is dependent on the percentage of equity ownership the manager has in the firm (Jensen and Meckling, 1976; Walking and Long, 1984, Eisenhardt, 1989 cited in Purgh et al, 2000). The theory further contends that managers, by acting as agents for owners, may pursue strategies and goals to meet their own utility rather than that of the owners. Consequently, the overall performance of the company may be impaired by less than optimal managerial decision making.

2.2.1 Agency Theory

Agency theory holds that owners incur costs from having hired management. These costs may occur in explicit ways such as the excessive use of prerequisites or in implicit ways, such as sub optimal decision-making. Managers controlled firms are more likely to maximize sales rather than profits, have a lower profit rate but less variability, engage in activities to smooth income, and engage in conglomerate mergers (Smith 1976; Nyman and Silberston, 1978; Amihud and Kamin, 1979; Amihud and Lev, 1981 in Pugh et al, 2000). These activities have the potential of shifting wealth from the owners to the managers, unless constrained by the owners. Consequently, if managerial ownership promotes entrenchment, resources can potentially be inefficiently used and shareholder wealth suffers (Fama and Jensen, 1983).

By definition, ESOPs increase the percentage of 'inside owners' in a company. **If** the new owners truly have decision making authority, then, according to agency theory, efforts will be made to increase shareholder wealth, and increase in corporate performance would be expected. However, if the employee owners are merely 'friendly*' shareholders with little or no decision making authority, management may, in effect gain more control. That is, employees who are hired and evaluated by management will align themselves with management out of concern for job security. As a result, one interpretation of the agency argument would be that the ESOP would facilitate management entrenchment and, thus possibly lower corporate performance (Chang and Mayers, 1992). For example, employee participants in the ESOP are not likely to gain significant decision making authority. Any change in the employees

behavior may result from the greater incentives to perform since, ultimately, they will benefit in terms of personal wealth.

Pugh et al (2000) also noted an alternative perspective, assuming that the ESOP shares are indeed 'friendly' shares; ESOPs would be expected to increase the voting power of the firm's managers. Therefore when faced with a potential takeover bid, managers would be in a more powerful position to elicit high bids and, hence, a higher price for company stock. In this situation, ESOPs would benefit the wealth of the shareholders.

2.2.2 Stakeholders Theory

Stakeholder's theorists argue that all persons or groups with legitimate interests participating in an enterprise do so to obtain benefits and that there is no priority of one set of interest and benefits over another. Thomas and Preston (1995) indicated that stakeholder theory is intended both to explain and to guide the structure and operations of established corporations. They stated that stakeholder theory is general and comprehensive and goes well beyond the descriptive observation that "organisations have stakeholders". Other writers have also indicated that stakeholder theory is justified in the literature explicitly or implicitly in ways that correspond directly to the three approaches: descriptive, instrumental and normative. The central core of the theory is normative and it presumes that managers and other agents act as if all stakeholders' interest have intrinsic value.

Clarkson (1991) and Halal (1990) noted in their empirical studies that managers may not make implicit reference to "stakeholder theory", but the vast majority of them

apparently adhere in practice to one of the central tenets of the stakeholder theory, namely that their role is to satisfy a wider set of stakeholders, not simply shareholders. Evan and Freeman (1993) asserted that "management has a duty of safeguarding the welfare of the entity that is the corporation" and of balancing the conflicting claims of multiple stakeholders to achieve the goal of the firm. They noted that success in satisfying multiple stakeholder interests rather than in meeting conventional economic and financial criteria would constitute the ultimate test of corporate performance.

Adoption of ESOP in a firm would also be viewed to be in line with the stakeholder's theory as far as satisfaction of multiple stakeholder interests in the firm are concerned.

2.3 Reasons for Adoption of ESOPs

This section looks at different reasons for establishing ESOPs. The main reason for adoption of ESOP is for exclusive benefit of participants. This is because ESOP is an employee benefit plan and therefore must aim at benefiting participants (Lapin, 1988). Other benefits of adoption of ESOP flow from its status as an employee benefit plan. The key benefits are analysed as follows:

First, adoption of ESOP is expected to lead to increased employee motivation and productivity. This could be attributed to ownership benefits of the ESOP to the participating employees. Buchko, (1992) in Bartkus (1997) indicated in their study that employee's owners who perceived that ESOP authorized them to have a greater voice in company decisions were more committed, more satisfied and more involved in their work. This is consistent with the agency theory, which indicated that providing ownership interest could motivate employees by aligning their interests

with those of shareholders (Chen and Kensiger, 1988 cited in Adamson S.R 1993). Further empirical studies have also shown that employee attitudes including organizational commitment and employee motivation have been influenced by perceptions of exercisable ownership rights (Buchko, 1992; Tucker et al., 1989 in Barktus (1997). Klein (1987) in Barktus (1997) also noted that employee ownership coupled with participatory management practices and financial rewards was found to be positively related to employee attitudes and hence employee motivation and productivity.

Secondly, ESOP was largely adopted as a defense against takeovers. Whatever the motive for implementation. ESOPs serve as a good defense in the event of an unfriendly corporate raider because they place a large block of voting stock in the hands of employee who are generally aligned with management (Pugh et al, 2000). Stulz (1988) in Adamson (1993) concurs and contends that ESOPs provide additional voting power to incumbent managers who can then extract a higher price for the firms' shares from potential bidders than can less informed outsiders.

Thirdly, ESOP can be used in a variety of purposes such as staff retention, business restructuring and expansions. One of the reasons for the proliferation of ESOPs is that it has become a standard business practice resulting from fierce competition for talented professionals. Thus, ESOPs are used as a means to recruit, retain and motivate qualified personnel. Accordingly, ESOPs intend to enhance efficiency and effectiveness of business operations (Chen Wei- Ning and Chen-Yi Hsu (Taiwan). 2008), leading to avenues for business restructuring and expansions. In Kenya, ESOPs have become an option for the attracting and retaining top talents.

A survey (Ryterband (1991) in Pugh *et al.* (2000) of over 3500 ESOP firms reported that employers perceive that ESOPs have six primary attributes: improvement in employee morale, potential tax savings; improvement in productivity; reductions in employee turnover; and a source of capital investment. Further, these employers believed that primary disadvantages of ESOPs were the dilution of outstanding stock, liability for repurchasing shares from participants and loss of company control. On the loss of control however, Blassi (1988) determined that the negative impact of dilution is minimal because most ESOPs in publicly held firms in USA control less than 10% of the firm's outstanding shares. Stulz (1988) in Adamson (1993) also contended that ESOPs provide additional voting power to incumbent managers who can then extract a higher price for the firms' shares from potential bidders than can less informed outside shareholders.

Taylor (1981) in Adamson (1993) concluded that ESOP adoption and implementation would enhance firm value due to increases in firm "information flow", increases in self and peer monitoring on the part of the employees, and managers and establishment of "reciprocal agency" between employees and managers. However, other practitioners and researchers and existing literature offered mixed results as to the effect of the implementation of the ESOP and the relationship with corporate performance. There have been several studies in recent years examining the potential for managers to exhibit myopic decision making (Pugh *et al.* (2000). Adamson (1993) noted that opponents of the ESOP concept claim that, like poison pills and other antitakeover provisions, ESOPs impede the efficient transfer of corporate control, in such a way that corporate shareholders may suffer not only from loss of a

potential takeover premium, but also from excessive "perk" consumption by entrenched managers Chang, (1990) in Adamson (1993).

2.4 Empirical Review

Studies have examined the relationship between ESOPs implementation and firm value, however, evidence on the impact of ESOP appear to be mixed (Ivanon and Zaima 2011; Hallock *et al.*, 2003). The succeeding paragraphs provide empirical literature on the association between ESOP and firm's financial performance.

Hallock et al (2003) alluded to studies conducted by different scholars in different parts of the world. The study findings established that there was a weak positive correlation between the existence of ESOP and employee productivity. Implied here was that ESOP should be positively associated with firm profitability. Further, they argued that other studies also suggested an existence of a positive association between employee attitudes and their level of commitment to the organization.

Blassi and Krusse (2002) have conducted several studies to address the issue of whether and how the employee ownership affects firm performance. In these studies, they have severally compared ESOP companies with non ESOP companies in the studies. Their conclusions are largely split between favorable and neutral findings on the relationship between employee ownership and firm performance.

Gupta and Dhiman, (2010) conducted an ESOP study on the pharmaceutical industry in India which aimed at measuring the post-financial performance of these companies after the adoption of ESOPs. In the study, they examined 10 of the top pharmaceutical

companies that adopted ESOP during the years 1st April, 2000 to 31st December 2005 and using the financial performance measures for six years (beginning from 2006 to 2010) after following the company's adoption of the employee stock option plan. The companies post financial performance was measured by four financial ratios: Net profit ratio. Employee cost ratio. Material Cost Ratio and Administrative cost ratio and these were compared against industry average. The empirical results of the study indicated mixed results. Some companies financial performance statistically improved as compared to group average value for all financial measures while one company's the performance reduced compared to the industry average (Gupta and Dhiman, 2010).

Similarly studies conducted on the effects of ESOP on performance and risk on the companies whose stocks were listed in the French stock exchange also revealed mixed results (Stephane and Henri, 2002). The duo performed studies focusing on the relationship between ESOPs and company performance on the firms listed in the French stock exchange. In the study, they examined 221 firms which had ESOP from a total sample of 701 publicly listed companies. The relationship existing between ESOPs and financial indicators were studied for the year 2000. They examined the correlation between ESOPs and risk and performance indicators, while controlling for size, sector, age and leverage.

The empirical results for this study were partly noted to be consistent with the agency theory predictions, where ESOP mechanism was expected to align the employee and shareholder interests. Overall, however, the study did not observe any optimal threshold of employee ownership which might maximize performance. Study also

noted that the presence of ESOPs is positively correlated to performance, but the relationship of causality remained complex and that ESOP firm had a higher beta.

Chen Wei- Ning (Taiwan) and Chen-Yi Hsu (Taiwan), (2008) conducted event studies on the corporate financial performance and market reaction to ESOP; evidence from Taiwan. The study examined whether companies in Taiwan have different financial performance when adopting ESOP and also analysed reactions of stock returns when the board meetings announce to adopt ESOP plans. The study used the time period data from fiscal year 2003 to 2005 obtained from the Taiwan Economic journal. The samples were selected from listed companies and non-financial sector companies. The findings of this study showed that adoption or non-adoption of ESOP in the electronic industry significantly their company performance, with the Return on Equity (ROE) measure of performance displaying significant disparities. The results of the non-electronic companies showed that ESOP adoption also contributes to company operation improvements, increased shareholder ROE, and reduced financial risk.

Hamid and Iqbal (2000) conducted studies on the stock price and operating performance of the ESOP firms. The list of ESOP firms sample was obtained from National Centre for Employee Ownership (NCEO), in USA. They explored the financial perspective of the employee ownership by empirically examining the relationship between stock returns and operating performance of ESOP firms. They noted that company stock price affects the value of the ESOP accounts, which in turn influences organizational commitment and productivity of employees. They hypothesized that employees of ESOP firms will be more (less) committed and

productive if stock appreciates (declines) in value thus improving (reducing) operating performance. They obtained a sample of 76 publicly traded firms that adopted an ESOP in 1988 or before and tested the hypothesis. They constructed a control sample by matching each ESOP firm with a non ESOP firm of similar size (measured by total employees) one year prior to ESOP adoption that has similar industrial characteristics. The findings of this study were consistent with other findings in the prior studies that operating performance improves following the adoption of ESOP, similarly, based on this studies, it was expected that operating performance of ESOP firms to fall after stock prices decreases. However, the results were anomalous in this study for the ESOP firms that experienced falling stocks prices as they also showed improved performance.

The above studies have largely indicated mixed results with positive association of the effect of ESOP adoption and corporate financial performance. However, there are some studies that have indicated a negative effect on the adoption of ESOP on the firm performance as noted below.

Blasi et al (1996), in their study of the financial returns of public ESOP companies: investor effects vs. manager effects. noted that financial returns of public companies that sponsor ESOPs are substantially and significantly higher than those of comparable non ESOP companies. In the analysis of pre- and post-adoption return of ESOP sponsoring companies, it suggested that the adoption of ESOP actually reduces financial returns. In this study, the control was maintained for financial risk and company size, which were noted to have independent effects on financial performance. The study comprised of more than 9,000 active companies with fiscal

year end in between 1981 to 1993 and financial data obtained from the S&P Compustat data base. The data for analysis included information such as financial returns, leverage, market capitalization, number of employees, whether company sponsored an ESOP in the year, the number of employee participants, and the value of sponsor stock the ESOP held. The findings for this study noted that ESOP adoption effect is marginal and insignificant for the small companies but negative and significant for large companies.

This was explained by the issue that public ESOP companies appear to be self-selected group of highly profitable companies whose managers may be willing to sacrifice financial returns to achieve a limited number of other objectives. The conclusions for the study indicated that ESOP companies had higher returns compared to non ESOP companies. Further, ESOP companies, particularly companies that employ fewer than 500 people, exhibited returns that are substantially and significantly higher than those of comparable non ESOP companies. It noted that although the presence of ESOP appears to be a good signal to buy stock, the ESOP adoption effect is negative, indicating that returns tend to be reduced by the presence of the plan as compared with returns for the same company in the pre-adoption period.

2.5 Conclusion

Most existing literature offers mixed results as to the effect of ESOPs on corporate performance. Several studies have indicated mixed results with positive association of the effect of ESOP adoption and corporate financial performance. However, some studied have indicated a negative effect on adoption of ESOP on the firm

performance. Despite these reviews, Blasi (1988 p.231) summed it up by pointing out that 'there is no evidence that employee ownership hurts companies'. Little research has been done locally to determine any effects or impact of adoption of ESOP on the firm performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter on research methodology is divided into four sections. The first section describes the research design. The second section discusses the study population and the third section discusses data sources and actual data collection process. The fourth discusses data analysis.

3.2 Research Design

A research design is a framework for conducting a research project. It specifies the details of the procedures necessary for obtaining the information needed to structure or solve research problems (Birks and Malhotra, 2003). A descriptive research design is one that describes the state of affairs as it is at present. It includes surveys and fact finding enquiries of different kinds. Descriptive research design is a valid method for researching specific subjects and as a precursor to more quantitative studies.

Descriptive research design was chosen because it involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection. It often uses visual aids such as graphs and charts to aid the reader in understanding the data distribution. Descriptive research also uses description as a tool to organize data into patterns that emerge during analysis which aid the mind in comprehending a qualitative study and its implications. Descriptive research design and statistics is very important in reducing data into manageable form (Glass & Hopkins, 1984).

3.2 Population

Mbokane (2009) refers to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. According to Castillo (2009), a research population is generally a large collection of individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done. A research population is also known as a well-defined collection of individuals or objects known to have similar characteristics. All individuals or objects within a certain population usually have a common, binding characteristic or trait.

For the purpose of this study, the research population was all listed companies that had adopted ESOPs. There were 10 companies that had adopted ESOPs as per the review of their latest available financial statements.

3.3 Data Collection

Data collection entailed gathering information to address the research question at hand. For the purpose of this study, secondary data, which refer to the information obtained from articles, books, newspapers, internet and magazines (Irerri, 2006), was collected. This data was used for generation of information and as Cooper & Schindler (2003) explained, secondary data is a useful quantitative technique for evaluating historical or contemporary confidential or public records, report, government documents and opinions.

The data was collected from the published annual reports and financial statements of the listed firms under study, for five years prior to adoption of ESOPs and also five

years after adoption of ESOPs. The study sought to determine whether adoption of ESOPs had an impact on the financial performance of the listed companies in Kenya. The study determined if the number of shares that were available to the ESOP compared to the total shares available contributed to the impact on financial performance of the listed firm on adoption of the ESOPs.

3.4. Data Analysis

The study utilized t-paired test in analysis. A paired t-test measures whether means from a within-subjects test group vary over 2 test conditions. The paired t-test is commonly used to compare a sample group's scores before and after an intervention. For this study t-test was used to establish whether adoption of ESOP by firms had a significant effect on the firms' financial performance.

The study had one dependent variable i.e. corporate financial performance of the study ESOP firms (measured by Return on Assets (ROA)) and one independent variable i.e. adoption of employee share ownership plan which took two values (0 and 1). The financial performance of the ESOP firm was measured when the independent variable (ROA) was 0, that is, on adoption of the ESOP and then projected to develop the expected ROA (based on the trends established on the period prior to ESOP adoption) for the post ESOP implementation period. Thereafter, the dependent variable (financial performance) was measured when the independent variable is 1 i.e. post ESOP adoption period. A comparison between the projected ROA (for post ESOP implementation period) based on the trends over five year period prior to ESOP adoption and the actual ROA was made using a statistical analysis model, specifically the paired t test (also called dependent t test) to ascertain whether adoption of ESOP

had had an impact on the corporate financial performance of the listed companies or not.

The paired/dependent t test takes the following formula (when $n_1=n_2$):

$$t = \frac{\bar{D}}{\frac{SS_D}{\sqrt{n(n-1)}}}$$

Whereby:

n refers to the number of pairs of ROAs (X_j and Y_j);

D is the difference between the projected ROA (X_j) and actual ROA (Y_j) for the entire period that the firm has adopted ESOP

$$D = X_j - Y_j$$

SS_D IS the standard deviation of the population means under study

\bar{D} is the mean of the difference between projected ROA (X_j) and actual ROA (Y_j)

$$\bar{D} = \frac{\sum D}{n}$$

The Null and Alternative Hypothesis for the paired t test were as follows:

$H_0: \mu_1 = \mu_2$ (there is no difference in corporate financial performance as a result of ESOP adoption)

$H_1: \mu_1 \neq \mu_2$ (there is a difference in financial performance as a result of adoption of ESOP).

The following main steps were followed in the analysis:

Step One:

Computation of the Return on Assets (ROA) for the ESOP firms for a 5 year period prior to ESOP adoption.

Step Two:

Projected the ROA (computed in step 1 above) using Microsoft excel for the period that each of the firms adopted ESOPs.

Step Three:

This step constituted statistical analysis using a Microsoft excel analysis tool referred to as the "t test: paired two samples for means".

Interpretation of Results

The results of the computation per excel analysis are displayed as follows for each of the study firms:

Table 3.4: Results of Computation for the t- tests

	<i>Variable</i> <i>KXi</i>	<i>Variable</i> <i>2 (X₂)</i>
Mean		
Variance		
Observations		
Pearson Correlation		
Hypothesized Mean Difference		
df(n-1)		
t Stat		
P(T<=t) one-tail		
t Critical one-tail		
P(T<=t) two-tail		
t Critical two-tail		

The value of t (t Stat per excel results) showed the difference in the population means.

The sign of the t value (t Stat) i.e. positive or negative showed the direction of the difference in the population means. The t Stat value was used to determine the P value {P (T<=t) two-tail}. If the P value was less or equal to 0.05 then the null hypothesis was rejected and the result deemed to be statistically significant.

This means that there is a significant difference in financial performance (dependent variable) as a result of adoption of employee share ownership plans (independent variable). If the P value was more than 0.05 then the null hypothesis was not rejected

meaning that there is no significant difference in financial performance (dependent variable) as a result of ESOP adoption by the companies (independent variable).

The ratio of the total number of shares in ESOP firm and the total available number of shares for the ESOP company was also tabulated as indicated in appendix iii.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the research objective in eight sections. The presentation is done based on the industry/ sector of the companies involved. The first section discusses the findings of ESOPs* adoption on firms in the banking sector. The second section looks at the findings of adoption of ESOPs on firms in the manufacturing sector while the third section discusses these findings on firms in the commercial and services sector. The fourth and fifth sections illustrate the findings of ESOPs on firms in the telecommunication and services and construction sectors respectively. The sixth section provides findings on firms in the energy sector. The seventh section provides a paired t-test analysis of the results of the ten companies studied. The eighth section looks at the comparison between the proportion of ESOP shares and the latest available number of ordinary shares in each of the study firms. The findings have been presented in tables.

4.2 Banking Sector

One of the sectors with listed firms at the NSE is the banking sector. This sector has ten listed firms. However, only three entities namely Housing Finance Company Limited, Equity bank and Kenya Commercial bank had adopted ESOPs at the time of the study albeit at different periods. The preceding section discusses the financial performance and trends of these banks in detail.

4.2.1 Housing Finance Company Limited

The bank adopted ESOPs in the year 2006. According to the bank's annual report and financial statement for the year 2011, the number of shares held in ESOPs stood at 2,125,000. The total number of available ordinary shares was 235,750,000. The data collected from the bank's annual reports and financial statements spanned from the years 2001 to 2011. The data reflected financial performance of the bank five years prior to ESOP adoption and five years after adoption. This information is presented in Table 4.2 below.

Table 4.2: Distribution of Profit/Loss and Total Assets by Years For Housing Finance Company Of Kenya Limited

Year	Profit/Loss	Total Assets	Pre-Adoption ROA	Post Adoption ROA	Projected ROA
	Kshs'000	kshs'000			
2001	-185,724	11,670,726	-0.015913663		
2002	55,851	10,445,217	0.005347041		
2003	51,847	10,764,533	0.004816465		
2004	59,976	9,460,632	0.006339534		
2005	58,799	9,861,078	0.005962736		
2006	101,049	9,133,831		0.011063156	0.004021716
2007	73,508	10,369,255		0.007089034	0.004700511
2008	136,427	14,294,368		0.009544100	0.003403085
2009	234,176	18,239,359		0.012839048	0.00294851
2010	379,531	29,278,396		0.012962834	0.002554657
2011	622,278	31,870,916		0.019524949	0.002213413

Source of profit/loss and assets: Annual report and financial statements from the years 2001-2011

Table 4.2 above provides information on the bank's financial performance from the years 2001-2011. This was presented in column one (1). In columns two (2) and three (3) information on the bank's profit or loss and total assets respectively was presented. Column four (4) presents information on pre adoption Return on Assets (ROA) while column 5 and 6 present post- adoption and projected ROA respectively. The pre and post adoption ROAs were calculated using the formula below:

$$ROA = \frac{\text{Total profits/ (loss) for the year}}{\text{Total assets}}$$

The formula above and explanations of the contents of the tables as indicated applies to all the listed companies being studied as detailed below.

The projected ROA was calculated based on the trends over the five year period prior to ESOP adoption (years 2001-2005). Excel was used to project the trends of ROA for the periods (2006-2011). The projected ROA was compared against post adoption ROA using paired t- tests at 0.05 level of significance.

4.2.2 Kenya Commercial Bank (KCB)

Kenya Commercial Bank (KCB) adopted ESOPs in the year 2008. In 2010 the number of E.SOP shares was 2,950,260 against 3,500,000,000 total ordinary shares. The data was captured from the bank's annual reports and financial statements for the periods 2003 to 2011. This is presented in tabic 4.3.

Table 4.3 Distribution of Profit/Loss and Total Assets by Years for Kenya Commercial Bank

Year	Profit /Loss	Total Assets	Pre Adoption ROA	Post Adoption ROA	Projected ROA
	Kshs'000	kshs'000			
2003	612,441	60,488,155	0.010124974		
2004	787,051	69,600,167	0.011308177		
2005	1,326,027	78,315,052	0.016931956		
1 2006	1 2,431,878	92,526,571	0.026283023		
[2007	2,974,572	120,479,553	0.024689434		
[2008	4,190,690	191,211,586		0.021916507	0.036483052
2009	4,083,871	195,011,548		0.020941688	0.047439804
2010	7,177,973	251,356,200		0.028556976	0.061687135
1 2011	10,981,046	330,716,159		0.033203839	0.080213287

Source of profit/loss and assets data: Bank's Annual reports and financial statements for the years 2003-201 /

The projected ROA was calculated based on the trends over the five year period prior to ESOP adoption (years 2003-2007). Excel was used to project the trends of ROA for the periods (2008-2011). The projected ROA was compared against post adoption or actual ROA using paired t-test at 0.05 level of significance.

4.2.3 Equity Bank

Equity bank was incorporated in the year 2004 and adopted ESOPs in 2005. Before its incorporation as a bank, the company operated as a building society. The data captured therefore for the bank spanned from the years 2004 to 2011. The latest number of ESOP shares held by employees as at 2011 was 154, 597,000 against 3,702,777,020 total number of ordinary shares. This is presented in Table 4.4 below.

Table 4.4: Distribution of Profit/Loss and Total Assets by Years for Equity Bank Limited

Year	Profit/Loss	Total Assets	Pre Adoption ROA	Post Adoption ROA	Projected ROA
	Kshs '000	Kshs-000			
2004	136,135	6,707,420	0.020296179		
2005	344,598	11,546,543	0.030078707		
2006	754,000	20,024,000		0.037654814	#NUM!
2007	1,890,000	53,076,000		0.035609315	0.052751831
2008	3,910,000	78,879,000		0.049569594	0.048502791
2009	4,234,000	100,812,000		0.041998968	0.059748439
2010	7,132,000	143,018,000		0.049867849	0.057432616
2011	10,325,000	196,294,000		0.052599672	0.061253271

Source of profit/loss and total assets : Bank's Annual reports and financial statements for the years 2004-2011

The projected **ROA** was to be calculated based on the trends over the five year period prior to **ESOP** adoption. However, the projections were made over a period of one year as the company adopted **ESOP** in 2005 after its incorporation or transformation into a bank in the year 2004. Excel was used to project the trends of **ROA** for the periods (2006-2011). The projected **ROA** was compared against post adoption **ROA** using paired t-test (paired two sample for means) at 0.05 level of significance.

4.3 Manufacturing Sector

In the manufacturing sector, nine companies had been listed at the Nairobi Securities Exchange. However, only one company; East African Breweries Limited had adopted ESOPs.

43.1 East African Breweries Limited

This company adopted ESOP in the year 2001. As at 2010 ESOP shares stood at 1,493,081 against 790,774,000 total number of ordinary shares. The data presented in Table 4.5 below showed financial performance of this company from the years 2000-2006.

Table 4.5 Distribution of Profit/Loss and Total Assets by Years for East African Breweries Limited

YEAR	PROFIT/LOSS	TOTAL ASSETS	Pre Adoption ROA	Post Adoption ROA	Projected ROA
	Kshs'000	Kshs'000			
2000	1,174,797	14,095,809	0.083343709		
2001	1,573,406	15,134,076	0.103964457		
2002	2,319,250	17,986,236		0.128945823	0.129687154
2003	1,964,146	17,297,637		0.113549961	0.160542290
2004	3,849,058	20,770,537		0.18531336	0.141238864
2005	4,769,912	12,701,832		0.375529451	0.196771735
2006	5,392,488	13,873,011		0.388703505	0.358360856

Source of profit/loss and total assets: Company's annual report and financial statements from the years 2000-2006

The projected ROA was to be calculated based on the trends over the five year period prior to ESOP adoption. However, the projections were made over a period of two years as the company adopted ESOP in 2001. The data on the financial performance of the company in the years 1998 was not available. Excel was used to project the trends of ROA for the periods (2002-2006). The projected ROA was compared against post adoption ROA using paired t-test (paired two sample for means) at 0.05 level of significance.

4.4 Commercial and Services Sector

In the commercial and services sector nine companies had been listed at the NSE however, however, only two had adopted ESOP at the time of this study. The companies were Standard Group Limited and ScanGroup Limited.

4.4.1 Standard Group Limited

This company adopted ESOPs in 2010. The total number of ESOP shares as at 2010 was 5,198,980 against 103,979,600 total number of ordinary shares.

Table 4.6 Distribution of Profit/Loss and Total Assets by Years for Standard Group Limited

Year	Profit/Loss	Total Assets	Pre Adoption ROA	Post Adoption ROA	Projected ROA
	Kshs'000	Kshs'000			
2015	72,988	981,564	0.07435888		
2006	205,257	1,291,360	0.158946382		
2007	289,820	205,257.00	1.411985949		
2008	286,192	2,686,213	0.106541067		
2009	263,384	3,003,966	0.087678755		
2010	279,784	3,306,000		0.084629159	0.169582837
2011	147,345	3,512,257		0.041951657	0.105944788

Source of profit/loss and total assets: Company's annual and financial statements from 2005-2011

The projected ROA was calculated based on the trends over the five year period prior to ESOP adoption (years 2005 - 2009). Excel was used to project the trends of ROA for the periods 2010 - 2011. The projected ROA was compared against post adoption ROA using paired t-test at 0.05 level of significance.

4.4.2 ScanGroup Limited

The company adopted ESOP in 2009. The total number of ESOP shares as at 2011 was 2,754,000 against 284,789,000 total ordinary shares.

Table 4.7 Distribution of Profit/Loss and Total Assets by Years for ScanGroup Limited

Year	Profit/loss	Total assets	Pre Adoption ROA	Post Adoption ROA	Projected ROA
	Kshs'000	Kshs'000			
2004	65,345	639,483	0.102184108		
2005	148,192	1,021,563	0.145063985		
2006	195,528	1,237,967	0.157942821		
2007	244,433	1,753,635	0.139386474		
2008	315,789	3,761,064	0.083962677		
2009	401,148	3,933,148		0.101991585	0.107440992
2010	640,585	8,009,431		0.07997884	0.099381661
2011	911,116	8,489,938		0.107317156	0.083441104

Source of profit/loss and assets: Company's annual reports and financial statements from the years 2004-2009

The projected ROA was calculated based on the trends over the five year period prior to ESOP adoption (years 2004 - 2008). Excel was used to project the trends of ROA for the periods 2009 - 2011. The projected ROA was compared against post adoption ROA using paired t-test at 0.05 level of significance.

4.5 Telecommunications and Services Sector

In the telecommunications and services sector, two companies had been listed and both have adopted ESOPs. The companies were Safaricom Ltd and AccessKenya Group Limited.

4.5.1 Safaricom Limited

This company adopted ESOPs in the year 2010. The group had an ESOP plan where 101,000,000 shares had been allotted. The total number of ordinary shares as at 2012 was 40,000,000.000.

Table 4.8: Distribution of Profit/Loss and Total Assets by Years for Safaricom Limited

Year	Profit/Loss	Total Assets	Pre Adoption ROA	Post Adoption ROA	Projected ROA
	Kshs -000	Kshs'000			
2005	5,855,380	3,437,821	0.1703441698		
2006	8,425,456	43,944,947	0.1917275267		
2007	12,010,431	56,408,239	0.2129198006		
2008	13,853,286	74,366,313	0.1862844269		
2009	10,536,760	91,682,324	0.1149261880		
2010	15,148,938	104,120,850	0.145485150		
2011	13,158,973	113,854,762		0.1155768346	0.13057773
2012	12,627,607	121,899,677		0.1035901596	0.11352404

Source of profit/loss and total assets: Company's annual reports and financial statements from 2005 -2012

The projected ROA was calculated based on the trends over the five year period prior to ESOP adoption (years 2005 - 2009). Excel was used to project the trends of ROA for the periods 2010 - 2012. The projected ROA was compared against post adoption ROA using paired t-test at 0.05 level of significance.

4.5.2 Access Kenya Limited

The company was incorporated in the year 2006 and it adopted ESOPs in 2007 following its listing at the NSE. In 2011 AccessKenya group ESOP shares was 6,368,490 representing 3.1% of the 207,227,000 total ordinary shares.

Table 4.9: Distribution of Profit/Loss and Total Assets by Years for Access Kenya Limited

Year	Profit/loss	Total assets	Pre Adoption ROA	Post Adoption ROA	Projected ROA
	Kshs'000	Kshs'000			
2006	(15,112,936)	225,251,811	-0.354564146		
2007	133,509,766	833,193,571	0.187454542		
2008	203,655,515	1,063,499,614		0.191496184	-
2009	147,909	1,771,307		0.083502747	0.126100152
2010	(7,951)	1,615,151		(0.00291354)	-
2011	109,084	2,415,111		0.045167282	-

Source of profit/loss and assets : Company's annual reports and financial statements from 2006 - 2011

The projected ROA was to be calculated based on the trends over the five year period prior to ESOP adoption (years 2002 - 2006). However, the company was incorporated in 2006 and adopted ESOP in 2007 following its listing at the NSE; consequently there was no sufficient data prior to ESOP adoption for the formulation of trends necessary for the computation of projected ROA. The paired t- test for this company could therefore not be run. Refer to appendix xi.

4.6 Construction and Allied Sector

Under this sector Athi River Minings Limited is discussed being the only company under this sector that had adopted ESOPs at the time this study was being conducted.

4.6.1 Athi River Mining Limited

The company adopted ESOPs in 2005. In 2007, 6,055,000 of ordinary shares were issued to the ESOP. In the same year, the total number of ordinary shares stood at 135,000,000.

Table 4.10: Distribution of Profit/Loss and Total Assets by Years for Athi River Minings Limited

Year	Profit/loss Rshs'000	Total assets Kshs'000	Pre Adoption ROA	Post Adoption ROA	Projected ROA
2000	29,890	1,270,612	0.023524097		
2001	35,266	1,273,277	0.027697037		
2002	57,390	1,415,154	0.040553890		
2003	97,116	1,575,403	0.061638831		
2004	116,718	2,025,991	0.057610325		
2005	199,504	3,238,664	0.061600709		
2006	264,557	4,254,328		0.062185379	0.089048213
2007	421,659	4,504,677		0.093604714	0.089681089
2008	503,454	6,152,478		0.079253167	0.109011984
2009	645,774	12,141,091		0.053189124	0.112969762
2010	792,011	16,564,899		0.047812607	0.097701368

Source of profit/loss and total assets data: Company's annual reports and financial statements from 2000 - 2010

The projected ROA was calculated based on the trends over the five year period prior to ESOP adoption (years 2000 - 2004). Excel was used to project the trends of ROA for the periods 2005 - 2010. The projected ROA was compared against post adoption ROA using paired t-test at 0.05 level of significance

4.7 Energy Sector

In this sector Kenol Kobil is discussed.

Kenol Kobil

The company adopted ESOPs in 2003. A total of 679,050 shares was allotted to ESOP trust on the grant vesting in 2003. The latest number of ordinary shares of the company was 1,471,761 in the year 2010.

Table 4.11 Distribution of Profit/Loss and Total Assets by Years for Kenol Kobil

Vcar	Profit/loss	Total assets	Pre Adoption ROA	Post Adoption ROA	Projected ROA
	Kshs'000	Kshs'000			
2000	155,601	1,337,838	0.116307804		
2001	375,072	2,092,942	0.179208024		
2002	441,460	2,441,239	0.180834404		
2003	468,745	4,587,586	0.102176831		
2004	838,484	6,234,806		0.134484377	0.127405604
2005	915,878	8,373,148		0.109382755	0.128082739
2006	842,947	13,350,607		0.063139227	0.112203965
2007	593,434	13,269,441		0.044721854	0.076866621
200K	1,155,319	27,708,602		0.041695319	0.052455941

Source of profit/loss and total assets data: Company's annual reports and financial statements from 2000 - 2008

The projected ROA was calculated based on the trends over the five year period prior to ESOP adoption (years 2000 - 2004). Excel was used to project the trends of ROA for the periods 2004 - 2008. The projected ROA was compared against post adoption ROA using paired t-test at 0.05 level of significance.

4.8 Interpretation of the Findings

This section provides an interpretation of the paired t-test results for the ten studied companies. Table 4.12 shows the name of the company and the paired t-test results.

An explanation of the paired t-test results is provided in the preceding paragraphs.

Table 4.12: Company Name and Paired t-test Results

Name of the company	t-test results	
Housing Finance Company of Kenya	(P (T<=t) two tail; 0.007715445	
Kenya Commercial Bank	(P (T<=t) two tail; 0.020749827	
Equity Bank	(P (T<=t) two tail; 0.044993	
East African Breweries	(P (T<=t) two tail; 0.33822	
Standard Group Limited	(P (T<=t) two tail; 0.089003888	
ScanGroup Limited	(P (T<=t) two tail; 0.981618867	
Safaricom Limited	(P (T<=t) two tail; 0.127630253	
AccessKenya Group	T test could not be calculated	
Athi River Minings	(P (T<=t) two tail; 0.041692	
Kenol Kobil	(P (T<=t) two tail; 0.094971	

The table above shows the paired t-test results for the studied companies. Row one provides results of Housing Finance Company of Kenya. The paired t-test (P) results showed that P was less than (<0.05). This implied that there was a significant difference in financial performance of the bank as a result of adoption of ESOP. (P (T<=t) two tail; 0.007715445: See appendix iv for a detailed computation). This means that all factors held constant as per the projections, ESOP adoption had a positive impact on the firm's financial performance.

The second row gives results of Kenya Commercial Bank. The paired t-test results indicated that P was less than (<0.05). This meant that there was a significant difference in financial performance as a result of adoption of ESOP. (P (T<=t) two tail; 0.020749827: Refer to appendix v for a detailed computation). This implied that ESOP adoption by the bank had a positive impact on its financial performance.

The third row provides an interpretation of the results of Equity Bank. The paired t-test results indicated that P was less than (<0.05). This meant that there was a significant difference in financial performance as a result of adoption of ESOP. (P (T \leq t) two tail; 0.044993: Refer to appendix vi for the computation). Very briefly it meant that ESOP adoption by the bank had a positive impact on its financial performance.

The fourth row shows the results of East African Breweries Limited. The results for the paired t-test indicated that P was greater than (>0.05). This meant that there was no significant difference in financial performance as a result of adoption of ESOP. (P (T \leq t) two tail; 0.33822: Refer to appendix vii for the computation). This implied that ESOP adoption by the company had a no impact on its financial performance.

The fifth row shows the results of the Standard Group Limited. The t-test results showed that P was greater than (>0.05). This showed that there was no significant difference in financial performance as a result of adoption of ESOP. (P (T \leq t) two tail; 0.089003888: See appendix viii for a detailed computation). This implied that the adoption of ESOP had no positive impact on the financial performance of this company.

The sixth row provides results of Scan Group Limited. The paired t-test results showed that P was greater than (>0.05). This implied that there was no significant difference in financial performance as a result of adoption of ESOP. (P (T \leq t) two tail; 0.981618867: Refer to appendix ix for the computation).

The seventh row provides results of Safaricom Limited. The paired t-test results showed that P was greater than (>0.05). This implied that there was no significant difference in financial performance as a result of adoption of ESOP. (P (T \leq t) two tail; 0.127630253: See appendix x for a detailed computation). In brief this meant that ESOP adoption by the company did not have significant impact on the financial performance of the company.

The eighth row provided information on AccessKenya Group. The company was incorporated in 2006 and adopted ESOP in 2007 following its listing at the NSE; consequently there was no sufficient data prior to ESOP adoption for the formulation of trends necessary for the computation of projected ROA. The paired t- test for this company could therefore not be run. Refer to appendix xi.

The ninth row showed information on Athi River Mining Limited. The paired t-test results showed that P was less than (<0.05). This indicated that there was a significant difference in financial performance as a result of adoption of ESOP. (P (T \leq t) two tail; 0.041692: See appendix xii for the computation).

The tenth row provided an interpretation of the results of Kcnol Kobil. The paired t-test results showed that P was greater than (>0.05). This implied that there was no significant difference in financial performance as a result of adoption of ESOP. (P (T \leq t) two tail; 0.094971: Refer to appendix xiii for the computation).

4.9 Comparison between ESOP Shares and Total Ordinary Shares of the Studied Companies

The ratio of the total number of shares in ESOP firm and the total available number of ordinary shares for the ESOP company was also be tabulated in Table 4.13 as follows:

Table 4.13: Comparison of Ratios between ESOP shares and Total Ordinary Shares

ESOP Firm	Latest Total Number of ordinary shares available for the F.SOP firm	Latest Total number of shares allocated to ESOPs	Ratio of total shares available to shares allocated to ESOPs (%)
Housing Finance Company of Kema Limited	235,750,000	2,125,000	0.90%
Khim Commercial Bank	3,500,000,000	2,950,260	0.08%
Fast African Breweries limited	790,774,1MW	1,493,081	0.19%
ScanCroup limited	2,754,000	254,789,000	4.9%
Safaricom Limited	40,000,000,000	101,000,000	0.25%
Access kema Group limited	207,227,000	368,490	0.2%
Athi River Minings limited	135,000,000 ¹	6,055,000	4.5%
Kenol Kobil limited	1,471,761,200	679,050	0.046%

Source of ordinary shares and ESOP shares: Annual reports and financial statements for the listed firms.

From the above analysis and the results of the findings, the relationship between the total number of ESOP shares and the effect of the ESOP on the financial performance of the listed firms is not clear. Some companies with a higher percentage of ESOP shares compared to the total available ordinary shares had the paired t-tests results indicating no significant effect of ESOP adoption on firm's financial performance, for example the Standard Group Limited. However, Equity Bank Limited with ESOP shares of 4.18% and Athi River Minings Limited with 4.5% ESOP shares compared to the total number of ordinary shares indicated a positive effect of ESOP adoption on the firm financial performance. For these companies, a further research into this area would be useful to determine if a relationship exists.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarises the methodology and findings of the study. It also draws conclusions from findings of the study. Further, it gives recommendations in line with the study findings.

5.2 Summary

This study aimed at establishing the effect of the implementation of ESOPs on financial performance of listed firms at the NSE. The study was guided by the following research objective: To establish the effect of implementation of ESOP on financial performance of firms listed at the NSE.

Quantitative data was collected and analysed. Data was collected from secondary sources -annual reports and financial statements of the different companies. The data that was captured spanned five years prior to adoption of ESOPs and five years after ESOP adoption. The period covered depended on the time the firms adopted ESOPs. The data that was captured included: The financial year, profit/loss, total number of assets and ordinary shares. This data was presented in the form of tables. Data analysis was done using Microsoft Excel. Return on assets (ROA) was first calculated by dividing each year's profits'/loss by the total assets as indicated below.

$$\text{ROA} = \frac{\text{Profit/loss for the year}}{\text{Total assets}}$$

Total assets

Thereafter projected ROA was calculated using the Excel and paired t- tests run to establish whether the t-test results were significant or not. The information above was presented based on the different sectors/industries the firms belong to.

5.3 Summary of financial performance

The study sought to establish the impact of ESOP adoption on the firms financial performance. The results for the different firms showed mixed results. For some companies the results indicated that adoption of FSOP had a significant impact on the firms' financial performance while for other companies adoption of ESOP did not have a positive impact on the financial performance of the firms.

T test results of four companies: Athi River Minings, Equity Bank, Kenya Commercial Bank and I lousing Finance Company of Kenya indicated that there was a significant impact of ESOP adoption on the financial performance of the said companies. However, paired t-test results of five companies that is: Kenol Kobil Limited, Safaricom Limited, ScanGroup Limited and Standard Group Limited showed that there was no significant impact of ESOP adoption on the financial performance of the companies.

One company-AccessKenya Group Limited which was incorporated in 2006 and adopted ESOP in 2007 following its listing at the NSE, had no sufficient data prior to ESOP adoption for the formulation of trends necessary for the computation of projected ROA. The paired t- test for this company could therefore not be run.

The above results are consistent with the literature reviewed where the adoption of ESOP had mixed results on the financial performance of entities. For instance the conclusion of Blassi and Krussc (2002) study on the effect of ESOP and firm performance also provided largely split results between favorable and neutral findings on the relationship between employee ownership and firm performance. Similarly Gupta and Dhiman, (2010) study on the effect of ESOP on the financial performance of the pharmaceutical industry in India also presented mixed results.

5.4 Recommendations for Policy

The study indicates that there is a positive association between the effect of adoption of ESOP and firm performance. The ESOP adoption provides an avenue for employee's interest to be aligned with those of the company and therefore is useful in the effort to attract and retain top talent for the various companies. Further, the percentage of shares allocated to the ESOPs plans could be increased to allow more participation of the employees. Listed entities should consider adoption ESOPs on this basis.

For the individual companies, ESOPs also provide an avenue for attracting and retaining staff with specialized skills for example innovators with adequate equity based compensation. This would also encourage private - public sector participations through organized incentives for persons with such specialized ideas or skills in the various fields the private companies or governments would like to venture into.

For the government policy makers, we recommend a deliberate policy move to encourage companies to adopt ESOPs as an investment vehicle especially during the capital sourcing at the NSE. In addition, since ESOPs are now recognized in the

Income Tax Act as an investment vehicle, this would boost the activities at the NSE and leading to increased economic activity in the country.

5.5 Limitation of Study

The study had proposed to review the financial data for companies five years pre and after ESOP adoption. However, for some companies the five years data was not available since some companies had just been incorporated and adopted ESOPs and for some companies, data was not available for some years. However, in all these cases, the study reviewed the available data and trends to allow for conclusions to be drawn on the study.

Due to the time and resources constraints, no comparative study on the companies in similar industries that have not adopted ESOPs were reviewed or studied. It would have been interesting to understand how the performance of such companies compare to those that have adopted ESOP in the various sectors.

The study only used one measure of performance. ROA other measures like Gross profit margin. Return on Investments could have been used to determine the effect of the financial performance.

5.6 Recommendations for Further Research

In this study, several factors were held constant and the firms performance prior to ESOP adoption was projected and compared to actual performance in the post ESOP adoption period. Further studies could be done on a comparative study option which could involve firms in similar industry and where one firm has adopted ESOP and a

control firm which has not adopted ESOP to come up with conclusive results if indeed ESOPs adoption has an impact on firm performance.

The study was limited by time constraints and resources and therefore the scope was narrowed to five years pre and post ESOP adoption period. Future studies should be performed for longer periods say, ten years to try and establish if the trends this study identified are similar.

The reserach only considered the effect of ESOP adoption on the financial performance of listed firms at the NSE. it may be important for another study to be carried out on the performance of the ESOP firm before and after ESOP adoption, but include other variables in the study such as the size of the ESOP firm, market share and performance of the economy before and after ESOP adoption

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APPENDIX XIII

APPENDIX I

NAIROBI SECURITIES EXCHANGE

AGRICULTURAL

- 1 Eaagads Ltd Ord 1.25
- 2 Kapchorua Tea Co. Ltd Ord 5.00
- 3 Kakuzi Ord.5.0()
- 4 Limuru Tea Co. Ltd Ord 20.00
- 5 Rea Vipingo Plantations Ltd Ord 5.00
- 6 Sasini Ltd Ord 1.00
- 7 Williamson Tea Kenya Ltd Ord 5.00

COMMERCIAL AND SERVICES

- 8 Express Ltd Ord 5.00
- 9 Kenya Airways Ltd Ord 5.00
- 10 Nation Media Group Ord. 2.50
- 11 Standard Group Ltd Ord 5.00
- 12 TPS Eastern Africa (Serena) Ltd Ord 1.00
- 13 Scangroup Ltd Ord 1.00
- 14 Uchumi Supermarket Ltd Ord 5.00
- 15 Hutchings Biemer Ltd Ord 5.00
- 16 Longhorn Kenya Ltd

TELECOMMUNICATION AND TECHNOLOGY

! 7 AccessKenya Group Ltd Ord. 1.00

18 Safaricom Ltd Ord 0.05

AUTOMOBILES AND ACCESSORIES

19 Car and General (K) Ltd Ord 5.00

20 CMC Holdings Ltd Ord 0.50

21 Sameer Africa Ltd Ord 5.00

22 Marshalis (E.A.) Ltd Ord 5.00

BANKING

23 Barclays Bank Ltd Ord 2.00

24 CfC Stanbic Holdings Ltd ord.5.00

25 Diamond Trust Bank Kenya Ltd Ord 4.00

26 Housing Finance Co Ltd Ord 5.00

27 Kenya Commercial Bank Ltd Ord 1.00

28 National Bank of Kenya Ltd Ord 5.00

29 NIC Bank Ltd Ord 5.00

30 Standard Chartered Bank Ltd Ord 5.00

31 Equity Bank Ltd Ord 0.50

32 The Co-operative Bank of Kenya Ltd Ord 1.00

INSURANCE

33 Jubilee Holdings Ltd Ord 5.00

34 Pan Africa Insurance Holdings Ltd Ord 5.00

35 Kenya Re-Insurance Corporation Ltd Ord 2.50

36 CFC Insurance Holdings

37 British-American Investments Company (Kenya) Ltd Ord 0.10

INVESTMENT

- 38 City Trust Ltd Ord 5.00
- 39 Olympia Capital Holdings ltd Ord 5.00
- 40 Centum Investment Co Ltd Ord 0.50
- 41 Trans-Century Ltd

MANUFACTURING AND ALLIED

- 42 B.O.C Kenya Ltd Ord 5.00
- 43 British American Tobacco Kenya Ltd Ord 10.00
- 44 Carbacid Investments Ltd Ord 5.00
- 45 East African Breweries Ltd Ord 2.00
- 46 Mumias Sugar Co. Ltd Ord 2.00
- 47 Unga Group Ltd Ord 5.00
- 48 Eveready East Africa Ltd Ord. 1.00
- 49 Kenya Orchards Ltd Ord 5.00
- 50 A. Baumann CO Ltd Ord 5.00

CONSTRUCTION AND ALLIED

- 51 Athi River Mining Ord 5.00
- 52 Bamburi Cement Ltd Ord 5.00
- 53 Crown Berger Ltd Ord 5.00
- 54 E.A.Cables Ltd Ord 0.50
- 55 E.A.Portland Cement Ltd Ord 5.00

ENERGY AND PETROLEUM

- 55 KenolKobil Ltd Ord 0.05
- 56 Total Kenya Ltd Ord 5.00
- 57 KenC.cn Ltd Ord. 2.50
- 58 Kenya Power & Lighting Co Ltd

Source: NSE.

APPENDIX XIII

FIRMS THAT HAVE ADOPTED ESOPS PER REVIEW OF THE LATEST FINANCIAL STATEMENTS 2010- 2011

Commercial and Services

1. Standard Group Ltd Ord 5.00 [Audited accounts from 2005-2012J
2. Scangroup Ltd Ord 1.00 [Audited accounts from 2004-2012J

Telecommunication and Technology

3. AccessKenya Group Ltd Ord. 1.00 [Audited accounts from 2006-20121
4. Safaricom Ltd Ord 0.05 [Audited accounts from 2005-2012]

Banking

5. Housing Finance Co Ltd Ord 5.00 [Audited accounts from 2001-2012]
6. Kenya Commercial Bank Ltd Ord 1.00 [Audited acccounts from 2003-2012J
7. Equity Bank Ltd Ord 0.50 [Audited accounts from 2000-2010]

Manufacturing and Allied

8. East African Breweries Ltd Ord 2.00 [Audited accounts from 1995-2006]

Construction and Allied

9. Athi River Mining Ord 5.00 [Audited accounts from 2000-2010]

Energy and Petroleum

10. KenolKobil Ltd Ord 0.05 [Audited accounts from 1998-2008]

Source: National Securities Exchange

APPENDIX XIII

Comparison between ESOP shares and Total Number of Ordinary Shares

ESOP Firm	Total Number of ordinary shares available for the ESOP firm	Total number of shares allocated to ESOPs	Ratio of total shares available to shares allocated to ESOPs

APPENDIX IV

Computation of T-Test for Housing Finance Company of Kenya Limited

t-Test: Paired Two Sample for Means

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	0.00330698	0.012170522
Variance	8.7048E-07	1.78216E-05
Observations	6	6
Pearson Correlation	-0.863401	
Hypothesized Mean Difference	0	
df	5	
t Stat	-4.3000005	
P(T<=t) one-tail	0.00385772	
t Critical one-tail	2.01504837	
P(T<=t) two-tail	0.00771545	
t Critical two-tail	2.57058184	

Computation of T-Test for Kenya Commercial Bank (KCB) Limited

t-Test: Paired Two Sample for Means		
	<i>Variable</i>	
	<i>J</i>	<i>Variable 2</i>
Mean	0.05646	0.0261548
Variance	0.00036	3.353E-05
Observations	4	4
Pearson Correlation	0.94913	
Hypothesized Mean Difference	0	
df	3	
t Stat	4.47898	
P(T<=t) one-tail	0.01037	
t Critical one-tail	2.35336	
P(T<=t) two-tail	0.02075	
t Critical two-tail	3.18245	

APPENDIX VI**Computation of T-Test for Equity Bank Limited**

t-Test: Paired Two Sample for Means		
	<i>Variable</i>	<i>Variable</i>
	<i>1</i>	<i>2</i>
Mean	0.05594	0.04593
Variance	2.8E-05	4.9E-05
Observations	5	5
Pearson Correlation	0.21917	
Hypothesized Mean Difference	0	
df	4	
t Stat	2.88155	
P(T<=t) one-tail	0.02247	
t Critical one-tail	2.13185	
P(T<=t) two-tail	0.04494	
t Critical two-tail	2.77645	

APPENDIX VII

Computation of T-Test for Kast African Breweries

t-Test: Paired Two Sample for Means		
	<i>Variable 1</i>	<i>Variable 2</i>
Mean	0.19732	0.23841
Variance	0.00875	0.01795
Observations	5	5
Pearson Correlation	0.78003	
Hypothesized Mean Difference	0	
df	4	
t Stat	-1.0868	
P(T<=t) one-tail	0.16911	
t Critical one-tail	2.13185	
P(T<=t) two-tail	0.33822	
t Critical two-tail	2.77645	

APPENDIX VIII

Computation of T-Test for Standard Group Limited

t-Test: Paired Two Sample for Means		
	<i>Variable 1</i>	<i>Variable 2</i>
Mean	0.1377638	0.06329
Variance	0.0020249	0.00091
Observations	2	2
Pearson Correlation	1	
Hypothesized Mean Difference	0	
df	1	
t Stat	7.1060556	
P(T<=t) one-tail	0.0445019	
t Critical one-tail	6.3137515	
P(T<=t) two-tail	0.0890039	
t Critical two-tail	12.706205	

APPENDIX XIII

Computation of T-Test for Scan Group Limited

t-Test: Paired Two Sample for Means		
	<i>Variable</i>	
	<i>1</i>	<i>Variable 2</i>
Mean	0.09675	0.0964292
Variance	0.00015	0.0002101
Observations	3	3
Pearson Correlation	-0.3636	
Hypothesized Mean Difference	0	
df	2	
t Stat	0.02551	
P(T<=t) one-tail	0.49098	
t Critical one-tail	2.91999	
P(T<=t) two-tail	0.98196	
t Critical two-tail	4.30265	

APPENDIX X

Computation of T-Test for Safaricom Limited

t-Test: Paired Two Sample for Means		
	<i>Variable</i>	
	<i>Variable 1</i>	<i>2</i>
Mean	0.1220509	0.10958
Variance	0.0001454	7.2E-05
Observations	2	2
Pearson Correlation	1	
Hypothesized Mean Difference	0	
df	1	
t Stat	4.9209938	
P(T<=t) one-tail	0.0638151	
t Critical one-tail	6.3137515	
P(T<=t) two-tail	0.1276303	
t Critical two-tail	12.706205	

APPENDIX XIII

Computation of T-Test for Access Kenya Limited

Year	Profit or loss b4 tax	Net assets	ROA	Projected ROA
2006	46,906	132,292	0.3545641	
2007	156,186	833,194	0.1874545	
2008	203,656	1,063,499	0.1914962	
2009	147,909	1,771,307	0.0835027	0.1261002
2010	(7,951)	2,728,978	-0.002914	
2011	109,084	2,415,111	0.0451673	

APPENDIX XII

Computation of T-Test for Athi River Minings Limited

t-Test: Paired Two Sample for Means		
	<i>Variable 1</i>	<i>Variable 2</i>
Mean	0.09968	0.06721
Variance	0.00012	0.00036
Observations	5	5
Pearson Correlation	-0.2958	
Hypothesized Mean Difference	0	
df	4	
t Stat	2.95668	
P(T<=t) one-tail	0.02085	
t Critical one-tail	2.13185	
P(T<=t) two-tail	0.04169	
t Critical two-tail	2.77645	

APPENDIX XIII

Computation of T-Test for Kcnol Kobil Limited

t-Test: Paired Two Sample for Means		
	<i>Variable 1</i>	<i>Variable 2</i>
Mean	0.0994	0.07868
Variance	0.00112	0.0017
Observations	5	5
Pearson Correlation	0.8584	
Hypothesized Mean Difference	0	
df	4	
t Stat	2.17786	
P(T<=t) one-tail	0.04749	
t Critical one-tail	2.13185	
P(T<=t) two-tail	0.09497	
t Critical two-tail	2.77645	