

**THE EFFECT OF MANAGERIAL OWNERSHIP ON STOCK  
PERFORMANCE OF FIRMS LISTED AT THE NAIROBI  
SECURITIES EXCHANGE**

**OTIENO BEATRICE AWUOR**

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## **DECLARATION**

This research is my original work and has not been submitted for examination to any other University.

Signed.....

Date.....

**OTIENO BEATRICE AWUOR**

**D61/74443/2014**

The research project is submitted with my approval as the University Supervisor

Signed.....

Date.....

**Mrs. Zipporah Onsomu**

**Lecturer**

**School of Business, University of Nairobi**

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## **DEDICATION**

I dedicate this research project to my children Edward Odhiambo and Ezekiel Ng'wono. You boys give me the push to strive for excellence in everything I do and I appreciate that.

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## **LIST OF ABBREVIATIONS**

<b>ACE</b>	Access Certainty Efficiency market
<b>ASEA</b>	African Securities Exchanges Association
<b>CBK</b>	Central Bank of Kenya
<b>CMA</b>	Capital Markets Authority
<b>DY</b>	Dividend Yield
<b>EASEA</b>	East African Securities Exchanges Association
<b>EPS</b>	Earnings per Share
<b>ICP</b>	Intellectual Capital Performance
<b>NSE</b>	Nairobi Securities Exchange
<b>P/E</b>	Price Earnings ratio
<b>PLCs</b>	Public Listed Companies
<b>ROA</b>	Return on Assets
<b>ROE</b>	Return on Equity
<b>ROI</b>	Return on Investment
<b>SOP</b>	Share Ownership Plans



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## **ABSTRACT**

This research had the objective of determining the effect of managerial ownership on stock performance for the companies listed at the NSE. Sixty five firms listed at the NSE for the year ending December 2015 formed the population for this research and it was a census. The use of secondary data was employed and data was obtained largely from the NSE Handbook 2015-2016 together company websites and the CMA website. The evaluation of managerial ownership's effect on stock performance was done using regression analysis. The coefficient of managerial ownership was found to be positive which showed that there existed a relationship that is positive of managerial ownership on the performance of stock. However the relationship was found to be insignificant since the results revealed a p value that was low. This means that a low percentage change in stock performance was explained by variation in managerial ownership. Shareholders may thus consider share ownership plans as a mitigating effort towards dealing with agency conflicts. Further studies are needed however because this is an area that has limited empirical evidence locally. Also further studies may seek to study firms that have women board members to see how the stock performance differs with those of firms that have all men boards.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Managerial ownership refers to the percentage of equity owned by insiders, where insiders are defined as the officers and directors of a firm (Holderness, 2003). The number one reason for the existence of companies today remains shareholder's wealth maximization. Since shareholders are most of the time not gifted enough, or simply because not all of them can manage the company, they end up hiring a management team to handle the day to day running of the company including decision making. This brings about an agency relationship. Agency relationship most times results in conflicts between shareholders and directors. Shareholders may offer share ownership plans resulting in managerial ownership as one of the mitigating efforts towards the said conflicts.

This study was anchored on three theories; agency theory (Jensen & Meckling 1976), stewardship theory (Donaldson & Davis 1991) and stakeholder theory (Freeman, 1980). Agency theory is by Jensen and Meckling (1976) who put forward an agency relationship as that of a person or a group of people referred to as the principal getting into a contract with another person or people referred to as the agent. The agent is then required to deliver certain objectives having the decision making authority delegated by the principal. Stewardship theory is by Donaldson and Davis (1991) who did not believe that managers' intentions are different from those of the owners and thus made it clear that management team always have the intention to maximize the going concern status of a

firm and are thus in line with owners' interests. Stakeholder theory was originally developed by Freeman (1980). It does not agree with agency assumptions that it's all about the owners' interests. It advocates for the management of a company to consider all the stakeholders' interests when running the businesses.

The Nairobi Securities Exchanges are made up of sectors such as investment, energy and petroleum, construction and allied, agricultural, telecommunication and technology, growth enterprise, automobile and accessories, commercial and services, manufacturing and allied, banking and insurance. They total eleven segments of the market. Managerial ownership exists at the NSE and despite being under regulation by the Capital Markets Authority, a company like Uchumi's stock has consistently declined in performance. This research thus contributes to the research area around stock performance.

### **1.1.1 Managerial Ownership**

Managerial ownership refers to the percentage of equity owned by insiders, where insiders are defined as the officers and directors of a firm (Holderness, 2003). Managerial ownership comes in as a solution to conflict in the agency relationship between directors and shareholders. In this case, the shareholders offer directors share ownership plans that delivers part ownership of the firm to directors in an effort to ensure that their efforts will completely be towards wealth maximization for the shareholders because that includes themselves, the directors.

Managerial ownership is important because its intention is to ensure that the decisions taken by the directors are in the firm's interest. There is a difference in propensity to risk where managers, because of the large stake that they hold at the firm, whatever happens to the firm has a huge impact on them. The managers own stock and sometimes even options to acquire more stock then also their salary is tied to the firm. On the other hand, the shareholder has stock in several firms hence a risk affecting only one of the many firms may not affect their total portfolio. The real effect whatever happens to the firm thus ways heavily on the manager that the shareholder (Panousi & Papanikolaou 2012). Managerial ownership is measured by calculating the percentage of shares held by officers against total number of shares issued by the firm.

### **1.1.2 Stock Performance**

Stock performance refers to total returns on stock held over a given period of time. It includes two components, that is, the gains or losses from capital and dividends. A gain or loss in capital comes from movements in stock prices. When there is an increase in price, it is a gain whereas a loss comes about where there is a decrease in price. Payments made by firms out of their profits to shareholders are the dividends. Total returns result when the dividends and capital gains are added together. The market benchmark or industry benchmark are important considerations when measuring stock performance. Any portfolio that represents the stock held by an investor is the benchmark. It is important to compare the portfolio and benchmark returns because this enables the performance of the stock to be categorized in relation to the benchmark used (Sandler 2016).

There are several measures of stock performance including Return on Investment (ROI) which refers to cash made or lost by a company in an investment. The other measure is Earnings per Share (EPS) which measures the earnings of a company on each share and Price to Earnings Ratio (P/E ratio) which is a comparison of current price and earnings on each share. A P/E ratio that is considered better than those of similar companies may mean that the value of that stock is higher than it should be. This only changes if the company has some large growth prospects or the entrance of a major customer into the business that makes an investor want to put their money in the company. The value of a stock is never indicated by the actual price. The P/E when examined could reveal a lower value for a stock that was initially highly priced.

### **1.1.3 Managerial Ownership and Stock Performance**

Managerial ownership may affect firm performance positively as it is expected that directors will make good decisions because they partly own the firm hence their interest in the decisions made. The stock price should thus increase with more shares being held by directors. Managerial ownership reduces agency costs for a firm because there is no longer a need for an incentive system to lure the management into performing well. Thus such incentives like bonuses pegged on profit achievement can easily be eliminated because at the end of the day, the directors will share in the dividends.

A study in Germany revealed that managerial ownership had a positive impact on firm performance. This positive effect was at 80% and the writers refer to it as incentive effect. The effect however became negative revealing the entrenchment effect. The tendency of managers to avoid risk and the information effect reflecting quality of firms

resulted in a non linear relationship when the two variables managerial ownership and risk exposure of a firm were considered (Mueller & Spitz 2001).

#### **1.1.4 Nairobi Securities Exchange**

The NSE came about as an association of stock brokers which was formed voluntarily. There was need for an office to run the association and in 1990 the office was set up at the IPS building together with a floor that would enable trading. Later, in 1994, the NSE moved to the Nation building on Kimathi Street. In September 2006 and in 2007 there were changes at NSE in line with technological advancements that allowed stock markets participants to access the market remotely. NSE is mandated to facilitate trade in securities and supports settlement of various trade instruments like debt, derivatives and equities. Another mandate for NSE is to list firms on the securities exchange so that investors can have options to trade in the instruments of the firms that have been listed. As at December 2015, there were 65 companies listed at the market. The NSE plays a vital role in the growth of Kenya's economy by encouraging savings and investment, as well as helping local and international companies' access cost-effective capital. NSE operates under the jurisdiction of the Capital Markets Authority of Kenya.

Managerial ownership exists at the NSE where companies have their officers or directors owning equity at the firms. Examples of such companies are Kenya Airways whose managers own about 2.9 million shares and Standard Group where 58,765 shares are under managerial ownership. Managerial ownership reduces agency costs because once managers are owners, the need for close monitoring by shareholders reduces as they are

expected to act in good faith at all times given their stake in the firm. The possibility of mitigating managerial myopia is also put across by Palia and Lichtenberg (1999).

Stock performance at the NSE is evidenced by the activities undertaken by the listed firms. In the year ending December 2015, several companies declared dividends both interim and final including Sasini Tea that declared a final dividend of 0.25, Stanchart interim of 4.50, KenGen final of 0.65 and Kenya Power that declared a final dividend of 0.30. The performance of stocks at the NSE can also be seen in the subscription levels whenever IPOs are made. In April 2006, the IPO for KenGen was oversubscribed at 333% while in June 2006 while the one for Scan group was oversubscribed at 620%.

## **1.2 Research Problem**

Managerial ownership ideally should have positive effect on stock performance. This is not always the case though. While shareholders always own securities in several firms which means a risk that affects one company will not endanger their stake because of the portfolio that they own, on the other hand, directors have a lot to lose in the company should things not go right. This is because aside from the stock that they own combined with the possibility of owning more of those stocks, their pay is also at stake. Anything happening to the company's performance thus weighs heavier on the directors than the shareholders. If this is the case, all decisions made by directors will be directed towards creating value hence improving the overall performance of the company including its stock. However, directors may cut down on investments if they feel that their stocks are not correctly diversified thus increasing uncertainty when it comes to the prospects of the



firm. This holds true even when looking at risk specific to the firm which refers to a threat to one company or a minimal industry segment. This overly cautious tendency of managers might result in decisions that cause the firm to miss high returns that come with high risk investments hence shareholders wealth is not maximized. Managerial ownership will thus sometimes have a negative effect on stock performance as the directors act cautiously when making investment decisions.

In Kenya, there are several companies listed at the NSE with managerial ownership. Uchumi Supermarket for example went into receivership in 2006. The reason given was incompetence by the management team. It was noted that this was one of the most disappointing case of corporate failure since Kenya got its independence in 1969 revealing just how negative the effects of agency conflicts can be (CMA, 2011). At CMC, the Kenyan public also witnessed war in the boardroom orchestrated by those entrusted to lead the company to prosperity by the shareholders. The caliber of management made up of members of the board was brought into question both in the public and private listed firms in Kenya (CMA, 2012). These examples in the Kenyan scenario indicate that even with managerial ownership the effect on performance will not always be positive.

Several researches have been done touching on the variables managerial ownership and firm performance. In Malaysia, Noradiva, Parastou and Azlina (2016) did a study on the effects of managerial ownership where intellectual capital performance and firm value were the variables and the results revealed an insignificant, nonlinear effect of managerial

ownership on the relationship between intellectual capital performance and firm value. While other researchers identified a relationship that was positive between managerial ownership and firm value or firm performance, there are studies that found a negative effect. Kiruri (2013) carried out a study whose findings indicated a concentration of ownership where also governmental ownership had huge negative effects on the ability of banks to make money while ownership by shareholders who are overseas and local ownership had highly positive effects on the ability of banks to make profits. These conflicting results necessitate more research around managerial ownership.

Mueller and Spitz (2001) did a study which checked the effect of managerial ownership on performance. The determinants of managerial ownership for small and medium sized companies that are privately owned in Germany were considered and found that managerial ownership, to the extent of 80 per cent had an impact that is positive the performance of firms but the effect then became negative. In the USA, Palia and Lichtenberg (1999) wrote a paper which found managerial ownership changes to be positively related to productivity changes. More empirical evidence that will be shown in the literature review of this research have had equally mixed results and the gap that this research intends to address is the fact that locally, there have been minimal research to examine the effect of managerial ownership on stock performance. This research will thus attempt to answer the research question; does managerial ownership have an effect on stock performance?

### **1.3 Research Objective**

To determine the effect of managerial ownership on stock performance of the firms listed at the Nairobi Stock Exchange.

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

This study now adds knowledge into the area of finance that deals with return on investments. While it provides much needed local empirical evidence in this area, it also adds into the literature already available regarding research findings globally when it comes to studies that seek to determine the effect of managerial ownership on stock performance. Basis for further research is also availed by studying other aspects of effect such as the effect of managerial ownership on stock performance when women are in the board of directors. This would be an interesting angle of research because naturally women are nurturers hence it will be interesting to find out if they can nurture the artificial person (firms) as well as they nurture the natural person.

In regard to policy making, the study gives a basis for shareholders to decide to include share ownership plans in their executive compensation plans or not. The regulators like CMA also gather valuable information to enable them come up with policies that will curb unethical behavior among directors of companies. For example, if the study proves that managerial ownership has positive effect on stock performance, the regulator might come up with a requirement that in every organization, two of the directors must own

shares in the companies. This would ensure that all the listed firms at the NSE are performing hence put the securities exchange on the regional and international map.

The study also adds value to existing and potential stakeholders of the companies listed or intending to get listed at the NSE. The findings of this study thus enormously add to the efforts to make company directors and managers take responsibility for their actions and thus improve actions and decision making processes within organizations by encouraging directors and officers to buy stocks of the firm to help in reducing agency costs. For example, the shareholders will find out whether or not owning stocks in the company contributes to the overall profitability of the company thus inform their decisions on how to reward their management teams as a mitigating factor on conflicts arising from the agency relationship between shareholders and directors.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter covers theoretical framework, empirical review and determinants of stock performance.

#### **2.2 Theoretical Review**

The theories that are discussed here are agency theory (Jensen & Meckling 1976), stewardship theory (Donaldson & Davis 1991) and stakeholder theory (Freeman, 1980). Agency theory is relevant because managerial ownership comes about as one of the mitigating efforts against conflicts that arise from agency relationships between shareholders and directors. Stewardship theory comes in because managerial ownership comes from the efforts to ensure that directors become good stewards of shareholder's funds that are left in their care and stakeholders' theory highlights the emerging trend and discussion that says that it is no longer only shareholders' interest at stake but that the directors' actions affect all of a firm's stakeholders.

##### **2.2.1 Agency Theory**

Jensen and Meckling (1976) gave a definition of the agency relationship as that of a contract between the principal, one or several people, who enter into an engagement with another person called the agent where the agent handles certain activities as delegated by the principal. This relationship requires delegation of some authority to make decisions

from the principal to the agent. The agency problem therefore deals with how to ensure that the actions of the agents are in line with the principal's interests at all times thereby reducing conflict of interest and ensure set goals (by principal) are achieved. It also deals with how to manage risk associated with the agents desire to put their interest before those of the principal. This is done through monitoring and motivation. The most recognisable form of agency relationship is that of employer and employee. In the case of a company, the shareholders delegate the day to day running of the organization to the directors and thus they become principals in that relationship.

On the part of the agent, morality requires them to act in the best interest of the shareholders. Their efforts at all times should be directed at increasing the wealth of the owners. In a case where either sides to this relationship have the intent to maximize their utility, there is a very good chance that the agent will undertake actions that are not in the best interest of the principal. According to Davis, Schoorman and Donaldson (1997) if both parties to the agency arrangement in the modern firms are geared towards maximizing their own personal gains, this is what brings about conflict of interest. This conflict is usually mitigated by among other ways, SOPs. Agency theory is very much in line with this research because it gives the origin of managerial ownership as a way to mitigate some of the conflicts that arise between the principals as shareholders and the directors as the agents.

### **2.2.2 Stewardship Theory**

Donaldson and Davis (1991) in their study called stewardship theory or agency theory found more support for stewardship theory while tests failed for agency theory. Tests were done and observations made for the intentions of senior managers and the findings showed that self-interest and personal gain intentions did not drive the managers. This finding was very different from the pessimism fronted by agency theory regarding executive behavior. The suggestion by stewardship theory is that there is potential for actions that are completely geared towards the benefit of the organization by managers. Performance here is driven by personal identification with what the organization stands for, its vision and mission and the desire to accomplish those. It is not greed. This theory therefore does not support the assumption that directors' motives are different from those of owners and insists that the directors want to maximize stewardship of the company to the foreseeable future and thus are already well aligned.

According to this theory therefore, a potential negative impact is likely between a chief executive and a chairman. It further suggests that the roles are combined. This would enable protection of authority for decision making, performance and strength of the position holder. The main advancement by stewardship theory therefore lies in its questioning of the pessimistic assumptions of the agency theory about the human reasoning. MacGregor (2013) brought to light theory X and theory Y managers. The suggestion here is that governance issues are not necessarily because of self-interest of the directors but rather in the assumption that the owners who are always distant from the

firm and the regulators are the ones with the said self-interest motives. This brings about a danger when it comes to negative assumptions that investors have that may inadvertently spoil company leadership (Roberts, 2006). Stewardship theory was relevant to this study because there is a general expectation that directors will be good stewards of shareholders' wealth that is left under their care and management.

### **2.2.3 Stakeholder Theory**

Stakeholder theory was originally developed by Freeman (1980), but has since gained audience in the wider United Kingdom and the rest of the world. This theory also challenges the assumptions fronted by agency theory that everything a company does is about the shareholders and their interests only. The theory argues that all the stakeholders of the company should be at the heart of its operations. The interests are thus not only of shareholders but also of all parties affected either directly or indirectly by the actions of the company. One of the key stakeholders are employees and this includes the directors. One Margaret Blair in one of the long lasting arguments in academia around governance argued that employees are residual risk takers in a company just like shareholders. Because directors are specialists in the specific firms that they manage, their opinions on governance matters need to be heard. This theory would also rubber stamp the position that other stakeholders like customers and suppliers have very strong interests in the performance of the firm. This interest is actually direct while the interests of the environment and local communities as well as the general society would be largely indirect.



This argument of stakeholder stake in the firm has however received a disapproval that is constantly raised against it that putting it into practice is not easy given the challenge of deciding what weight to allocate to each stakeholder's interest. Also, the argument continues that if directors are to be made accountable to all and sundry in terms of stakeholders, they would end up being answerable to none. When it comes to the performance of a firm, stakeholder theory has made several key contributions like the change of direction towards interest in business ethics which is a recent change fronted by stakeholder ideas. Also, the issue of executive pay which sometimes results in downsizing which ends up affecting employees and communities does not give the due value to the demands by shareholders for their value. Failures relating to corporates and pension funds are a threat to the traditional contracts which exist not necessarily in writing but in the mind. At threat also is the leeway to run a business hence brings to question the privileges granted to corporates by society at large. Stakeholder's theory was relevant to this study because it widens the audience that is affected by directors' decision and puts a bigger weight on the decision taken by some firms to offer managerial ownership with the hope that decisions made thereafter will be in the interest of the firm.

### **2.3 Determinants of Stock Performance**

The commonly used fundamental factors that determine stock performance include market capitalization, book to market value, financial leverage, dividends, price to earnings ratio, liquidity and firm size (Bodie, Kane & Marcus 2009). Market capitalization refers to the total value of a firm's shares when the current market price is taken into account. To arrive at market capitalization, existing price at the market is

multiplied by the number of shares of a company that are outstanding. This figure determines firm size as opposed to the regular use of turnover or total asset figures. The use of market capitalization to determine firm size is crucial because firm size is a basic determinant of some of the characteristics of a firm that interest investors. Market capitalization thus affects stock performance by informing investors on the riskiness or not of the company as a whole.

Another determinant is book to market ratio that is normally used to determine firm value by making a comparison between book value of a company to its value in the market. This value is usually available from the company's books which are prepared using the historical cost less accumulated depreciation to date. This information is normally available in the statement of financial position. Market value is calculated by multiplying the number of shares outstanding and the current market price. The bigger this ratio is, the more fundamentally cheap is the stock of the company. Financial leverage use can either have a negative or a positive effect on a firm's returns. This is contributed by the level of risk which inadvertently increases. Therefore, an addition of value resulting from financial leveraging delivers an associated risk level that is positive. When financial leverage is at acceptable levels, a firm's return on equity will increase. This is because stock volatility will increase as a result of the use of leverage which results in increased returns. Also, when earnings before taxes and interest are higher than financial leverage cost then it will be worth the increase in the risk experience by the firm as a result of leverage.

Dividend announcements have a signaling effect. When a company announces dividends, the message to investors is that the company is stable thus will attract attention from investors hence a positive effect on stock performance. The price earnings ratio will give an indication in terms of how much to invest in order to gain one measure of the firm's earnings. For this reason, the price earnings ratio is often given the name the multiple. This ratio is usually administered to determine if a firm's stock price is over or undervalued thus the investors are able to make purchase decisions on undervalued stocks and sell the overvalued stocks.

The ability of a security to be quickly changed into cash without its price reducing is referred to as liquidity. A high trading level characterizes liquidity combined with a small spread between bid and offer. Normally, illiquid assets have higher returns compared to liquid assets. This is the risk premium which compensates for the increased risk and higher trading costs. This therefore affects stock performance as illiquid assets attract risk takers thus increasing their stock prices. Farhan and Sharif (2015) did a study to determine the impact of the size of a firm size on stock returns. The study took place at Karachi Stock Exchange and it checked the effect of the size of the firm on stock returns between the periods of January and July. A relationship was found to exist between firm size and stock returns where firms that are small enjoyed higher returns that have been adjusted for risk compared to larger firms. This finding remains true in other empirical studies that have been carried out relating to firm size and stock returns.

## **2.4 Empirical Review**

Palia and Lichtenberg (1999) wrote a paper in the United States of America whose objective was to re-examine the variables managerial ownership and firm performance. Productivity measurement was used in the paper. The ownership stake of the firm directors was used by the paper to argue for and estimate the firm's production function. The paper thus brought together issues of corporate finance and existing literature relating to productivity. The methodology involved obtaining the managerial ownership evidence from the annual statements of proxy filed by each company as a requirement. Use of the entire population was extremely costly hence a sample was created with no bias in size from the publicly traded companies. The companies also had to have no going concern issues and they were selected randomly. The findings of this research showed managerial ownership changing positively in relation to productivity changes.

Ruan, Tian and Ma (2011) carried out a research on the influence of managerial ownership on the performance of a firm. The research was carried out using debt and equity decisions across a sample of civilian-run companies listed on the stock market in China. The study period was 2002 and 2007. The methodology included selection of a sample of the said civilian-run listed companies on the Shanghai and Shenzhen Stock Exchanges during the period 2002 and 2007. The study period was decided on because Chinese firms implemented new standards of accounting in 2001 hence the effects would start being felt the following year in 2002. The research findings showed a relationship that is not linear between between managerial ownership and the value of the firm.

Capital structure was driven into a non linear shape by managerial ownership but in a different direction to the effect of managerial ownership on the value of the firm.

Sulong, Gardner, Hussin, Sanusi and McGowan (2013) did a research whose objective was to extend literature around cost of the agency relationship by examining if managerial ownership, the quality of audit and leverage in any way have an effect on increased performance of firms trading on the stock market in Malaysian called ACE market. The methodology followed a sampling method which resulted in 82 firms that were listed between the periods of 2007 to 2009. Multiple regression, correlation analysis and descriptive statistics formed the methodology for the study. The findings revealed that the firms listed did not perform any better during the three years that were reviewed. The result was thought to be the explanation as to why the firms listed dropped in the period 2006 to 2009. This was different from the hypotheses that had been proposed as the study also found that the quality of audit had a negative effect statistically when firm performance is a variable. The suggestion here was that bonding between auditors and their clients may happen as a result of high audit fees paid to the auditors.

Kamardin (2014) carried out a research with a main aim of examining the family directors' influence on the performance of a firm of public listed companies (PLCs) in Malaysia which gave empirical evidence on the agency issues that exist between big shareholders with control and the shareholders with minority interests. The methodology included a sample of 112 PLCs in year 2006 and the two ways of measuring the performance of a firm were used. These were Tobin's Q and Return on assets (ROA) and Tobin's Q. In relation to ROA, managerial ownership was found to be positively significant. There was also a relationship that was positive between managerial

ownership was contributed by the managerial non family ownership. Positive relationships between managerial ownership and the two measures of firm performance existed. This indicates that managerial ownership and family ownership yield greater efficiency. The study also showed that when it comes to governance, on ROA and Tobin's Q, the results were somewhat different. It provided some evidence on the need to use appropriate measure of firm performance.

Noradiva, Parastou and Azlina (2016) carried out a study whose objective was to study the effect of managerial ownership on the relationship between intellectual capital performance and firm value. For methodology, Pulic's Value Added Intellectual Coefficient method was used as the measure of efficiency and it measured capital performance when it comes to intellect. Panel data was used in this study to check the effect if any of managerial ownership on the relationship between ICP and the value of a firm. Sampling was used and same was collected for the period 2009 to 2012 from firms listed at the Bursa Malaysian ACE Market. Final sample was made up of 46 companies having four year data. This gave rise to 184 observations. The results had non linear effect that was not significant.

Aduda (2011) carried out a research whose objective was to find out if there exists a relationship between executive compensation and firm performance for banks that fit the criteria for commercial and are listed at the NSE. The methodology used in the study was a regression analysis that regressed pay and performance while also considering the functional relationship form between levels of executive pay and performance measures in accounting terms. The results made a suggestion to the effect that accounting measures of performance do not hold much weight when it comes to the determination of executive

pay among the big commercial banks in Kenya. The findings also showed that size is an important consideration in determining executive pay because it was significant but the relationship with compensation was inverse. A suggestion on capping of executive pay to ensure shareholder's wealth maximization was put across by the correlation.

Okoth and Owoko (2011) wrote a paper whose objective was to examine the relationships among board, ownership and characteristics of managers and firm performance. The study involved a sample of 54 companies listed at the NSE. Methodology used included stepwise and logistic regressions. The results showed a positive relationship that was significant when considering insiders, foreign, institutional, diverse ownership against firm performance. There was however, a different revelation when it comes to government, ownership concentration and the performance of a firm which was actually negative. Board role was found to be insignificant and thus of very little value mostly due to lack of following of guidelines that relate to selection criteria for the said board. The findings were a positive relationship that was significant between managerial discretion and performance.

Kiruri (2013) carried out a study that sought to determine the effect of composition of equity on the profitability of Kenyan banks. The aim of the study therefore was to determine the effects of ownership structure on bank profitability in Kenya. The methodology that the study adopted used primary data that was obtained through a questionnaire that was structured to meet the objectives of the study. The results showed state ownership and ownership concentration were significantly negative on the effects of profitability of banks while domestic and foreign ownerships had significantly positive effects on the profitability of banks.

Kipkorir, Aboko and Bitange (2014) studied the relationship between executive compensation and performance financially when it comes to Kenyan insurance firms. The objective of the paper was to assess the effect of executive compensation on the performance financially of Kenyan insurance companies. The methodology was a relationship in the functional form considering the variables of level of executive pay and performance ratios that are key using a model of regression that establishes the relationship between pay and financial performance. The findings showed that there is a relationship that is non-significant when it comes to executive pay and performance financially of the said insurance companies. The correlation that is negative suggested the capping of compensation for executives to maximize shareholders returns. There is therefore need to sensitize executives to make their payment plans in line with measures that use accounting data to gauge performance since these are linked to maximization of shareholders wealth directly.

Oguna (2014) did a research whose objective was to examine the effect of debt equity decisions on performance financially of manufacturing, allied sector and construction firms listed at the NSE. Return on Equity and Return on Assets formed the variables and were used to measure the performance of the said firms. Total debt, short term debt and long term debt were the representatives of the structure of capital. The study covered the allied sector, construction and manufacturing firms listed at the NSE for the period 2010 to 2013. The methodology employed a descriptive research design and data was collected from the firms' consolidated financial statement which was then analyzed using linear regression models using SPSS to establish a relationship that is significant if any between structure of capital and the performance of the said firms financially. The findings



showed correlation between return on equity and current debt to be significant compared to the correlation between long term debt and return on equity. The study also noted that there was a relationship that is significant between long term debt and ROA but not with ROE.

## **2.5 Summary of Literature Review**

The international empirical evidence discussed here shows that research on managerial ownership in relation to firm performance and firm value have been carried out in various countries. The evidence from the USA showed that managerial ownership had positive results on productivity while the two researches from Malaysia had mixed results. In Kenya, there has also been research on factors affecting firm performance like executive compensation, corporate governance and capital structure. The results here are also mixed. One interesting finding is by Kiruri (2013) which showed that a concentration of ownership and ownership by government had significant negative effects on the profitability of banks whereas ownership by foreigners and local ownership had a significant positive effect on profitability of banks.

There are several factors that affect stock performance including managerial ownership, press releases on earnings and profits, a new contract that might come into play, staff retrenchments, plans of mergers or takeovers, scandals relating to accounting, a new product that is introduced into the market by the company and the signaling effect of announcements relating to dividends. From the empirical evidence presented, both international and local, it is evident that there has been minimal research on the effect of managerial ownership on stock performance, hence this research.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter discusses the procedure that was used to handle this research. The research design used is thus explained here together with population of the study, data collection and data analysis.

#### **3.2 Research Design**

A descriptive design of research was employed in this research to describe whether or not a relationship exists between managerial ownership and stock performance. Sekeran and Boujje (2009) explains that a design that is descriptive is used to check and give a description to the variables' characteristics that are of interest in a research situation. According to Burns and Grove (2003), the research design that is descriptive is intended to give a clear picture of the situation as it is in the natural. It may actually be used to put forward practices that are current and make judgment while also developing theories. In this research, the design was used to get a picture of the financial statements that are used to calculate stock returns that enabled the determination of the performance or not of the said stocks.

#### **3.3 Population**

The Nairobi Stock Exchange had 65 listed firms as at the end of December 2015 (NSE, 2015). All the 65 firms formed the population for this research. It was important to

analyze all the 65 firms because it was not obvious that there would be a representative firm in every grouping at the NSE that has managerial ownership.

### **3.4 Data Collection**

Secondary data was used in this research. The data was accessed on the websites of the NSE, CMA and those available on the listed firms' websites. Financial statements for the companies under study were used as well. The data from the Statement of Income and Statement of Financial Position was used to calculate stock returns. The data collected included share prices, dividend, net income and asset information.

### **3.5 Data Analysis**

Statistical Package for Social Science (SPSS) program was used in this research together with Microsoft Excel. An analysis that uses regression was applied to model the relationship between stock performance (dependent variable) and managerial ownership (independent variable). The data was then analyzed and presented using tables for ease of understanding and interpretation.

#### **3.5.1 Analytical Model**

The relationship between managerial ownership and stock performance was estimated using the following regression model:

$$\text{Model: } Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

$Y$  = stock performance,  $\beta_0$  = constant (intercept of the variable),  $X_1$  = managerial ownership,  $X_2$  = market capitalization,  $X_3$  = size of the firm,  $e$  = error term

### 3.5.2 Operationalization of Variables

Variable	Measure
Stock Performance	Returns
Managerial Ownership	Percentage of shares held
Market capitalization	Outstanding shares x market price
Size of Firm	Total assets

### 3.5.3 Test of Significance

The t-test and f-tests were used to test for significance at 5%. T-test is normally used to check the significance level of the coefficient of regression while f-test is used to test significance of the whole model.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter has the details of the analysis showing data collection and findings discussions. Data was collected from secondary sources, the NSE handbook 2015-2016, CMA website and the listed companies' websites. The study covered all firms listed at the NSE as at December 2015. Sixty five firms satisfied the requirements for inclusion in the study hence the analysis included those firms. SPSS was used to analyze the data and the research objective was to determine the effect of managerial ownership on stock performance of firms listed at the NSE. Regression analysis was carried out and the results and findings are respectively discussed.

#### 4.2 Regression Analysis

The model that was used is as shown below:

$$\text{Model: } Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Y = stock performance,  $\beta_0$  = constant (intercept of the variable),  $X_1$  = managerial ownership,  $X_2$  = market capitalization,  $X_3$  = size of the firm,  $e$  = error term

Table 1 on the next page indicates the regression coefficients, the t statistic and the p-value (significance level). The variables result in the following equation:

$$\text{Stock Performance} = 0.58 + 14.301X_1 - 1.052E-013X_2 - 6.030E-010X_3 + 0.148$$

**Table 1: Regression Analysis Results**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.058	.036		1.630	.109
Managerial Ownership	14.301	9.722	.194	1.471	.147
Market Capitalization	-1.052E-013	.000	-.065	-.465	.644
Size of the firm	-6.030E-010	.000	-.153	-1.091	.280

a. Dependent Variable: stock performance

From the regression model obtained above, holding all other factors constant, stock performance at the NSE would be 0.58. In addition, it means that when managerial ownership increases by one unit, stock performance increases by 14.301 units. When market capitalization increases by one unit, stock performance decreases by 1.052e-013units. Finally when size of the firm increases by one unit, stock performance decreases by -6.030e-010units.

**Table 2: R and R<sup>2</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.306 <sup>a</sup>	.094	.046	.148740158

a. Predictors: (Constant), Size of the firm, managerial ownership, market capitalization

Table 2 above reports the regression statistics obtained when managerial ownership and the other variables were regressed against stock performance. The value of R-square which is a coefficient of determination in regression analysis is normally used to show how well the real data points are approximated by the regression line. The result here of 94% shows that the regression line fits the data almost perfectly. The value of R is 0.306 which implies that a relationship exists between the variables. This is because the value is not zero which usually means that a relationship is nonexistent. The p value which is also shown in table 3 below shows a significance level of 0.129. The result of this regression was not significant at 5% since the F statistic has level of significance of 0.129 which is greater than 0.05.

### 4.3 Analysis of Variance

**Table 3: Analysis of variance**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.131	3	.044	1.968	.129 <sup>b</sup>
Residual	1.265	61	.022		
Total	1.392	64			

a. Dependent Variable: Stock Performance

b. Predictors: (Constant), Size of the firm, Managerial Ownership, Market Capitalization

Table 3 above shows the result of analysis of variance. From the table it is noted that the simple regression model has an F statistic of 1.968 with a significance level of 0.129. The result of this regression was not significant at 5% since the p value of 0.129 is greater than 0.05.

#### **4.4 Discussion**

The coefficient of managerial ownership was found to be positive meaning that managerial ownership has a positive effect on stock performance. However, the existing relationship was insignificant since the research results revealed a p value that was low. This means that a low percentage change in stock performance was explained by variation in managerial ownership. Market capitalization and the size of the firm each showed a negative effect on stock performance given by the negative coefficients that resulted from the regression analysis. The findings of a negative effect of market capitalization for example, can be supported by the market anomaly of small firm effect which implies that it is not necessarily the big firms that have stocks with high performance.

Market capitalization is obtained by multiplying the number of shares outstanding with the current market price. Given that the market price do not normally reflect the intrinsic value of a stock, it is possible that the values obtained for market capitalization are either understated or overstated. An understatement would occur if the stock is undervalued while an overstatement will occur when the stock price is overvalued.



## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter summarizes the findings from the study and gives conclusions, limitations and recommendations. Areas for further research are also suggested.

#### **5.2 Summary of the Findings**

This study sought to establish the effect of managerial ownership on stock performance at the Nairobi Securities Exchange. Regression statistics obtained when managerial ownership and the other variables were regressed against stock performance implied that 94% of the total variance of stock performance is explained by the model. Managerial ownership had a positive effect on stock performance. The positive effect was indicated by the coefficient of 0.058 reported in table 1. However the effect was not significant at 5% level because the p-value was 0.129 which is greater than 0.05 hence the conclusion that the effect is not significant.

The coefficients for the other two variables in the model, market capitalization and size of the firm were negative implying a negative effect on stock performance. Market capitalization had -1052E013 while size of the firm had -6.030E010. R-square value was 94% showing a regression line that fits the data almost perfectly. R value of 0.306 also implied that there exists a relationship between the variables.

### **5.3 Conclusions**

This study sought to determine the effect of managerial ownership on stock performance. The results of regression analysis indicated that managerial ownership has a positive effect on stock performance. However the p value of 0.129 showed that the effect is not significant at the 5% level of significance. The effect of managerial ownership on stock performance remained positive but insignificant when modelled with market capitalization and size of the firm. This study concludes that there exist a positive but statistically insignificant effect of managerial ownership on stock performance at the Nairobi Securities Exchange.

The effect of size of the firm was found to be negative implying that a negative effect exists between size of the firm and stock performance. Another negative effect was that of market capitalization on stock performance. This effect was also found to be negative hence among the three variables one had a positive effect on stock performance, that is, managerial ownership, while the remaining two variables had a negative effect.

### **5.4 Recommendations**

This study found that managerial ownership had positive but statistically insignificant effect on stock performance while market capitalization and size of the firm had negative effects on stock performance. It recommends that shareholders consider share ownership plans as a means to mitigate the conflicts that arise from agency relationships. Also, the regulator, Capital Markets Authority, can consider making it a policy to have a percentage of shares owned by insiders for every listed firm.

For the investors that want to make investment decisions as to which stocks to purchase, they might consider avoiding firms that are very big in size. This is because this research findings show that the stocks of such firms will not necessarily be positively affected by an increase in firm size. For this reason, the investors might not enjoy capital gains resulting from increase in stock prices. Market capitalization results also show a negative effect on stock performance. This also adds to the need for investors to look at these variables keenly even as they make their decisions on which firm's stocks to purchase.

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

This study covered one year, that is, year ending December 2015. Data over several years might provide different results. There are also other factors that affect stock performance that are outside the control of an organization for example inflation hence combining such micro economic factors might also give different results.

### **5.6 Suggestions for Further Study**

Further studies may seek to explore the effect of managerial ownership on stock performance when looking at firms in the same industry. This is because each industry has different factors that affect their stock performances hence zeroing in on a sector might shed more light as to the extent of the effect of managerial ownership on stock performance. Another area of research might be to study the effect of managerial ownership where the percentage of ownership is minimal against firms that have a huge part of their stock owned by managers.

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## APPENDICES

### Appendix 1: Nairobi Securities Exchange Listed companies

	<b><u>Agricultural</u></b>
1	Eaagads Ltd
2	Kapchorua Tea Co. Ltd
3	Rea Vipingo Plantations Kenya Ltd
4	Williamson Tea Kenya Ltd
5	Kakuzi
6	Sasini
7	The Limuru Tea Co.
	<b>Commercial and Services</b>
8	Express Ltd
9	TPS Eastern Africa (Serena) Ltd
10	Kenya Airways Ltd
11	Scangroup Ltd
12	Nation Media Group
13	Uchumi Supermarket Ltd
14	Hutchings Biemer Ltd
15	Standard Group Ltd
16	Longhorn Kenya Ltd
17	Atlas Development and Support Services
	<b>Telecommunication and Technology</b>



18	Access Kenya Group Ltd
19	Safaricom Ltd
	<b>Automobiles and Accessories</b>
20	Car and General (K) Ltd
21	Sameer Africa Ltd
22	Marshalls (E.A.) Ltd
	<b>Banking</b>
23	Barclays Bank Ltd
24	CFC Stanbic Holdings Ltd
25	I&M Holdings Ltd
26	Diamond Trust Bank Kenya Ltd
27	Housing Finance Co Ltd
28	Kenya Commercial Bank Ltd
29	National Bank of Kenya Ltd
30	NIC Bank Ltd
31	Standard Chartered Bank Ltd
32	Equity Bank Ltd
33	The Co-operative Bank of Kenya Ltd
	<b>Insurance</b>
34	Jubilee Holdings Ltd
35	British-American Investments Company
36	Pan Africa Insurance Holdings Ltd
37	CIC Insurance Group Ltd

38	Kenya Re-Insurance Corporation Ltd
39	Liberty Kenya Holdings Ltd
	<b>Investment</b>
40	Olympia Capital Holdings Ltd
41	Centum Investment Co Ltd
42	Trans-Century Ltd
43	Home Africa Ltd
44	Kurwitu ventures
	<b>Manufacturing and Allied</b>
45	B.O.C Kenya Ltd
46	British American Tobacco Kenya Ltd
47	Carbacid Investments Ltd
48	East African Breweries Ltd E
49	Mumias Sugar Co. Ltd
50	Unga Group Ltd
51	Kenya Orchards Ltd
52	Eveready East Africa Ltd
53	A.Baumann CO Ltd
54	Flame Tree Group Holdings Ltd
	<b>Construction and Allied</b>
55	Athi River Mining
56	Crown Berger Ltd
57	Bamburi Cement Ltd

58	E.A.Cables Ltd
59	E.A.Portland Cement Ltd
	<b>Energy and Petroleum</b>
60	KenolKobil Ltd
61	Total Kenya Ltd
62	KenGen Ltd
63	Kenya Power Co Ltd
64	Umeme Ltd
	<b>Investment Services</b>
65	Nairobi Securities Exchange