

INSIDER SHAREHOLDINGS AND FIRM PERFORMANCE: THE CASE OF COMPANIES QUOTED AT NAIROBI STOCK EXCHANGE

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**A MANAGEMENT RESEARCH PROJECT PROPOSAL SUBMITTED IN
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DECLARATION

This research is my original work and has not been presented for the award of a degree in any other University.

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ABSTRACT

This paper has sought to establish whether there is a relationship between insider shareholdings and firm performance. It measures the effects of insider ownership using a measure of firm performance, namely return on equity. The paper applies the insider ownership model on publicly listed firms at the Nairobi Stock Exchange.

The insider ownership model provides results that support a cubic relationship between insider ownership and firm performance. This confirms that managerial entrenchment has an unambiguous negative effect on firm performance as measured by return on equity, and that the wealth effect of insider ownership is unambiguously positive. This evidence is consistent with both the convergence of interest and entrenchment effect hypotheses. Overall results indicate that insider ownership has a positive impact on firm performance.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Decisions are not made in a vacuum but rather with some objectives/goals in mind. The goals of a firm include shareholders' wealth maximization, profit maximization, social responsibility, growth, survival, market leadership, ethics and cost minimization (Pandey 1989). The primary goal in finance is shareholders' wealth maximization and this means maximizing the price of the firm's stock. Shareholders own a firm though they do not manage it. They elect a board of directors, which in turn appoint the top managers. The board is the representative of shareholders and is supposed to ensure that management is acting in their best interest. Financial manager's primary task is to plan for the acquisition and use of funds so as to maximize the value of the firm. The financial manager's responsibility include: financial analysis and planning; investment decisions; financing decisions; dealing with financial markets; and risk management.

The separation of ownership and control raises worries that the management team may pursue objectives attractive to them, but which are not necessarily beneficial to the shareholders – this is termed “managerialism”. This conflict is what is known as the principal-agent problem (Agency problem). The principals (the shareholders) have to find ways of ensuring that their agents (the managers) act in their interests.

This conflict that arises from the separation of corporate ownership and control was foreseen by Berle and Means (1932). Manifestations of the conflict include excess perquisite consumption (Jensen and Meckling, 1976), risk shifting (Galai and Masulis, 1976), and sub optimal investment (Myers, 1977). As Barnea, Haugen, and Senbet (1985) observe in their comprehensive analysis of financial contracting, the complexity of virtually all contractual aspects of the firm, including capital structure and capital investment, may be traced to the agency conflict.

Agency problems are productive inefficiencies or conflicts of interest that lead to sub optimal resource allocation within an organization. Agency problems arise within a firm whenever managers have incentives to pursue their own interests at shareholders' expense. When managers

own a small fraction of the ownership shares of the firm, they may work less vigorously because less of this wealth will accrue to them and or consume more perquisites since majority owners bear most of the cost. In practice managers are concerned with their personal wealth, job security, life style and fringe benefits such as good offices, country club membership, and limousines all provided at company's expense. Such concerns may make managers reluctant or unwilling to take more than moderate risk if they perceive that too much risk may result in a loss of job and damage to personal wealth. The result of such a satisficing approach is a less than maximum return and a potential loss of wealth to shareholders.

The measures of firm performance are usually ratios fashioned from the financial statements or stock market prices, such as operating margins or stock market returns.

Jensen and Meckling (1976) point out that the conflict may be resolved by exercising monitoring, by instituting contracts that bond managers' performance with shareholder interests, or by using some combination of monitoring and bonding. Monitoring may come from sources external to the firm, for example the capital markets), the managerial labor market (Fama, 1980; Gibbons and Murphy, 1990), and regulatory agencies, such as state utility commissions or bank regulatory agencies. The use of debt can improve performance by inducing monitoring by lenders. The labor market for managers can motivate managers to attend to their reputation among prospective employers and so improve performance.

Bonding the CEO's performance with shareholder interests may be accomplished directly by suitable design of the compensation contract (Haugen and Senbet, 1981). Tying managers' compensation to firm performance motivates them to make more value maximizing decisions (Holmstrom, 1979; Harris and Raviv, 1979; Grossman and Hart, 1983). One specific way to tie compensation to performance is by making a greater percentage of a manager's compensation equity based such as through incentive stock option (Jensen and Murphy, 1990). Incentive compensation plan motivates managers to take on more risk.

Threat of takeover of hostile takeover (where management does not want the firm to be taken over) are most likely to occur when a firm stock is undervalued relative to its potential as a result

of poor managerial performance. In such a hostile takeover, the managers of the acquired firm are generally fired and any who are able to stay on lose their autonomy that they had prior to acquisition.

Insider shareholding is also another mechanism to control agency problems. These are the shares held by the directors and the managers of a firm. Demtzt and Lehn (1985) argue that insider shareholdings and outside directors will lead to firm value maximization. Managers and directors whose personal wealth is significantly linked to the value the firm will have the incentive to act in the interests of outside shareholders. According to Jensen and Meckling (1976), if outside shareholders can costlessly assess the extent to which an owner-manager imposes agency costs on other shareholders, the market value of the firms stock will be reduced, decreasing therefore the owner's wealth. The corporate governance literature argues that increasing stock ownership by managers and directors can be an effective control mechanism designed to reduce the moral hazard behavior of firm managers. If this is an effective control mechanism, then an increase in the extent of its use would induce a reduction in the level of other monitoring. Berle and Means (1932) pointed out that the distribution of the firm's shares between its managers and outside owners is likely to affect market value of the firm. As insider equity ownership increases, these conflicting interests converge. This convergence of interest hypothesis suggest that firm value increases as management ownership rises.

Morck, Shleifer and Vishny (1988) presented evidence of a relationship between the share holdings of a company's board of directors and Tobin's q. Tobin's q rose from around 0.75 when the board held no shares to roughly 1.0 when it held 5 percent of shares, and then reaching the value of only 0.7, when the board held 25 percent of the outstanding shares. They attributed this non-linear pattern to two conflicting effects of insider ownership. The first one is that as the number of shares held by board increases, the effect on the wealth of its members from a rise in the market value increases. The second one is that as the number of shares held by managers increases, the likelihood of their being replaced through a proxy fight or takeover declines and the managers have more discretion to pursue their own goals.

Lloyd, Hand and Modani (1987) found the company market value to sales ratio to be greater for (“owner-controlled”) companies with concentrated ownership. Working with a sophisticated index of owner influence as a function of concentration Leach and Leahy (1991) reached the same conclusion. Zeckhouser and Pound (1990) found that the price/earnings ratio increases with ownership concentration in industries that they categorize as “easy to monitor” and where owners can therefore presumably affect performance. McConnell and Servaes (1990) found non-monotonic relationships between insider (i.e. managerial) share holdings and Tobin’s q. Tobin’s q increased with insider shareholding upto some 40% of total shares outstanding and decreases after that.

The Craswell et al. (1997) paper investigated the role of insider shareholdings. At a basic level increasing insider shareholding is likely to raise incentives by reducing potential principal-agent problems. However it also recognized that if such shareholdings reach high levels they may result in necessary voting power to retain (directors’ own) job and set compensation levels. These observation imply that the effect of insider shareholding may be non linear: at lower levels exerting a positive influence and at higher levels exerting a negative influence. They investigated this issue by using a quadratic term of insider shareholding. They found using a sample of large Australian firms in 1986, that the linear relationship held. However the relationship did not hold in the 1989 sample. These varying results imply a need for further research.

Fama and Jensen (1983) stressed that significant insider ownership has offsetting costs. They argue that even at low levels of insider ownership, market discipline may force managers to pursue firm value maximization, inspite their lack of personal incentive to do so. When a manager owns a substantial percentage of the firm shares, which confers him enough voting rights, he may satisfy his non value maximizing objectives without endangering his job security. These arguments give rise to the entrenchment hypothesis. According to this hypothesis, excessive insider ownership has a negative effect on firm performance, probably because if the level of insider ownership is too high is likely to entrench them. In a simultaneous estimation of causes and effects of ownership concentration, Cho (1998) found the effect to be insignificant.

1.2 Statement of the Problem

The managers are ordinarily expected to make investment decisions that enhance the value of the firm. It is difficult and expensive for the principal (shareholders) to verify what the agent (manager) is actually doing. The principal and the agent also may prefer different actions because of different risk preferences. The question of whether managers will act in the best interest of shareholders will depend on two factors. First is how closely are management goals aligned with shareholders goals; and second whether management can be replaced if they do not pursue shareholders' goals. These questions relate to the way managers are compensated and the control of the firm.

Top managers like most individuals are risk averse. This implies as Harris and Raviv (1979) explain that managers will want their compensation structured so that they bear less personal risk. Given a certain level of compensation, managers will prefer fixed cash compensation over equity based compensation. In order to reduce their compensation risk, managers may engage in activities, which reduce the firm's risk (Jensen and Meckling, 1976). These activities can in turn adversely affect shareholders' wealth. Shareholders, on the other hand are considered risk neutral because they can diversify firm-specific risk simply by holding a diversified portfolio. Moreover shareholders will anticipate that managers will attempt to avoid risks in ways that can reduce the value of the firm. Resolving this conflict is tied in balancing the diverging interests to facilitate shareholders' wealth enhancing investments.

Studies by Onyango (2004), focused on the ownership structure and the value of the firm. Thuku (2002), researched on ownership structure and bank financial performance who categorized ownership in foreign vs. local, institutional vs. individual, governmental vs. non-governmental and listed vs. unlisted firms' ownership structure. Other researches were done by Olteita (2002) on ownership structure and financial performance of listed companies; Munyuru (2005) on corporate governance and organizational performance and Maina (2005) researched on board activity and firm performance. The varying results by Crasswell et al. (1997) necessitate further research on this area.

The empirical evidence is not conclusive regarding the effect of insider ownership on firm performance. This study intends to investigate the role of insider ownership in resolving the agency conflict and enhancing shareholder value.

1.3 Objectives of the Study

- 1 Ascertain the extent of insider shareholdings of companies listed at Nairobi Stock Exchange.
- 2 Identify the relationship between firm performance and insider shareholdings.

1.4 Importance of the Study

Agency problem is a major issue in organizations. Organizations will not be able to fulfill the goal of shareholders' wealth maximization unless this problem is curbed.

The study will be important to:

1. Academicians since it will provide a body of knowledge regarding analysis of the agency problem and insider shareholdings as a mechanism of solving this problem.
2. Investors both existing and potential will gain understanding of effectiveness of insider shareholdings in solving agency problem.
3. Students of research will acquire new knowledge and a basis for further research.
4. The public will gain awareness on insider shareholdings as a mechanism of ensuring that the managers maximize shareholders' wealth.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1. Agency theory

Agency theory is part of the positivist group of theories, which derives from the financial economics literature. It postulates that the firm consists of a nexus of contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling those resources. It is based on the premise that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor effectively whether agents are properly serving their interests. It also assumes that principals and agents act rationally and that they will use the contracting process to maximize their wealth.

Agency theory deals with the relationship that develops when an individual in a transaction (the principal) grants authority to another (the agent) and the welfare of the principal becomes affected by the decisions of the self-interested agent (Jensen and Meckling, 1976). Agency works have often dealt with the problems that evolve from the separation between the management of a publicly held firm and its ownership. It has primarily focused on the differing goals and risk preferences over which principals and agents may have conflicts regarding the firm.

2.1.1 Agency Conflicts

The goal of the principal is wealth maximization. For the principal, therefore, benefits or costs are primarily relevant in financial terms. The goal of the agent, however, may not only be to enhance his or her wealth (selfishly and at the expense of the principal) but also to enhance his/her non-pecuniary benefits. Consequently, for the agent, benefits or costs are relevant in both financial and non-financial terms. The agent's financial benefits (or costs) include such variables as employment income and equity ownership (or the possibility of losing such rewards). Alternatively, the non-financial benefits of the agent may encompass the physical appointments of the office, the attractiveness of the secretarial staff, the level of employee discipline, the kind and amount of charitable contributions, (Jensen and Meckling, 1976). The non financial costs relevant to agents may be the undertaking of additional effort required to manage firm synergies or master

new technologies or the anxieties inherent in innovative, and higher-risk corporate ventures.

According to agency theory, principals and agents may also have conflicts because of differing risk preferences. Firms are confronted with risks not only because of their own volition patterns but also because of environmental uncertainties. In the agency view, principals may be risk neutral because they can diversify their ownership across firms and other investments (Eisenhardt, 1989). However, selfish agents are expected to be risk averse since they can not diversify their employment. Because of differing goals and risk preferences, if left unchecked the agent will presumably manage the firm according to his or her preferences rather than promoting the principal's interests (Donaldson, 1999; Eisenhardt, 1989). Indeed, individual agents are expected to pursue selfish interests at the expense of the principal.

The premise of selfish behaviour in agency theory may be incompatible with the attainment of goal or risk preferences theoretically attributed to either the principal or the agent (or other stakeholders). More specifically, the prevalence of selfish interest assumed in agency theory may detract from a firm's achievement of lower costs and competitive advantage, harming the interests of stakeholders.

In this setting, principals and agents cannot be viewed to have congruency in their goal or risk preferences. Thus, via a specified formal contract, attempts are made by principals to influence agents to behave responsibly. But because of the presumed self-interested behaviour, and given the divergence in goal and risk preferences, the decisions that would promote the self-interests of the agents may nevertheless be different from those that would serve the best interests of principals. Consequently, in addition to extensive formal contracting, costly monitoring and bonding efforts will be necessary. But despite these efforts, because information asymmetry is also presumed to prevail between the principal and the agent (Donaldson, 1999), the agent is expected to capitalize on this asymmetry and abuse the principal by pursuing selfish goals and risk-reducing strategies that are harmful to the interests of the principal.

If the leadership of the firm is assumed to be selfish and not concerned with the needs of others, then on a broader front, individuals and groups internal and external to the firm may be hesitant to cooperate without extensive, costly contractual or monitoring safeguards (Donaldson and Preston, 1995). Such costs may preclude being price competitive and detract from a firm's achievement of

advantage over rivals. Consequently, reduced benefits may accrue to the firm's owners, agent, or others.

In agency theory it is anticipated that opportunism may prevail because of adverse selection or moral hazard. Opportunism is often perceived as self-interest seeking with guile (Williamson, 1975). Adverse selection denotes wilful misrepresentation of capability by the agent. Moral hazard refers to shirking in effort on the part of the agent that can affect the probability of the distribution of outcomes. Both moral hazard and adverse selection may exist because of information asymmetry between the principal and the agent.

In the context of the firm's principal, agent, or other stakeholder interactions, opportunism may be subject to spiral reinforcement processes, further degrading the nature of such interactions. That is because the presumption is likely to be that opportunistic senior executives will increasingly make bad agents because they will be irresponsible. Opportunistic people will be poor employees because they may to a greater extent shirk or cheat. Opportunistic individuals will be undesirable buyers or sellers because they may increasingly abuse their positions. Moreover, honest individuals may be reluctant to initiate and maintain cooperation with those who are opportunistic because such cooperation will presumably be disadvantageous. Consequently, the existence of opportunistic behaviour among stakeholders and its spiral may increasingly require more extensive formal contracting, bonding, and monitoring efforts that will elevate costs associated with the functioning of a firm. An enterprise with elevated costs will be less capable of being price competitive, diminishing its survival prospects. Consequently, reduced benefits may be forthcoming to such a firm's owners, agent, or other stakeholders. A key point in positive agency theory is that ownership is an important mechanism for exercising corporate control.

2.1.2 Corporate Governance

The need for governance derives from the potential conflicts of interest among participants (stakeholders) in the corporate structure. These conflicts of interest often referred to as agency problems, arise from two main sources. First, different participants have different goals and preferences. Second, the participants have imperfect information as to each others' actions, knowledge, and preferences. Berle and Means (1932) are credited as being among the first to address these conflicts by focusing on the separation of corporate ownership from corporate

management—commonly referred to as the separation of ownership and control. Berle and Means noted that this separation, absent other corporate governance mechanisms, provides managers with the ability to act in their own self-interest rather than in the interests of shareholders.

Corporate governance is viewed as a set of internal and external governance mechanisms within the context of a given legal framework. These mechanisms and the legal framework provide the necessary environment in assuring that the control and cash flow rights of the suppliers of finance or outside investors are not usurped.

Gillan and Starks (1998) define corporate governance as ‘the system of laws, rules, and factors that control operations at a company’. They highlight that a firm’s governance comprises the set of structures that provide boundaries for the firm’s operations. This set of structures includes participants in corporate activities, such as workers, managers, and suppliers of capital, the returns to those participants, and the constraints under which they operate. Shleifer and Vishny (1997) define corporate governance in terms of the economic interests of the participants. In particular, they refer to corporate governance as dealing with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment.

Corporate governance discusses problems arising in a corporation, when ownership and control of production assets are separated. It refers to the mechanisms that solve two principal-agent problems, one between the owners of capital and managers, and another between the small, dispersed owners and large concentrated block holders of the firm.

2.2 Ownership concentration.

The effects of ownership concentration on firm performance are theoretically complex and empirically ambiguous. Conceptually, concentrated ownership may improve performance by increasing monitoring and alleviating the free-rider problem in takeovers (Shleifer and Vishny, 1986), but other mechanisms may work in the opposite direction. Most frequently discussed is the possibility that large shareholders exercise their control rights to create private benefits, sometimes expropriating smaller investors. Even the fear of expropriation may limit the ability of firms with high ownership concentration to raise fresh finance through borrowing or new share

offerings. Other potential costs of concentration may result if managerial initiative is repressed by excessive monitoring (Burkart, Gromb, and Panunzi, 1997), or if a smaller fraction of liquid shares available to quietly establish a “toehold” raises a raider’s costs of attempting a takeover (Kyle and Vila, 1991). The reduced liquidity could also lower the informational value of the firm’s share price as a measure of managerial performance (Holmström and Tirole, 1993).

The effect of ownership concentration on company profitability has been studied since Berle and Means (1932). Earlier studies comparing the profitability of manager- and owner-controlled companies, often categorized by the share of the largest owner, generally found a higher rate of return in companies with concentrated ownership (Cubbin and Leech, 1983). But these studies lacked a theoretical foundation. They did not provide a theory of ownership structure and seemed to imply that shareholders could profit by rearranging their portfolios. This point was raised by Demsetz (1983) who argued theoretically that the ownership structure of the firm is “an endogenous outcome of competitive selection in which various cost advantages and disadvantages are balanced to arrive at an equilibrium organization of the firm”. If ownership structure is an endogenous result of profit-maximizing behavior the marginal performance effect of changing ownership structure should be zero.

In support of the equilibrium hypothesis Demsetz and Lehn (1985) found no association between ownership concentration and profitability (return on equity) in large US companies when controlling for the determinants of ownership concentration and other variables. They examined the effects of concentrated ownership on firm performance. They also classified concentrated ownership into three groups: all investors, family and individual investors, and institutional investors. The results suggested that there is no significant relationship between concentrated ownership including its three types and return to shareholders. They argued that the structure of corporate ownership varies systematically in ways that are consistent with value maximization. Evidently, a theoretical argument is needed to justify the presence of systematic performance effects of ownership concentration, if any exist.

According to standard agency theory (Shleifer and Vishny ,1997) the choice of a privately optimal ownership structure involves a trade off between risk and incentive efficiency. Ceteris

paribus, larger owners will have a stronger incentive to monitor managers and more power to enforce their interests and this should increase the inclination of managers to maximize shareholder value. But generally the owners' portfolio risk will also increase with large ownership share. To the extent that companies differ in terms of firm specific risk the privately optimal share of the largest owner will therefore vary. Furthermore, the nature and complexity of activities carried out by individual firms may also vary, and so may the marginal effect of monitoring on the shareholder value of individual firms (Demsetz and Lehn, 1985).

But if owners could increase their wealth by adjusting their portfolios why don't they do so? The same factors which cause inefficient monitoring by a multitude of small investors can also prevent them from an efficient restructuring of ownership structure. In parallel to the theory of collusion in industrial economics the argument is that cost of shareholder cooperation may increase and the gains for the individual shareholders may decrease with the number of shareholders.

Small shareholders may have an insufficient incentive to maximize total shareholder value because the control and monitoring gains from large block share holdings are shared with other investors (who also benefit from a higher share price). And if one shareholder attempts to acquire a large ownership stake the gains will (largely) be captured by the other shareholders who sell their shares at a premium price reflecting the anticipated increase in the value of the firm. The free rider problem leads to a positive equilibrium effect of ownership concentration on company performance since companies with large owners will do better and since minority investors have insufficient incentives to change the structure.

In contrast nothing would prevent a large owner from selling his shares in case this maximizes his wealth (so wealth maximizing owners would eliminate negative performance effects by arbitrage). But with increasing ownership share improved incentives will have less of an effect on performance if the marginal effect of monitoring effort is decreasing. Furthermore, a large ownership stake in a particular company indicates a less than fully diversified portfolio on the part of the owner so that owner risk aversion may induce the company to trade off expected returns for lower risk. And finally, the separation between ownership and management becomes blurred as

ownership share increases with the added risk of “entrenchment” due to private benefits of control (information advantages, perks).

Chen (2001) examined the relationship between ownership structure and firm value in the China firms. The results showed that there is a strong positive relationship between concentrated ownership and corporate value (Tobin’s q). A positive relationship between corporate value and domestic institutional shareholders was also reported. Moreover, he mentioned that managerial shareholders are positively and state shareholders are negatively related to firm value respectively

Wiwattanakantung (2001) tested the impact of ownership structure on firm performance of Thai non-financial firms listed in the Stock Exchange of Thailand in 1996. The study argued that there is no evidence to support that controlling shareholders extract corporate assets away from the firm for their own benefits. That is, firms with controlling shareholders have higher profitability (as measured by the return on assets and sales-to-asset) than those with non-controlling shareholders. The results also reported that firms with family and foreign-controlling shareholders, as well as firms with more than one controlling shareholder, have higher profitability than do firms with non-controlling shareholders.

In contrast, Holderness and Sheehan (1988) suggest that there is no difference between firms with concentrated owners and those with dispersed owners. Mulari and Welch (1989) support this notion that the performance of firms with high concentrated ownership does not differ from other firms with dispersed ownership.

McConnell and Servaes (1990) found no effect on the ratio of market value to replacement cost of assets (Tobin’s Q), although they did find a positive effect of ownership by corporate insiders and by institutional investors. On the other hand, Wruck (1989) reports that private sales of blocks of shares, associated with increasing concentration, have a positive effect, although one that is nonmonotonic, on abnormal market returns. She found, similar to Morck et. al. (1988) analysis of managerial ownership, that returns are increasing at low levels of concentration, decreasing at moderate levels, and again increasing at higher levels. As the coefficient for low concentration is statistically insignificant, this suggests a roughly U-shaped relationship. An interpretation of these

results is that the negative effects of concentration outweigh the positive effects over some ranges of the level of concentration.

Among studies of other economies, Leech and Leahy (1991) report inconsistent findings in the United Kingdom, including a negative relationship when performance is measured as profitability. Gorton and Schmid (2000) report that concentration increases the market-to-book ratio and return on assets in Germany, although only the former result is statistically significant.

Prowse (1992) finds no relationship, linear or nonlinear, between profitability and ownership concentration. In Japan; Claessens and Djankov (1999) estimated an inverse U-shaped relationship in the Czech Republic; Claessens et al. (2002) found a positive effect of ownership concentration on the market-to-book ratio but a negative effect when control rights exceed cash flow rights in a sample of Asian firms.

Zwiebel (1995) has provided some indirect theoretical justification for such a group measure by suggesting that a particularly large owner will tend to “create its own space,” discouraging other block holdings from forming, while in the case where a dominant large owner is absent, smaller shareholders may form coalitions to exercise joint control. A measure of the shareholdings of the group of largest block holders captures either possibility. But the group measure may also obscure some important aspects of interactions among block holders.

2.3 Owner Identity

Investors differ in terms of wealth, risk aversion and the priority they attach to shareholder value relative to other goals. To the extent that owners have other economic relations with the firm, conflicts of interest may arise. For example, banks may play a dual role as lenders and owners, managers may play a dual role as employees and owners, governments may play a dual role as regulators and owners. For each of these stakeholders preferences regarding company strategy will involve a trade off between the pursuit of shareholder value and other goals. A similar trade off is implied for corporate owners such as multinational parent companies which may want to sacrifice local profit maximization in the overall, global interest of the corporation. While

“insider” owners will generally share a preference for shareholder value this preference will presumably be mitigated by their individual stakeholder interests.

A theoretical argument is needed to explain sustainable performance differences as a function of owner identity. If one type of owners (institutional investors) can increase shareholder value by buying more shares why don't they do so? One reason may be free rider problems. Minority owners may have an insufficient incentive to change the structure because of free rider problems. Another reason may be that the private benefits of control (personal utility, stakeholder gains) outweigh the anticipated gains in shareholder value by ownership restructuring. For example the large portfolios of institutional investors will usually allow them to diversify away firm specific risk whereas individual/family owners may be expected to trade off expected returns against downside risk. Similarly bank may be adverse to downside risk if they also have large bank loans to the company in which they are the largest owner.

La Porta et al. (1998,1999) have argued that national legal systems differ with regard to investor protection, and that this has implications for insider ownership and market valuation. Others have emphasized the importance of a wider set of institutional differences including the structure of the financial system, financial regulation and complementary institutions (Roe 1991, 1994, Whitley 1994, Thomsen and Pedersen 1997, 1999), which in effect make each nation a unique case.

National Differences

National differences have a strong influence on both ownership structure and market valuation, and it cannot be taken for granted that they do not influence the functional relationship between them. Roe (1994) find strong nation effects on corporate ownership structure. Thomsen and Pedersen (2000) also find strong nation effects on the market valuation of European companies. La Porta et al. (1998, 1999) argue that relatively weak systemic investor protection in civil law systems leads to higher levels of insider ownership (control by large owners) compared to common law systems. because control by large owners functions as an alternative control mechanism to legal protection.

Furthermore, La Porta et al. (1999) argue that systemic investor protection has a positive impact on market valuation because investor protection increases insider owners' costs of diverting resources to their private benefit. Specifically, they argue that investors are better protected in common law regimes and that share valuation therefore tends to be higher in common law compared to civil law systems. Because of nation effects it cannot be taken for granted that the relationship between ownership Structure and economic performance is the same indifferent countries.

Governments

A high level of government ownership could have very different implications for market valuation compared to a high level of managerial ownership. Likewise it could very well have different implications for company behavior if the largest owner is a family, a bank or another corporation. This point has been stressed by Thomsen and Pedersen (2000).

Hansmann (1996) argued that the largest owner influences company objectives according to the preferences of that owner category. In addition to their ownership interest in shareholder value the preferences are assumed to be influenced by other economic relations ("the stakeholder interest"), which that owner category may have with the firm. Owners can be distinguished between four owner categories: Financial institutions, non-Financial Companies, Families and Governments.

Governments may emphasize on social goals more than shareholder value. Government organizations are likely to be more sensitive to political concerns than other ownership categories, which essentially means that a higher ownership share will not necessarily function as a deterrent against profit diversion. The theoretical literature (Shepherd (1989) and common sense suggest that governments are likely to pay special attention to political goals such as low output prices, employment or external effect many of which may be negatively correlated with financial performance. In fact, non profit-maximizing behavior is a key rationale for government ownership in welfare economics (Shepherd 1989), since government intervention is expected to correct market failures. Ceteris paribus, the government-owned enterprises may therefore be expected to be low performers in terms of conventional performance measures. A high level of government ownership could therefore very well be associated with relatively low market valuation. Likewise the determinants of government ownership should in theory differ from determinants of private

ownership. Governments might have a preference for owning companies that are not commercially viable (relatively unprofitable); for example to prevent job losses or to maintain production of indispensable services.

Families

Families or single individuals are the prototype insiders referred to by La Porta et al. (1999) because single owners or family members often play a dual role as managers and owners, if they own large amounts of shares. In other words, their marginal cost of profit diversion is presumably small and therefore ownership share should have a relatively strong effect on market valuation for family-managed companies. However, the performance effects of family ownership are disputed. Since single owners and families typically invest a disproportionate share of their wealth in the company, family-owned companies may be relatively risk averse, and they are more likely to be capital-rationed than outsider-controlled companies which could detract from their economic performance. Furthermore the private utility that families derive from running the company may go beyond what they can pocket at the expense of minority shareholders. In support of the expropriation hypothesis, Johnson et al. (1985) found that the stock market reacted favorably to unexpected death of CEOs with large ownership stakes. On the other hand, families sometimes make firm specific investments in human capital which create long-term ties to the company, and which may be value increasing. Nickel et al. (1997) found no effects of family ownership on productivity and Gorriz and Fumas (1996) found a positive effect.

Financial Institutions

Financial institutions (banks, insurance companies, pension funds, investment companies) are assumed to be portfolio investors whose main objective is maximizing shareholder value. This means that they can to a large extent be regarded as outsiders. To be sure there are exceptions to this rule; for example, banks may value the security of their loans and other business relations with the company as much as their owner interest. And pension funds may have links to trade unions or governments that make them extra sensitive to political concerns like job safety or the public image of the companies that they invest in. Nevertheless, holding a large portfolio of shares at arms length distance and being evaluated regularly on their financial results compared to other institutions will arguably make financial institutions likely to be strongly concerned with

shareholder value. Furthermore financial investors are generally subjected to special regulation and supervision by government organizations (ministries of finance, securities and exchange commissions and the like). In other words, their marginal cost of value diversion is presumably relatively high, which should lead to a positive, but relatively small effect of ownership share on market valuation. In the same way, high profit diversion costs could theoretically imply a low level of value diversion and therefore higher share value and higher ownership share for financial owners relative to other ownership categories, while the marginal effect of share valuation on ownership share should tend to be smaller than for other categories given the higher share value.

Thomsen and Pedersen (2000) argued that a higher level of ownership by a financial institution will give that institution more voting power and stronger incentives to monitor the incumbent management (the “real” insiders), and that this will imply a greater pressure to maximize shareholder value. In support they reported that market valuation tended to increase with the ownership share of dominant financial institutions.

Nickel et al. (1997) found a positive productivity impact of financial ownership. In the case of bank ownership Cable (1985) found a positive performance effect among West German firms; and Hoshi et al. (1990) found that members of bank-based business groups were less likely to be credit-rationed. An alternative interpretation may be to simply define financial owners as outsiders because their costs of profit diversion are prohibitive. In that case an increase in financial investor ownership would imply a decrease in insider ownership by other owner categories, which would imply a negative relationship between financial ownership and market valuation given lower costs of profit dispersion for the insiders. This also contradicts previous research.

It may therefore be necessary to understand the causes and consequences of financial ownership. For example, the wealth effects may imply that financial institutions and the companies that they own appear to be less likely to be capital-rationed than companies whose owners have less direct access to capital. And, because of financial regulation and supervision they may be forced to invest “prudently” in relatively liquid, high value blue chip shares. If a higher ownership share

implies an increase in the control of shareholder value maximizing financial owners this may have positive effect on market valuation.

Non-Financial Companies

Non-financial companies sometimes hold shares in other companies as part of cross-ownership or company group structures. Because company owners often have business ties with the companies that they own, they come closer to being classical insider-owners than financial institutions and their costs of profit diversion are presumably small which should indicate a relatively large positive performance effect of increasing ownership share. Likewise, a relatively high expected profit diversion should indicate a positive, and relatively large effect of market valuation on corporate ownership share. Vertical ties between companies at different stages of the value chain/system make economic sense under conditions of high asset specificity and transaction frequency (Williamson 1995). In particular corporate ownership ties may be expected to facilitate knowledge transfers between the affiliated companies. Non-financial companies are likely to have lower costs of capital than individuals or families, but higher than financial investors.

Parent Company

The relationship between a foreign parent company and a subsidiary can be interpreted in this way if the subsidiary markets and distributes products produced or developed by the parent company. The owner company has stronger incentives to transfer proprietary resources to the subsidiary/affiliate (Caves 1996), which should tend to increase its market valuation. Nevertheless, as recognized by Williamson (1985) in the case of full integration into a company hierarchy or by Kester (1992) in the case of more loosely affiliated members of a company group, the advantages of business group membership come at a cost, for example loss of flexibility and risk of deficient mutual monitoring. The impact of market value on company ownership also to be uncertain.

2.4 Insider ownership

Insider ownership is defined as the total number of shares held in aggregate by all officers and directors divided by the number of shares outstanding. The value of the shares held by insiders and calculated by multiplying insider ownership with the market value of equity. Insider ownership reflects the governance problem arising due to variance in the cash flow and control rights.

2.4.1 Insider ownership and firm performance

Several studies have been published on the issue of insider Ownership. Two important results emerge from this branch of literature. First, most of the studies provide evidence that insider ownership actually affects firm value, although the relationship seems to be monotonic. A positive impact of insider ownership on firm value can be explained by the so- called convergence of interest hypothesis, stating that large equity shares of insider should be associated with higher market valuation due to lower agency costs. In contrast a negative relation can be explained by the so -called entrenchment hypothesis, predicting that insider ownership above certain threshold will have a value destroying effect due to the up coming conflict between large block holders (in this case the management) and the dispersed shareholders. These two hypotheses serve as an explanation for the bell-shaped relationship between insider ownership and firm value found by McConnell and Servaes (1990) or the piecewise-linear relationship discovered by Morck, Shleifer and Vishny (1988).

Jensen and Meckling (1976) suggest that the holding of shares by the managers a firm helps to align the interests between shareholders and managers. When the manager's interests coincide more closely with those of shareholders, the conflicts between managers and shareholders are mitigated. Also, managers are less inclined to divert resources of the firm away to their own account. Moreover, with a large proportion of shares in the hands of managers, they may work harder to improve the firm performance. This action leads to an increase in firm's value and also the managers' private wealth.

Demsetz (1983) argued that insider ownership is endogenously determined and, hence, cannot be a determinant of firm value. His arguments are supported by the evidence presented in Demsetz

and Lehn (1985), where firm size, stock price volatility, industry affiliation, and return on assets evolve as adequate explanatory variables for the ownership structure of US corporations. Hence, it may well be that low levels of managerial ownership turn out to be an optimal incentive arrangement in those firms whose firm value tends to be lower than in other companies, where higher levels of insider ownership are optimal. As long as one cannot control for the variables being responsible for this relationship, that is there is unobserved firm heterogeneity, the detected correlation between ownership and firm performance might just be spurious. Basically, they argued that in competitive capital market environment market forces will make sure that every company chooses its value maximizing ownership structure. Hence, inside ownership is an endogenously determined variable and any observed correlation of ownership and firm value is, basically, meaningless. In fact, the relationship of inside ownership with firm value might be due to some firm characteristics that are unobservable for the econometrician. As a consequence, an endogeneity problem arises, because ownership structure and firm value are determined simultaneously.

Kesner (1987) investigated the relationship between members of the board of directors and six performance measures (profit margin, return on equity, return on assets, earning per share, stock market performance and total return to shareholders). The results showed that a proportion of shares held by board members is positive and significant to only two of the performance measures (the profit margin and return on assets).

Vance (1964), however, suggests that the managerial shareholding is positively related to the profit margin.

Morck et al (1988) investigated whether or not there is a non-linear relationship between managerial ownership and firm performance (as measured by firm's market value and a profit rate) for 456 of the Fortune 500 firms in 1980. To capture this relationship, they categorized managerial shareholding into three different levels: 0% -5%, 5%-25%, and beyond 25%. The results revealed that there is a positive relationship between managerial ownership holding at 0% to 5% and the firm's value. After that, a negative relationship was found at 5% to 25% of

managerial shareholding, and then the relationship became positive again (but not significant) beyond 25% of shareholding. In the profit rate regression, they reported that there is only a significant positive relationship between managerial ownership holding at 0% - 5% and the profit rate. Thus the relationship between managerial ownership and its performance is 'non-linear'. That is, at a certain level of managerial shareholding, managerial shareholders can 'entrench' the controlling power over the firm's activities, leaving external or small shareholders with difficulty in controlling the actions of such ownership. Short (1994) supported this notion and suggested that implicitly assuming the 'linear' relationship between managerial ownership and firm performance in the previous researches possibly brings misleading results. This is because there may be the opposite relationship between managerial shareholding at a certain level and firm performance.

McConnell and Servaes (1990) investigated the effects of managerial ownership on the firm's value. In their study, instead of fixing the level of managerial ownership, as had been conducted in Morck et al's (1988) study, they adopted managerial shareholding and managerial shareholding square as ownership variables. To do so, they drew upon a sample of 1,173 firms in 1976 and 1,093 firms in 1986. The results reported that a positive relationship exists between managerial ownership holding at 0% to approximately 50% of shareholding and firm performance. Beyond 50%, a negative relationship between them was found. McConnell and Servaes therefore suggested that the impact of managerial ownership on the firm's value is non-linear.

Short and Keasy (1999) also investigated whether there is a non-linear relationship between managerial ownership and firm performance based on return on shareholders' equity and market value, in the case of UK. Their study adopted the cubic model to investigate this relationship. They suggested that performance (as measured by return on shareholders' equity) is positively related to managerial shareholding in the 0% to 15.58% range, negatively related in the 15.58% to 41.84% range, and becoming positively related again beyond 41.48%. In the market return (as measured by Tobin's Q) regression, they suggested that Tobin's Q is positively related to managerial shareholding in the 0% to 12.99% range, negatively related in the 12.99% to 41.99% range, and turning positive again when managerial shareholding exceeds 41.99%.

Hand and Suk (1998) examined the non-linear relationship between insider Ownership of 301 firms and average stock returns during 1988 to 1992. To capture the potential of the non-linear relationship, the inside ownership and insider ownership squared variables were applied. The inside ownership in their study consisted of not only the board members, but also the officers, beneficial owners and principal stock holders owning ten percent or more of the firm's stock. The results showed that the insider ownership is positively related to the stock returns. In contrast, the inside ownership square is negatively related. The minimum turning point is found at 41.8% of insider shareholding. They concluded that as insider ownership increases, stock returns increase. But excessive insider ownership rather hurts corporate performance.

Wiwattanakantung (2001) examined the relationship between managerial shareholders and firm performance for Thailand firms in 1996. Managerial shareholding was classified into three levels (25% -50%, 50%-75% and beyond 75%). The study compared the three levels of managerial shareholders with non-managerial controlling shareholders. The study reported that there is a non-linear relationship between managerial shareholders and firm performance based on the return on assets and the sales-asset. That is, managerial shareholders who control between 25%-50% of outstanding shares have poorer returns on assets and sales as compared to non-managerial controlling shareholders.

Loderer and Martin (1997) examine both Tobin's Q-values and abnormal stock returns to 867 acquisitions made by companies listed in the US over the period 1978-1988. They found a weak concave effect of director ownership on both measures estimated by simple regression. However, the relationship became insignificant when a simultaneous two-equation model was estimated that includes firm size and earnings volatility as determinants of director ownership. Abnormal acquisition returns were found to have a significant positive effect on director ownership whereas Tobin's Q-values are found to have a significant negative effect. The authors interpreted these results as evidence that managers have inside knowledge and increase their shareholdings prior to good acquisitions whereas high share prices and Tobin's Q-values induce them to sell out.

Cho (1998) examined investment as an intermediate variable between director ownership and performance measured by Tobin's Q-values. On a sample of 326 Fortune 500 firms in 1991 he

found that Tobin's Q-values have a positive impact on director ownership and that director ownership has a significant non-monotonous effect on investment, which again has a positive impact on Tobin's Q-values. When taking this into account in a 3-equation model simultaneously determining director ownership, Tobin's Q-values and investment, the non-monotonous effect of ownership structure on Tobin's Q-values became insignificant.

Himmelberg, Hubbard and Palia (1999) used a panel of 300 Compustat firms over the period 1982-1992 to control for fixed firm effects as an indicator of unobserved firm heterogeneity which influences both ownership structure and Tobin's Q-values. They found a significant impact of director ownership on Tobin's Q-values even after controlling for some observable determinants of ownership structure, but the impact became insignificant when the fixed firm effects were taken into account.

Onyango (2004) found a cubic relationship between the value of the firm and insider ownership. Value of the firm increased between 0% and 37% insider ownership. When insider ownership ranged between 37% and 51% the firm value decreased. At high levels above 51%, the convergence of – interest dominated the relation again.

Demsetz and Villalonga (2001) found a negative relationship between the value of the firm and insider shareholdings, on the one hand, and the percentage of capital held by the five main shareholders, on the other. The effect in the opposite direction is not significant.

Agrawal and Knoeber (1996) found that the effects of insider shareholdings are statistically insignificant. In summary, empirical research has tended to find a positive direct effect of insider ownership or similar measures such as director ownership, ownership concentration or owner-control dummies. But the effect has tended to become insignificant when attempts were made to control for the determinants of ownership structure.

2.5 Performance measures

2.5.1 Earnings Before Interest and Taxes (EBIT)

EBIT is a measure of a company's earning power from ongoing operations, equal to earnings before deduction of interest payments and income taxes also called operating profit or operating income.

2.5.2 Return On Assets (ROA)

A measure of a company's profitability, equal to a fiscal year's earning divided by its total assets, expressed as a percentage. Is a useful indicator of how profitable a company is relative to its total assets. It also gives an idea as to how well the company is able to use its assets to generate earnings. It is calculated by dividing a company's annual earnings by its total assets. This ratio needs to be examined along with return on investment or return on shareholder's equity (Xu and Wang, 1997). Some investors add interest expense back into net income when performing this calculation because they'd like to use operating returns before cost of borrowing. The higher the ROA number, the better it is seen.

2.5.3 Return On Equity (ROE)

Return on equity is calculated by taking a year's worth of earnings and dividing them by the average shareholder's equity for that year. The earnings can be taken directly from the Consolidated Statement of Earnings in the company's last annual filing with the Securities Exchange Commission (SEC), or they can be taken as the sum of the last four quarters worth of earnings. They can also be figured using the average of the last five or ten year's earnings, or they can simply be annualized based on the last quarter's results. (Investors should be careful not to annualize the results of a seasonal business where all of the profit is booked in one or two quarters.) Shareholder's equity is an accounting convention that represents the assets that have actually been generated by the business. Short and Keasy (1999) used return on equity as a measure of performance in their study for UK firms.

2.5.4 Earnings Per Share (EPS)

An earnings per share is the earnings divided by the number of shares outstanding. Companies often use a weighted average of shares outstanding over the reporting term. EPS can be calculated

for the previous year ("trailing EPS"), for the current year ("current EPS"), or for the coming year ("forward EPS"). The last year's EPS would be actual, while current year and forward year EPS would be estimates.

2.5.5 Tobin's q ratio

Tobin's q-ratio is the market value of a firm's securities to the replacement costs of its tangible assets. If the Tobin's q is greater than one, it indicates that the firm has done well its investment decisions. Loderer and Martin (1997) used Tobin's Q as a measure of performance for US firms.

2.5.6 Economic Value Added (EVA)

Is a value-based financial performance measure reflecting the absolute amount of shareholder value created or destroyed during each year. Is a useful tool for choosing most promising financial investment. It is highly correlated with stock prices.

2.5.7 Market To Book value

Basically, the market to-book ratio attempts to identify undervalued or overvalued securities by taking the market value and dividing it by book value. Xu and Wang (1997) used MBV as a measure of performance of 100 Chinese town and village enterprise listed in two Chinese stock exchanges In basic terms if the ratio is above 1 then the stock is overvalued, and if it is less than 1 then the stock is undervalued. This term can also be inversed to be the book to-market value.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The research was an empirical study based on data recorded at the Nairobi Stock Exchange database.

3.2 Population and Sample

The whole population of publicly listed firms from 2000 to 2002 was studied. The study was restricted to quoted firms due to difficulties in getting data from private firms. The sample was a set of all firms for which is available from the Nairobi Stock Exchange database.

3.3 Data Collection

Secondary data was obtained from the Nairobi Stock Exchange secretariat. This was in form of balance sheet and income statement extracts from listed firms stored in the Nairobi Stock Exchange database. The ownership structure data was collected from the registrar of companies and the Capital Market Authority.

3.4 Hypotheses

The research focussed on testing the following hypotheses;

Ho

There is no relationship between insider shareholding and firm performance of firms listed at NSE

Ha;

There is relationship between insider shareholding and firm performance of firms listed at NSE

3.5 Data Analysis

Firm performance was measured by Return on equity. The use of Tobins's was not found appropriate in this study because its reliability is highly dependent on financial markets being well developed (Xu and Wang, 1997). To establish the relationship between insider ownership and firm performance, the study adopted the model used by Morck, Shleifer and Vishny (1988). The independent variable being insider ownership and the dependent variable being performance. The

control variables were debt ratio and size of the firm and opportunities for future growth as measured by intangible non-current assets divided by the book value of the total assets.

The model was tested as below

$$Y = A1 + C_1IS + C_2IS^2 + C_3IS^3 + C_4SL + C_5D + C_6INCA/K + e$$

Where:

Y = performance measured by ROE

A1= the intercept

IS= insider ownership

IS²= Square of insider ownership

IS³= Cube of insider ownership

SL=logarithm of the value of the total assets

D= is the debt ratio

INCA=Intangible Non-Current Assets

K= Book value of assets

E =Error term

C₁, C₂, C₃, C₄, C₅ and C₆ are coefficients

Once the equation was obtained, the significance test will be conducted. The t statistics was used.

N –2 degrees of freedom at 95% confidence level was used to obtain critical t- values.

CHAPTER FOUR

4.0 DATA ANALYSIS AND FINDINGS

4.1 Correlation analysis

Table 4.1 shows correlation coefficients between return on equity and the various variables. Examining the correlation matrix, a positive correlation between the insider ownership variable and firm performance. However, there is a low and negative correlation between firm performance and logarithm of the total assets (-.063). Equally the study shows that there is a negative correlation between performance and debt ratio and a low positive correlation between performance and future growth opportunities.

Table 4.1: Correlations Matrices

	ROE	IS	IS^2	IS^3	SL	D	INCA/K
ROE	1.000						
IS	.400	1.000					
IS^2	.381	.996	1.000				
IS^3	.361	.986	.997	1.000			
SL	-.063	-.023	.001	.025	1.000		
D	-.343	-.118	-.114	-.109	.084	1.000	
INCA/K	.059	-.015	-.015	-.017	.089	.052	1.000

4.2 The Model

This study used the following model to test the relationship between return on equity (Y) and the various independent variables.

$$Y = A_1 + C_1IS + C_2IS^2 + C_3IS^3 + C_4SL + C_5D + C_6INCA/K + e$$

With the results in table 4.4 the coefficients table, the model can be mathematically written as:

$$ROE = -9.7087 + 58.67601S - 17.6798IS^2 + 79.4634IS^3 + .00485SL - .05555D + .1181INCA/K$$

Table 4.2 shows the coefficients table. The coefficients of insider ownership and insider ownership cube are positive while the one on insider ownership square are negative. These coefficients are statistically significant which suggests a cubic relationship between performance and insider ownership. This is an indication that there might be an economic rationale for firm performance to be influenced by insider ownership.

The coefficient for leverage in the insider ownership model is negative. This confirms that debt and insider ownership cannot substitute each other to mitigate information and agency problems.

The coefficient of firm size is positive. The reason for a positive relationship between size and firm performance is that small companies may find it difficult to raise sufficient funds to finance all of their wealth-creating investments due to asymmetric information problems. There are, of course, other reasons why firm size and performance might be related. To the extent that firm size is related to market shares a positive relationship between size and performance might be expected, due to market power or efficiency effects. To the extent that size is related to diversification, a positive relationship would be expected, if one believes that diversification improves performance.

The coefficient for future growth opportunities is positive. Firms that have attractive opportunities to innovate are likely to spend more than other companies, and earn from their innovations. These firms will have relatively high returns on capital that will be reflected in higher return on equity than other firms. On the other hand, firms that spend a lot on innovations may have more attractive investment opportunities. These may allow managers to satisfy their desires for growth without over investing, or at least without over investing as much as do managers of firms with limited investment opportunities. This reasoning would imply a positive relationship between future growth opportunities due to the fact that future growth opportunities may increase the earnings of the firm and hence increase in return on shareholders equity.

At 0.05 significance debt is insignificant given a p value of 0.002267 and the other variables are significant and therefore can be used to explain the variability of return in equity.

Table 4.2 Coefficients Table

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	-9.70869401	9.135967599	-1.06269	0.29112032
IS	58.67601109	67.19703209	0.873193	0.385171118
IS^2	-117.6798278	161.7289249	-0.72764	0.46896053
IS^3	79.46336247	127.9753999	0.620927	0.536412882
SL	0.004850146	0.054124183	0.089611	0.928819958
D	-0.555527678	0.176122295	-3.15422	0.002267264
INCA/K	0.118116166	0.133565739	0.88433	0.379168276

4.3 Significance of the model

Table 4.3.1 shows the regression results for the return on equity. The regression statistics table shows a Adjusted R Square (R^2) of 0.6243267606 which suggests that the model that uses the independent variables insider ownership, Square of insider ownership, Cube of insider ownership, logarithm of the value of the total assets, debt ratio, and opportunities for future growth can be used to explain 62% of the variation in firm performance. This is a major contribution to the objective of this study.

The ANOVA table 4.3.2 shows a significance F of 6.75042E-05, which is also indicative of the model being statistically significant.

Table 4.3.1 Regression Statistics

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.8544116614
R Square	0.7300192871
Adjusted R Square	0.6243267606
Standard Error	0.318664733
Observations	87

Table 4.3.2 ANOVA

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	6	3.416709877	0.569452	5.607752642	6.75042E-05
Residual	80	8.123776957	0.101547		
Total	86	11.54048683			

4.4 A Comparison of Return On Equity and Insider Ownership Holding other Factors Equal

Table 4.4 shows the coefficients table when insider ownership was considered as the only factor affecting return on equity. The coefficients of insider ownership and insider ownership cube are positive while the one on insider ownership square are negative. These coefficients are statistically significant which suggests a cubic relationship.

Table 4.4

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	-7.438691444	9.419127483	-0.789743154	0.431928
IS	41.1847094	68.67696074	0.59968742	0.550348
IS^2	-73.95994265	164.7801578	-0.448840101	0.654717
IS^3	44.14321188	130.0016706	0.339558805	0.735047

$$ROE = -7.43869 + 41.18471IS - 73.9599IS^2 + 44.14321IS^3$$

$$dROE/dIS = 41.18471 - 147.92IS + 132.4296IS^2$$

The values of IS obtained from the first derivative of return on equity and insider ownership above equation are 52.8% and 58.9% and thus these are the turning points. The gradient before 52.8% is positive; between 52.8% and 58.9% is negative and becomes positive again above 58.9%. This implies that other things equal, return on equity increases as insider ownership increases for insider ownership between 0% to 52.8%. On the other hand, the relation between return on equity and insider ownership between 52.8% and 58.9% turns negative and becomes positively related again beyond 58.9%. These results are similar to previous studies. The results by Morck Shleifer and Vishny (1988) were that there is a positive relationship between insider ownership at 0% to 5% and the firm's value. After that, a negative relationship was found at 5% to 25% of managerial

shareholding, and then the relationship became positive again (but not significant) beyond 25% of shareholding. This is also consistent with a trade-off between the incentive alignment and entrenchment effect of insider ownership.

4.5 Descriptive Statistics

Table 4.5 shows that the mean performance as measured by return on equity is 0.012556322 with a standard deviation of 0.366321863. The study also shows that insider ownership is averagely 41.5% with a standard deviation of .0576.

Table 4.5 : Descriptive Statistics

	ROE	IS	IS^2	IS^3	SL	D	INCA/K
Mean	0.012556322	0.415391	0.175833	0.075846	9.708667	0.130575	0.323655
Median	0.082	0.412	0.169744	0.069935	9.65	0.06	0.178
Mode	0.13	0.381	0.145161	0.055306	10.18	0	0.143
Std deviation	0.366321863	0.057631	0.049442	0.032525	0.678561	0.197682	0.261584
Variance	0.134191707	0.003321	0.002444	0.001058	0.460445	0.039078	0.068426
Kurtosis	33.19032671	-0.14429	0.101638	0.531812	0.965389	3.744452	-0.50397
Skew ness	-5.064007514	0.426477	0.749099	1.038225	-0.34998	2.113414	1.020951
Maximum	0.39	0.55	0.3025	0.166375	10.93	0.8	0.918
Minimum	-2.65	0.3	0.09	0.027	7.19	0	0.009
Range	3.04	0.25	0.2125	0.139375	3.74	0.8	0.909
Sum	1.0924	36.139	15.29744	6.598576	844.654	11.36	28.158

CHAPTER FIVE

5.0 CONCLUSION AND SUMMARY

5.1 Conclusion

The ownership-performance relationship has recently been under debate in the finance literature. At the heart of the debate is the complex endogeneity problem, which arises with ownership and performance variables in the presence of reversed causality and uncontrolled firm heterogeneity. The endogeneity problem is unavoidable with data of publicly traded firms, and is often difficult to address.

This paper addressed the question whether there is any empirical relationship between firm performance and insider ownership for the companies listed at the Nairobi Stock Exchange. Although agency theory provides some good reasons why such a relationship should exist, empirical evidence is rather fuzzy in this regard. Insider ownership is expected to play a crucial role in controlling agency problem.

This paper has examined the relationship between insider shareholding and firm performance of the companies listed at Nairobi Stock Exchange. The paper provides empirical evidence on the relationship between insider ownership and firm performance. Other things equal, the relationship between insider ownership and return on equity is positive when insider ownership is between 0% to 52.8% but turns negative between 52.8% and 58.9%. It then turns to positive at high levels of insider ownership that is above 58.9%. This implies that managers get entrenched between 52.8% and 58.9%.

The results in this paper confirm that insider ownership structure has important impact on firm performance.

5.2 Limitations

This study focused on listed companies, which may not be a representative of all the companies in Kenya. Results were based on quantitative statistics and over looked other essential parameters

which are non quantitative.

5.3 Recommendations

These results have confirmed that there is a relationship between insider ownership and the companies listed at the Nairobi Stock Exchange. Other researches should be done on the companies that are not listed.

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APPENDIX 1

LISTED COMPANIES

MAIN INVESTMENTS MARKET SEGMENT

AGRICULTURAL

Unilever Tea Kenya

Rea Vipingo Plantation Ltd.

Sasini Tea & Coffee Ltd

Kakuzi Ltd

COMMERCIAL & SERVICES

TPS Eastern Africa (Serena)

Car & General (k) Ltd

Hutchings Biemer Ltd

CMC Holdings Ltd

Kenya Airways

Uchumi Supermarkets Ltd

Marshalls (EA) Ltd

Nation Media Group

Scangroup

FINANCE AND INVESTMENT

Barclays Bank of Kenya Ltd

CFC Bank Ltd

Standard Chartered Bank Ltd

Diamond Trust Bank of Kenya

Housing Finance Company Ltd

I.C.D.C Investment Company Ltd

Jubilee Insurance Co Ltd.

National Bank of Kenya Ltd

Kenya Commercial Bank Ltd

NIC Bank Ltd

Pan Africa Insurance Holding Ltd

Equity Bank Limited

INDUSTRIAL AND ALLIED

Athi River Mining
B.O.C Kenya Ltd
Bamburi Cement Ltd
British American Tobacco (K) Ltd
Carbacid Investment Ltd
Crown- Berger (K) Ltd
Olympia Capital Holdings Ltd
E.A Breweries Ltd
E.A Cables Ltd
E. A. Portland Cement Ltd
Sameer Africa Ltd
Mumias Sugar Co. Ltd
Kenya Power & Lighting Co. Ltd
KenGen Ltd
Kenya Oil Ltd
Total Kenya Ltd
Unga Group Ltd.

ALTERNATIVE INVESTMENT MARKET SEGMENT

A. Baumann and Company Ltd.
City Trust Ltd
Standard Group Ltd
Eaagads Ltd
Express (K) Ltd
Williamson Tea Kenya Ltd
Kapchorua Tea Company Ltd.
Kenya Orchards
Limuru Tea Ltd