# OWNERSHIP STRUCTURE, CORPORATE GOVERNANCE AND CORPORATE PERFORMANCE: THE CASE OF THE KENYAN QUOTED COMPANIES. //

## BY

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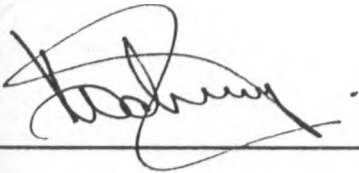
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# DECLARATION

This research paper is my original work and has not been presented for a degree in another University.

_____    12/09/02.

Richard Ngunjiri Maina

This research paper has been submitted for examination with our approval as university supervisors.

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Mr. Ambala

# DEDICATION

To my love Joyce Anne Waithera

# ACKNOWLEDGEMENT

# ABSTRACT

This study presents a final report on ownership structure, corporate governance and its impact on the corporate performance of the Kenyan quoted companies. The result utilizes cross-sectional data from forty-four publicly quoted companies out of the fifty-four listed companies for the year 2001. Our findings dispel many of the commonly held opinion on some of issues on the relationship between ownership structure and performance. The results reject the first hypothesis that implies that concentration ratio does not play a significant role in explaining performance. Also, the structure of ownership has impact on firms' performance under EVA.

The result did not support the convergence of interest hypothesis that there is correlation between managerial shareholding and firms' performance. The present results indicate that we do not have a discernible or systematic impact of internal shareholding on performance.

With the results, policy measures should be taken to stimulate the growth of collective investment vehicles in the country. The government should also practice crowding in policies as a way of uplifting corporate performance through the growth of small and medium scale enterprises.

Finally, the government policies of attracting foreign investors, strengthening market regulatory mechanisms and liberalization of the pension industry will make the capital market more vibrant in offering value adding services to lift Kenyans out of poverty.

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# 1.0    INTRODUCTION

## 1.1    BACKGROUND INFORMATION

This study investigates the ownership structure of the corporate sector in Kenya and its impact on corporate performance[1]. The idea that characteristics of firms' ownership structure can affect performance has received considerable attention in recent economic literature. Especially recent developments in agency theory that says the structure of corporate ownership can affect firm performance by mitigating agency principle conflicts between the management and the shareholders.

Ownership structure covers both the mix and concentration, and includes state, institutions, management, individuals and foreigners. Firms are different, in terms of ownership mix and the degree to which ownership is concentrated among corporate insiders and external investors. The resultant distribution of ownership can impact on managerial opportunism which has implications for managerial behavior and corporate performance.

Two contending schools of thought exist on the impact of ownership structures on performance. The first school argues that ownership structure does not matter. They attribute the failure of state owned enterprises (SOE) to the absence of enabling environment for them to be efficient but not strictly to ownership. They contend that if the markets for products, for factors of production and for corporate control exist and

function well, SOE would perform as well as the private owned enterprises (Xu and Wang, 1997)

The other school argues that ownership structure is critical to performance. To them, private ownership is a necessary condition for enterprise efficiency. SOE's by their ownership structure do not have the essential efficiency factors. Lack of residual claimant provides no motivation for SOE's to be efficient. Furthermore, they are not subject to the strict control and discipline that the market impose and demand from managers of private enterprises. Unless subsidized, they go out of business.

## 1.2   STATEMENT OF THE PROBLEM

Proceeding by the introduction section, it is important to determine whether ownership structure affects corporate control and performance of the Kenyan quoted companies. This is especially so in light of the current privatization programme in the country. A major assumption underlying the privatization scheme is that ownership structure matters for corporate performance and hence former SOE's are being transferred to private hands.

Thus the study attempts to answer the following policy issues:

- Does private ownership (where the general public owns shares as opposed to state control) necessarily enhance economic performance[2]? i.e. are the privately

2.  In Germany, Volkswagen manufacturing company was government owned but it outperformed private companies.

owned companies more efficient that those in which the state is present (excluding natural monopolies)?

♦ What is the best option in ownership diversification? Is it dispersed private ownership, a core investor or institutional shareholding?

♦ Is ownership structure correlated with firms' performance?

The study envisages providing a detailed analysis of the ownership structure in terms of public/private, individuals/institutions, foreign/domestic, insider/outsider and the assessment of the implications of these combinations on performance in order to answer the above pertinent policy questions.

## 1.2  OBJECTIVES OF THE STUDY

The objectives of the study are:

(a) To examine the ownership structure (concentration and mix) of quoted companies in Kenya.

(b) To investigate the effect of ownership structure on the performance of quoted companies in Kenya, and

(c) To make recommendations on the appropriate ownership structure for firms going public in Kenya based on (a) and (b) above.

## 1.4    SIGNIFICANCE OF THE STUDY

In spite of its importance on corporate performance, only recently has there been a systematic analysis to show how variations in ownership concentration across firms affect performance across various countries. Moreover, most of the research and studies have been undertaken in developed countries, with very limited evidence from developing counties particularly Africa.

Kenyan has no privatization law despite embracing the Structural Adjustment Programme (SAP) and its' associated privatization that have altered its corporate structure. Economic literature provides various forms of privatization representing different ownership regimes; some involving divesting in favor of strategic investors, while others involve more widespread divestiture to allow for equity objective and yet others involve single strategic (core) investors.  These approaches have been employed in the sale of government shares around the world. In Kenya, we are yet to have privatization involving a single strategic investor.

Empirical findings from the privatization program across the world show that private owned enterprises outperform SOE's as the market imposes discipline on managers of SOE's and forces them to be efficient[3]. This evidence led to divestiture of government interests in SOE's being an important component of the economic reforms in most developing countries. However, privatization has been very controversial in the less

developed world and Kenya is no exception. Even more controversial is the issue of the appropriate form of divestiture to adopt. Does divestiture to a single strategic investor allow for greater efficiency than a diffused ownership structure? Do companies where managers own shares likely to outperform others where managers have no shares? These are important issues that are of interest to policy makers

Despite the enormous literature on the Kenyan corporate arena, none has examined how the structure of corporate ownership affects its performance. The focus of this study is to document the Kenyan corporate experience since privatization and what the best way forward is.

## 2.0    LITERATURE REVIEW

## 2.1    A REVIEW OF THEORITICAL LITERATURE

### 2.1.1 AGENCY THEORY

The relationship between ownership structure and performance can be captured under the principal – agency theory.  The agency relationship is defined as a contract under which one or more persons (the principal (s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent (Jensen and Meckling, 1976).

The principal-agent theory assumes that objectives of hired managers are dissimilar to those of the profit-oriented private owners. The agents should use firm-specific rents to satisfy the principals' objective function and not their own. Limitations on their

discretionary behavior will reduce efficiency and profitability, depending in part on the external constraints imposed by product and capital markets and also internal constraints imposed via corporate statutes and governance mechanisms by the owners themselves. The principal-agent theory is centered on the problems of incentives and asymmetric information, as outside owners do not have access to full information on corporate performance or on the reasons for under performance. The separation of ownership and control, which occurs as a result of the introduction of external investors, bring to fore the agency problem: managers are expected to represent the interests of the external owners of the enterprise; however, it is difficult for owners to ensure that managers do so.

Shleifer and Vishny (1998) argue that managers and the equity investors should be capable of entering into a binding contract, which would ensure that investors' interests are fully represented. However, it is difficult to specifying a contract ex-ante that accommodates all possible future contingencies. If contingencies arise, managers assume contingency control rights that provide them with the potential to operate against investors' best interest, by, for example, expropriating investors' funds or engaging in assets striping. The discretionary control rights of managers are further increased by the existence of asymmetric information between themselves and external investors. Although this insider knowledge encourages investors to permit managers to operate as their agents, it also allows managers the freedom to conceal information from external investors. Such action increases costs of monitoring and therefore enables managers to pursue their own goals rather than those of the equity investor, by

entrenching their position or engaging in behavior that is sub-optimal for the equity investor.

The possibility of higher monitoring costs is strong if there is large number of dispersed external investors, as a free-rider problem emerges if monitoring costs are large relative to the benefits accruing to each individual. If ownership is concentrated in the hands of large block shareholders (individuals or investment funds), the free-rider problem is minimized and internal constraints on managerial discretion can probably be imposed. Thus, the returns to monitoring will increase monitoring activity, which may also be subject to economies of scale. Moreover, large block shareholders are likely to utilize their voting power to influence managerial behavior, although this does require shareholding-voting rights (Shleifer and Vishny 1986). Hence the proposition that large block shareholders will exercise more effective corporate governance, a finding that has been supported by a host of studies in developed market economies (World Bank, various reports).

The agency theory provides explanation of corporate financial decisions. The task of the theory is to provide appropriate incentive structure that will align the interest of managers to those of stakeholders. Bromwich and Walker (1998) provide a formal framework for situating the residual income analysis within the literature on the economics of incentives and information.

Based on the agency framework, several relationships between ownership structure and performance have come up with some testable hypothesis that are of relevance to this study.

The first is **Active Monitoring Hypothesis (AMH).** It suggests that external block shareholders have incentives to monitor and influence management appropriately in order to safeguard their significant investment (Friend and Lang, 1998). The external block investor-monitoring role reduces direct agency conflict with the management by minimizing managerial opportunism.

The second is **Passive Voters' Hypothesis (PVH).** PVH challenges the active monitoring hypothesis and postulates that large shareholders might be passive voters who instead of protecting the interests of general shareholder may actually collude with management against the best interest of dispersed shareholders (Pound 1998).

The third is **Managerial Self-interest Hypothesis (MSH).** It states that the possibility of losing employment if the company should fail places a responsibility on risk-averse managers to lower unemployment risk by ensuring continued viability of the firm. That is, existence of corporate governance mechanism provides an opportunity to discipline and control the behavior of managers (Aminod and Lev 1981). Stock prices are visible signs that summarize the implications of decisions about future net cash flows. This external governance device exerts pressure to orient managers' decision towards the interest of shareholders (Fama and Jensen 1983).

The fourth is **Convergence-of-Interests Hypothesis (CIV)**. It says instituting managerial share ownership can align the interests of both managers and shareholders. Managerial share ownership can reduce managerial incentives to consume perquisites (special rights/advantages enjoyed by virtue of rank in addition to one's pay), to expropriate shareholders wealth and to engage in other non-maximizing behavior (Jensen and Meckling, 1976).

The fifth is **Entrenchment Hypothesis (EH)** which suggest that rather than promote performance, managerial share ownership may have adverse effects on agency conflict between management and shareholders. Instead of reducing managerial incentive problem, managerial share ownership may entrench the incumbent management team, leading to an increase in managerial opportunism (Fama and Jensen 1983, Demesetz 1983).

### 2.1.2 MEASURES OF ECONOMIC PERFORMANCE

Controversy does exist, not only on the impact of ownership structure on corporate performance but also on the appropriate measure of performance. This is due to the growing dissatisfaction of many managers and investors with conventional measures of corporate performance. Of late attention has shifted from using traditional accounting measures to use of residual income based metrics such as the economic value added (EVA) as measures of performance.

The conventional measures are accounting ones and include:

(a) Measures of the size of the company, such as turnover (or sales revenue), profit or market capitalization.

(b) Measures of return or profitability, which relate profit to sales (profit margin), capital employed (return on capital employed, ROCE) or even equity (return on equity, ROE).

(c) Measures of growth of sales or of profit

(d) Measures of corporate efficiency in terms of sales per staff or sales per unit of pay.

Most empirical studies in developed economies make use of profitability indicators in two ways. First approach looks at the return to the total capital of the firm (the return to both equity and debt holders combined) i.e. the entire liability side of the balance sheet where profit is measured before deduction of interest. In this case the standard accounting ratio that measure profitability is operating profit (earnings before interest, tax and depreciation) as percentage of sales or total assets (the return on asset, ROA). The second approach looks at the return accruing only to equity holders. Implying that interest charges (the cost of debt/capital) is treated as a cost. The usual accounting ratio used here is profit after interest and depreciation as a percentage of equity.

However, the history of cost accounting conventions and inflation has generally resulted in inaccurate measurement of the value of stock variables such as capital. Hence inducing bias into measures of performance.

Financial markets use the Tobin's Q as a valuation estimate of a firms' performance. Tobin's Q indicates the value of the firms in terms of its replacement value and is calculated as the ratio of the market value of the enterprise (value of equity plus debt) to the replacement value of its assets. Higher values indicate that the firm is increasingly valuable as a growing concern rather than as a collection of individual assets. However, since Tobin's Q derives from a market valuation of the firm, its reliability depends on financial markets being well developed. Moreover, inflation has a differential impact on the components of market to book ratio, thus artificially reducing the book value but not the market value of capital.

In Africa, even simple measures of corporate performance such as labour productivity or profitability are hard to apply. Even though the relevant accounting legislation exists, shortcomings in its enforcement for financial reporting purposes abound. Also currencies devaluation and substantial inflation makes comparison of financial performance over time problematic.

These problems apply to both listed and non-listed enterprises, and specifically in private firms where there are widespread attempts to hide profits in order to evade taxes. First, traditional accounting systems do not accurately measure real economic income. They do not reflect changes in risk or the cost of capital associated with a particular project. Growth of earnings can also be a misleading indicator of value-adding performance because the creation of value depends on the ability to earn an acceptable return on that additional capital. Thus, traditional measures of performance like accounting return on investment (ROI) and return on equity (ROE) are necessary but insufficient in determining value creation.

Economic Value Added (EVA), defined as a company's net operating profits after tax less its cost of capital (Walbert 1995), is considered a good alternative to traditional accounting earnings in both valuation and incentive compensation. EVA assists corporations to pursue their prime objectives - maximization of shareholders wealth. Whereas traditional accounting net income measure profits net of interest expense on debt capital, residual income measure profits net of the full cost of both debt and equity capital. Residual income is equal to traditional accounting net income minus a charge for the cost of equity capital.

The strengths of EVA are:

1) Simplicity. Its concept and underlying principle is easy to understand and hence could serve as a powerful motivational and communication tool (Manning and McCartney 1996).

2) Ability to closely reflect the trends in market value. Implying that over time a company that increases/decreases EVA will also increase/decrease its Market Value Added (MVA).

3) It is a powerful measure of corporate performance as it can be used to measure performance of a firm for which no market value data exists.

4) It provides managers with extremely insightful information and can allow the manager to identify areas of weakness in performance with a view to improving them.

5) Ability to align both the interests of managers and shareholders. It motivates managers to increase shareholders value through incentives for improving

investment performance by linking executive compensation to value creation. It encourages managers to make efficient inter-temporal investment decisions and guarantees in a simple way that managers will make efficient input decisions.

However, several studies have questioned the perceived advantages of EVA over accounting measures. Goetzman and Garstka (19  ) show that simple earnings per share do as well or better than EVA at explaining differences across firms and at predicting future performance. However, most of these studies concede that EVA is better at providing strong motivation for managers.

## 2.1.3 HYPOTHESES

The discussions under the introduction and literature review lead to the formulation of the following hypotheses that we wish to test in this study.

1) Firms with a higher level of share ownership concentration are likely to have superior performance.
2) The mix of share ownership is likely to have effect on corporate performance.
3) Is there a curvilinear relationship between managerial share ownership and firm's performance? That is, at low levels of managerial ownership, managerial share ownership is likely to be positively related to superior performance. But at a high level of managerial share ownership, managerial share ownership is likely to be negatively related to good performance.

## 2.1.4  MONITORING

It is assumed that equity control rights are worthless unless their stakeholders have the information necessary to use these rights effectively. Since acquiring information is costly, it is also assumed that only the large shareholder potentially engages in monitoring. The large shareholder can choose a probability m at a private cost c (m), representing the likelihood that he becomes informed. If the large shareholder becomes informed, he has control. If the large shareholder remains uninformed the manager has control, chooses a project and diverts a fraction of the project's payoff for his own use. Here control means two things: one, the large shareholder can prevent managerial on the job consumption, and two the large shareholder is sufficiently informed about the set of possible projects to make an optimal project choice consistent with the objectives of the owners of the firm. (Burkart, Gromb and Panunzi 1997)

## 2.2        REVIEW OF EMPIRICAL LITERATURE

Shome and Singh (1988), and Bethel et al (1998) provide empirical support for the Active Monitoring Hypothesis and found that long term operating performance of firms improves sequel to the acquisition of block shares by activist shareholders.

McConnel and Servaes (1996), obtain empirical support for the passive voters' hypothesis that large shareholders are passive voters who instead of protecting the interests of general shareholder actually collude with management against the best interest of dispersed shareholders.

Morck, et al (1998), McConnell and Servaes (1990) and McConnell and Servaes (1995) give empirical findings on the implication of the Convergence-of-Interests and Entrenchment hypothesis that a curvilinear relationship may exist between managerial share ownership and corporate value. They found a non-linear relationship between managerial share ownership and firm value. Their findings imply that at low levels of managerial share ownership, convergence-of-interests effect dominates and thus managerial share ownership is high, entrenchment's sets in, leading to higher agency conflicts and consequently decline in the value of the firm.

In Kenya, in spite of the numerous literature on the Nairobi Stock Exchange and the quoted companies (Gichuki 1998, Mutavi 1998, Njuguna 1998, Njoroge 1999, Karani 1999, Bwoda 1999, Kagume 1991 and Wagacha 2000), no study has examined the impact of share ownership structure on corporate governance and firms performance. Mbui Wagacha (2000) is an exception as he carried out a study of shareholders domestic resource mobilization and strategies in the Kenyan capital market. He used 20 share index companies as his sample. He looked at the demographic profiles of shareholders (age, sex, marital status, head of household, and level of educational attainment), their investment strategies, attitudes and expectations about NSE, their evaluation of stockbrokers, company management and company profitability). His study found that since half of the respondents use personal savings to invest in shares, the savings mobilization process could be strongly served in Kenya by strengthening the capital market. This implies that only a strong and vibrant capital market will in the long run promote non-banking savings and increase equity ownership in listed companies

among Kenyans. Hence his study focused only on the personal characteristics of the shareholders and not the firms.

In China, Xu and Wang (1997) carried out a study of ownership structure, corporate governance and corporate performance for Chinese Stock Companies. They found that institutional shareholders have a positive impact on corporate governance and performance, state ownership seems to lead to inefficiency and an overly dispersed ownership structure has no discernible effect in the performance of Chinese quoted companies.

They used the recent literature on the role of large institutional shareholders in corporate governance as a theoretical base. They found that a typical Chinese listed stock company has a mixed ownership structure, with three predominant groups of shareholders—state, institutions, and individuals—each holding about 30 percent of the stock. (Employees and foreign investors together hold less than 10 percent.). Ownership is heavily concentrated. The five largest shareholders accounted for 58 percent of outstanding shares in 1995, compared with 57.8 percent in the Czech Republic, 42 percent in Germany, and 33 percent in Japan.

Their empirical analysis shows that the mix and concentration of stock ownership do indeed significantly affect a company's performance because:

- There is a positive, significant correlation between concentration of ownership and profitability.

- The effect of concentrated ownership on performance is greater with companies dominated by institutions than with those dominated by the state.

- The firms' profitability is positively correlated with the fraction of institutional shareholders; it is either negatively correlated or uncorrelated with the fraction of state shareholding and individual shareholders.

- Labor productivity tends to decline as the proportion of state shares increases.

Olayinka and Folasade (2000) also carried out a study on the ownership structure, corporate governance and corporate performance for Nigerian quoted companies. They rejected the hypothesis that concentration ratio does play a significant role in explaining performance. They found no empirical evidence that firms with a higher level of share ownership concentration have superior performance even though most of the firms had high concentration index. The coefficient for the concentration ratio was positive but nevertheless insignificant.

Also they found that the ownership mix has only marginal impact on firms' performance especially under EVA. Only institutions (both foreign and domestic) and domestic individuals had significant impact on performance. State share ownership did not have any negative impact on firms' performance though the coefficient was positive.

Equally their results did not support the convergence of interest hypothesis that there is correlation between managerial shareholding and firms' performance. The coefficients on internal shareholders variables were insignificant and even negative. In essence, they found no discernible or systematic impact of internal shareholding on performance in Nigerian quoted companies.

Their analysis on ownership structure shows the following significant features;

♦ Most of Nigerian individual investors are small shareholders and they are few among the top ten largest shareholders.

♦ On average, ownership structure is highly concentrated in Nigeria. However, the free-rider problem does not exist in the corporate sector.

♦ The absence of significant role of concentration ratio supports the Passive Voters Hypothesis rather than the Active Monitoring Hypothesis.

♦ Industrial effects were found unimportant

♦ Firm size has no discernible impact on firm performance.

## 2.3    OVERVIEW OF THE LITERATURE

Theoretical literature provided us with the agency theory, which suggests that agents have different objectives from the principal(s). However, with the right incentives for managers and the right insider information by shareholders through monitoring, corporations can mitigate the agency conflict and perform better.

Traditional measures of economic performance are necessary but insufficient in evaluating the value adding performance, hence the use of Tobin's Q and EVA as measures of value adding performance. But Tobin's Q depends on finance markets being well developed (efficient), which is not the case with the Nairobi Stock Exchange (NSE), an emerging market significantly affected by inflation as well as the conventional accounting practices of the quoted companies. EVA is simple, closely follows the market trend, is applicable where there is no market data and provides insightful information to align agency-principal interests by pegging managerial compensation to value creation. Hence an incentive to motivate managers.

We have also seen that in China, institutional investors control performance, state share ownership leads to inefficiency and individual investors are unsystematic in determining performance. In Nigeria, institutional investors are also significant in determining performance, domestic individuals are indiscernible, state share ownership is positive and the corporate sector has no free-rider problem.

In Kenya, only Wagacha's study on the demographic profiles of the shareholders and their savings mobilization, not the firm performance came nearer to the study we propose to undertake.

This study will empirically evaluate the impact of ownership structure on corporate performance of the companies' quoted at the NSE using EVA as a measure of value adding performance. This is the gap on the economics of incentives and information in Kenya that we seek to fill.

## 3.0 METHODOLOGY

## 3.1 THEORITICAL FRAMEWORK

In order to investigate the relationship between the structure of equity ownership and corporate performance, our initial sample covered all the 58 quoted companies but only 44 were analyzed because they had the relevant financial data for all the variables under study. We considered available data for 2001.

For each company, we obtained data on ownership structure, net-operating profit after tax (NOPAT), economic book value (EBV) and the firms cost of capital. Also total assets and other information necessary to compute EVA was obtained. To compute EVA, we obtain data on NOPAT and subtract the total cost of capital measured as the weighted average cost of capital (WACC) times the total invested capital (Biddle, Bowen and Wallance 1997). EVA for period t is thus given as:

$$EVA_t = NOPAT_t - [WACC_t * CAPITAL_{t-1}] \qquad (1)$$

NOPAT can also be stated as return on asset (ROA) times capital;

$$EVA_t = [ROA_t * CAPITAL_{t-1}] - [WACC_t * CAPITAL_{t-1}] \qquad (2)$$

Rearranging (2) we get

$$EVA_t = [ROA_t - WACC_t] * CAPITAL_{t-1} \qquad (3)$$

Equation (3) states that firms producing positive residual income earn a positive spread between return on invested capital and cost of capital.

Equation (3) can also be stated as:

$$EVA_t = NI_t - [K_t * BV_{t-1}] \qquad (4)$$

Equation (4) says residual income is equal to traditional net income (NI) minus cost of equity capital (K), where K is expressed as the beginning of period book value of equity (BV) times cost of equity capital (K).

In calculating the cost of equity the beta method, the dividend growth method and the earnings discount method are used. We adopt the earnings discount method owing to difficulties of estimating significant betas and occurrence of zero dividend payments.

## 3.2    MODEL SPECIFICATION

The models are based on the hypotheses earlier stated. The basic model was applied to EVA (the dependent variable) as the measure of corporate performance.

**MODEL 1**

The first hypotheses that firms with higher levels of ownership concentration will have superior performance was tested by regressing the performance variables against the ownership concentration index (CR) and a control variable S (Size of the firm)

$$PF_{it} = \alpha + \alpha_1 CR_{it} + \alpha_2 S_{it} + \varepsilon_{it} \qquad (5)$$

Where

PF = performance variable

S = total assets of the firm

CR = concentration index proxied by concentration ratio (fraction of shares held by top 20% shareholders).

We expected $\alpha_1$ and $\alpha_2$ to be positive, implying that high CR is necessary for superior performance.

**MODEL 2**

The second hypothesis that share ownership mix has implications for firm performance was tested by regressing performance variable against the various forms of ownership mix. The hypothesis was rejected if the coefficients of ownership variables are insignificant and accepted if significant..

$$PF_{it} = \alpha + \Sigma_h \beta MX_{ith} + \alpha_2 S_{it} + \varepsilon_{it} \qquad (6)$$

Where

MX = is the measure of ownership mix which is a vector of the following variables.

ST = fraction of shares owned by the state or its agencies

DI = fraction of shares owned by domestic institutions

DK = fraction of shares owned by individual Kenyans

OM = fraction of shares owned by management

FI = fraction of shares owned by foreign institutions

FF = fraction of shares owned by individual foreigners

All the ownership mix variables coefficients were expected to have positive impact on performance with ST being the only exception.

**MODEL 3**

The third hypothesis that a curvilinear relationship exists between managerial share ownership and firm performance was tested by regressing the performance variables against the variable denoting percentage of shares owned by management.

$$PF_{it} = \alpha_0 + \alpha_1 OM + \alpha_2 S_{it} + \varepsilon_{it} \qquad\qquad (7)$$

Where

OM = % of shares owned by the management.

Other variables are as previously described and all the coefficients were expected to be positive.

**MODEL 4**

This was the final model that combined models 1, 2 and 3 above to provide a comprehensive analysis of the relationship between ownership structure and firm's performance

$$PF_{it} = \alpha_0 + \Sigma_h \beta MX_{it} + \alpha_1 OM + \alpha_2 CR_{it} + \alpha_3 S_{lt} + \varepsilon_{lt} \qquad (8).$$

All the variables were as previously defined and all the coefficients were expected to be positive except for ST.

## 3.3 ESTIMATION TECHNIQUES

We used cross – sectional data for the year 2001. This is because this was the only year in which we could found ownership data organized in the format compatible to our models. We used a sample of 44listed companies out of a population of 54 companies. The sample selection was based on availability of full financial data needed for purposes of this study. Moreover, this gave us adequate degrees of freedom. The basic framework for the regression model was borrowed from Green (1990).

$$Y_i = \alpha_i + \beta' X_i + \varepsilon_i \qquad\qquad (9)$$

This is a K +1 regressor in $X_i$

Where i = 1.....N denotes firms in cross – section data.

$X_i$ = the ith observation on the K explanatory variables

$\alpha i$ = the individual effect specific to the individual cross-sectional unit i.

Given the nature of our data, we performed OLS estimation on the models equations to get consistent and efficient estimates of the coefficients.

## 3.4 DATA TYPES AND SOURCES

In the study, we made use secondary data from the Nairobi Stock Exchange (NSE) library materials, staff and the internal publications such as the NSE figures and facts yearbook 2001. To calculate EVA, we made use of the information from the listed companies submitted accounts and the NSE figures and facts yearbook 2001.

## 3.5      LIMITATIONS OF THE STUDY.

The findings of this study are based entirely on secondary data. First, the quantity, quality and availability of such data are the main limitations of the study. Second, we excluded state variable in the ownership mix regression. This was because we only had ten observations out of a sample of forty-four companies. This was necessary because inclusion of the state variable would have made all the coefficients of the ownership mix variables insignificant.

# 4.0   EMPIRICAL FINDINGS

## 4.1   REGRESSION RESULTS

Given the nature of the data, we estimated the models using intercooled stata 6.0 by OLS estimator. The cross-sectional data had forty-four observations for all the variables. The descriptive statistics and results of the regression are presented below in Table 4.1 and 4.2 respectively.

**Table 4.1**

**Summary of the descriptive statistics of the basic data used in the analysis.**

| Variable | Mean | Std. Dev. | Min | Max |
| --- | --- | --- | --- | --- |
| EVA | 432.9318 | 760.028 | -54666 | 26677 |
| CR | 75.93341 | 15.54946 | 22.69 | 97.99 |
| Assets | 2970.386 | 3201.878 | 112 | 12249 |
| Keninv | 15.85318 | 13.79486 | 1.76 | 71.74 |
| Kenins | 50.15386 | 26.5746 | 8.11 | 91.07 |
| Forinv | 2.305909 | 6.817117 | 0 | 44.73 |
| Forins | 26.41273 | 28.63451 | 0 | 88.2 |
| State | 4.7975 | 10.6144 | 0 | 39.23 |
| Mngt | 49.20818 | 21.31704 | 7.55 | 88.24 |
| Logasset | 7.406818 | 1.195917 | 4.72 | 9.41 |

## Definition of Variables

| Variable | Name Variable Description |
|---|---|
| EVA | Economic Value Added |
| Logassets | Log of Assets |
| CR | Proportion of Total shares held by top twenty shareholders |
| Keninv. | Proportion of Total shares held by Kenyan individuals |
| Kenins. | Proportion of Total shares held by Kenyan institutions |
| Forinv. | Proportion of Total shares held by foreign individuals |
| Forins. | Proportion of Total shares held by foreign institutions |
| State | Proportion of Total shares held by the state |
| Mngt | Proportion of Total shares held by the Management |
| Assets | Total assets of a company |

Table 4.1 presents the descriptive statistics of the data employed in the study. Assets of the companies vary from a minimum of about Kshs.112 million to a maximum of Kshs12.2 billion. The estimated EVA also ranged from a deficit of Kshs. 54.6 billion to a surplus of Kshs. 26.6 billion. The mean EVA for all the companies in the year 2001 stood at Kshs. 433 million. In terms of ownership concentration, the highest value recorded by a firm was 97.99% while the firm with the most dispersed ownership has a concentration ratio of 22.69%. The highest proportion of ownership by foreigners in any company stood at 88.2%. On average management ownership was about 49%, with the highest company recording 88.2% to the total shareholding.

**Table 4.2**

**Regressions: Ownership Structure and Performance (OLS Estimator)**
**Dependent Variable: EVA**

| Variable | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|
| Constant | -6769.594 (-0.564) | -62653.3 (-3.130) | -6851.973 (-0.714) | -59359.21 (-2.840) |
| CR | 15.41739 (0.158) | | | -77.95204 (-0.609) |
| Logasssets | 814.3619 (0.642) | 2147.256 (1.594) | 624.3196 (0.486) | 2122.646 (1.561) |
| Keninv. | | 579.4531 (3.130) | | 576.6154 (3.087) |
| Kenins. | | 472.6423 (3.054) | | 489.7778 (3.088) |
| Forinv. | | 416.924 (1.784) | | 420.2889 (1.783) |
| Forins. | | 498.1374 (3.422) | | 506.7004 (3.435) |
| Mngt | | 3.502109 (0.049) | 54.06994 (0.750) | 39.24818 (0.422) |
| $R^2$ | 0.0106 | 0.2671 | 0.0234 | 0.2746 |
| S. E. | 0.9942 | 0.9007 | 0.9877 | 0.9084 |

NB: significant at 95% Confidence Interval for all the models.

Looking at Table 4.2, we see that our first hypothesis that firms with a higher level of share ownership concentration are likely to have superior performance is rejected. Though CR has the expected positive sign, it was non the less insignificant in this

model. This implies that CR does not play a significant role in explaining performance. Most of the firms have high concentration index already and thus CR may not be important in explaining variation in performance among Kenyan quoted companies. The CR results differ from what was obtained in China by Xu and Wang (1997) that reported a positive and significant impact on performance. However, our results are similar to the Czech report by Claessens et al (1996) and the Nigerian report by Olayinka and Folisade (2001) that reported that CR has no significant impact on performance once other factors like strategic investors are controlled for.

In respect to our second hypothesis that the mix of share ownership has implications for corporate performance, our regression results indicate that ownership mix does indeed impact on firms' performance under EVA. All the ownership mix coefficients (except state variable, which was excluded. State has ownership in only ten out of the forty four companies and its inclusion in the model would lead to lower degrees of freedom and also make all other mix variables insignificant) are positive and significant. However, foreign individuals and management coefficients are insignificant. Hence Model 2 shows that only institutions and Kenyan individuals have significant impact on corporate performance.

In respect to state ownership, this variable was not included in the model because the state ownership is present in only ten out of the forty four companies considered. Hence where the state ownership is absent, other ownership mix variables would have to mitigate the absence of state ownership and this would adversely affect our results leading to negative coefficients as well as insignificant t - statistics. This would in turn

make us reject our hypothesis that share ownership mix has no impact on corporate performance, which by intuition is not true.

Our findings also did not support our third hypothesis that there is a curvilinear relationship between managerial share ownership and firms performance. That is at low levels of managerial share ownership, managerial share ownership is positively related to performance but at high level of managerial share ownership, managerial share ownership is negatively related to good performance. The coefficients of managerial share ownership were insignificant in all the models and even negative. Indicating that internal share ownership is not a motivating factor for manager to maximize shareholders wealth. The present results indicate that in the Kenyan corporate sector, we do not have a systematic or discernible impact of managerial share holding on performance.

The coefficients of the controlling factor, log of assets, which was used as a measure of size, were positively signed but insignificant in all the models. This implies that assets are not important in explaining corporate performance.

Table 4.3:     Correlation matrix (obs=44)

|          | EVA  | CR   | Keinv. | Kenins. | Forinv. | Forins. | Mngt | Logasset |
|----------|------|------|--------|---------|---------|---------|------|----------|
| EVA      | 1.0  |      |        |         |         |         |      |          |
| CR       | 0.0  | 1.0  |        |         |         |         |      |          |
| Keninv.  | 0.0  | -0.3 | 1.0    |         |         |         |      |          |
| Kenins.  | 0.1  | 0.1  | -0.1   | 1.0     |         |         |      |          |
| Forinv.  | -0.0 | -0.1 | 0.0    | -0.1    | 1.0     |         |      |          |
| Forins.  | 0.2  | 0.1  | -0.3   | -0.7    | -0.1    | 1.0     |      |          |
| Mngt     | 0.1  | 0.6  | -0.2   | -0.0    | -0.1    | 0.2     | 1.0  |          |
| Logasset | 0.1  | 0.0  | -0.0   | -0.3    | 0.0     | 0.2     | 0.1  | 1.0      |

The correlation matrix in table 4.3 attests to the degree of relationship among the variables in the model. Some highlights of the matrix include a negative, though weak relationship between proportion of total shares held by foreign individuals and economic value added. Also most of the ownership mix variables have weak relationships among themselves.

## 4.2 FINDINGS

A number of significant features of the ownership structure, which emerged from the data presented, can now be summarized as follows:

1. The vast majority of Kenyan individual investors are small shareholders and few are in the list of the top twenty largest shareholders. This can be explained by the fact that most individual Kenyans though they might have the knowledge, do not have adequate resources in terms of savings or time to invest in the capital market. To mitigate this the use of collective investment vehicles should be pursued and popularized as by mobilizing savings, they will have economies of scale and scope by spreading risk and cost of placing funds under professional management.

2. A typical Kenyan listed stock company has a mix ownership structure, with two predominant groups of shareholders – institutions and individuals. This might sound obvious, but it might not be common empirical knowledge.

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3. State share ownership is only in ten out of forty-four companies considered in the observation sample. This reflects the Kenyan government low attitude towards privatization programme and anti-capital markets development policies by the government towards the capital market for economic as well political as reasons.

4. The effect of concentrated ownership is greater with companies dominated by institutions than those dominated by individuals. This is because institutions through pooling of resources are able to buy block shares.

5. On average, ownership structure is highly concentrated in Kenya. The top twenty shareholders accounted on average for over 75 percent of shareholding. The absence of significant role of CR did not support the Active Monitoring Hypothesis (AMH) whereby block shareholders have incentive to monitor and influence management in order to safeguard their investments (Friend and Lang, 1998). Rather, we found support for the Passive Voters Hypothesis (PVH) deduced by Pound (1988) and empirically supported by McConnel and Servaes (1996) that large shareholders might be passive voters who instead of protecting the interest of general shareholders may actually collude with management against the best interest of dispersed shareholders.

6. Size of the company as tested using log of assets did not have any impact on firms performance.

7. We did not find empirical support for the Jensen and Meckling (1976) position that managerial share ownership would promote efficiency as managers now have incentives to reduce consumption of perquisites, expropriate shareholders wealth and engage in other non-maximizing behavior. Our findings show no significance correlation between managerial share ownership and performance.

8. Most companies are trading below their net asset value implying the risk averse and speculative nature of Kenyan securities investors as opposed to the rational long-term gain nature.

## 4.3   POLICY IMPLICATIONS

CR indicator suggests that there is a threshold effect on the relationship between CR and Monitoring. However, coupled with the significant impact of institutional ownership it gives some credence to the government efforts of encouraging core investors in those companies it is divesting.

State share ownership in ten out of the forty-four companies sampled is indicative of the crowding out policies of the government as well as its poor attitude and its slow pace in facilitation and implementation of the privatization programme. This has eroded

institutional investors' confidence towards the capital market. The massive expansion of public sector borrowing has led to the deterioration of performance of the listed companies and reducing investor attractiveness for equities. Consequently, the substitution effect between equities and fixed income securities that offers less risk but are more profitable.

The positive and significant effect of share ownership of institutions in total equity also suggests that measures should be taken to stimulate the growth of collective investment vehicles (mutual funds and other equity – holding savings institutions) in the country. The government has already given some indications of moving in this direction.

In addition, the size of the coefficients on foreign and domestic institutions are very close in most of the models implying that capital market authority should continue with policies of attracting foreign investors into the economy.

Size, as measured by the log of assets, has no positive impact on performance. This implies that big companies may not necessarily be more efficient than smaller firms and therefore the government should encourage the growth of small and medium scale enterprises in Kenyan as a way of lifting corporate performance.

The high CR of the Kenyan quoted companies implies that this is what is optimal for the Kenyan economy. This is so given the uncertainty of business environment, the nature of our market, the limited number of local investors, the weak legal and regulatory environment and the costs of regulatory compliance as well as other emerging markets

offering better returns. The government should move in the direction of improving the business environment and provide effective legal and regulatory conditions that would minimize cost of corporate governance in the country.

Given the nature and limited number of local investors, the Retirement Benefits Act and the liberalization of the pension industry should motivate the institutional investors in the capital markets to enhance returns on shareholders funds.

The market currently reflects the wealth effect as institutional investors are now pouring money into government debt thus starving the private sector off capital. This has given rise to lower capital investment in the market.

Lack of state confidence in the stock market reflects existing crowding out policies. This has reduced investment and output hence compromising the competitiveness of Kenya's private sector versus the regional competitors as well as the massive expansion of the public sector borrowing, which has led to deterioration of economic performance.

## 4.4 CONCLUSION

This study set out to describe the ownership structure of the Kenyan quoted companies and to test out a number of hypotheses on the relationship between structure and performance. Our results did not uphold many of the commonly held opinion on some of these issues. First, we did not find empirical evidence to support the hypothesis that

firms with a higher level of share ownership concentration have superior performance. Second, the structure of ownership has impact on performance. Finally, there is no correlation between managerial shareholding and firms' performance.

Hence ownership structure and corporate governance weakly explain corporate performance in the Kenya capital market. There are a host of other factors that were not captured in this study and which are areas for further research in future.

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