THE RELATIONSHIP BETWEEN INSTITUTIONAL OWNERSHIP AND PROCEEDS OF RIGHTS ISSUES OF LISTED FIRMS AT THE NAIROBI STOCK EXCHANGE

BY

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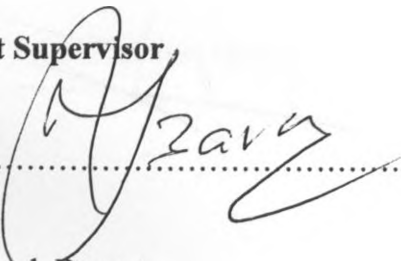
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DECLARATION

This research project is my original work and has not been presented for any academic award in any academic Institution.

Signed.. Date.5th NOVEMBER 2009.........

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

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DEDICATION

My Dear Parents

David Waweru Githinji

Regina Munyiva Waweru

My Brothers

Geoffrey Mbugua Waweru

Francis Kamande Waweru

My Grandmother

In the Loving Memory of Esther Wanjiru Gachugu

ABBREVIATIONS

AIMS	Alternative Investment Market Segment
CACG	Common Wealth Association For Corporate Governance
CARs	Cumulative Abnormal Returns
CMA	Capital Market Authority
FISMS	Fixed Income Securities Market Segment
FOMS	Futures and Options Market Segment
IPOs	Initial Public Offerings
KCB	Kenya Commercial Bank
MIMS	Main Investment Market Segment
NPV	Net Present Value
NSE	Nairobi Stock Exchange
OLS	Ordinary Least Square
ROE	Return on Equity
SEOs	Seasoned Equity Offerings
SPSS	Statistical Package for Social Sciences

A LIST OF CHARTS AND TABLES

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Introduction

This study sought to assess whether there exist a relationship between institutional shareholding and the amount of cash raised from rights issues. The amount to be raised in an equity issue is a financing decision that depend on various factors for instance, market value of equity, investment projects, profitability, leverage and institutional ownership or block shareholding among other factors. Institutional investors may affect this financing decision through monitoring or taking an active role in their investee firms thereby reducing the free cash flow problem that exist in equity issues if managers are left on their own to decide how much is to be raised. When managers are given full discretion in running a firm, they tend to over issue and use the excess cash to maximize their own private benefits and even engage in empire building. This is a relatively new area of study and is motivated firstly by a research by Gao and Mahmudi (2008) who documented a negative relationship suggesting that institutional investors in USA check against free cash flow problem that exist in seasoned equity offerings (SEOs).Secondly, it is motivated by the fact that prior studies on SEOs appear to ignore proceeds of rights issues and tend to use prices and profitability in their research.

1.2 Background to the Study

Companies in Kenya have traditionally used banks for financing, which is usually secured over assets of the company. However, companies have recently started using more sophisticated financing sources particularly from the capital markets, by issuing commercial papers and bonds. Some larger companies have also considered listing shares by way of initial public offerings (IPOs) and use rights issues or secondary floatation at the NSE as means of raising additional equity. This was evidenced in

2006 when a number of companies got listed at the NSE for instance KenGen, Scan Group, Access Kenya and Eveready.

The primary legislation governing the capital markets in Kenya is the Capital Markets Act (the CMA).The CMA act chapter 485A (2000) prescribes that no person may offer its securities for subscription or sale to the public or a section of the public in Kenya unless before the offer, it publishes an information memorandum and files the same with the authority. Companies have the option of raising capital from the Main Investment Market Segment (MIMS), the Alternative investment Market Segment (AIMS) or the Fixed Income Securities Market Segment (FISMS) for corporate and treasury bonds. Hence the Nairobi Stock Exchange (NSE) is divided into these three independent market segments and the Futures and Options Market Segment (FOMS) is underway. The NSE had about fifty five (55) listed as at 31st December 2008 and a list of listed firms has been provided in Appendix II (obtained from the NSE website).

The listing of bonds and shares at the NSE is regulated by the Capital Markets (securities) Regulations 2002.The listing regulations require a company seeking approval for offering securities charge to the members of the public, and ensure the prospectus compiles with the detailed provisions set out in the listing regulations. The Capital Markets (foreign Investors) Regulations (2002) define a foreign investor as "any person who is not a local investor or an east African investor". A listed company is required to reserve at least 25% of its ordinary shares for investment by local investors in the issuer or listed company. The shares to be reserved should be the percentage of the ordinary shares already listed at the NSE. A listed company would have to immediately report to the NSE all transactions that would result in the percentage of ordinary shares held by foreign and East African investors reaching 70% or more.

There have been twenty two (22) rights issues in Kenya as per the records held at the NSE. According to the NSE database, the first rights issue was carried out in 1989 and the Barclay Bank was the first to issue. A total of Ksh.24.678 had been raised as

at 31st December 2008 and this analysis has been provided in appendix 1.Barnes and Walker (2006) defines a rights Issue as an offer to existing holders of securities to subscribe or purchase further securities in proportion to their holdings made by means of the issue. Thus under this approach, existing shareholders are automatically entitled to participate in any new equity issue in proportion to their ownership stake at the time the issue is announced. Typically they may be entitled to subscribe for one new ordinary share for every X ordinary shares already held.

Rights issues have attracted a lot of studies both at the local and the international arena. The common areas of study being market reaction around announcement date for instance by Slovin *et al.* (2000) in UK and long run performance by Loughran and Ritter (1997). On average empirical evidence on rights issues have documented their underperformance and this is no exception in Kenya as documented by Njoroge (2003) and Nyangweso (2003) who also documented the same and cited Total Kenya rights issue of 2001 as having suffered a sixty three percent price fall upon announcement .The Total's share price dropped from Ksh.49.00 to Ksh.20.00 after the rights issues announcement. The underperformance of share prices following rights issues and Seasoned Equity Offerings (SEOs) announcements has been attributed to a number of factors.

Jensen (1986) attributed this to agency problems i.e. the conflicts between managers and shareholders. Jung *et al.* (1996) attribute this, partly to the fear that a firm's equity issuance will destroy shareholders value if its executives misuse the proceeds. The view holds that capital will not be utilized in a value maximizing manner, if the firm does not have valuable growth prospects. The agency theory predicts that the firm is more likely to use the capital for agency spending, such as empire building. Investors' awareness of such potential misuse of funds raised in equity offerings causes the negative reaction. McLaughlin *et al.* (1996) suggest that free cash flow problems after issues play an important role in explaining the underperformance of issuing firms. Myers and Majluf (1984) attributed this to managers having superior information and that they use this to time equity issues when the shares are

overpriced. Investors realize this and interpret the announcement as bad news and revise their estimates of the stock downwards.

Due to the agency problem between managers and shareholders, managers will tend to over issue so as to have free cash flows. Jensen (1986) define free cash flows as cash flows in excess of that required to fund all projects that have positive net present value when discounted at the relevant cost of capital. This make managers to have an incentive to make their firms grow beyond an optimal size and predict that agency conflicts due to managers' selfishness give rise to over investment. Managers are likely to undertake negative NPV projects and engage in empire building. Consequently when internal cash flows are high managers are likely to over invest. However, Jensen (1986) argues that shareholders can curtail this by either refusing to provide funds or forcing managers to payout free cash flows as dividends. Unfortunately due to asymmetric information, shareholders are not able to know precisely when free cash flows and over investment occur.

Shleifer and Vishny (1997) suggest that large investors because of the relevance of the resources invested have all the interest and the power to monitor and promote better governance of their investee firms. Faccio and Lasfer (2000), support this by arguing that under the agency setting large block holding is considered to be one of the mechanisms for controlling the agency problem which arise whenever managers have incentives to pursue their own interests at the expense of shareholders. Institutional shareholders have therefore a role to play in mitigating both information asymmetries and free cash flows problems.

D'Mello et al. (2007) argue that the role of institutional investors in rights is important because of two main reasons: first, the monitoring role of institutional investors would be particularly significant in firms that receive large cash inflows since managers often have the propensity to undertake investments and activities that enhance their own value but dissipate shareholders' value. Since equity represent some of the largest infusions of capital for a firm, often combined with increase in

ownership dispersion they constitute appropriate setting to analyse the incremental benefits from monitoring. Secondly, the post issue under performance of equity issuing firms provides another reason to study institutional monitoring. The institutional investors may also conflict with the managers just like the individual shareholders. However Huyghebaert and Hulle (2004) say that if institutional investors become dissatisfied with the board and the firm's performance they have 3 choices: use of the old walk street rule (simply sell their shares), secondary hold their shares and voice their dissatisfactions and thirdly hold their shares and do nothing. Ferreira and Matos (2007) contribute to the debate by saying that institutions involvement can range from threatening the sale of shares to the active use of corporate voting rights or meetings with management.

The importance of institutional investors in any firm cannot be taken for granted; hence their activism is desired. D'Mello *et al.* (2007) argues that the comparative advantage of institutional investors in monitoring managers stems from many sources: First, because institutional investors typically control a large block of votes and thus managers are more amenable to their demands. Secondly, institutional investors have greater incentives to monitor since they cannot always sell the shares of underperforming firms. This is because trading their large holdings could create adverse price movements and further loss. In addition it will be difficult to find a market to off load the block shares at once. Thirdly, the cost of acquiring information about managerial effectiveness is likely to contain a fixed component; institutional investors can thus exploit the economies of scale in these costs because they often own a large number of shares.

Numerous studies show that there exist positive impacts in an investee firm as a result of institutional investors' activism. Kang and Shivdasani (1996) found out that presence of large institutional investors is associated with management turnover, suggesting that these investors provide monitoring benefits. Bethel *et al.* (1998) add to the debate by saying that company performance improves after an activist investor purchases a block shares.

Investee firms with high institutional holding have been found to perform better during rights issues. This has been attributed to a number of factors by various authors. D'Mello *et al.* (2007) and Gao and Mahmudi (2008) attribute this to the monitoring benefits associated with institutional investors. Ridder and Råsbrantb (2007) attribute this to the information gathering activities of institutional investors. Chemmanur *et al.* (2007) attribute this to the private information held by institutional investors for share allocation and trading. Gibson *et al.* (2004) attribute this to the ability of institutional investors to obtain superior information from publicly available data than individual investors. This was also found to hold in IPOs as documented by Huyghebaert and Hulle (2004) who attributed this to the reduction of information asymmetries due to information dissemination of institutional investors. In addition, Hertzel *et al.* (2006) found out that the same was replicated in placements. Gao and Mahmudi (2008) analysed the association between institutional investors and rights issues. They found out that share prices performed better around rights issues' announcements and this trend improved with higher institutional holding. The issuance size of rights issues is much smaller for firms with high institutional investors and that firms with high institutional holdings were more likely to complete a rights' issue deal.

The common wealth Association for Corporate Governance (CACG) has been in the front line in promoting good governance. In fact Jebet (2001) argues that good corporate governance practices are now becoming a necessity for every country and business enterprises. If countries are to reap the full benefits of the global capital market and if they are to attract long term capital, their corporate governance arrangements must be credible and well understood across borders. The CACG has indicated that the adherence to good corporate practices will help restore investor confidence, reduce cost of capital and ultimately induce stable capital flows. Rojo and Garrido (2001) conclude by saying that, the agency problem could be mitigated when taking into account that institutional investors do exist and their active role would serve as a limit to the abuse of power by the corporate managers. The atomization of

shareholders that give rise to the managers' revolution could be reversed through the intelligent use of the powers awarded to the institutional investors.

1.3 Problem Statement

The literature around rights issues and SEOs is abundant, however most of these prior studies relate to their price reactions around their announcement date, post issue operating performance and their underperformance. The agency problem has been cited by various researchers as the major reason for the underperformance in SEOs. Jensen (1986) linked the underperformance to the free cash flow problem. He argued that there exist important divergences of interest between managers and shareholders that might induce managers to issue equity and waste funds by taking negative NPV projects and even engage in empire building.

The few studies that have studied rights issues and institutional investors; have only used stock prices and profitability to measure the effect of institutional investors on rights issues. On average high institutional shareholding in a firm lead to better performance compared to firms with no or low institutional shareholding. Most of these studies have linked the good performance to superior information held by these investors. Gibson *et al.* (2004) attributed the performance to the ability of institutional investors to obtain superior information from publicly available information. Chemmanur *et al.* (2007) attributed the performance to private information held by these investors.

While the analysis of SEOs has been abundant, little has been done in Kenya and globally to assess how institutional shareholding affect rights issues from a monitoring or agency angle. Despite the agency problem being cited in most prior studies as the main reason for the underperformance of SEOs, little has been done to find out how the agency problem in SEOs can be addressed thereby improving the performance of issuer firms and SEOs. Prior studies show that Institutional investors can control the agency problem through monitoring for instance Faccio and Lasfer (2000) documented this finding. There is little prior evidence on the effect of

institutional ownership or block shareholding on the financing decision of a firm. This is the knowledge gap that this study sought to fill by assessing whether institutional investors in Kenya have a voice in rights issues of their investee firms. This study extended empirical literature by taking into account proceeds figures of rights issues unlike prior studies which have used profitability and stock prices to measure the relationship between institutional investors and SEOs.

1.4 Objective

To assess the relationship between institutional shareholding and the amount of cash raised from rights issues of listed firms at the Nairobi Stock Exchange.

1.5 Importance of the Study

This research will open new areas for further research by academicians involving institutional investors not covered in this study. For instance these areas include; Stock-picking ability of institutional investors, their impact on the operating performance of their investee firms and trading behaviour of institutional investors around seasoned equity offerings.

This study will also help exploit the need for Nairobi Stock Exchange and capital market authority to consider other seasoned equity issuance methods such as placings which have the advantage of bringing into ownership structure institutional shareholders who can monitor on behalf of retail shareholders. This could be through disqualification or waiving of pre-emption rights. Prior empirical evidence show that placings perform better than rights issues. Studies done by Slovin *et al.* (2000) and Barnes and Walker (2006) in UK shows that placings have better market reactions than rights. This has been attributed to the fact that placings lead to high levels of institutional or large investors in the ownership structure of a company. Cronqvist and Nilsson (2005) argue that private placements can be used to reduce moral hazard and adverse selection costs, thereby offsetting their high issue costs.

This study will be very important to the management of companies more so because they are the main source of agency conflicts which lead to erosion of shareholders' wealth. If managers understand their role in acting in the best interest of shareholders and avoid self seeking behaviour for example maximizing their own private benefit at the expense of shareholders, they will able to reduce the cost of capital and issuance costs. This is because if the market believes a firm enjoys monitoring benefits due to institutional ownership; there will be less negative reaction to equity issues. It is for this very reason that managers should appreciate and support institutional monitoring and activism in their firms.

This study will be useful to retail investors. This is because, the understanding of the ownership structure of a company will help an investor know where to invest and where not to. Retail investors will thus be attracted to companies with high institutional holding because they will be assured of the safety of their investments. In addition, companies with high institutional holding will attract active investors who are willing and able to monitor management and ensure that corporate resources are used more efficiently.

This research will also be important to institutional investors in that it emphases on their need to monitor and take an active role in their investee firms. Institutional investors are in a much better position to ensure that managers do not over issue and the proceeds raised are utilised in maximizing shareholders' wealth. This will help to dampen the negative abnormal returns at the announcement of equity offerings and mitigate against free cashflows problems.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews prior studies, highlights issues that are related to this study and identify gaps that exist which this study sought to fill. The major areas of concern are: agency problem, free cash flow problem, monitoring benefits of institutional shareholders and the relationship between institutional investors and equity offerings. In addition, it also reviews theories related to this study and discusses the conceptual framework which help to appreciate that, there could be other factors not addressed in this study that affect rights issues besides institutional ownership and the control variables used in this study. This section will thus be discussed under the following sub headings as follows:

2.2 Theoretical Literature

2.2.1Agency Theory

Berle and Means (1932) are among the first to address the agency conflicts between managers and shareholders, by focusing on the separation of corporate ownership from corporate management—commonly referred to as the separation of ownership and control. They 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.

This theory analyses the relationship between principal and agents, a relationship termed by Jensen (1986) as fraught with conflicting interests. Jensen and Meckling (1976), posit an entrepreneur, initially the 100% owner of her firm, contemplating an initial public offering (IPO) in which she would sell some shares, selling to passive outside shareholders, retaining the rest, and stays on as CEO. The CEO can divert corporate resources to augment her utility – for example, using corporate funds to buy

unnecessary Lear jets, hire unqualified cronies, advance personal political agendas, fund pet charities and the like.

Roe (1990) suggests that the magnitude and nature of agency problems is related to ownership structures. Given the differences in ownership structures around the world, one would expect differences in the form, consequences, and solutions to the shareholder-manager agency problem across countries. In countries where ownership structures are dominated by the existence of a large shareholder, there may be a lower likelihood of agency problems as envisioned by Berle and Means (1932).

Gillan and Starks (2000), say that the 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. It is this imperfect information that managers use to maximize their private benefits at the expense of the owners who should be informed of all relevant matters.

Rojo and Garrido (2001) further noted that in corporation with large disorganized body of shareholders, shareholders may find themselves in a situation in which the cost of exerting their rights is higher than the benefits obtained. In this situation of 'rational apathy' corporate managers would profit from the shareholders passivity to control the company. The centre of power moves from the shareholders to the Board of Directors. This poses an important agency problem as the managers are able to act without restraint. The situation of power without responsibility derived from the separation of ownership and control gives rise to conflicts of interests, scenarios where managers serve their own interest in complete or partial disregard of the proclaimed objective of maximizing the shareholders benefits. They suggested that to solve this problem, institutional investors will need to play a more active role in their investee firms.

Mizruchi (2004) defines an agency problem as a situation in which the owners of a corporation do not actively participate in its management. In its earliest form, business was owned and managed by the same people. Economic and technological development led to the advent of the joint-stock company in the seventeenth century to meet the need for larger amounts of capital. This began the process of the separation of ownership from control that continued with the introduction of limited liability for both public companies and private companies, and the gradual emergence of the modern giant corporation in which none of the directors or managers has more than a minority financial interest. This process has given rise to the possibility that the interests of those who control business and those who own it may conflict, a subject of continuing controversy among economists since the publication by Berle and Means of The Modern Corporation and Private Property (1932).

Hansmann and Kraakman (2004), say that almost any contractual relationship, in which one party (the 'agent') promises performance to another (the 'principal'), is potentially subject to an agency problem. The core of the difficulty is that, because the agent commonly has better information than does the principal about the relevant facts, the principal cannot costlessly assure himself that the agent's performance is precisely what was promised. As a consequence, the agent has an incentive to act opportunistically (self interested behavior, deception, misrepresentation or bad faith), skimping on the quality of his performance, or even diverting to himself some of what was promised to the principal. This means, in turn, that the value of the agent's performance to the principal will be reduced, either directly or because, to assure the quality of the agent's performance, the principal must engage in costly monitoring of the agent. The greater the complexity of the tasks undertaken by the agent, and the greater the discretion the agent must be given, the larger these 'agency costs' are likely to be.

2.2.2 The Theory of Capital Structure

Capital structure theory is one of the most puzzling issues in the corporate finance literature. Modigliani and Miller (1958) were the first who theorized the issue by

posing their "M&M capital structure irrelevance proposition". By stating the circumstances under which capital structure does not influence firm value, the authors isolate factors that can explain why daily observations of reality prove the opposite. In a comment that followed five years later Modigliani and Miller (1963) showed how the relaxation of one of their crucial initial assumptions, the absence of corporate taxation, could attribute to the understanding of empirical findings, which typically exhibit negative price reactions on equity offering announcements. These two classical publications triggered a stream of studies and hypotheses over time, which contributed to the clarification of "the capital structure puzzle"

The idea to test whether tax arguments can account for market reactions to the news of security issues by investigating tax-exempt companies is not novel. Howe and Shilling (1988) investigated the stock price reactions to the announcements of new security issues, both debt and equity. They found both the classical positive price reaction on debt issue announcements and the negative price reaction on equity issues. This was also the case as documented by Brounen and Eichholtz (2001) who found a modest nonnegative price reaction following the announcements of debt offerings and a significantly negative price reaction on the announcement of equity issues. Hence their findings help to explain the underperformance of rights issues.

McLaughlin *et al.* (1996) argue that the capital structure can be one of the means used to constrain managerial behavior. Use of debt reduces the cash flow available for managers' discretionary spending and effectively bonds them to pay out future cash flows. Alternatively, firms can increase their dividends or repurchase their shares. However, unlike bondholders, who have access to bankruptcy court in default, shareholders cannot force the payment of dividends

2.2.3 Information Asymmetry Model

Leland and Pyle (1977) define information asymmetry as a situation whereby managers and members of the board of directors of publicly traded firms hold more information about their company than shareholders. They further argue that SEOs

under perform because of sales by better-informed investors that signal that they believe the share is overpriced and call this signaling effect. Investors realize this and interpret the announcement as bad news and revise their estimates of the stock downwards

In the Myers and Majluf (1984) model, managers acting on behalf of existing shareholders have private information about the firm. These managers prefer to issue equity when their shares are overpriced, for example, when they have private information indicating that cash flows are going to fall in the future. In contrast, managers who believe that their stock is undervalued by the market may prefer to abandon valuable projects rather than fund investments by issuing under priced shares. Hence, examination of the performance of firms conducting SEOs should find both negative abnormal stock price performance for the firm around the announcement of the offer and a decline in firm operating performance subsequent to the offer.

Diamond and Verrecchia (1991) says that reduction in information asymmetries lowers the cost of capital and that companies that benefits most will invest more strongly in reducing such asymmetries. In their model, the decline in the cost of capital is caused by the fact that better information attracts more large investors such as institutional owners as less information asymmetries enhance everyday liquidity. Huyghebaert and Hulle (2004), argue that adverse selection through asymmetric information is a well known phenomenon in financial markets. When stock prices are low, managers and company insiders often complain that their firms cannot issue new shares to finance its investments because the market cannot be convinced that it under estimates the true value of the firm.

2.2.4 Jensen (1986) Free Cash Flow Theory

Jensen (1986) argues that there is a serious divergence of interest between managers and shareholders. Managers prefer to retain excess cash flow in the firm and might use the cash for value-reducing activities, such as investment in negative-NPV

projects. This problem is especially acute for firms with few positive-NPV investment opportunities. Jensen argues that a major problem for shareholders is to force managers to pay out cash rather than use it for such value-reducing activities. This theory predicts that that the announcement of SEOs has a negative effect on stock prices because SEOs increase the resources available for poor investment by managers. An empirical prediction of the free cash flow theory is that the change in performance following the equity issue is negatively related to the existing free cash flow. The theory also predicts that as long as the number of positive-NPV opportunities is limited, these firms will experience a decline in operating performance subsequent to issuing equity.

In support of Jensen (1986) is McLaughlin, *et al*. (1996).They suggest that the poor operating performance in post issue firms is the result of free cash flow related agency problems. Hence the need for institutional shareholders to monitor their investee firms so as to mitigate the free cash flow problem. On average, firms' stock prices react negatively to seasoned equity offerings announcements. Jung *et al.* (1996) add to the debate by saying that the underperformance is at least partly because a firm's equity issuance will destroy shareholder value if its executives misuse the proceeds. Good corporate governance mechanisms, such as an effective board, can potentially reduce this risk to shareholders.

The Jensen (1986) model has also been supported by Burkart and Panunzi (2006). Burkart and Panunzi (2006) argue that as much as takeovers can be used to mitigate agency problems and discipline self seeking managers, take overs can be a symptom of another agency problem. This problem is particularly pertinent for cash-rich firms that enable managers to undertake unprofitable but power-enhancing investments. Hence firms with a lot of free cash flows can engage in empire building through unprofitable takeovers and mergers. It is for this reason that shareholders' monitoring in financing decisions such as rights issues is particularly important.

2.3 The Monitoring Benefits of Institutional Investors

Numerous authors have argued that an important role for large shareholders is to ameliorate agency problems by monitoring or otherwise taking control of the corporation. Shleifer and Vishny (1986) have argued that, because all shareholders benefit from the actions of a monitoring shareholder without incurring the costs, only large shareholders have sufficient incentives to monitor. Put another way, large investors have stronger incentives to undertake monitoring activities, as it is more likely that the gains on their investment as a result of monitoring would be sufficient to cover the associated costs. Further evidence is provided by Agrawal and Mandelker (1990) who report smaller 'overpayment' in corporate takeovers when the bidding firm has a large shareholder.

Lang *et al.* (1995) who examine firms that receive large cash infusion through windfall cashflows from law suits and assets sales. Since equity issues represent some of the largest infusions of capital for a firm, often combined with an increase in ownership dispersion, they constitute particularly appropriate setting to analyse the incremental benefits from monitoring. Further monitoring benefits have been cited by Kang and Shivdasani (1996) and Bethel *et al.* (1998). Kang and Shivdasani (1996) found that the presence of large shareholders in a firm is associated with management turnover, suggesting that these shareholders provide a monitoring function. In addition, Bethel *et al.* (1998) find that company performance improves after an activist investor purchases a block of shares.

Further Gillian and Starks (2000) argue that institutional investors have greater incentives to monitor since they cannot always sell the shares of underperforming firms. This is because trading their large holdings could create adverse price movements and further loss. In addition it will be difficult to find a market for off loading the block of shares at once. Second, the cost of acquiring information about managerial effectiveness is likely to contain a fixed component; institutional investors can thus exploit the economies of scale in these costs because they often own a large

number of shares. Finally, institutional investors also generate additional indirect monitoring of the firm's management

Ferreira and Matos (2007) used a different approach to study the monitoring role of institutional shareholders. They divided institutional investors into two domestic and institutional overseas investors and further grouped them as either independent or grey investors. Independent institutional investors tend to be 'pressure resistant' and include mutual funds, investment advisers while grey institutions tend to be ' pressure sensitive' or loyal to the corporate management and include banks, insurance companies and other institutions. They also studied the monitoring ability of professional money managers and characterised them as being of different 'colours' in terms of their ability to monitor and influence management decisions. However this study differs from Ferreira and Matos (2007) because it will consolidate all institutional investors into one and assess their impact on rights issue outcome. Hence this study will not categorise institutional investors as either domestic versus foreign or dependent versus independent. This is because the data available in Kenya on institutional investors is too small to allow such an analysis. However their findings help provide evidence on the role of institutional investors and their impact on corporate affairs.

2.4 Institutional Shareholders and Equity Offerings

Huyghebaert and Hulle (2004) documented that institutional investors have a positive effect on the stock prices. These effects arise due to the reduction of information asymmetries between firms and investors, increase in liquidity of the company's stock and improve corporate governance. Using a data on Belgian firms, they found that firms are more likely to pre-allocate shares to institutional investors at IPO time. Hence pre-allocation of shares to institutional investors is shown to reduce under pricing and enhance post IPO liquidity. Though this study is not investigating the relationship between IPOs and institutional holding and allocations, empirical evidence on the relationship has provided Supplementary evidence on the effects of institutional holding on the performance of issuer firms. In addition their findings add

more evidence on the role of institutional investors in reducing agency problems and information asymmetry.

Hertzel *et al.* (2006) found that firms that increased their institutional ownership did not under perform their portfolio benchmarks in the three years following the private placement. Thus institutions are better able to identify superior private placements at the time of placement and increase their holdings in these firms accordingly. However the study done by Hertzel *et al.* (2006) differ from this research in two ways, first it studied placings which have a natural preference among institutional investors than rights issues whereas this paper will solely focus on rights. Secondly, it base the out performance in placings to superior information held by institutional investors while this paper will focus on pre-issue monitoring and how it lead to better performance in rights issues.

Chemmanur *et al.* (2007) analysed the consequences of private information possessed by institutional investors for share allocation, institutional trading before and after the SEO and realized trading profitability. They concluded that institutions are able to identify and obtain more allocations in SEO firms with better long term returns. Secondly, institutions flip only a small fraction of their SEO share allocation during the first two days of post SEO. Thirdly, the profitability of post offer trading in SEO where institutions obtained allocations is higher than that of trading in SEO where they did not obtain allocations. Chemmanur *et al.* (2007) study is similar to Gibson (2003) whose main objective is to understand the trading behavior and stock-picking ability of institutional investors, rather than the monitoring role of institutional investors this research paper seeks to investigate. Nevertheless their findings provide supplementary evidence that explain the relationship between institutional investors and issuers firms.

2.5 Local Literature

Onyango (2004) carried out a similar study and sought to find out the relationship between ownership structure and the value of the firms listed at the NSE. He found

that firms' value is maximized at higher levels of ownership concentration. The overall results obtained confirmed that ownership structure is highly correlated to the value of the firm. In his study, the firm value is the market value of equity at the last day of the trading for the year. Ownership structure is the percentage of common shares held by significant shareholders. Significant shareholders are those shareholders who own 5% and above of the total shares of the firm. However, Onyango (2004) study differ from this study in that, it uses the concentration of significant shareholders to measure the value of the firm. While this study uses institutional ownership to measure the performance of rights issues. Whereas both studies show that the ownership structure has an effect on the performance of a firm, Onyango (2004) measure this performance using firm's value while this study measure it using rights issues performance.

2.6 Empirical Literature

Faccio and Lasfer (2000) analysed the monitoring role of occupational pension funds, the largest in UK. Due to the large funds held by them these funds should be effective monitors of their investee firms. However they found that pension funds in UK do not add value to the investee firms in which they hold large stakes. Their findings cast doubt on the monitoring role of pension funds which are considered in theory to be promoters of corporate governance in UK. Their findings also show that despite the relatively poor performance of their investee firms' pension funds do not opt for an exit strategy. Once 'locked in' pension funds find it difficult and costly to monitor.

Hartzell and Starks (2003) find evidence suggesting that institutional investors provide a monitoring role with regard to executive compensation contracts. They find a positive association between the concentration of institutional ownership and the pay-for performance sensitivity of a firm's executive compensation and a negative association between the concentration and excess salary. One implication of this result, consistent with the theoretical literature regarding the role of the large shareholder, is that institutions have more influence when they have larger proportional stakes in firms. Hartzell and Starks also find that the monitoring

influence is associated more with investment companies and pension fund managers (pressure insensitive) than with banks and insurance companies (pressure sensitive).

Gibson *et al.* (2003) found in their research that institutional investors' money managers have the ability to obtain superior information from publicly available data than individual investors. They dubbed this as 'smart money hypothesis' to explain the out performance of post issue firms. Gibson *et al.* (2003 documented that seasoned equity issuers experiencing the greatest increase in institutional investment around the offer date outperformed their benchmark portfolios in the year following the issue by a statistically and economically significant margin relative to those experiencing the greatest decrease. Their results showed that institutions are able to identify above average SEO firms at the time of equity issuance and increase their holding in these potential out performers. This study differ from Gibson *et al.* (2003) in that this study does not focus on the stock picking ability of institutional investors in SEO firms that lead to 'smart investments' but rather on how pre-monitoring by institutional investors lead to the out performance of SEO firms.

D'Mello *et al.* (2007) documented evidence on the monitoring benefits from institutional ownership around equity issue. They analysed a link between changes in institutional ownership and the stock price and operating performance following public equity issue. They found that announcement returns are positive and significantly associated with institutional ownership levels and concentration. Post issue stock returns and changes in operating performance are positively and significantly related to the contemporaneous post issue changes in total institutional ownership and the concentration of their shareholding. However, this study differ from D'Mello *et al.* (2007), which investigates the influence of monitoring effect of institutional investors on post SEO performance. This is because, this study will focus on the consequences of institutional shareholders monitoring in pre-issue period and how the monitoring shapes the optimal financing and investment decisions.

Ridder and Råsbrantb (2007) examined trading around right issues in Sweden. They found that the magnitude of the announcement effect is negatively related to the level of institutional ownership over the initial announcement period and are consistent with the argument that the information gathering activities by institutional investors reduce information asymmetries. They also documented that firms with rights issues and also experiencing the greatest increase in institutional surrounding the offering out performed their bench marks portfolio in the year following the offering relative to those firms with greatest reductions in institutional holdings. This study differs from Ridder and Råsbrantb (2007) because it seeks to establish whether the out performance of some rights issues is associated with monitoring benefits of institutional holding. However Ridder and Råsbrantb (2007) study focus on the information gathering of institutional investors to explain the out performance of rights issues.

Goergen *et al*. (2007), used events studies on insider (directors) trades to test the monitoring role of UK's institutional shareholders. If institutional investors are monitors, their presence as major shareholders should convey value relevant information to other shareholders and reduce information asymmetry between the managers and all shareholders. However they found out that directors' trades are informative as they cause share price reaction. Secondly, institutional shareholders do not have significant impact on the market reaction to purchases and sales. Thirdly, other types of shareholders mainly families and other firms reduce the market reaction to both directors' purchases and sales. This suggests that the latter types engage in monitoring and thereby decrease the informative value of directors' dealings. In summary, UK's institutional shareholders are passive investors leading to directors with high discretionary powers. Their conclusion is similar to Faccio and Lasfer (2000) who concluded that institutional investors in UK are passive. However this research differ from Goergen *et al*. (2007),in that it this use the regression model to regress institutional shareholding against the amount of cash raised in a rights issue. If Kenya's institutional investors are in deed monitors, rights issues will be of a

smaller size indicating that institutional investors are mitigating against free cash flows problems.

Ferreira and Matos (2007) found that foreign and independent institutions with large stakes have the potential to enhance firm value through direct and indirect monitoring. They are also more often able to play a major role in prompting changes in corporate governance practices than domestic and grey investors.

Gao and Mahmudi (2008) demonstrate that stocks in firms with the largest increase in institutional shareholdings also outperformed their benchmark return in the year following the offering compared to firms with the largest decrease in institutional shareholdings. They found out that firms with larger institutional holdings had better market reaction and were more likely to complete an announcement SEO deal. They attributed this to pre-monitoring benefits associated with institutional investors. This study differs from Gao and Mahmudi (2008) in two ways: First, this study solely focus on rights issues which are commonly used in Kenya unlike Gao and Mahmudi (2008) study which incorporates other seasoned equity offerings i.e. public issues, placings etc. The inclusion of placings in the sample has a tendency to overstate institutional holding, because placings are generally issued to institutional investors. Secondly, this study will use a smaller sample compared to the larger sample of 7,365 SEOs conducted by Gao and Mahmudi (2008).This is due to differences in the size of the Kenyan economy as compared to the USA's economy. Thirdly it will only use proceeds from rights issue and not stock prices.

2.7 Conceptual Framework Literature

The key independent variable in this study is the top5holding, which is the proportion of the institutional ownership by top five institutional investors in the firm. It will be regressed against proceeds of rights issues to measure the association between institutional holding and proceeds of rights issues.

According to Gao and Mahmudi (2008) there are other factors that may affect proceeds of rights issues other than institutional ownership and these are: market value to book value ,market value of equity(market capitalization),the firm size which is computed as the natural logarithm of firms' sales, Return on Equity (ROE) measured as the ratio of operation income before depreciation to book value of equity, leverage as the ratio of long term debt over total assets, asset-liquidity as the ratio of cash and short term investments plus receivables over total assets and capital expenditure which is the firm's capital expenditure normalized by total assets. All the variables are measured at the fiscal year end prior the SEO announcements

Diagram 2.1: Proceeds, Institutional Shareholding and Control Variables

```
┌─────────────────────────────┐
│ Control Variables:          │
│ Market value to book value  │
│ Market value of equity      │
│ Return on Equity (ROE)      │
│ Leverage                    │
│ Asset-liquidity             │
│ Capital expenditure         │
│ Sales                       │
│ Past Return                 │
└─────────────────────────────┘
              ⇓
┌────────────────────────────┐      ┌────────────────────────────┐
│ Key independent variable:  │ ⇒    │ Dependent variable:        │
│ Top 5 Institutional Holding│      │ Proceeds of Rights issues  │
│ (C5)                       │      │                            │
└────────────────────────────┘      └────────────────────────────┘
```
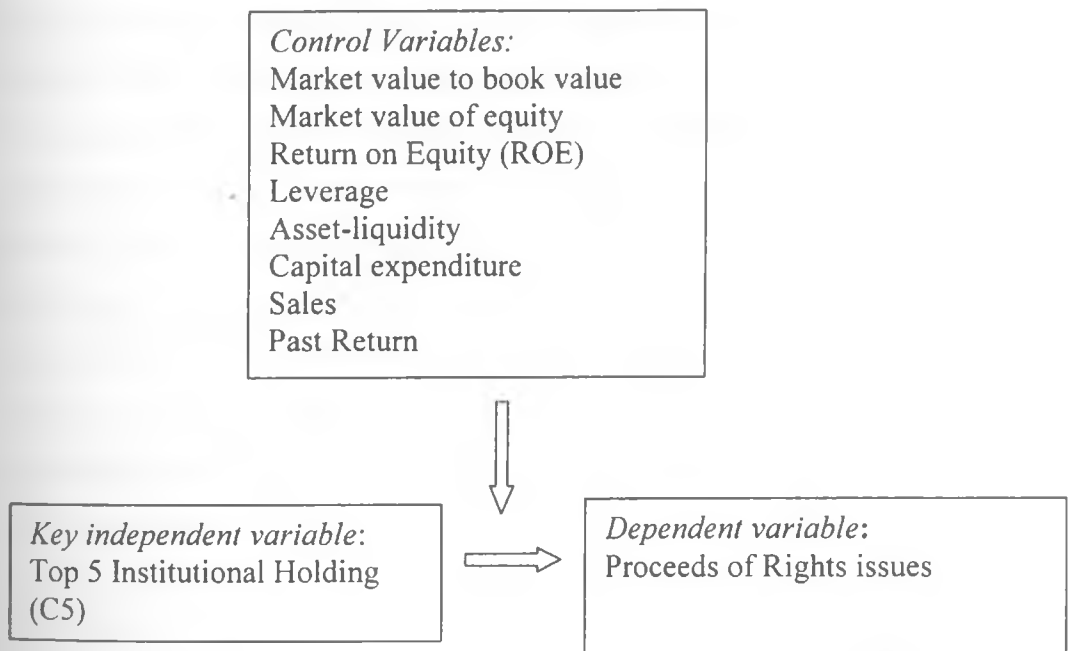
The additional independent variables have been used as control variables in their model. Of the controls, past return, firm size and market value to book value have strong explanatory power towards the size of equity issuance. However, the overall results show that firms with large shareholders tend to raise less money in SEO transactions.

2.8 Conclusion

The agency problem between managers and shareholders has been fronted in my studies as the main reason for the underperformance of rights issues and SEOs. D'Mello *et al.* (2007) argue that institutional investors have all the incentives to monitor and are therefore better placed to reduce agency problems. Prior literature on the impact of institutional investors on their investee firms', shows that firms with high institutional holding have stronger SEO performance. This has been attributed to a number of factors; Gibson *et al.* (2003), Hertzel *et al.* (2006), Chemmanur *et al.* (2007) and Ridder and Råsbrantb (2007) have attributed this, to the ability of institutional investors to obtain superior information which they use to identify above average SEO firms.

However this study differ from most of the authors above who have attributed the stronger SEOs performance to the stock picking ability of institutional investors. Nevertheless, this study will attribute the stronger rights issue's performance to the monitoring benefits associated with institutional investors. D'Mello *et al.* (2007) has attributed this to monitoring effect of institutional investors on post SEO performance. However Gao and Mahmudi (2008) attributed this to pre-monitoring of institutional investors on their investee firms which help to reduce agency related problems for instance free cash flow problems. This study will attribute rights issue performance to pre-monitoring benefits and will thus be take Gao and Mahmudi (2008) approach.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the research design and methodology that was used in this study. It discusses the population from which the sample studied was obtained from and how the data used in this study was collected and how data analysis was carried out.

3.2 Design of the Study

3.2.1 Correlational Research Design

According to Kombo and Tromp (2006) correlational designs enables researchers to assess the degree of relationship that exists between two or more variables. Data is mainly analysed using correlation of coefficient and using this tool the researcher indicates the degree of relationship between two variables. The correlation of coefficient is a number ranging from 1 (a perfect positive correlation) through zero (no relationship) to -1 (a perfect negative correlation).

Chan (2004), points out four reasons for using regression analysis model. These are: to establish the form of strength of the association between outcome and factors of interest, for covariates/cofounders, to determine important risk factors affecting the outcome and to quantify new cases. In this study regression analysis was used to assess the degree of association between institutional holding and proceeds of rights issue. The proceeds are the dependent variable and the institutional shareholding is the key independent variable. This research used a multi regression model to assess the relationship between proceeds and the Top5 institutional shareholding which is the key independent variable. However, since this relationship cannot be assessed in isolation, I introduced other independent variables to act as control variables and these are; leverage market value of equity to book value of equity and Return on

- 25 -

Equity (ROE). The correctional design was used to assess how the Top5 institutional ownership and the control variables correlated with proceeds of rights issues.

3.3 Population

The population comprised of fifty five (55) listed firms at the NSE as at 31st December 2008 and this has been provided in appendix II. Nineteen (19) firms of the fifty five (55) have issued rights and three out of the nineteen three firms (KCB, ICDI and Diamond Trust) have issued rights twice between 1989 and 2008 bringing the number of rights issues to twenty two. The twenty two rights issues had raised Ksh.24.68 Billion as at 31st December 2008 and this analysis has been provided in Appendix I.

3.4 Sample of the Study

The firms included in the sample are only those whose institutional shareholding data and proceeds figures were available at the time of the issue. The sample studied comprised of twenty (20) rights, however Barclays Bank issue of 1989 and Kenya Finance Corporation Ltd issue of 1994 was not included in the sample. This is because the top5 institutional investor index was unobtainable and using an index for a different period would have distorted the findings. This was made worse by the fact that most prospectuses and annual reports of the 90s did not include the top shareholders' list. It was also not possible to get this information from the shares' registrar of Barclays Bank since the bank has since changed its shareholders' register system and was not able to get institutional shareholding at the time. The prospectus for Kenya Finance Corporation issue of 1994 did not contain the top shareholders list and it was not possible to obtain the institutional shareholding since the company is no longer listed at the NSE and has since been liquidated and could not get this information from NSE either. Nevertheless, with the advancement in good corporate governance and technology most companies are now providing this analysis in their prospectuses, financial statements and websites.

3.5 Data Collection

This study used secondary data and required data for the seven variables used in this study. Institutional shareholding was obtained from the prospectuses issued to the public during the rights issue from which top shareholders are listed. At least most of the prospectuses issued between 2001 and 2008 had the top shareholders analysis. In addition, financial statements were used to obtain the shareholding of institutional investors for the financial year prior the issue in instances where the prospectus did not provide the analysis. These prospectuses and financial statements were obtained the Capital Market Authority's library and the Nairobi Stock Exchange. I used the financial statements to obtain the top5 institutional index for Kenya Orchards, standard newspaper, CFC Bank and Unga Ltd. Institutional ownership for Marshalls, East African Breweries, and ICDI issue of 1990 and 1998 were obtained from the NSE monthly bulletin which is used to file monthly returns of top shareholders. Fortunately the institutional ownership of East African Portland's was obtained from the financial statement of 1996.Institutional ownership was obtained by perusing through the prospectus, financial statements and NSE monthly bulletins. It involved summing up the Top5 institutional investors shareholding percentages contained in the prospectuses, financial statements and the NSE's monthly bulletin.

Data on rights issues was retrieved from the NSE Handbook. This included the year of the issue, the company that issued and the amount of cash raised in the issue. Obtaining this data was much easier than obtaining the top5 index of issuer firms. Proceeds of rights issues are the dependent variables in this study and have been provided in appendix I. This data was obtained from the NSE's hand book for 2008.

Data on leverage, market value of equity to book value of equity and Returns on Equity were obtained from the financial statements prior the issue year. These financial statements are filed with NSE yearly in the NSE's handbook. The process involved identifying the financial year prior the issue and reading the notes attached to find out whether the change in equity is as a result of a rights issue. This was done by examining the trend in the number of issued shares and I picked the year before

the change in equity as the reference year. To enable the computation of leverage I collected the all current liabilities, long term liabilities, current assets and non current asset's figures as depicted in the financial statements for all firms .I also collected the book value of equity and the market value of equity as disclosed in the handbook as at the close of the financial year. To enable computation of Return on Equity (ROE) I also collected the net profit figure for the financial year prior the issue for all firms. This analysis has been provided in Appendix V. Data for period 2000 to 2008 was obtained from the handbook and the remaining data was obtained from the financial statement obtained at the CMA's library.

3.6 Data Analysis

3.6.1 Measures of Institutional Ownership

To compute institutional shareholding of a company two measures can be used. These are the top 5 institutional holding (C_5) and total institutional holding and are discussed below as follows:

3.6.1.1 Top 5 institutional holding (C_5)

This is the proportion of the institutional ownership by the top five institutional investors deflated by the firm's total shares outstanding. According to D'Mello *et al*. (2007), a high C_5 suggests that institutional ownership in the firm is concentrated, that is, a relatively small number of institutions own a large proportion of the shares. In the context of monitoring, the variables will help classify as 'poorly monitored' those firms where there are several institutions owning the firm's shares but each only holding a small fraction of the shares. The top 5 institutional holding index was computed from the top shareholders list provided in the information memorandum and financial statements prior the issue. The top shareholders list contained in the prospectuses and financial statements was given in percentage form and hence the top 5 institutional index was obtained by summing up the top 5 institutional investors percentages.

3.6.1.2 Total institutional Holding

This is computed by obtaining total institutional ownership deflated by the total number of share outstanding in the firm. Total institutional ownership is defined as the number of shares held by institutional investors. However this measure was not used in this study to measure institutional holding because it requires the availability of the entire shareholders register which is difficult to obtain reliably .Nevertheless, the top5 institutional index (C_5) was used because it could be obtained reliably and consistently used for all the issuer firms. In addition, both D'Mello *et al*. (2007) and Gao and Mahmudi (2008) used both measures and found consistent results and hence the top5 institutional index was used in this study to measure institutional ownership which is the key independent variable.

3.6.2 Definition of Study Variables

This study used seven variables and three equations. Proceeds figures were used to represent the amount of cash raised in rights issue. The proceeds figures were used as dependent variables in three ways, first as actual proceeds, secondly the actual proceeds deflated by total assets and then actual proceeds figures deflated by market value of equity. The Top5 institutional shareholding is the key independent variable and was used in three multi regression models and represents the proportion of the institutional investors in a firm.

In the multi regression model other independent variables were introduced to act as control variables. These are; Return on Equity (ROE), market value of shares to book value of shares and leverage. Return on Equity represents residual profits entitled to shareholders since their rate of return is not fixed. ROE indicates how well the firm has used the resources for the benefits of owners and reflects the extent to which their objectives have been accomplished. The higher the ROE the better the firm, since this means that the company has enough internal reserves from which it can finance itself cheaply and from which it can reward its shareholders through dividends.

The higher the market value the better the firm since the firm's value also increases as perceived by the market and the investors gain through capital gain when they sell their shares. The market value of shares as at the close of a financial year were provided in the financial statements in the NSE's Handbook. Leverage is an index that measure the level of debt in a firm compared to what is owned by shareholders (assets).The higher the leverage the higher the financial or insolvency risk. Leverage was obtained by deflating total liabilities by total assets for the financial period prior the issue for all firms. Table 3.1 below summarises the seven variables that were used in this study.

Table 3.1: Study Variables

Symbol	Study Variable	Type of a study Variable
Z_1	Actual Proceeds	Dependent Variable
Z_2	Actual Proceeds / Total Assets	Dependent Variable
Z_3	Actual Proceeds / MV of Equity	Dependent Variable
X_1	Top5 Institutional Ownership	Key Independent Variable
X_2	Leverage	Independent Variable (control)
X_3	MV of Equity / BV of Equity	Independent Variable (control)
X_4	Return on Equity	Independent Variable (control)

Table 3.1 highlights the variables used in this study and indicate the type of the variable. There are three dependent variables representing the three different measures of proceeds. There are four independent variables; however the Top5 institutional ownership was the key independent variable while the other three independent variables were used as control variables. Where MV is the Market Value of Equity and BV is the Book Value of Equity

3.6.3 The Conceptual Model

Diagram 3.1 below shows the relationship between the three measures of proceeds, Top5 institutional ownership and the three control variables. The institutional shareholders may influence the amount of cash to be raised in an equity issue through monitoring or activism in their investee firm. Ideally, the institutional investors prefer that their investee firms raise just enough to finance their operations to avoid too much money being held in the hands of the managers. However, the amount to be raised by a firm is also dependent on other factors such as the degree of leverage. This means the higher the leverage the higher the financial risk hence a point is reached where a firm cannot raise further capital through debt and hence equity capital becomes ideal. In addition, if a firm feels its financial risk is high it may raise more capital through a rights issue to offset part or all the debt.

Diagram 3.1 The Dependent, the key Independent and the Control Variables

Key independent variable:
Top 5 Institutional Ownership

Control Variables:
Market value to book value of equity
Return on Equity (ROE)
Leverage

Dependent variable:
Actual Proceeds
Actual Proceeds / Total Assets
Actual Proceeds / Market Value of Equity
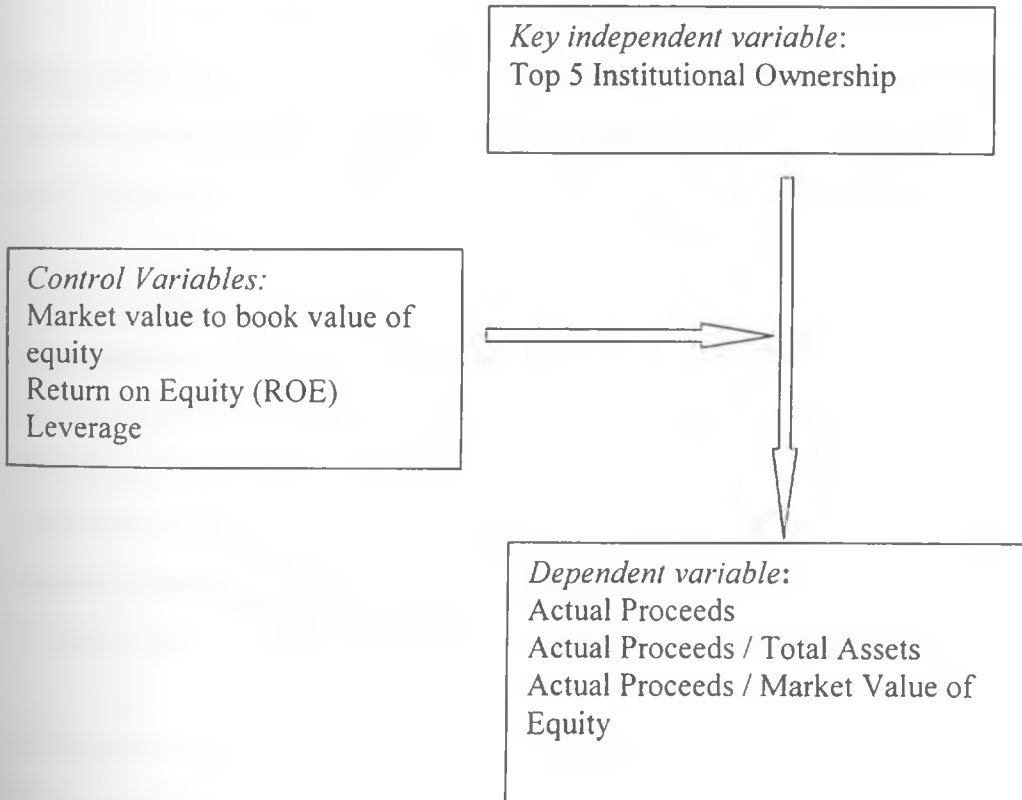
Alternatively, the Return on Equity ratio will also affect the amount of capital raised by a firm. The lower the ROE ratio, the higher the amount of cash that will be raised from an issue and hence the ROE ratio will also affect the decisions of the institutional investors. Whereas the institutional investors would prefer just what is enough to fund all the positive NPV projects is raised, a low ROE ratio would mean that the firm will have to raise more from external sources to finance its operations.

Finally, the decision of the institutional investors may be affected by the market value of equity to book value of equity. According to Myers and Majluf (1984), firms tend to issue capital when they believe they are overvalued. Alternatively, firms issue equity when their shares are trading well at the stock market because this is the only time they can convince the market. Hence, during this time a firm is able to undertake crucial projects which would otherwise not be undertaken had the stock prices been depressed.

Whereas the institutional investors would always prefer their investee firms to raise smaller equity issuances, their decision is also affected by other factors as stated above. Hence the inclusion of these factors in my model to act as control variables.

3.6.4 The Regression Model

This study used three multi regression models to assess how the four independent variables related with the three measures of proceeds. The multi regression model used the proceeds as the dependent variable against the Top5 institutional investor proportion which is the key independent variable and three other independent variables which acted as the control variables. The additional control variables are Return on Equity (ROE), market value of equity to book value of equity and leverage.

Klein and Rossin (1999) define a linear regression as a statistical tool for modeling the relationship between a dependent variable and one or more independent variables. The parameters of the linear regression model are typically estimated using the least-squares method which results in a line that minimizes the sum of squared vertical

distances from the observed data points to the line. Al-Nasser and Radaideh (2008), say that in a regression analysis the relationship is expressed in the form of an equation or model connecting the response variable *(Y)* and one *(X)* or more explanatory variables. The simple true relationship can be approximated by the regression model: $Z = \alpha + \beta H + \varepsilon$, where ε is assumed to be random error, α and β are unknown regression parameters to be estimated from the data. When the regression line is linear $Z = \alpha + \beta H + \varepsilon$, the regression coefficient is the constant α that represents the rate of change of one variable (Z) as a function of changes in the other (H) while β is the slope of the regression line.

However this study used a multi regression model since there are four (4) independent variables for each of the three different measures of proceeds. Three multi regression equations were used as shown by equations (3.1), (3.2) and (3.3) below.

$$\check{Z}_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots\dots\dots 3.1,$$

In equation (3.1) $\check{Z}_1$ denotes the actual proceeds which is the dependent variable, β_1 measures the change in $\check{Z}_1$ with respect to Top5 institutional shareholding (X_1) holding other factors fixed and β_2 measures the change in $\check{Z}_1$ with respect to leverage (X_2) holding other factors constant and so on.

$$\check{Z}_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots\dots\dots 3.2$$

In equation (3.2) $\check{Z}_2$ denotes the actual proceeds deflated by Total Assets which is the dependent variable, β_1 measures the change in $\check{Z}_2$ with respect to Top5 institutional shareholding (X_1) holding other factors fixed and β_2 measures the change in $\check{Z}_2$ with respect to leverage (X_2) holding other factors constant and so on.

and

$$\check{Z}_3 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots\dots\dots 3.3$$

In equation (3.3) $\check{Z}_3$ denotes the actual proceeds deflated by Market Value of Equity which is the dependent variable, β_1 measures the change in $\check{Z}_3$ with respect to Top5 institutional shareholding (X_1) holding other factors fixed and β_2 measures the change in $\check{Z}_3$ with respect to leverage (X_2) holding other factors constant and so on.

The three measures of proceeds represented by equations (3.1),(3.2) and (3.3) were regressed against each of the independent variables that is, the Top5 institutional shareholding which is denoted by ($X_{1\%}$) which measure the proportion of institutional ownership in a firm, leverage which is denoted by ($X_{2\%}$) which measure the proportion of debt to assets, market value of equity to book value of equity which is denoted by ($X_{3\%}$) and Return on Equity which is denoted by ($X_{4\%}$). In the three equations β_0 is the intercept.

The computation of the control variables and the normalised proceeds was done using MS-Excel software while the regression analysis was computed using the Statistical Package for Social Sciences (SPSS) and these results are contained in Appendix VI. The data entry in the SPSS program involved entering each measure of proceeds against the Top5 institutional shareholding and the other three independent variables. The intercept, slope, correlation of determination, Pearson co-efficient, confidence level, t-statistic, standard error of estimate and the significance level for each equation was automatically generated by the program.

CHAPTER FOUR

4.0 DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

In this chapter, the descriptive statistics of the study variables is discussed. This chapter also discusses the empirical findings of this study and also gives a summary of the findings and interpretation with regard to the study objective.

4.2 Descriptive Statistics of Study Variables

The full sample consisted of twenty (20) completed rights issues from the period 1st January 1990 to December 31st, 2008. The average proceeds raised from rights issues is Ksh.1.227 Billion and the average Top5 institutional shareholding is 61.20 % for issuer firms for the period under study. It is evident from appendix IV that issuer firms with large issues had lower Top5 institutional holding. The results also show that the issuer firms in the study had an average of 61.20 % top5 institutional ownership. However, had the total institutional ownership been used, the proportion of total institutional ownership would have been higher than 61.20 %, since the top5 institutional index represents the lowest institutional ownership in a firm and this means that issuers firms in this study are well monitored and this explains the inverse relationship between institutional shareholding and the three measures of proceeds.

KCB issue of 2008 was the largest and raised Ksh.5.54 Billion but had the lowest institutional holding at 41.13%. In addition Diamond Trust issue of 2007 was the second largest issue and raised Ksh.4.5 Billion and had the second lowest institutional holding of 42.40%. Marshall's issue of 1995 was the smallest issue at Ksh.21.47M and its institutional holding stood at 85.73% far above KCB's and Diamond Trust's institutional shareholding. Hence at a glance the data in Appendix IV show that the relationship between institutional shareholding and proceeds of rights is inversely correlated. However the proceeds figures are highly dispersed over the 18 years

period of study ranging from Ksh.21 Million to Ksh.5.54 Billion. It is also worthy noting that four companies in the sample had made losses the financial year prior the issue. These are: Unga, Kenya, Orchards, Express Kenya and Uchumi Supermarket. The descriptive statistics of the study variables is contained in table 4.1 below.

Table 4.1: Descriptive Statistics of Study Variables

	Mean	Standard Deviation
Proceeds	Ksh.1,227,229,500.00	Ksh.1,503,286,,454.00
Proceeds /Total Assets	26.65%	23.21%
Proceeds / MV of equity	171.90%	402.51%
Top5 Institutional holding	61.20%	16.45%
Leverage	127.68%	202.9622
MV of Equity/BV of Equity	799.3%	715.16%
ROE	1.879%	139.21%

Table 4.1 summarises the mean and the standard deviation of the variables used in this study. The table shows that all the three measures of proceeds have a high variation as measured by the standard deviation and could be attributed to a number of factors. This is due to the fact that this study did not differentiate the issuer firms according to their firm sizes, the industry they belong to and did not discount the proceeds occurring at different times. Where MV is the Market Value of Equity and BV is the Book Value of Equity.

4.3 Institutional Ownership and Proceeds of Rights Issues

This section investigates the association between institutional ownership and the proceeds of rights issues. As predicted by Gao and Mahmudi (2008), firms with high institutional shareholding make small sized rights issues. To examine this relation empirically, the pooled OLS regression model was applied as shown in equation 4.1 below where $\check{Z}$ represent the three measures of proceeds; the actual proceeds and the two normalised proceeds.

$$\check{Z} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 4.1$$

The SPSS software was applied to analyse the data in appendix V, the regression co-efficient β_1 was found to be negative for top5 institutional index for the three measures of proceeds and the Pearson correlation was also found to be negative as shown in Table 4.2 and table 4.3.

Table 4.2: The Effect of Institutional Ownership on Proceeds of Rights Issues

	Actual Proceeds	Proceeds/TA	Proceeds/MV
Significance of Level	1%	5%	1%
Intercept	888,067.13	67.354	530.671
Top5 Holding ($\beta1$)	-18,880.471	-0.442	-3.987
Leverage ($\beta2$)	2,244.212	0.024	-0.137
MV/ BV ($\beta3$)	1,512.079	-0.029	-0.119
ROE($\beta4$)	-300.048	0.001669	-1.104
Sample Size (N)	20	20	20
Adjusted (R^2)	62.5%	25.9%	9.4%

Where MV is the Market Value of Equity, BV is the Book Value of Equity and TA is the Total Assets of sample firms. The table 4.2 reports the regression results examining the effect of institutional holding and the control variables on the amount of cash raised from a rights issue as measured by proceeds from the issue. The sample consisted of 20 completed rights issue from period 1990 to 2008.The dependent variables are three measures of proceeds; actual proceeds of rights issue, the proceeds deflated by firm's total assets and the proceeds deflated by the firm's market value of equity.

Table 4.2 highlights that the top5holding is significantly negatively associated with the proceeds of rights issues. The dependent variables in this table are the three measures of proceeds. The independent variables include the top5 institutional shareholding and three independent variables which act as control variables. In the

first model where actual proceeds were used as the dependent variables, the co-efficient of Top5 institutional shareholding is -18,888.471 at 1% significance. The actual proceeds were normalised by the firm's total assets in the second model and the co-efficient of Top5 institutional shareholding was found to be -0.442 which is significant at 5%.In the third model, proceeds were deflated by the firm's market value of equity in regression equation (3) and the co-efficient of Top5 institutional shareholding was found to be -3.987 and is significant at 1%.

Table 4.2 also shows the sign of the slope (β) which also explains the relationship between proceeds and other independent variables used as control variables in this study. Leverage is positively correlated with proceeds in model (1), slightly correlated with proceeds deflated by total assets and slightly negatively correlated with proceeds deflated by market value of equity. The market value of equity deflated by book value of equity is also positively correlated with actual proceeds in model (1) and slightly negatively correlated with the normalised proceeds in both model (2) and model (3).Return on Equity (ROE) is significantly correlated with proceeds in model (1) with a slope of -300.048, slightly positively correlated with proceeds deflated by total assets and negatively correlated with proceeds deflated by market value of equity.

4.4 Goodness of Fit Tests of the Regression Model
Al-Nasser and Radaideh (2008) say that a goodness of fit test is a test that measures how well the regression equation fits the data set from which it was derived. There are two types of goodness of fit test: whole equation and slope tests. This study used co-efficient of determination which is a whole equation test and the co-efficient of correlation test which is a slope test.

4.4.1 Co-efficient of Determination (R^2)
The adjusted co-efficient of Determination (R^2) is goodness of fit tests and measures how well the regression equation fits the data set from which it was derived. The adjusted co-efficient of Determination (R^2) is 62.5% for the first model. This means

that 62.5% of the variation in proceeds (Z) is explained by the variation by Top5 institutional holding, leverage, market value of equity deflated by book value of equity and ROE. The residual 37.5% is unexplained and is caused by chance, disturbance or other independent variables not included in the model. The adjusted (R^2) is 25.9% in model (2) meaning that the only 25.9% of the variation in proceeds deflated by total assets is explained by the four independent variables the residual 74.1% is unexplained while the adjusted (R^2) is 9.4% in the third model and the residual 90.6% is unexplained by the independent variables.

4.4.2 Pearson Correlation (R)

Stigler (1989) says that the Pearson correlation is an appraisal of the relationship between a particular independent variable and a dependent variable if the other independent variables are held constant. Thus the coefficient of correlation indicates an association between two variables.

Table 4.3 shows the relationship between two variables while holding other variables constant. The Top5 institutional shareholding has a negative correlation with the three measures of proceeds meaning as the Top5 institutional ownership increase the amount to be raised from a rights issue reduces. The leverage is positive correlated with proceeds and proceeds deflated by total assets though it is slightly negative correlated with proceeds deflated by market value of equity. The ratio of market value of equity to book value of equity and ROE are positively correlated with proceeds but negatively correlated with the other two measures of proceeds. These results are highlighted in table 4.3.

Table 4.3: Correlations between Proceeds and the Independent Variables

	Proceeds	Proceeds/Total Assets	Proceeds/MV
Top5 Holding	-0.5	-0.135	-0.09
Leverage	0.262	0.337	-0.1
MV / BV	0.739	-0.51	-0.364
ROE	-0.365	-0.27	-0.503

4.5 Summary of Findings and Interpretation

The results of the regression model show that the relationship between institutional ownership and proceeds is a negative correlation. This result is consistent with the findings by Gao and Mahmudi (2008) who documented that the relationship between institutional ownership and proceeds is an inverse association and found -60.8 in their model. In the first model where actual proceeds were used as the dependent variable the co-efficient of Top5 institutional shareholding was found to be -18,880.471.This means that the amount of cash to be raised in an equity issue (as measured by proceeds) reduces by Ksh.18.88 Million when Top5 institutional shareholding increases by one standard deviation.

In the second model where actual proceeds were deflated by total assets the co-efficient of Top5 institutional holding is -0.442 this means that the ratio of proceeds to total assets reduces by Ksh.442 when Top5 institutional shareholding increase by one standard deviation. This was also the trend in the third model where actual proceeds were deflated by market value of equity to book value of equity where the co-efficient of the Top5 institutional shareholding was found to be -3.987.This means that the ratio of proceeds to market value of equity reduces by Ksh.3,987 when the Top5 institutional shareholding increase by one standard deviation. The results of the slope β for the three measures of proceeds were found to be negative and this was consistent with the results of the Pearson correlation which was also found to be negative for the three as shown in table 4.3.

The findings imply that block shareholding help in controlling the agency problem that may arise in equity issues if managers are tempted to over issue and use the free cash flow to maximize their own private benefits at the expense of shareholders).This finding is consistent with other prior studies for instance Gao and Mahmudi (2008) and Faccio and Lasfer (2000) who argue that block shareholding help to reduce agency problems. D'Mello *et al.* (2007) found that institutional ownership mitigate

concerns about free cash flow problems and therefore dampen the negative abnormal returns at the announcement of an equity issue.

The relationship between institutional ownership and rights issues cannot be assessed in isolation. This is because there are other factors that may affect the financing decision around rights issues. It is for this reason that this study included other factors to act as control variables. Leverage was found to be positively correlated with actual proceeds and proceeds deflated by total assets and slightly negatively correlated with proceeds deflated by market value of equity but its Pearson correlation coefficient was found to be positive. The findings that leverage is positively correlated with actual proceeds and actual proceeds deflated by total assets is consistent with the Net Operating Income approach (NOI).Under the NOI approach the cost of equity is assumed to increase linearly with leverage.

The other explanation is that, as leverage increase, equity capital is raised to pay off debt thereby reducing the financial risk exposed to a firm as a result of high debt. On the other hand the slight negative correlation between leverage and proceeds deflated by market value of equity mean that as the share prices raise managers prefer equity to debt capital and this explain why managers issue equity when they believe the firm's shares are overvalued and they have private information that indicate that cash flows are going to fall in the future. This was documented by Myers and Majluf (1984) in their information asymmetric model. The ratio of market value of equity to book value of equity is positively correlated with actual proceeds and has a weak negative correlation of -0.27 with actual proceeds deflated by total proceeds and − 0.51 with proceeds deflated by market value of equity. The findings are consistent with Myers and Majluf (1984) that managers prefer equity when the shares prices rise. Hence as the ratio of market value of equity to book value of equity raise, managers will prefer equity to other sources of capital.

Return on Equity was found to be negatively correlated with the three measures of proceeds. As The Return on equity (ROE) increase the amount to be raised lowers

since a firm can finance itself from internal equity which is a much cheaper source of capital compared to external equity. This finding is consistent with the pecking order theory which is based on the premise that companies have a hierarchy for financing decisions and maximize value by systematically choosing to finance new investments using the cheapest available source of funds. This theory further holds that managers therefore prefer internally generated funds to external funding and if necessary, prefer debt to equity because of the lower information costs associated with the debt issues.

In conclusion, the various findings of this study are consistent with known theories and prior empirical studies. However, of great concern to this study was the institutional ownership which was the key independent variable. Whereas there are other factors that may affect how much is to be raised in an issue, the findings of this study have confirmed that there indeed exist a relationship between proceeds and institutional ownership. This relationship is negatively correlated where institutional investors monitor and take an active role in their investee firms because they are in a position to reduce agency related problems for instance free cash flow problem. Hence the empirical findings successfully achieved the objective of this study.

5.0 CONCLUSIONS AND RECOMMEDATIONS

5.1 Introduction

This chapter concludes the study and the implications of the main findings. It also give recommendations that maybe adopted by various policy makers and institutions for the well being of all stakeholders in the stock market. It also discusses limitations that maybe in this study and suggest areas that need further research.

5.2 Conclusion

This study examined the rights issues decisions under the monitoring of institutional shareholders. The driving force behind this theoretical analysis is that shareholders with large equity ownership tend to monitor management, prevent empire-building managers from raising too much capital and improve corporate decisions related to rights issues. This study has contributed enormously to the literature involving SEOs and corporate governance issues. It also reaffirms Gao and Mahmudi (2008) findings in USA that institutional shareholding is negatively correlated to proceeds. It has also helped to provide one of the solutions to the agency problem in SEOs and rights issue and that is, through block shareholding. The institutional shareholders can help to monitor their investee firms and even mitigate these firms from raising too much capital than is required to fund all projects with positive NPV. In conclusion, institutional investors in Kenya are monitors just like their counterparts in USA.

5.3 Recommendations for Policy Makers

This study not only contributes to the literature around rights issues but also to literature related to corporate governance. This study has proved that institutional investors can promote good governance by influencing financing decisions around rights issues of their investee firms. Companies' directors have also a role to play in

corporate governance and they are expected to uphold good governance practices and avoid behaviour that destroy shareholders wealth for instance investing in negative NPV projects just because they maximize their own private benefits. The Capital Market Authority should require all companies wishing to offer securities for sale to the public or a section of the public to include in their information memorandum a list of directors and their shareholding in addition to the list of top shareholders and their shareholding. This will enables the investing public to know the top shareholders of an issuer firm and what stake each director has in the issuer firm.

There is need for centralized and an automated database from which researchers, money managers and investors can obtain relevant data for their specifics needs. Therefore it is important for all the data at the NSE, CMA and registrar of companies is collected, assembled and organized in a manner that can be used. The researchers and academicians will require the database to carry out research thus contributing to knowledge. Stock brokers and money managers will need the data to advise their clients accordingly and the investors will require the data to make a more informed decision when investing.

There is need to audit how proceeds from equity issues are expended to ensure that such monies are spent in a manner that enhance shareholders wealth and are not misused or misappropriated. This auditor's report should be included in all financial statements of issuer firms. This will help dampen the negative market reactions to rights issues announcements. In addition the purpose for which the proceeds will be put into should be clearly stated in the information memorandum and an accountant's or auditor's report should be appended explaining the viability of the purpose.

5.4 Limitations of the Study

Firstly, there have been 22 rights issues in Kenya and this study only managed to study 20 issues. This resulted to a somewhat small sample and unfortunately, small samples are subject to errors that can distort the study. Secondly, this study did not take into account the time value of money and thus assumed one Kenya shilling of

1990 is equivalent to one Kenya shilling as at 31st December 2008 hence the proceeds were not discounted. Finally, the proceeds figures show a high variation as measured by the standard deviation as shown in table 4.1.This is partly explained by the fact that this study did not segment the firms according to the industries they belong to and into their firm sizes. For instance KCB will raise more equity than NIC bank despite the two being in the same industry because KCB's size is much bigger.

This study will also help exploit the need for Nairobi Stock Exchange and capital market authority to consider other seasoned equity issuance methods such as placings which have the advantage of bringing into ownership structure institutional shareholders who can monitor on behalf of retail shareholders. This could be through disqualification or waiving of pre-emption rights. Prior Studies by Slovin *et al.* (2000) and Barnes and Walker (2006) in UK shows that placings have better market reactions than rights. This has been attributed to the fact that placings lead to high levels of institutional or large investors in the ownership structure of a company.

5.5 Suggestions for Further Study

Prior studies have shown that on average stock prices react negatively to SEOs announcements. This finding was also found to hold in Kenya as documented by Njoroge (2003) and Nyangweso (2003). There is need to study the effect of institutional shareholding on stock prices (CAR) and find out whether the negative price reaction still hold in firms that enjoy high institutional shareholding. In addition, it is crucial to examine the effect of institutional shareholding on the operating performance of issuer firms in their post issue period.

There is need to study further the other factors that lead to good performance in firms that enjoy high institutional holding compared to firms that have low institutional ownership. This study attributed the good performance enjoyed by firms with high institutional holding to pre-monitoring of institutional investors. However, prior studies by Gibson *et al.* (2004) and Chemmanur *et al.* (2007) attribute the performance to superior knowledge held by these investors.

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Rights issues in Kenya from 1989 to 2008

Year	Company	Proceeds (Ksh.)
1989	Barclays Bank Of Kenya	88,000,000.00
1990	ICDI	70,966,196.00
1994	KFC	44,875,000.00
1993	Marshalls	21,475,475.00
1996	East Africa Portland Cement	1,008,000,000.00
1997	East African Breweries Ltd	1,488,275,775.00
1998	ICDI	282,584,280.00
2000	Unga	103,627070.00
2000	Pan Africa Insurance	516,000,000.00
2001	Kenya Orchards	36,000,000.00
2001	Standard Newspaper	306,080,775.00
2001	Total Kenya Company	1,275,086,508.00
2003	Express Kenya	178,004,216.00
2004	KCB	2,748,026,508.00
2005	Uchumi Supermarket	1,269,469,056.00
2005	CFC Bank	700,000,000.00
2006	Diamond Trust Bank	776,550,000.00
2007	Olympia Capital	420,000,000.00
2007	NIC Bank	1,000,000,000.00
2007	Diamond Trust Bank	4,500,000,000.00
2008	Housing Finance	2,300,000,000.00
2008	KCB	5,544,444,000.00
	TOTAL	**24,677,465,223.00**

Source: Nairobi Stock exchange

Listed Companies at the Nairobi Stock Exchange as at 31/12/2008

Main Investments Market Segment (MIMS)	**Agricultural Sector**
	Kakuzi Ltd
	Rea Vipingo
	Sasini Tea and Coffee
	Unilever Tea
	Commercial and Services
	Access Kenya
	Car and General Kenya
	CMC Holdings
	Hutchings Biemer Ltd
	Kenya Airways
	Marshalls East Africa
	Nation Media Group
	Safaricom
	Scan Group Kenya Ltd
	Standard Group Ltd
	TPS Serena
	Uchumi Supermarket
	Athi River Mining
	Bamburi Cement
	BOC Kenya
	British American Tobacco Ltd
	British Oxygen Kenya
	Carbacid Investments
	Crown-Berger Kenya
	East African Cables
	East African Portland Cement
	East African Breweries
	Eveready East Africa
	Kengen
	Kenya Oil
	Mumias Sugar
	Olympia Capital Holdings
	Sameer Group
	Total Kenya
	Unga Group
	Finance and Investment
	Barclays Bank of Kenya
	Centum Investment Company
	CFC Bank
	Diamond Trust Bank (K)
	Equity Bank
	Housing Finance Company
	Jubilee Insurance
	Kenya Commercial Bank
	Kenya Re-Insurance Corporation
	National Bank of Kenya

	Pan Africa Insurance
	Standard Chartered
	National Industrial Credit Bank (NIC) Bank
Alternative Investment Market Segment (AIMS)	A Baumann
	Citytrust Ltd
	Eaagads
	Express Kenya
	Kapchorua Tea
	Kenya Orchards
	Limuru Tea
	Williamson Tea Kenya
Fixed Income Securities Segment (FISMS)	Kenya power & Lighting-7% Preference shares
	Kenya power & Lighting-4% Preference shares

Source:www.nse.co.ke

APPENDIX III

Top5 Institutional shareholding of issuer firms

(Source: Respective Prospectuses at the time of issue, NSE monthly Bulletin and Annual reports for fiscal year prior the issue)

ICDI as at 30th June 1990

Shareholders	Shareholding (%)
ICDC	38.70
Christopher Kirubi	16.28
UAP Provincial Insurance Co Ltd	12.02
International House Ltd	6.30
Kiruma International Company Ltd	8.38
Barclays Bank (K) Nominees Ltd	1.15
Old Mutual Life Assurance	1.10
Others	16.07
Total	100.00

Top5 holding for ICDI is $\sum C_5 = 66.55\%$

Marshalls as at 31st October 1993

Shareholders	Shareholding (%)
Marshalls Investments Ltd	65.57
Woodside Ltd	13.36
Jubilee Insurance Company Ltd	2.99
Marshalls E.A Ltd-Staff provident Fund	1.96
Agile Ltd	1.85
Mrs S.V.R.Shah	1.09
Others	13.18
Total	100.00

Top5 holding for Marshalls is $\sum C_5 = 85.73\%$

East Africa Portland Cement as at 31st March 1996

Shareholders	Shareholding (%)
NSSF	27.00
Cementia(Lafarge)	14.60
BCI	14.60
Bamburi Nominees	12.50
Kenya Re-insurance	0.95
Others	30.35
Total	100.00

Top5 holding for Portland Cement is $\sum C_5 = 69.65\%$

East African Breweries as at 31st December 1996

Shareholders	Shareholding (%)
Diageo Kenya Ltd	42.82
Board of trustees NSSF	4.82
Diageo Holdings Netherlands BV	4.60
Barclays (K) Nominees Ltd A/C 9011	3.06
Guinness Overseas Ltd	2.61
kanaksinh Karsandas & Sandip Kanaksinh Babla	2.00
Barclays (Kenya) Nominees limited A/C 9057	1.60
Others	34.49
Total	100.00

Top5 holding for EABL is $\sum C_5 = 57.91\%$

ICDI as at 30th June 1998

Shareholders	Shareholding (%)
ICDC	25.15
Christopher Kirubi	16.28
UAP Provincial Insurance Co Ltd	9.83
International House Ltd	6.30
Kiruma International Company Ltd	3.41
Barclays Bank (K) Nominees Ltd	1.15
Old Mutual Life Assurance	1.10
Others	36.78
Total	100.00

Top5 holding for ICDI is $\sum C_5 = 45.84\%$

Unga as at 30th June 2000

Shareholders	Shareholding (%)
Victus Ltd	60.68
Nomura Nominees Ltd	2.66
Baloobhai Chnotabhai Patel	1.52
Rajesh Dharamshi Shah	1.34
Stanbic Nominees (K) Ltd	1.27
Ali Mohammed Adam	0.95
Velji Ralchand Shah	0.61
Cannon Assurance	0.60
Jubilee Insurance Ltd	0.50
Others	29.87
Total	100.00

Top 5 holding for Unga is $\sum C_5 = 65.71\%$

Pan Africa Insurance 30th April 2000

Shareholders	Shareholding (%)
Hubris Holding Ltd	46.08
Thammo Holdings Ltd	7.05
Kanchar Kenya Ltd	6.75
Co-op Trust Investment Services Ltd A/C 1450	6.25
Nak Enterprises Ltd	3.68
Githere Investments	2.82
Co-op Trust Investment Services Ltd A/C 1451	1.87
Stanbic Nominees (K)	1.31
Others	24.19
Total	100.00

Top5 holding for Pan Africa Insurance is $\sum C_5 = 69.80\%$

Total Kenya 30th September 2001

Shareholders	Shareholding (%)
Total Outre-mer	72.16
Elf Oil Africa Ltd	6.13
Elf Oil Kenya Ltd	4.00
Barclays Bank Nominees A/C 1256	0.18
ICEA	0.17
Barclays Bank Nominees A/C 1853	0.49
ICEA life fund	0.28
Others	16.59
Total	100.00

Top5 holding for Total is $\sum C_5 = 82.64\%$

Kenya Orchards as 31st March 2001

Shareholders	Shareholding (%)
Westpac Holdings Limited	34.28
Thakarshi Keshav Patel	33.60
Vipul Thakarshi Patel	14.89
Sadolin Paints (EA) ltd	14.21
Penta Enterprises Ltd	1.65
Kurbhan Baloo	0.15
Malek Bhaloo	0.15
A.J Virjee	0.07
Khadija Sharrif	0.07
Nasim Virjee	0.07
Others	0.86
Total	100.00

Top5 holding for Kenya Orchards is $\sum C_5 = 50.14$

Standard News paper as at 31st October 2001

Shareholders	Shareholding (%)
S. N. G. Holdings Limited	50.30
Miller Trustess Limited	14.60
Trade world Kenya Limited	15.30
Kirtesh Premchand Shah	0.70
Trade world Kenya Limited	0.60
Julius Gecau	0.30
Savitaben Velji Raichand Shah	0.30
Eufrazio Juliao Goes	0.20
Sherai Gulamhussein Parpai	0.20
AAKS Nominees Limited A/c 230	0.10
Others	17.4
Total	100.00

Top5 holding for Standard Newspaper is $\sum C_5 = 80.9\%$

Express Kenya as at 27th November, 2003

Shareholders	Shareholding (%)
Etcoville Holdings Ltd	50.02
KTDC Utalii Investments	6.89
Pekan Ltd	3.28
UAP Provincial Insurance Co Ltd	1.69
Stanbic Nominees (K) Ltd	1.31
Peter Tiras Kanyago	1.06
Velji Raichand Shah(Deceased)	1.01
Others	34.76
Total	100.00

Top 5 holding = $\sum C_5 = 63.19\%$

Kenya Commercial Bank as at 4th May 2004

Shareholders	Shareholding (%)
Permanent Secretary to treasury of Kenya	35.00
Nomura Nominees Ltd	5.00
ICDC Investment Company Ltd	4.321
KCB Staff pension Fund	4.118
Mr. Sunil Narshi Shah	2.065
National Social Security Fund	0.891
Kenya Re Insurance	0.668
Freight Forwarders (K) Ltd	0.627
Barclays (K) Nominees Ltd	0.540
UAP Provincial Insurance	0.537
Others	46.233

Top5 holding for KCB IS $\sum C_5 = 49.33\%$

Uchumi Supermarket as at 22nd August 2005

Shareholders	Shareholding (%)
ICDC investment	24.99
Kwa Holdings E.A Ltd	18.75
Industrial & Commercial Development Corporation	7.78
Jamal Karim	4.81
BBK Nominees Ltd a/c 9099	3.34
BBK Nominees Ltd a/c 9057	2.99
Sunil Narshi Shah	2.33
Orthodox Archbishopric Of Kenya	1.83
Old Mutual Life Assurance Company Ltd	1.20
John Kidunga Kimani	0.92
Others	31.06
Total	100.00

Top5 holding for Uchumi is $\sum C_5 = 57.85\%$

CFC Bank as at 30th September 2005

Shareholders	Shareholding (%)
Gambit Holdings Ltd	49.68
African Liason & Consultants Services Ltd	30.03
Sovereign Trust Ltd	13.92
Kingsway Nominees Ltd	3.62
Kamau Mike Maina	1.13
Shah Aruna Chandrakant (Mrs.)	0.55
Phoenix of East Africa Assurance Company Ltd	0.35
APA Insurance Ltd	0.25
Sayani Investment Ltd	0.24
Beechwood Investments Ltd	0.23
Total	100.00

Top 5 holding for CFC is $\sum C_5 = 98.32\%$

Olympia Capital as at 31st December 2006

Shareholders	Shareholding (%)
Dunlop Properties Ltd	37.99
Croxley Properties Ltd	8.16
Karen Enterprises Ltd	6.92
CFCFS Nominees Ltd	4.25
Nairobi Nominee Ltd A/C Rakesh Gadani	4.24
Eliud Mathu Wamae	1.79
Suboth K Gadani	1.78
Scottlink Ltd	1.73
Jagden Kristians	1.65
Prakash Kantilal Gadani	1.50
Others	29.99
Total	100.00

Top5 holding for Olympia capital is $\sum C_5 = 63.29\%$

Diamond Trust Bank as at 30th September 2006

Shareholders	Shareholding (%)
Aga Khan Fund For Economic Development	20.21
International Finance Corporation	9.85
The Jubilee Insurance Company Ltd	8.86
Habib Bank Ltd	3.82
The Diamond Jubilee Investment Trust (U) Ltd	1.87
Cray sell Investments Ltd	1.57
Noorali Mohan Manji	1.45
Ameerali Nazarali Esmali	1.43
Mehul Pata	1.01
Amin Nanji Juma	0.92
Others	49.01
Total	100.00

Top5 holding for Diamond Trust is $\sum C_5 = 44.61\%$

NIC Bank as at 30th June 2007

Shareholders	Shareholding (%)
First Chartered Securities	15.85
ICEA Investment Services Ltd	9.06
Livingstone Registrars	7.82
Rivel (K) Ltd	7.43
Duncan Nderitu Ndegwa	4.43
Saimar Ltd	4.13
Amwa Holdings Ltd	1.90
KCB Nominees Ltd A/C 7699	1.50
Thuthuma Ltd	1.26
Makiwa Consults	1.21
Others	45.41
Total	100.00

Top5 holding for NIC is $\sum C_5$ = 44.29%

Diamond Trust Bank as at 30th September 2007

Shareholders	Shareholding (%)
The Aga Khan for Economic Development	22.73
Barclays (K) Nominees Ltd	10.06
The Jubilee Insurance Co Ltd	6.29
The Diamond Jubilee Investment Trust (U) Ltd	1.87
Ameerali Nazarali Esmali	1.50
Cray shell Investment Ltd	1.45
Noorali Mohan Manji	1.44
Amin Nanji Juma	0.91
Gulzar Amirali Somji	0.77
Phoenix of Eat Africa Assurance Co Ltd	0.74
Others	52.24
Total	100.00

Top5 holding for Diamond Trust is $\sum C_5$ = 42.40%

Housing Finance as at 23rd November 2007

Shareholders	Shareholding (%)
Equity Bank	20.00
National Social Security Fund	7.87
Permanent Secretary-Treasury	7.32
BBK Nominees Ltd	4.90
North Bound Holdings	4.60
Steel Son Ltd	3.55
Nomura Nominee Ltd	3.15
Ndungu Paul Wanderi	1.37
Kibuwa Enterprises Ltd	0.91
Kirinyaga Construction Ltd	0.52
Others	45.81
Total	100.00

Top 5 holding for Housing Finance is $\sum C_5 = 44.69\%$

Kenya Commercial Bank as at 31st December 2007

Shareholders	Shareholding (%)
Permanent Secretary-Treasury	26.23
National Social Security Fund	6.80
Stanbic Nominees Kenya	3.35
Mr. Sunil Narshi Shah	2.33
KCB staff Pension fund registered	3.23
Stanbic Nominee (K) Ltd	1.53
Nomura Nominees Ltd A/C NSSF	1.01
Kenya Re-insurance Corporation	0.87
Barclays (K) Nominees Ltd A/C 9230	0.82
Barclays (K) Nominees Ltd A/C 1256	0.69

Top 5 holding for KCB is $\sum C_5 = 41.13\%$

Where $\sum C_5$ is the summation of the proportion of top5 institutional investors in a firm

Proceeds and Institutional Shareholding of Issuer Firms

	Company	Rights Issue proceeds Kshs.	Top 5 Institutional Holding (%)
1990	ICDI	70,966,196.00	66.55
1993	Marshalls	21,475,475.00	85.73
1996	East Africa Portland Cement	1,008,000,000.00	69.65
1997	East African Breweries Ltd	1,488,275,775.00	57.91
1998	ICDI	282,584,280.00	45.84
2000	Unga	103,627070.00	65.71
2000	Pan Africa Insurance	516,000,000.00	69.80
2001	Kenya Orchards	36,000,000.00	50.14
2001	Standard Newspaper	306,080,775.00	80.90
2001	Total Kenya Company	1,275,086,508.00	82.64
2003	Express Kenya	178,004,216.00	63.19
2004	KCB	2,748,026,508.00	49.33
2005	Uchumi Supermarket	1,269,469,056.00	57.85
2005	CFC Bank	700,000,000.00	98.32
2006	Diamond Trust Bank	776,550,000.00	44.61
2007	Olympia Capital	420,000,000.00	63.29
2007	NIC Bank	1,000,000,000.00	44.29
2007	Diamond Trust Bank	4,500,000,000.00	42.40
2008	Housing Finance	2,300,000,000.00	44.69
2008	KCB	5,544,444,000.00	41.13
	Total	**24,473,623,663.00**	

Proceeds, Top5 Institutional Ownership and Control Variables Ksh. 000'

Financial Data from Financial Statements for Issuer Firms Prior the Issue

Company	Total Assets	Market Value of Shares	Total Liabilities	Net Profit	Book Value of Shares
ICDI	152,251.20	195,000.00	109,648.05	35,958.10	89,141.00
Marshalls	1,287,000.00	263,873.61	531,720.00	16,106.00	32,480.00
Portland	5,790,621.00	2,115,000.00	4,090,415.00	375,707.00	450,000.00
EABL	4,186,928.00	2,700,000.00	4,159,104.00	167,810.00	655,216.00
ICDI	760,461.00	1,109,143.34	177,760.00	149,744.00	141,292.00
Unga	4,501,036.00	721,624.87	2,292,623.00	- 682,598.00	234,294.00
PA Insurance	3,061,462.00	648,000.00	1,019,905.00	30,819.00	120,000.00
K. Orchards	84,408.00	2,000.00	103,560.00	- 7,361.00	3,000.00
Standard	635,918.00	70,465.23	780,807.00	62,842.00	64,161.00
Total Kenya	10,073,413.00	3,080,000.00	8,438,423.00	206,509.00	280,000.00
Express	810,982.00	43,200.00	799,514.00	- 68,151.00	24,000.00
KCB	5,613,853.00	8,078,400.00	54,771,404.00	485,520.00	1,496,000.00
Uchumi	1,411,366.00	720,000.00	2,738,824.00	- 654,358.00	300,000.00
CFC Bank	29,815,563.00	8,352,000.00	24,004,079.00	665,454.00	720,000.00
DTB	16,384,422.00	4,006,062.75	9,730,651.00	294,598.00	496,875.00
Olympia C	796,893.00	310,000.00	597,407.00	14,800.00	50,000.00
NIC Bank	26,062,413.00	8,406,284.20	23,026,171.00	458,004.00	412,073.00
DTB	21,737,391.00	10,131,591.74	18,869,301.00	487,830.00	558,984.00
HFCK	10,369,255.00	5,261,250.00	8,922,984.00	73,508.00	575,000.00
KCB	120,479,553.00	56,886,000.00	107,274,893.00	2,974,572.00	1,996,000.00
Total	**264,015,189.20**	**113,099,895.74**	**272,439,193.05**	**5,087,313.10**	**8,698,516.00**
Mean	**13,200,759.46**	**5,654,994.79**	**13,621,959.65**	**254,365.66**	**434,925.80**

The Three Measures of Proceeds of Rights Issues

Year	Company	Actual Proceeds	Proceeds/Total Assets	Proceeds/Market Capitalisation
1990	ICDI	70,966.20	46.61	36.39
1993	Marshalls	21,475.48	1.67	8.14
1996	Portland Cement	1,008,000.00	17.41	47.66
1997	EABL	1,488,275.78	35.55	55.12
1998	ICDI	282,584.28	37.16	25.48
2000	Unga	103,627.07	2.30	14.36
2000	Pan Africa Insurance	516,000.00	16.85	79.63
2001	Kenya Orchards	36,000.00	42.65	1,800.00
2001	Standard Newspaper	306,080.78	48.13	434.37
2001	Total Kenya	1,275,086.51	12.66	41.40
2003	Express Kenya	178,004.22	21.95	412.05
2004	KCB	2,748,026.51	48.95	34.02
2005	Uchumi Supermarket	1,269,469.06	89.95	176.32
2005	CFC Bank	700,000.00	2.35	8.38
2006	Diamond Trust Bank	776,550.00	4.74	19.38
2007	Olympia Capital	420,000.00	52.70	135.48
2007	NIC Bank	1,000,000.00	3.84	11.90
2007	Diamond Trust Bank	4,500,000.00	20.70	44.42
2008	Housing Finance	2,300,000.00	22.18	43.72
2008	KCB	5,544,444.00	4.60	9.75
Total		24,544,589.89	532.95	3,437.97
Mean		1,227,229.49	26.65	171.90

Top5 Institutional Shareholding and the Control Variables

		X1	X2	X3	X4
Year	Company	Top5 Holding (%)	Leverage (%)	MV/BV (%)	ROE (%)
1990	ICDI	66.55	72.02	218.75	40.34
1993	Marshalls	85.73	41.31	812.42	49.59
1996	Portland Cement	69.65	70.64	470.00	83.49
1997	E A B L	57.91	99.34	412.08	25.61
1998	ICDI	45.84	23.38	785.00	105.98
2000	Unga	65.71	50.94	308.00	- 291.34
2000	Pan Africa Insurance	69.8	33.31	540.00	25.68
2001	Kenya Orchards	50.14	122.69	66.67	- 245.37
2001	Standard Newspaper	80.9	122.78	109.83	97.94
2001	Total Kenya Company	82.64	83.77	1,100.00	73.75
2003	Express Kenya	63.19	98.59	180.00	- 283.96
2004	KCB	49.33	975.65	540.00	32.45
2005	Uchumi Supermarket	57.85	194.05	240.00	- 218.12
2005	CFC Bank	98.32	80.51	1,160.00	92.42
2006	Diamond Trust Bank	44.61	59.39	806.25	59.29
2007	Olympia Capital	63.29	74.97	620.00	29.60
2007	NIC Bank	44.29	88.35	2,040.00	111.15
2007	Diamond Trust Bank	42.4	86.81	1,812.50	87.27
2008	Housing Finance	44.69	86.05	915.00	12.78
2008	KCB	41.13	89.04	2,850.00	149.03
Total		**1,223.97**	**2,553.59**	**15,986.50**	**37.58**

APPENDIX VI

The Results for the Multi Regression Analysis

CONFIDENCE LEVEL

Model 1

Actual proceeds, Top5 Institutional Shareholding and the control Variables

	Coefficients	Significance	95% Confidence Interval	
Model			Lower Bound	Upper Bound
1 (Constant)		0.45	- 1,546,870.88	3,323,005.15
X1		0.22	- 50,046.82	12,285.88
X2		0.06	- 67.71	4,556.13
X3		0.00	654.58	2,369.58
X4		0.88	- 4,388.00	3,787.91
a			Dependent Variable: Z1	

Model 2

Proceeds deflated by total assets, Top5 Institutional Shareholding and the control Variables

	Coefficients	Significance	95% Confidence Interval	
Model			Lower Bound	Upper Bound
1.00 (Constant)		0.02	14.47	120.23
X1		0.18	- 1.12	0.23
X2		0.32	- 0.03	0.07
X3		0.03	- 0.04	- 0.00
X4		0.69	- 0.07	0.11
a			Dependent Variable: Z2	

Model 3

Proceeds deflated by Market Value of Equity, Top5 and the control Variables

	Coefficients	Significance	95% Confidence Interval	
Model			Lower Bound	Upper Bound
1.00 (Constant)		0.28	- 483.22	1,544.57
X1		0.52	- 16.96	8.99
X2		0.77	- 1.10	0.83
X3		0.49	- 0.48	0.24
X4		0.19	- 2.81	0.60
a			Dependent Variable: Z3	

COEFFICIENTS

Model 1

Actual proceeds, Top5 Institutional Shareholding and the control Variables

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients Beta	t
1.00	(Constant)	888,067.13	1,142,385.97		0.78
	X1	- 18,880.47	14,622.14	- 0.21	- 1.29
	X2	2,244.21	1,084.67	0.30	2.07
	X3	1,512.08	402.31	0.72	3.76
	X4	- 300.05	1,917.92	- 0.03	- 0.16
a	Dependent Variable: Z1				

Model 2

Proceeds deflated by total assets, Top5 Institutional Shareholding and the control Variables

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t
1.00	(Constant)	67.35	24.81		2.71
	X1	- 0.44	0.32	- 0.31	- 1.39
	X2	0.02	0.02	0.21	1.02
	X3	- 0.02	0.01	- 0.65	- 2.40
	X4	0.02	0.04	0.10	0.40
a	Dependent Variable: Z2				

Model 3

Proceeds deflated by Market Value of Equity, Top5 and the control Variables

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta
1.00	(Constant)	530.67	475.68	
	X1	- 3.99	6.09	- 0.16
	X2	- 0.14	0.45	- 0.07
	X3	- 0.12	0.17	- 0.21
	X4	- 1.10	0.80	- 0.38
a	Dependent Variable: Z3			

PEARSONS CORRELATIONS

Model 1

Actual proceeds, Top5 Institutional Shareholding and the control Variables

		Z1	X1	X2	X3	X4
	Z1	1.00	-0.50	0.26	0.74	0.37
	X1	-0.50	1.00	-0.18	- 0.33	0.03
	X2	0.26	-0.18	1.00	- 0.11	- 0.02
	X3	0.74	-0.33	-0.11	1.00	0.56
	X4	0.37	0.03	-0.02	0.56	1.00
Sig. (1-tailed)	Z1	.	0.01	0.13	0.00	0.06
	X1	0.01	.	0.22	0.08	0.46
	X2	0.13	0.22	.	0.32	0.47
	X3	0.00	0.08	0.32	.	0.01
	X4	0.06	0.46	0.47	0.01	.

Model 2

Proceeds deflated by total assets, Top5 Institutional Shareholding and the control Variables

		Z2	X1	X2	X3	X4
Pearson Correlation	Z2	1.00	- 0.13	0.34	- 0.51	- 0.27
	X1	- 0.13	1.00	- 0.18	- 0.33	0.03
	X2	0.34	- 0.18	1.00	- 0.11	- 0.02
	X3	- 0.51	- 0.33	- 0.11	1.00	0.56
	X4	- 0.27	0.03	- 0.02	0.56	1.00
Sig. (1-tailed)	Z2	.	0.29	0.07	0.01	0.12
	X1	0.29	.	0.22	0.08	0.46
	X2	0.07	0.22	.	0.32	0.47
	X3	0.01	0.08	0.32	.	0.01
	X4	0.12	0.46	0.47	0.01	.

Model 3

Proceeds deflated by Market Value of Equity, Top5 and the control Variables

		Z3	X1	X2	X3	X4
Pearson Correlation	Z3	1.00	- 0.09	- 0.01	-0.36	- 0.50
	X1	-0.09	1.00	- 0.18	0.33	0.03
	X2	0.01	- 0.18	1.00	-0.11	- -0.02
	X3	0.36	- 0.33	- 0.11	1.00	0.56
	X4	0.50	0.03	- 0.02	0.56	1.00
Sig. (1-tailed)	Z3	.	0.35	0.48	0.06	0.01
	X1	0.35		0.22	0.08	0.46
	X2	0.48	0.22		0.32	0.47
	X3	0.06	0.08	0.32		0.01
	X4	0.01	0.46	0.47	0.01	

ANOVA

Model 1

Actual proceeds, Top5 Institutional Shareholding and the control Variables

Model		Sum of Squares	df	Mean Square
1.00	Regression	30,235,493,315,544.50	4.00	7,558,873,328,886.13
	Residual	12,702,039,800,902.40	15.00	846,802,653,393.49
	Total	42,937,533,116,446.90	19.00	
a	Predictors: (Constant), X4, X2, X1, X3			
b	Dependent Variable: Z1			

Model 2

Proceeds deflated by total assets, Top5 Institutional Shareholding and the control Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1.00	Regression	4,246.28	4.00	1,061.57	2.66	0.07
	Residual	5,990.53	15.00	399.37		
	Total	10,236.82	19.00			
a	Predictors: (Constant), X4, X2, X1, X3					
b	Dependent Variable: Z2					

Model 3

Proceeds deflated by Market Value of Equity, Top5 and the control Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1.00	Regression	875,921.79	4.00	218,980.45	1.49	0.25
	Residual	2,202,337.33	15.00	146,822.49		
	Total	3,078,259.12	19.00			
a	Predictors: (Constant), X4, X2, X1, X3					
b	Dependent Variable: Z3					

SUMMARY OF THE MODEL

Model 1

Actual proceeds, Top5 Institutional Shareholding and the control Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change
1	0.84	0.70	0.63	920,218.81	0.70
a				Predictors: (Constant), X4, X2, X1, X3	

Model 2

Proceeds deflated by total assets, Top5 Institutional Shareholding and the control Variables

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics
Model					R Square Change
1	0.6441	0.414805031	0.25875304	19.98421	0.414805031
a				Predictors: (Constant), X4, X2, X1, X3	

Model 3

Proceeds deflated by total assets, Top5 Institutional Shareholding and the control Variables

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics
Model					R Square Change
1.00	0.53	0.28	0.09	383.17	0.28
a				Predictors: (Constant), X4, X2, X1, X3	