THE EFFECT OF CORPORATE GOVERNANCE PRACTICES ON STOCK MARKET LIQUIDITY OF FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

MARTIN BARASA SAKWA

D61/P/7697/2006

A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

JUNE, 2015
DECLARATION

This research project report is my original work and has not been submitted for an award of a diploma or a degree in this or any other university.

Signature……………………………….. Date…………………………

Martin Barasa Sakwa
D61/P/7697/2006

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

Signature……………………………….. Date…………………………

Dr. Fredrick Ogilo
Lecturer
Department of Finance and Accounting
School of Business
University of Nairobi
ACKNOWLEDGEMENT

I would like to thank the Almighty God for availing an opportunity and strength to pursue my education. It is through His abundant grace that has brought this research project to a success.

My sincere thank go to my supervisor, Dr. Fredrick Ogilo for his support and professional advice was invaluable to the development and completion of this study. His suggestions, vast knowledge of the discipline of finance, his standard for quality and details, gave me impetus to refine and produce this quality work.

I am grateful to all my lecturers, fellow students and friends who through their interaction and experiences shared helped to sharpen and widen my knowledge base which led to the success of this research work. Profound thanks and appreciation go to my family for their unfailing support. My parents and siblings, I will eternally be grateful to you.
DEDICATION

To my parents Mr. Vincent M Sakwa & Mrs. Elizabeth N Sakwa, whose love for education is inspirational for many as exhibited through their passion of educating their family and others in society. To my wife Joan Okango and Daughter Larisa Lena Barasa together with my siblings who constantly encouraged me to finish this research project.
ABSTRACT

This study sought to investigate the effect of selected corporate governance variables on stock liquidity for firm’s listed at the Nairobi Securities Exchange. In particular the study examined the effect of size of the Board on stock liquidity, the effect of frequency of board meetings on stock liquidity, the effect of unitary structure of Board on stock liquidity, the effect of Board independence on stock liquidity and the effect of seniority of the boards on stock liquidity for firms listed at the Nairobi Securities Exchange. The study addressed the gap of whether the corporate governance variables had an effect on the stock liquidity and whether one can use them to predict the stock liquidity at the bourse. The study used a descriptive research design. The population of this study comprised of all the listed firms at the Nairobi Securities Exchange from January 2009 to December 2013. The sample constituted all the firms that comprise the NSE 20 Share Index. Analysis was conducted through the use of regression analysis and ANOVA. The results indicated that corporate governance variables, as represented by the predictor variables only influenced four percent of variations in stock liquidity as indicated by the adjusted R square statistic. The model thus only explained a small proportion of the variations in stock liquidity. The study also found board independence to have a positive and sizeable effect on stock liquidity. Thus a shift in board independence influences a same direction shift of the stock liquidity; board size had a positive but lesser effect on stock liquidity; further frequency of board meetings had a positive but lesser effect on stock liquidity. Unitary structure of the board was found to have a negative relationship with stock liquidity and Seniority of the board slightly larger negative relationship with stock liquidity. The ANOVA test of significance on the five predictor variables found none of the variables to be of significance in predicating stock market liquidity in the model. On the basis of the findings, the study recommends none of the selected corporate governance variables of firms in the Nairobi Securities Exchange can be reliably used as a basis for projecting stock liquidity variations of listed firms. It is therefore suggested that other corporate governance variables be studied to determine those that can be reliably used to predict stock liquidity variations at the Nairobi Securities Exchange.
# TABLE OF CONTENTS

DECLARATION........................................................................................................................................... ii

ACKNOWLEDGEMENT .......................................................................................................................... iii

DEDICATION............................................................................................................................................... iv

ABSTRACT.................................................................................................................................................. v

LIST OF ABBREVIATIONS ................................................................................................................... viii

LIST OF TABLES ....................................................................................................................................... ix

CHAPTER ONE: INTRODUCTION ........................................................................................................ 1

1.1 Background of the Study ...................................................................................................................... 1

1.1.1 Corporate Governance .................................................................................................................. 2

1.1.2 Stock Market Liquidity .................................................................................................................. 3

1.1.3 Corporate Governance and Stock Market Liquidity ..................................................................... 4

1.1.4 The Nairobi Securities Exchange ................................................................................................. 4

1.2 Research Problem .............................................................................................................................. 5

1.3 Research Objective ............................................................................................................................ 6

1.4 Value of the Study ............................................................................................................................... 6

CHAPTER TWO: LITERATURE REVIEW ............................................................................................ 7

2.1 Introduction ......................................................................................................................................... 7

2.2 Theoretical Review .............................................................................................................................. 7

2.2.1 Agency Theory ............................................................................................................................... 7

2.2.2 Stewardship Theory ....................................................................................................................... 8

2.2.3 Resource Dependence Theory ....................................................................................................... 9

2.2.4 Stakeholder Theory ....................................................................................................................... 9

2.3 Corporate Governance Practices .................................................................................................... 10

2.4 Determinants of Stock Market Liquidity ........................................................................................... 12

2.5. Empirical Review ............................................................................................................................. 14

2.6. Summary of literature ...................................................................................................................... 17

CHAPTER THREE: RESEARCH METHODOLOGY ......................................................................... 18

3.1 Introduction ....................................................................................................................................... 18

3.2 Research Design ................................................................................................................................ 18

3.3 Population ......................................................................................................................................... 18

3.4 Data Collection .................................................................................................................................. 18
3.5 Data Analysis ..................................................................................................................... 18
  3.5.1 Model Specification ............................................................................................. 19
  3.5.2 Operationalization of Variable ............................................................................ 19
  3.5.3 Test of Significance ............................................................................................... 20

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS .................. 21
  4.1 Introduction ............................................................................................................... 21
  4.2 Summary Statistics .................................................................................................. 21
  4.3 Regression Model Results ....................................................................................... 22
    4.3.1 Determination of How the Model Fits ............................................................ 22
    4.3.2 Regression Model ............................................................................................... 23
  4.4 Interpretation of Results ......................................................................................... 25

CHAPTER FIVE: SUMMARY CONCLUSION AND RECOMMENDATIONS .......... 27
  5.1 Introduction ............................................................................................................... 27
  5.2 Summary of Findings ................................................................................................. 27
    5.2.1 Effect of Board size on Stock Market Liquidity ............................................. 27
    5.2.2 Effect of Board independence on Stock Market Liquidity .............................. 28
    5.2.3 Effect of Unitary structure of the Board on Stock Market Liquidity .............. 28
    5.2.4 Effect of Board seniority on Stock Market Liquidity .................................... 28
    5.2.5 Effect of Frequency of Board Meeting on Stock Market Liquidity ............. 29
  5.3 Conclusion ............................................................................................................... 29
  5.4 Recommendation ..................................................................................................... 29
  5.5 Limitations of the Study ........................................................................................... 30
  5.6 Suggestions for Further Studies ............................................................................... 30

REFERENCES ..................................................................................................................... 31

APPENDICES ....................................................................................................................... 34
  APPENDIX 1: LIST OF COMPANIES .............................................................................. 34
  APPENDIX II: CORPORATE GOVERNANCE PRACTICES DATA TABLE ............... 37
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>Chief executive officer</td>
</tr>
<tr>
<td>CMA</td>
<td>Capital market authority</td>
</tr>
<tr>
<td>KCC</td>
<td>Kenya corporative creameries</td>
</tr>
<tr>
<td>NSE</td>
<td>Nairobi securities exchange</td>
</tr>
<tr>
<td>NASDAQ</td>
<td>National association of securities dealers automated quotations.</td>
</tr>
<tr>
<td>NYSE</td>
<td>New York stock exchange.</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 4.1: Summary of Descriptive Statistics
Table 4.2: Summary of Corporate governance Variables on Stock Liquidity
Table 4.3: Coefficients of the Model
Table 4.4: ANOVA for Corporate governance Variables on Stock Liquidity
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Governments throughout the world have become aware of the importance of corporate governance for the efficient performance of the stock market. A market that has sound corporate governance proves to be very efficient. An efficient market in turn attracts more investment and increased transaction thus increasing liquidity. The term ‘corporate governance’ is susceptible both to broad and narrow definitions. The important point is that corporate governance is a concept, rather than an individual instrument. It includes debate on the appropriate management and control structures of a company. Further it includes the rules relating to the power relations between owners, the Board of Directors, management and, last but not least, the stakeholders such as employees, suppliers, customers and the public at large (Murthy, 2003).

Various theories explain the relationship between corporate governance and liquidity such as the agency theory, stewardship theory, Resource dependent theory and stakeholder theory. These theories justify the relationship between the governance practices and asymmetric information. In relation to governance of firms, these theories have both merits and shortcomings. They provide good explanations in many situations but have severe difficulties in dealing with institutions with several stakeholders and complex objective functions for the management. Firms guided by shareholder value may work more effectively than firms guided by stakeholder disharmony.

The Nairobi Securities t Exchange (NSE) has played an important role in mobilizing resources and providing a means by which companies can raise capital from investors. By providing companies with an opportunity to be privatized, the NSE has ensured that ownership of such companies in widely distributed among members of the public (Jebet, 2001). In this regard the NSE expects the directors of every public listed company to undertake or commit themselves to adopt good corporate governance practices as part of their continuing listing obligations. Investors are concerned about liquidity risk as it affects their ability to trade the quantity of shares they want to buy or sell within their desired time-frame (Vassalou, 2005). Most importantly, investors fear that in the event of a financial crisis, they may not be able to exit the market fast enough to contain
their losses. For emerging market countries, good corporate governance reduces emerging market vulnerability to financial crises, reinforces property rights, reduces transaction costs and the cost of capital, and leads to capital market development & stock market liquidity. Weak corporate governance frameworks reduce investor confidence, and can discourage outside investment and thus lower stock market liquidity (The World Bank, 2008). While the Corporate governances have been studied and debated at length, much less have been done to understanding its effect on stock liquidity.

1.1.1 Corporate Governance

Corporate Governance refers to the system by which corporations are directed and controlled. The governance structure specifies the distribution of rights and responsibilities among different stakeholders (such as the board of directors, managers, shareholders, creditors, auditors and regulators) and specifies the rules and procedures for making decisions in corporate affairs (Donalson, 1999).

There has been renewed interest in the corporate governance practices of modern corporations, particularly in relation to accountability, since the high-profile collapses of a number of large corporations during 2001–2002, most of which involved accounting fraud. Corporate scandals of various forms have maintained public and political interest in the regulation of corporate governance. In the U.S., these include Enron Corporation and MCI Inc. (formerly WorldCom). Their demise is associated with the U.S. federal government passing the Sarbanes-Oxley Act in 2002, intending to restore public confidence in corporate governance (The World Bank, 2008).

The identification of organizational problems from a situation of asymmetry of information was one factor that led to the emergence of corporate governance. In this sense, Attig & Morck (2005) argue that in the case of companies whose boards are ineffective, the asymmetry of information may be more troubling to shareholders because it usually results in a large opacity. In other words, external investors may fear a significant difference between what they know and what other investors may have learned about information. Indeed, they find that if the board is working effectively, the level of information asymmetry should be small (less informed trading. Shares are actively traded). So, an effective board should improve the transparency of information and reduce both the diversion and the expropriation of minority interests.
The capital market infrastructure-depth and breadth-supports the ability of shareholders to hold management accountable, if a corporation is under-performing, investors may significantly discount the value of their shares, and in severe cases the corporation may be taken over and reorganized to produce acceptable returns for its owners. Accounting standards prescribe presentation of financial information in terms of timeliness and accuracy that investors use to hold management and the board accountable (Novikova, 2004).

1.1.2 Stock Market Liquidity

Liquidity can be defined as ability of continuously transforming asset from one form into another (Ivanovic, 1997). The most accepted definition of liquidity is ability to convert stock into cash & vice versa without affecting the price or with minimal impact of price. Liquidity is characterized by high level of trading activity. Assets that can easily be bought or sold are known as liquid assets. Liquidity is the ease of trading a security and that just makes it one of the key elements upon which the investor will decide whether or not to invest, as it enhances quick execution of orders and ability to convert into cash at lowest cost (Amihud, 2005). Liquidity is a key element for well-functioning stock markets as it has important repercussions for traders, trading venues (stock exchanges or alternative trading systems) and listed firms. Moreover, also the stability of the financial system as whole benefits from liquidity.

Wyss (2004) defines four aspects or dimensions of financial market liquidity namely trading time, tightness, depth and resiliency. Trading time being the ability to execute the transaction immediately at the prevailing price. The waiting time between trades is the measure for trading time. Tightness being the ability to buy and to sell an asset at about the same price at the same time Hasbrouck (2003) argues that tightness shows the cost associated with transacting or the cost of immediacy. Measures for tightness are the different versions of spread. Depth being the ability to buy or to sell a certain amount of an asset without influence on the quoted price. A sign of illiquidity would be an adverse market impact on price when trading occurs. Depth is characterised with existence of large number of buy and sell orders with little changes in prices. Resiliency being the ability to buy or to sell a certain amount of an asset with little influence on the quoted price. While the aspect of market depth regards only the volume of best bid and best ask prices, resiliency takes the elasticity of supply and demand into account. Dong, Kempf and Yadav (2007)
argue that resiliency measures how fast the prices will return to previous levels after have been changed under large volume transaction.

1.1.3 Corporate Governance and Stock Market Liquidity

The impact of corporate governance mechanisms on the liquidity of shares is generally explained, in researches, by the risk of an adverse selection that may confront an investor in a context of asymmetric information (Glosten & Milgrom, 1998). According to the investors’ vision, the only guarantee of the accuracy of the disclosed information is good corporate governance. In fact, several researchers state that this concept makes it possible to potentially reduce the information asymmetry. Conflicts of interests between managers and shareholders, the possibility of expropriation of minority shareholders, and embezzlement, are thus weakened.

Consequently, fewer opportunities will be available to allow informed agents who take advantage of private information available to them, at the expense of uninformed agents. Therefore, the uninformed agents will find no interest in broadening the adverse selection component of the spread and reducing share liquidity. In this context, it is important to recall that a system of efficient corporate governance raises investor confidence in the markets, and furthers the establishment of more stable investment flows in the long run. This is a lever for establishing a relationship of trust between the company and investors, attracting new investors, and improving shares liquidity

1.1.4 The Nairobi Securities Exchange

In Kenya, dealing in shares and stocks started in the 1920's when still a British colony. In 1951, an Estate Agent Francis Drummond established the first professional stock broking firm. In 1954 the NSE was then constituted as a voluntary association of stockbrokers registered under the Societies Act. Africans and Asians were not permitted to trade in securities, until after the attainment of independence in 1963, the business of dealing in shares was confined only to the resident European community. At independence, stock market activity came to a standstill due to uncertainty about the future of independent Kenya.
In 1994 NSE moved to Nation Centre setting up computerized delivery and settlement system (DASS) and the number of stockbrokers increased with licensing of eight new brokers. (NSE Website). In July 2011, the Nairobi Stock Exchange Limited changed its name to the Nairobi Securities Exchange Limited. The change of name reflected the strategic plan of the NSE to evolve into a full service securities exchange which supports trading, clearing and settlement of equities, debt, derivatives and other associated instruments. Recently on September 9, 2014 NSE commenced trading on the NSE. This is after formal approval on June 27, 2014 from CMA to operate as a demutualized entity and subsequent issuing of shares to the public. As a demutualized entity the ownership of NSE is separate from the right to be trading participant (a stockbroker or investment banker) i.e. members of the Kenyan investing public can now own shares in the NSE, (NSE website). The CMA has also supported development of a code of best practice for corporate governance in Kenya. The objective of these guidelines is to strengthen corporate governance practices by public listed companies in Kenya and to promote the standards of self-regulation so as to bring the level of governance in line with international.

1.2 Research Problem

Corporate Governance encompasses processes for board effectiveness and enhanced transparent disclosures. Both these requirements result in improved quality and quantity of information made available to investors. This information flow is expected to result in informed trading, reduce information asymmetry and improve market liquidity (Charoenwong, 2010).

Efficient corporate governance on NSE will raise the investor confidence in the markets and further the establishment of more stable investment flows in the long run. This is a lever for establishing a relationship of trust between the company and investors, attracting new investors and improving shares liquidity. Because investors are guided by returns in the form of dividend and capital gains, relating corporate governance and liquidity will make them make informed decisions. Moreover the recent turbulence in the financial markets has underlined the importance of adopting good corporate governance practices.

Studies conducted on the relationship between corporate governance and stock market liquidity internationally have yielded positive results. In the emerging markets studies done in
Tunisia have also yielded positive results, however this covered the period 1998-2007 and covered 49 different companies on Tunisian stock exchange (Loukil, 2008).

Locally Sitienei (2005) established a positive relationship between stock ownership patterns and stock liquidity on NSE firms for period 2000-2004. While Sitienei (2005) explored stock ownership patterns this study explores governance practices effect on stock liquidity. Further there has been considerable growth and changes in corporate governance from the time all the above studies were undertaken. All the previous studies coincided with a period of low awareness of corporate governance practices and significant reforms brought about by CMA. This led to the problem statement analyzed. Does corporate governance practice have an effect on stock market liquidity of companies on NSE?

1.3 Research Objective

The objective of this study was to assess the effect of corporate governance practices on the performance of stock market liquidity at the NSE.

1.4 Value of the Study

The study may be useful to policy makers such as NSE and CMA to encourage compliance to the existing guidelines by establishing if there is a relationship between corporate governance and stock market liquidity. Given the need to Fast Track governance reforms the significance cannot be over emphasized.

Managers, shareholders and investors can use this study to construct corporate governance index and use same to forecast stock market liquidity of companies listed in NSE. The study will enable the investors know which stocks are likely to be liquid thus able to help to determine which stocks to acquire and which to dispose.

The study will enable academics and scholars to bridge the gap on the effect of corporate governance practices on stock market liquidity. It will also be useful to future researchers as it will form part of the empirical literature on corporate governance practices.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature on corporate governance, individual theories of corporate governance and how they affect stock market liquidity. This chapter will look into the various theoretical frameworks advanced, empirical studies conducted as well as summary of the research gap.

2.2 Theoretical Review

The section covers the theoretical basis of this study; it is informed by four theories namely: Agency theory, Stewardship theory, and Resource dependent theory and Stakeholder theory. Researchers and scholars have discussed these theories in relation to the corporate governance variables effect on stock market liquidity.

2.2.1 Agency Theory

Agency theory is concerned with aligning the interests of owners and managers and is based on the premise that there is an inherent conflict between the interests of a firm's owners and its management (Fama and Jensen, 1983). The recognition of this conflict is documented as far back as Adam Smith (1776) but its silence was not realized until the expansion of capitalism in the late 1800s and early 1900s. This led to a widespread separation of the ownership and control functions of the firm. This meant that managers now possessed superior knowledge and expertise to the firm's owners and were therefore in a position to pursue self-interested action at the expense of shareholders. Jensen and Meckling (1976) who argued that agency costs are an inevitable part of the management relationship formalized this hypothesis into a mathematical model.

The impact of agency theory on corporate governance research can be observed in the predominance of studies that examine two key questions, namely, how the composition of boards of directors affects firm performance and how the leadership structure of the company (i.e. the duality of the CEO/chairman role) affects corporate performance. Findings from these studies
have been contradictory. Studies of outsider ratios and firm performance, for example, have produced findings ranging from positive correlations, to negative correlation at all.

As to the mechanism by which a board is expected to impact on corporate performance, agency theory suggests that a greater proportion of independent directors will be able to monitor any self-interested actions by managers. As a result of the monitoring, there will be less opportunity for managers to pursue self-interest at the expense of owners (lower agency costs) and so shareholders will enjoy greater returns (or increased profits). The agency model is widely accepted in the business community, as can be seen by the widespread adoption of normative guidelines emphasizing the need for independent directors to monitor the activities of the board.

2.2.2 Stewardship Theory

This theory focuses on the proportion of insiders on the board to investigate links with corporate performance. From this perspective, one expects to see significantly different patterns emerge. More particularly, it is expected to see that a high proportion of inside directors would lead to greater access to information, superior decision-making and therefore higher firm performance.

Nicholson & Kiel (2007) examined seven cases out of which only two conformed to the expected patterns i.e. (high insider-proportion and high access to information). The insider dominated board did follow a segment of the pattern, but this did not translate into quality decision-making and improved corporate performance. In point of fact, this organization was the worst performing of the seven cases.

Two of the cases supported the pattern predicted by stewardship theory. It is difficult, given the information uncovered in the case research, to support the claim that high access to information, quality decision-making and subsequent strong performance would have occurred had there been a greater number of insiders on the board. These organizations, while high on outside directors were moderate to low on independent directors. In both cases several of the outside directors had long and in-depth experience with the organizations, approaching the level of understanding expected of inside directors. However, this knowledge base and a high level of involvement were not sufficient to provide either access to information or quality of decision-making to improve performance in the short term (Rechner & Dalton, 1991).
2.2.3 Resource Dependence Theory

This proposes that the Board of directors plays a crucial role in linking the organization to necessary resources. Thus, it is expected that boards that have significant links to fundamentally important constituencies and/or resources will contribute significantly to firm performance. Nicholson & Kiel (2007), examined seven cases, in each, the test of the resource dependence patterns revealed no consistency across the cases. There was no match in five cases, while the only match to a pattern was provided by one case where directors had few external linkages, provided very little resources to the company, and the organization was under considerable financial strain.

Another case provided a partial match to pattern one which associated low links with the environment and low access to resources with poor performance. Five of the directors were farmers who had strong links with other farmer suppliers. However, they have few links with either the general environment or key customers. Fieldwork established that much of the attention of the organization had been focused on farmer supplier issues, to the detriment of more general business issues, which in turn was one cause of the organization’s low performance. This could be argued to be a situation where some links to the environment had led to a misdirection of governance and corporate effort, while a lack of other links had led to the outcomes predicted by resource dependence theory (Boyd, 1990).

2.2.4 Stakeholder Theory

This theory posits that the management of the organization has a network of relationships to serve in its stakeholder’s circle in its achievement of corporate goals. It was developed by Freeman (1984) to expand the understanding of corporate accountability to include a broad range of stakeholders to include customers, suppliers, employees, business associates, government and its agencies, financial institutions. Mitchell et al. (1997) argues that stakeholders can be identified by looking at either one or two or all three of the associative attributes namely, the power to influence the firm, the legitimacy of relationship with the firm, and the urgency of their claim on the firm.
Donaldson and Preston (1995) observe that all stakeholders participating externally or internally in the organization have an interest to fulfill. They further explain the characteristics and behaviors of firms including how the organizations are managed, how the board of directors thinks about corporate units, the way the managers think about managing and the nature of the organization itself. In this regards, the firm should strive to satisfy not only the interests of its shareholders but also the interests of other relevant stakeholders. Hence the board should ensure that the firm acts on opportunities that enhances value to all the relevant stakeholders and also prevent bad management practices that may expose the firm to scandals or risk of financial distress. To ensure these achievements, the board team should consist of more members with diverse competencies, experience as well as capabilities that will effectively discharge its governance function.

2.3 Corporate Governance Practices

Governance provides the structure through which corporations set and pursue their objectives, while reflecting context of social, regulatory and market environment. The effectiveness of the board of directors is often conditioned by some characteristics such as size and independence of directors, Seniority, frequency of meetings, unitary structure and external audit.

2.3.1 Board of Director’s Size

The factors that determine the influence of the board size on liquidity are usually factors related to the leader control and to the quality of the process of decision making. The assumptions of agency theory state that the large size of the board favors the dominance of the leader by raising coalitions and group conflicts. This results in fragmented councils that have difficulty functioning effectively and reaching consensus on decisions. In this context, Jensen (1993) guidance recommends small sizes. Thus, manipulation of assessments of the directors is greatly facilitated which generates a lower quality of information published, aggravates the problem of asymmetric information, and reduces liquidity.
2.3.2 Board of Directors Independence

The role of directors is to monitor the tasks performed by management, to oppose to bad decisions, and provide advice at a high level. The independence of directors has been the subject of much debate in the corporate governance literature. Since the work of Fama and Jensen (1983) it was assumed that the independence of the board of directors and its effectiveness are linked. The rooting theory predicts that outside directors have not sufficient power to oppose the strategies used by leaders in order to enhance their power and partners including the development of asymmetric information. In this framework, Fama (1980) and Fama and Jensen (1983) argue that the most influential members in the council naturally have to be internal members, since they have valid and specific information regarding the activity of the organization. This information is mainly obtained by internal mutual supervision of other managers. Furthermore, Eng and Mak (2003) found that increasing the proportion of external directors reduces the voluntary disclosure of information by business leaders. Thus, it raises the problem of adverse selection and widens the price spread widens.

2.3.3 Seniority of Directors

The length of service on a board of directors is an indicator of familiarity with the company’s business. While it can help an administrator to exercise his rights of supervision, familiarity can also reveal some rooting and inefficiency (Koppes, 1999). Thus, the signal theory (1999) explains the relationship between seniority and liquidity in both directions. It can transmit to investors a signal of confidence concerning the information published, or rather, an engine management results, thereby increasing the asymmetry of market information and reducing the number of transactions.

2.3.4 Frequency of Board Meetings

To ensure efficiency and good communication from the management team, the board must keep a certain periodicity in the meetings of directors. The establishment of a well-defined plan of meetings and the publishing of reports give more confidence to stakeholders and reduces the asymmetry of information between them. These meetings provide signals to the market, thus
revising expectations of investors and increasing the volume of market transactions (Jenkins, 2002). The more the frequency of committee meetings contributes to a better quality of financial reporting. The attendance of the members of the board to the meetings can also be an important factor in the quality of the work of the latter particularly with regard to production control of accounting information (Schatt, 2004).

### 2.3.5 Unitary Structure of Board

Companies in which roles of CEO and chairman of the Board of directors are combined (held by one person) are considered to have a unitary board in the council. Duality first points out the absence of separation of decision control and decision management, and then indicates that the board is not an effective means for the control decision if it does not limit the discretion of individual decisions of top managers (Fama and Jensen, 1983).

The role of governance and oversight may extend to the dissemination of information from the firm to the external directors. Thus, firms having a dual executive will have a weak level of voluntary disclosure because the board seems to be less effective in controlling the management and ensuring the high level of transparency. Such a low level of transparency can be used to hide the fraud and incompetence (Gul and Leung, 2004). The results of the study of Cai (2006) reveal that the separation of functions enhances the process of information dissemination to the public and reduces the opportunities for informed trading. This weakens the adverse selection component and improves shares liquidity.

### 2.4 Determinants of Stock Market Liquidity

Stock market liquidity depends on other variables other than governance mechanisms namely, specific characteristics of shares such as the trading volumes, price volatility, share price, the company size and listing on other the international stock markets.
2.4.1 Trading Volumes

The relationship between the trading volumes and liquidity is ambiguous. Pfeleider (1998) assert that there is a positive correlation between those two entities. This is explained by the fact that investors tend to concentrate their trading at the same time in order to benefit from a greater liquidity. Similarly Skerrat (2002) foresaw the same kind of relation. However, Lin and Booth (1995) maintain that the trading volumes imply an adverse selection problem as the informed investors prefer to negotiate important volumes in order to take advantage from their information. So the rise of the trading volumes brings about disequilibrium in the market and leads to extra costs that have to be recouped by the enlargement of the spread. This variable is measured by the annual average of the trading volumes. We, then, expect the relationship between the spread and the trading volumes to be negative.

2.4.2 Price volatility

Stoll (1978) argue that volatility affects inventory holding costs and risk of stock management. It is positively associated with bid-ask spreads. Dennis & Weston (2001) prove a negative relationship between liquidity and the volatility of prices. Volatility is measured by the annual average of the standard deviation of equity returns. We expect the relationship between bid-ask spreads and volatility to be positive.

2.4.3 Share Price

The microstructure of financial markets stipulates that the price explains a significant part of the liquidity of shares. While some authors have shown that share price is positively associated with levels of liquidity (Shastri, 2000; Dennis & Weston, 2001), others advocate a negative relationship between the price of shares and their liquidity (Heflin, 2005, Sharma, 2005). This variable is measured by the average of the daily closing prices of each year. We expected a negative relationship between share price and bid-ask spreads.
2.4.4 Firm size

It is considered as a proxy of information asymmetry and agency costs. Demsetz (1986) suggests that small companies incur high level of information asymmetry. Moreover, equities firms with weak market capitalization are less liquid (Chiang and Venkatesh, 1988 and Laux, 1993). Consequently, we anticipate a positive association between firm size and bid-ask spreads. It is measured by the natural logarithm of year-end market capitalization.

2.4.5 Listing in international stock markets

The listing on overseas investments is considered as one of the essential characteristics that may influence the decision of publication. Indeed, when a company is publicly listed on international markets, it must comply with the requirements of these markets. Joos (2000), argue that trading on more than one market is among the reasons that may motivate leaders to become more inclined to inform the market. The application of these standards and subsequently the higher level of published information are perceived as a positive signal by the market, thereby increasing confidence among investors. This is likely to attract investors to invest in these companies, thus increasing the volume of transactions.

2.5. Empirical Review

Chung (2010) found that firms with better corporate governance have narrower spreads, higher market quality index, smaller price impact of trade and lower probability of information based trading. Using regression analysis applied on American firms on both NASDAQ & NYSE the results suggested that firms may alleviate information based trading and improve stock market liquidity by adopting corporate governance standards that mitigate informational asymmetries.

Attig (2007) tests the relationship between adverse selection and characteristics of the board of directors of Canadian listed companies. The author using regression analysis on firms quoted on the Canadian stock exchange shows that the impact of board size on the price spread depends on the ownership structure. It actually shows that companies with dispersed ownership and having a large board associate with a low price spread. However when it comes to pyramidal family
business groups. Attig (2007) finds that the size of the board and the excessive control of the directors widen the price spread.

Chen and Jaggi (2000) highlight a positive link, through the examination of the association between external directors and the spread of information in Hong Kong Stock Exchange firms. Using the ordinary least squares regression the result indicates the presence of independent directors enhances corporate compliance with regulatory requirements, determines the transparency of the market, and has a positive influence on liquidity. Thus, asymmetric information decreases while liquidity increases.

Beasley (1996) argues that seniority enhances their ability to exercise control over the executive. The author applied logit regression on a sample of 150 public firms selected from American stock exchanges. According to him, the more directors are experienced, the more their mandate is assured within the company and the more they are able to withstand groups’ pressures along the lines of the wishes of management. Notably, the author finds a strong negative relationship between the average numbers of years that external directors have served on the board of directors and the likelihood of issuing fraudulent financial states, suggesting that the age increases the ability of external directors to effectively monitor the management of the company. Accordingly, seniority reduces problems of asymmetric information which leads to the increase of shares liquidity. This result confirms the theory of stewardship.

Karamanou and Vafeas (2005) performed investigation on 325 firm listed in the 1995 Fortune 500 magazine to find out how corporate boards and audit committees were associated with voluntary financial disclosure practices. They reported that in companies with more effective board and audit committee structures, managers were more likely to make or update an earnings forecast, and their forecast was less likely to be precise, it was more accurate, and it elicited a more favorable market response. The author had used Pearson (spearman) pair wise correlations in investigating this relationship.
Sitienei (2005) studied the effect of stock ownership patterns on stock liquidity using least squares methodology on a sample of NSE firms. The results indicated stock liquidity cannot be isolated with the aggregate impact of stock ownership patterns at the NSE.

Muturi (2007) surveyed the degree of compliance with the Capital Markets Authority guidelines on corporate governance on firms quoted on the NSE. The study employed descriptive statistics and content analysis and found that the degree of compliance was high among the listed companies in Kenya.

Wanjau (2007) using descriptive statistics surveyed the relationship between corporate governance and performance in microfinance institutions in Kenya and found that Board size was positively related to turnover or loan disbursements. The sample used in this study was 15 registered microfinance institutions.

Ngugi (2007) studied the relationship between corporate governance structures and performance of Insurance companies in Kenya and found that Board Size and Insider Holding were positively related to performance of Insurance Companies. To get these results the author had employed regression analysis on a sample of 33 insurance companies.

Nyagari (2008) studied the control and enforcement of corporate governance by the capital markets authority and found that the authority has put in place various measures and reporting requirements for listed companies which essentially act as a guideline. Control and enforcement of the guidelines is effected through various means including use of fines and penalties. This study involved a survey conducted on firms on the NSE and concluded that there is however varying levels of control and enforcement of the guidelines against prescribed measures.

Muriithi (2008) studied Corporate Governance and financial performance of state corporations, the case of new KCC and found that the board of new KCC adopted practices of good governance which were reviewed and improved over time and had yielded improved financial performance. Some corporate governance practices identified included appointment and leadership of the board, structure of the organization, purpose and values, balance of power in the
board, corporate communication, and assessment of performance of the board and responsibility to stakeholders.

2.6. Summary of literature

The above studies have established that increasingly companies are facing a challenge of separation of ownership, control and its impact of stock market liquidity. Firms with an unusually low number of restrictive governance provisions compared with other firms in their industries have shown low stock market liquidity. Studies by Chung et al. (2010) argued that corporate governance practices like board size and existence of external directors tend to reduce asymmetric information thereby leading to increased liquidity.

Studies by Muriithi et al. (2008) argued that corporate governance practice enhanced firm performance. Locally studies have not been conclusive on the effect of corporate governance on stock liquidity as they have largely concentrated on its (corporate governance) effect to other variables such as firm performance and capital structure. Further, the above studies focused on corporate governance practice at the time when awareness was very low and few companies had embraced these practices with existence of little or no corporate governance regulatory framework.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology that was used in carrying out the study. Aspects covered include research design, population, and data collection procedures and data analysis technique.

3.2 Research Design

This study used descriptive research design. The choice of the descriptive study design was based on the fact that the research is interested on the state of affairs already existing in the field and no variable will be manipulated. The main focus of this study was quantitative. However some qualitative approaches were used in order to gain a better understanding and possibly enable more insightful interpretation of the results from the quantitative study.

3.3 Population

A census study of 59 firms that have been consistently listed in the Nairobi Securities Exchange and embraced corporate governance practices over a five financial year period (2009-2013) was considered. This period was considered representative to provide sufficient data for a reliable regression model so as to ascertain the strength of the relationship.

3.4 Data Collection

Secondary data was collected from published annual reports filed with NSE, websites of the selected Companies and CMA. The secondary data provided a reliable source of the information needed to investigate the phenomenon and seek efficient ways for problem solving situations (Uma, 2003). Specifically the data was collected from the portion expounding on corporate information, statement of Corporate Governance as well as the directors’ profile. Data on stock market liquidity was collected from the NSE data.

3.5 Data Analysis

Correlational analysis was employed in the study to see the direction and effect of various firms’ corporate governance practices on stock market liquidity. Multiple regression analysis was used to
investigate the relationship between corporate governance practices and stock market liquidity performance of the firm on NSE.

3.5.1 Model Specification

Multiple regression model was used. This study employed the following model;

\[ Y_t = \beta_0 + \beta_1 BOS + \beta_2 BDEP + \beta_3 BUNIT + \beta_4 BSEN + \beta_5 BFM + \varepsilon \]

Where:

\( Y_t \) = Measures of stock market liquidity variable trading volume for firms at time \( t \).

\( BOS \) = Board size of company

\( BDEP \) = The independence of directors of company

\( BUNIT \) = The unitary structure of the board

\( BSEN \) = Seniority of directors of company.

\( BFM \) = Frequency of Board meeting of company.

\( \varepsilon \) = Error term

\( \beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \) and \( \varepsilon \) are constant terms

3.5.2 Operationalization of Variable

3.5.2.1 Stock Market Liquidity

Trading Volume \( T_n = V/S \times P \)

Where \( T_n \) = Turnover rate

\[ V = \sum P_i Q_i \] where \( V \) = Monthly stock shillings volume traded and \( P \) & \( Q \) are prices & quantities of stock during a particular month.

\( S \) = Outstanding stock of the asset

\( P \) = average price of the stock in the month
Therefore the higher the trading volume is, the more the liquid the market is.

3.5.2.2 Corporate Governance

**BOS** (Board size of company)

Terms of measurement the total number of directors on board in a particular year.

**BDEP** (The independence of directors of company)

Terms of measurement the percentage of the independent Directors on the board in any particular year

**BUNIT** (The unitary structure of the board)

Terms of measurement Dummy variable 1 if CEO exercise same role as chairman of the Board (unitary) and to 0 if otherwise in any particular year.

**BSEN** (Seniority of directors of Company)

Terms of measurement the average tenure of board members in a particular year

**BFM** (Frequency of Board meeting of company)

Terms of measurement the number of meetings of the board conducted during one year

$\varepsilon$ = Error term; possible factors that could influence stock liquidity that are not captured in the model such as share price, firm size and listing on the NSE.

3.5.3 Test of Significance

Several significance tests at 5 % significant level was applied to the variables and model under study to see the significance of the variables and the fitness of the overall model. To explain how much the model explains the changes in the dependent variable the study analyzed the coefficient of determination (R squared), ANOVA, and beta coefficients of the regression model.
CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results of the data analysis. Secondary data was collected from published annual reports filed with NSE, websites of the selected Companies and CMA. Data on stock market liquidity was collected from the NSE. The data was then converted to desired form and input into the SPSS package. Data analysis was conducted to generate descriptive and regression output. The chapter is organized as follows; Section 4.2 gives summary statistics. Section 4.3 provides results of the data analysis and it includes relevant tables that help to explain the results of the analysis.

4.2 Summary Statistics

The first table of interest is a Summary of the descriptive statistics results of corporate governance variables and stock market liquidity as shown below.

Table 4.1: Summary Descriptive Statistics of Model Variables

<table>
<thead>
<tr>
<th></th>
<th>Liquidity(Yt)</th>
<th>BOS</th>
<th>BDEP</th>
<th>BUNIT</th>
<th>BSEN</th>
<th>BFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.0060</td>
<td>8.3163</td>
<td>0.0419</td>
<td>5.6419</td>
<td>0.6975</td>
<td>5.8977</td>
</tr>
<tr>
<td>Standard error</td>
<td>0.0031</td>
<td>2.4104</td>
<td>0.1930</td>
<td>2.9014</td>
<td>0.1798</td>
<td>3.7797</td>
</tr>
<tr>
<td>Median</td>
<td>0.0057</td>
<td>8.0000</td>
<td>0.0000</td>
<td>5.0000</td>
<td>0.7500</td>
<td>4.4000</td>
</tr>
<tr>
<td>Mode</td>
<td>Nil</td>
<td>5.0000</td>
<td>0.0000</td>
<td>6.0000</td>
<td>0.8000</td>
<td>4.0000</td>
</tr>
<tr>
<td>Standard dev</td>
<td>0.0031</td>
<td>2.4104</td>
<td>0.1930</td>
<td>2.9014</td>
<td>0.1798</td>
<td>3.7797</td>
</tr>
<tr>
<td>Sample Var</td>
<td>0.0000</td>
<td>5.8100</td>
<td>0.0373</td>
<td>8.4182</td>
<td>0.0323</td>
<td>14.2864</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-.5460</td>
<td>-0.2877</td>
<td>19.9947</td>
<td>0.9999</td>
<td>-1.0597</td>
<td>6.5340</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.2590</td>
<td>-0.1188</td>
<td>4.5576</td>
<td>1.0367</td>
<td>-0.4125</td>
<td>2.5436</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.0008</td>
<td>3.0000</td>
<td>0.0000</td>
<td>2.2000</td>
<td>0.3333</td>
<td>2.0000</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.0134</td>
<td>14.0000</td>
<td>1.0000</td>
<td>14.4000</td>
<td>1.0000</td>
<td>20.8000</td>
</tr>
<tr>
<td>Sum</td>
<td>.2590</td>
<td>357.6000</td>
<td>1.8000</td>
<td>242.6000</td>
<td>29.9938</td>
<td>253.6000</td>
</tr>
<tr>
<td>Count</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Largest(I)</td>
<td>0.0134</td>
<td>14.0000</td>
<td>1.0000</td>
<td>14.4000</td>
<td>1.0000</td>
<td>20.8000</td>
</tr>
<tr>
<td>Smallest(I)</td>
<td>0.0008</td>
<td>3.0000</td>
<td>0.0000</td>
<td>2.2000</td>
<td>0.3333</td>
<td>2.0000</td>
</tr>
<tr>
<td>Conf.L (95.0%)</td>
<td>0.00002</td>
<td>0.0230</td>
<td>0.0018</td>
<td>0.0277</td>
<td>0.0017</td>
<td>0.0361</td>
</tr>
</tbody>
</table>

Source: Computation from raw data obtained from NSE, CMA & Company websites
The descriptive statistics of Table 4.1 above provides a window into the data set that was used for the regression analysis. It indicates that BFM has the highest sample variance of the five variables at 14.2864, the result also indicate that the BFM has the highest standard deviation of the five variables at 3.7797 based on the data used. These two figures are indicative of high variability in frequency of board meetings of firms listed at the NSE and may have a greater effect on the stock liquidity over Board size of company, the independence of directors of company, the unitary structure of the board and seniority of directors of company.

4.3 Regression Model Results

The regression results have been categorized into the following: Results that determine how the model fits, regression model, statistical significance of the independent variable and statistical significance of the overall regression model.

4.3.1 Determination of How the Model Fits

The second table of interest is the model summary. This table provides R, R square, adjusted R square and the standard error of the estimate, which can be used to explain how the regression model fits the data which also implies the effect of corporate governance variables to stock market liquidity

Table 4.2: Summary of Corporate Governance Variables on Stock Liquidity

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.203</td>
</tr>
<tr>
<td>R Square</td>
<td>0.041</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.089</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.32</td>
</tr>
<tr>
<td>Observations</td>
<td>43</td>
</tr>
</tbody>
</table>
a. Predictors: (Constant), Board size of company, the independence of directors of company, the unitary structure of the board, Seniority of the directors of Company, Frequency of board meetings of a company.

Table 4.2 indicates that Corporate Governance variables, as represented by the predictor variables (BOS; BDEP; BUNIT; BSEN; BFM), only influenced 8.9% of variations in stock liquidity as indicated by the adjusted R square statistic. The model thus only explained 8.9% of the variations in stock liquidity.

4.3.2 Regression Model

The general form of equation to predict the stock market liquidity is shown as follows:

Stock liquidity \((Y) = 0.529 + 0.008BOS + 0.117BDEP -0.075BUNIT -0.016BSEN+0.002BFM\)

This is derived from the coefficient table below:

**Table 4.3: Coefficients of the model**

<table>
<thead>
<tr>
<th></th>
<th>Coefficients</th>
<th>95% confidence interval</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.529</td>
<td>0.010 to 1.049</td>
<td>0.256</td>
<td>2.064</td>
<td>0.046</td>
</tr>
<tr>
<td>BOS</td>
<td>0.008</td>
<td>-0.044 to 0.061</td>
<td>0.026</td>
<td>0.327</td>
<td>0.745</td>
</tr>
<tr>
<td>BDEP</td>
<td>0.117</td>
<td>-0.541 to 0.776</td>
<td>0.325</td>
<td>0.361</td>
<td>0.720</td>
</tr>
<tr>
<td>BUNIT</td>
<td>-0.075</td>
<td>-0.637 to 0.487</td>
<td>0.277</td>
<td>-0.272</td>
<td>0.787</td>
</tr>
<tr>
<td>BSEN</td>
<td>-0.016</td>
<td>-0.052 to 0.021</td>
<td>0.018</td>
<td>-0.867</td>
<td>0.392</td>
</tr>
<tr>
<td>BFM</td>
<td>0.002</td>
<td>-0.026 to 0.030</td>
<td>0.014</td>
<td>0.146</td>
<td>0.885</td>
</tr>
</tbody>
</table>

a. Dependent variable: Stock market liquidity

Table 4.3 depicts the numerical relationship between the independent variable and the predictor variables in the following resultant equation:

The coefficients and their signs are indicative of the effect of each predictor on the stock liquidity.
For instance the coefficient, $\beta_1$ (Board size of company) is 0.008. This means that for each unit increase in the board size the stock market liquidity will increase by a factor of 0.008, a unit change in board independence will lead to increase in stock market liquidity by a factor 0.117, a change in the unitary structure will lead to decrease in stock market liquidity by a factor 0.075, a unit change in board seniority will lead to a decrease in stock market liquidity by a factor 0.016 and finally a unit change in frequency of board meetings will lead to a increase in stock market liquidity by a factor of 0.002.

At 95% level of significance as depicted by the p value, Board size of company had 0.745 level of significance, Board independence had 0.720 level of significance, board unitary structure had 0.787 level of significance, board seniority had 0.392 level of significance and board frequency of meetings had 0.885 level of significance. Overall board independence had the greatest effect on stock market liquidity followed by board size followed by frequency of board meeting followed by unitary structure of the board and finally board seniority.

### 4.3.3 Statistical Significance of the Independent Variable

A t-test was additionally conducted to ascertain whether one or more of the predictor variables significantly predict the dependent variable at the 5% significance level. Testing whether the coefficient of Board size is equal to zero at 5% level of significance yields a p-value of (0.745 > 0.05), which is insignificant. Similarly, Board independence yielded a p-value of (0.720 > 0.05), which was not significant either. Unitary structure of the board yielded a p-value of (0.787 > 0.05), which was not significant as well. Board seniority yielded a p-value of (0.392 > 0.05), which was not significant. And finally Board frequency yielded a p-value of (0.885 > 0.05), which was also not significant. Therefore; of the five predictor variables none is a useful predictor of variations in stock liquidity.

### 4.3.4 Statistical Significance for the Overall Regression Model

Significance F on table 4.4 below demonstrates the usefulness of the overall regression model at a 5% level of significance. The table below shows that the independent variable does not significantly predicts the dependent variable.
Table 4.4: ANOVA\textsuperscript{a} for Corporate Governance Variables on Stock Liquidity

<table>
<thead>
<tr>
<th></th>
<th>Df</th>
<th>Sum of squares</th>
<th>Mean sum of squares</th>
<th>F</th>
<th>P-Value (Significance F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5</td>
<td>0.163</td>
<td>0.033</td>
<td>0.317</td>
<td>0.900\textsuperscript{b}</td>
</tr>
<tr>
<td>Residual</td>
<td>37</td>
<td>3.796</td>
<td>0.103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>3.959</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a} Dependent Variable: Stock Market liquidity

\textsuperscript{b} Predictors (Constant), Board size, Board Independence, Unitary Structure of the Board, Board Seniority, Board Frequency of Meeting.

The above shows a low level of fit with an F-value of 0.317. The model is therefore not a fit with the specifications therein to explain the relationship between the dependent and the independent variables. The P value is greater than 0.05 thus Board size, Board independence, unitary structure of the board, Board seniority and Board frequency of meeting are insignificant determinants of stock market liquidity.

4.4 Interpretation of Results

The results indicated that investors view positively those firms that show an increase in board independence and therefore results in the stock having activity as investors buy and sell more. Thus investors may use the increase in board independence to make the buy-sell or hold decisions for a given stock at the NSE. On the other hand, seniority of the board and unitary structure of the board had a negative effect on the stock liquidity. The results indicated that a unit increase in Board seniority reduces the liquidity of a stock by about 1.6% while a unit change in unitary structure reduces the liquidity of a stock by about 7.5% for firms listed at the NSE.

Kurtosis measures how different a distribution is from the normal distribution. A negative value typically indicated a distribution is more peaked than the normal. A positive value typically
indicated a distribution is flatter than normal. As shown in Table 4.1, Board independence and Board frequency of meeting were 19.997 & 6.53 respectively, indicating a distribution flatter than normal variables. Further, unitary structure with 0.999 positive also indicated a distribution flatter than normal. The board size and board seniority was more peaked than normal as its value was negative.

In Table 4.2, there was variation of 4.1% on the stock market liquidity due to changes in board size of company, board independence, and unitary structure of the board, board seniority and frequency of board meetings at 95% confidence level. This shows that 4.1% changes in stock market liquidity could be accounted for by Company board size, board independence, and unitary structure of the board, board seniority and frequency of board meetings.

Table 4.3 showed that at 95% level of confidence, board size had a P value of 0.745, Board independence had a P value of 0.720, Unitary structure had a P value of 0.787, Board seniority had a P value of 0.392, and Board frequency of meetings had a P value of 0.885. They were all insignificant (p<0.05).

Table 4.4 on ANOVA Statistics also clearly indicates that the regression only accounted for a less than dominant number of variations in stock liquidity; 0.163 (4.12%) out of 3.959; the rest of the variations being accounted for by other factors external to the model (Residual) as indicated by the sum of the squares (SS). Residual (or error) represents unexplained (or residual) variation after fitting a regression model. It is the difference (or left over) between the observed value of the variable and the value suggested by the regression model.
CHAPTER FIVE: SUMMARY CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the analysis in chapter four and highlights the key findings in regard to the data analysis done. It draws conclusions and implications from the findings and gives recommendations. Limitations of the study and suggestions of areas for further studies are also presented.

5.2 Summary of Findings

This study was conducted with the main objective of establishing the effect of five selected corporate governance variables on stock liquidity for listed 20 Share index companies at the Nairobi Securities Exchange. The study used regression analysis to establish the relationship between corporate governance variables and stock market liquidity of NSE 20 Share index companies at the NSE. One major finding of the study is that there is a weak relationship between the independent variables (Company board size, board independence, unitary structure of the board, Board seniority and frequency of board meetings) used in the model and dependent variable (stock market liquidity)

5.2.1 Effect of Board size on Stock Market Liquidity

The study found a positive mean of Board size of 8.31 as shown in table 4.1. From table 4.2 R square is 0.041, an indication that there was variation of 4.1% of stock market liquidity due to changes in the Board size. As shown by the coefficients in table 4.3, BOS had a positive and marginal effect on stock liquidity at 0.80 %. This means that an increase in BOS leads to a marginal increase in stock liquidity. Thus a unit increase in board size influences a same direction unit increase of the stock market liquidity by a 0.80 % margin. Board size showed a P value of 0.745 which shows that it was not a significant factor.
5.2.2 Effect of Board independence on Stock Market Liquidity

There was a positive mean of Board independence of 0.0419 as shown in table 4.1. From table 4.2 R square is 0.041, an indication that there was variation of 4.1% of stock market liquidity due to changes in Board independence.

As shown by the coefficients in table 4.3, an increase in Board independence had a positive relationship with stock liquidity at 11.7%. Thus a given increase in Board independence leads to a marginal increase in stock liquidity in the same direction. Investors therefore react positively to an increase in Board independence although less than they do regarding Board size. Board independence showed a P value of 0.720 which shows it was not a significant factor.

5.2.3 Effect of Unitary structure of the Board on Stock Market Liquidity

The study found a positive mean of unitary structure of 5.64 as shown in table 4.1. From table 4.2 R square is 0.041, an indication that there was variation of 4.1% of stock market liquidity due to changes in the unitary structure of the Board. As shown by the coefficients in table 4.3, unitary structure of the board had a negative relationship with stock liquidity at -7.5%. The sign of the coefficient means that unitary structure of the board and stock liquidity move in opposite directions. Thus the presence of unitary structure in the board leads to a marginal decrease in stock liquidity. This means that stocks shade off their liquidity with Presence of unitary structure in the board of an organization. With a P value of 0.787 the unitary structure of the board was found not to be significant.

5.2.4 Effect of Board seniority on Stock Market Liquidity

The study found a positive mean of Board seniority of 0.69 as shown in table 4.1. From table 4.2 R square is 0.041, an indication that there was variation of 4.1% of stock market liquidity due to changes in Board seniority. As shown by the coefficients in table 4.3, BSEN had a negative relationship with stock liquidity at -1.6%. An increase in BSEN would therefore result in a slight decrease in stock liquidity. The results indicate that stock liquidity and board seniority move in opposite directions and that a unit increase in board seniority results in a 1.60% decrease in stock liquidity.
liquidity of firms listed at the NSE. Board Seniority showed a P value of 0.392 which shows it was not a significant factor.

5.2.5 Effect of Frequency of Board Meeting on Stock Market Liquidity

The study found a positive mean of 5.89 as Shown in table 4.1. From table 4.2 R square is 0.041, an indication that there was variation of 4.1% of stock market liquidity due to changes in the frequency of board meeting. As shown by the coefficients in table 4.3, BFM had positive relationship with stock liquidity at 2.0%. An increase in BFM would therefore result in a slight increase in stock liquidity. The results indicate that board frequency meetings would move in the same directions and that a unit increase in board frequency result in 2.0% increase in stock liquidity of firms listed in the NSE. Frequency of board meeting showed a p value of 0.885 which shows it was not a significant factor.

5.3 Conclusion

The results indicate that the selected Corporate Governance variables do not significantly influence stock liquidity variability. The study consequently concludes that other factors other than the selected Corporate Governance variables were primarily responsible for variability in stock liquidity levels of firms’ listed in the NSE.

The study also concludes that with respect to the nature of the relationship in terms of both magnitude and direction; an increase in Board independence led to a sizeable increase in stock liquidity; an increase in Board size led to a marginal increase in stock liquidity; an increase in frequency of Board meetings led to marginal increase in stock liquidity; the presence of Unitary structure in the board led to a slight decrease in stock liquidity; and an increase in Seniority of the board resulted in a marginal decrease in stock liquidity.

5.4 Recommendation

The study recommends that the selected corporate governance variables of firms in the NSE should not be reliably used as a basis for projecting stock liquidity variations of listed firms. The
study also found that board size; board independence; unitary structure of the board; seniority of the board; and frequency of board meetings was insignificant in predicting stock liquidity variation in the model.

5.5 Limitations of the Study

The study was unable to obtain data for all the NSE 20 Share index firms in the sample, managing to obtain complete data from 43 firms. This study also only used five proxies for corporate governance variables whereas many other possible corporate variables surrogates that the study may not have used exist. Finally, this study is based on 2009-2013 stock liquidity; board size; board independence; unitary structure of the board; seniority of the board; and frequency of board meetings for the respective 43 NSE 20 Share Index firms and thus interpretations deviating from the findings of this research may occur if period is outside the study period or if regression variables are not study variables.

5.6 Suggestions for Further Studies

Further investigation may be done to establish the effect of other corporate governance variable surrogates. In addition, further inquiry may be done into why the corporate governance variables exhibited the specified relationships and coefficient magnitude against stock liquidity. Finally, an investigation may be done to establish the key factors that constitute the residuals in this study.
REFERENCES


APPENDICES

APPENDIX 1: LIST OF COMPANIES LISTED IN NAIROBI SECURITY EXCHANGE AS AT 31 DECEMBER, 2013

SECTOR

AGRICULTURE
1 EAAGADS LTD
2 KAKUZI LTD
3 KAPCHORUA TEA CO. LTD
4 THE LIMURU TEA CO LTD
5 REA VIPINGO PLANTATIONS LTD
6 SASINI LTD
7 WILLIAMSON TEA KENYA LTD

AUTOMOBILES & ACCESSORIES
8 CARS & GENERAL (K) LTD
9 MARSHALLS (E.A) LTD
10 SAMEER AFRICA LTD

BANKING
11 BARCLAYS BANK OF KENYA LTD
12 CFC STANBIC OF KENYA HOLDINGS LTD
13 DIAMOND TRUST BANK KENYA LTD
14 EQUITY BANK LTD
15 HOUSING FINANCE CO. KENYA LTD
16 I&M HOLDINGS LTD
17 KENYA COMMERCIAL BANK LTD
18 NATIONAL BANK OF KENYA LTD
19 NIC BANK LTD
20 STANDARDS CHARTERED BANK KENYA LTD
21 THE CO-OPERATIVE BANK OF KENYA
COMMERCIAL AND SERVICES
22 EXPRESS KENYA LTD
23 HUTCHINGS BIEMER LTD
24 KENYA AIRWAYS LTD
25 LONGHORN KENYA LTD
26 NATION MEDIA GROUP LTD
27 SCANGROUP LTD
28 STANDARD GROUP LTD
29 TPS EASTERN AFRICA
30 UCHUMI SUPERMARKET LTD

CONSTRUCTION
31 ARM CEMENT LTD
32 BAMBU CEMENT LTD
33 CROWN PAINTS KENYA LTD
34 E.A.CABLES LTD
35 E.A.PORTLAND CEMENT CO LTD

ENERGY & PETROLEUM
36 KENGEN CO LTD
37 KENOLKOBIL LTD
38 KENYA POWER & LIGHTING CO LTD
39 TOTAL KENYA LTD
40 UMENE LTD

INSURANCE
41 BRITISH –AMERICAN INVESTMENTS
42 CIC INSURANCE GROUPS
43 JUBILEE HOLDINGS LTD
44 KENYA RE INSURANCE CORPORATION LTD
45 LIBERTY KENYA HOLDINGS LTD
46 PAN AFRICA INSURANCE HOLDINGS LTD
INVESTMENTS

47 CENTUM INVESTMENTS CO LTD
48 OLYMPIA CAPITAL HOLDINGS LTD
49 TRANS-CENTURY LTD

MANUFACTURING & ALLIED

50 A.BAUMAN & CO LTD
51 B.O.C KENYA LTD
52 BRITISH AMERICAN TOBACCO KENYA LTD
53 CARBACID INVESTMENTS LTD
54 EAST AFRICA BREWERIES LTD
55 EVEREADY EAST AFRICA LTD
56 KENYA ORCHARDS LTD
57 MUMIAS SUGAR CO LTD
58 UNGA GROUP LTD

TELECOMUNICATION & TECHNOLOGY

59 SAFARICOM LTD

Source: Capital Market Authority 2014
### APPENDIX II: CORPORATE GOVERNANCE PRACTICES DATA TABLE

<table>
<thead>
<tr>
<th>Variable</th>
<th>DETAILS</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BOS</strong> (Board size of company)</td>
<td>The number of Board members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BDEP</strong> (The independence of directors of company)</td>
<td>The % number of non-executive board members 70 % =1 less than equals 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BUNIT</strong> (The unitary structure of the board)</td>
<td>Where the CEO doubles as Board Chairperson (indicate 1 if yes, 0 if otherwise).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BSEN</strong> (Seniority of directors of Company)</td>
<td>Tenure of directors on the board</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BFM</strong> (Frequency of Board meeting of company)</td>
<td>Number of meeting by board of directors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>